

The encoding of definiteness in L2 Norwegian

A study of L1 effects and universals in narratives written by L1 Russian and L1 English learners

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Scientific environment

I was offered a PhD fellowship at the University of Bergen, Norway, in the spring of 2012. From August 1st 2012 to August 11th 2016, I have been an affiliate at the Department of Linguistics, Literature, and Aesthetic Studies at the Faculty of Arts. My closest research community has been scholars working with research and teaching of Norwegian as a second language. I have been a member of the research project group *ASKeladden* studying L1 transfer in Norwegian as a second language. I have also been included in the research network for *Nordic Languages* at the local department, and the faculty research group *Conditions and Strategies for Developing Language Competences* which gathers a network of scholars concerned with educational matters in foreign and second language learning. When I began my PhD work, I joined the *PhD Research School in Linguistics and Philology* at the University of Bergen, and I have participated in classes and seminars given to PhD students locally and nationally.

During my time as a PhD scholar, I was given the opportunity to spend the spring semester of 2014 at UC Berkeley, U.S., as a visiting student researcher. My affiliation was at the Berkeley Language Center, headed by Rick Kern, who kindly agreed to be my sponsor. I was offered the opportunity to participate in meetings and seminars organized by the group. I also had the chance to audit a graduate class given by Claire Kramsch on language and identity.

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Many metaphors may suitably describe the process of completing a PhD: Writing a PhD is like a journey, a climb, like holding one's breath, or as my MA-supervisor, Jon Erik Hagen, always said in order to illustrate the efforts and excitement of doing academic work: It's like climbing a hill and descending while creating a snowball. In the beginning you push the snowball but later you run after. These metaphors emphasize different aspects of a continuum of PhD feelings, and I have lived by them all during the past four years. However, most importantly, they all imply that at some point you transcend from one phase to another; something new has developed and you reach a stage of relief. I am at that stage now, and many have helped me and contributed to my getting there.

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During these past four-five years, two people passed away, who in different but important ways contributed to my development and education: Associate professor in Norwegian as a Second Language, Jon Erik Hagen, and my father, Arild Johansen. Jon Erik's genuine engagement in his students and his teaching made me discover a whole new world of knowledge; his efforts, support, and trust gave me the motivation to apply for a PhD. From the very beginning my father introduced me to the treasures of books, encouraged my curiosity and taught me to learn from literature. He also continuously reminded me that education is a privilege not to be taken for granted. This dissertation is dedicated to him.

Abstract

Norwegian expresses definiteness grammatically partly with inflection (definite NPs) and partly with articles (indefinite NPs and some definite NPs). The present study investigates the use of grammatical definiteness in Norwegian as a second language among adult Russian learners (N=7) and English learners (N=4) living in Norway. The data consist of written Pear Story retellings (Chafe, 1980a) collected at three data points within approximately one year.

The overall assumption guiding the research design is that the linguistic structure of the first language is a major force in second language learning. In the specific case of L2 acquisition of definiteness, most research conducted on L2 English has documented deviant patterns in the article use of learners with an L1 not possessing any such category (Austin, Pongpairaj, & Trenkic, 2015; Butler, 2002; Huebner, 1983, 1985; Chaudron & Parker, 1990; Ionin, Ko, & Wexler, 2004; Ionin, Zubizarreta, & Maldonado, 2008; Liu & Gleason, 2002; Master, 1987; Parrish, 1987; Robertson, 2000; Tarone & Parrish, 1988; Thomas, 1989; Trenkic, 2007, 2008, 2009; Trenkic & Pongpairaj, 2013; Trenkic, Mirkovic, & Altmann, 2014; Young 1996). However, an interaction between the L1 and universal principles of language and second language learning is often hypothesized. In the present study learners with an L1 not exhibiting a category of grammatical definiteness (Russian) are therefore compared to learners with an L1 exhibiting a category of grammatical definiteness (English) that is partly similar to and partly diverge from that of the target language (Norwegian).

Following previous research (e.g., Butler, 2002; Huebner, 1983, 1985; Master, 1987, Parrish, 1987; Tarone & Parrish, 1988; Thomas, 1989, Trenkic, 2002b; Young, 1996) and in particular Sharma (2005a), the present study employs two models of analysis: The Semantic Wheel of NP Reference (Bickerton, 1981; Huebner, 1983) and The Taxonomy of Assumed Familiarity (Prince, 1981). The first model classifies NPs in terms of two binary categories: [\pm specific referent] and [\pm assumed hearer knowledge], whereas the second model distinguishes discourse referents from each

other on the basis of degree of givenness. Finally, the study performs a post-hoc analysis of a set of specific NP constructions in Norwegian in order to arrive at a deeper understanding of the impact of structural features of grammatical definiteness. Through these analyses the study seeks to answer how L1 related effects and universal principles of discourse interact in the learners' encoding of grammatical definiteness in Norwegian. How the crosslinguistic relations between Norwegian, English and Russian affect the L2 outcome are accounted for by the incorporation of two different frameworks for cross-linguistic relations: one originating from Ringbom (2007) and the other from Tokowicz and MacWhinney (2006).

The data sample of the present study is limited and its strengths are thus mainly found in the fact that it highlights and explores complexity and diversity rather than creating a basis for statistical generalization. It further capitalizes on the strengths of longitudinal data by performing several in-depth analyses that report on both similarities and differences in individual profiles and between the two L1 groups. The results of the analyses are, as mentioned above, interpreted in light of the research questions and prediction. The main findings of the study have emerged from an explorative process of conducting several analyses. Chiefly, it is documented that omission of the indefinite article is a characteristic feature of the L1 Russian learners' development only, while the L1 English learners, unexpectedly, seems to be prone to omit the definite inflection at initial stages. The observation of these patterns appears to be reinforced when specific NP constructions are investigated more closely. Yet, when all three data points are examined, it becomes clear that the development towards the target norm is more rapid within the L1 English learner group than within the L1 Russian learner group. This is particularly salient in the encoding of definites for the L1 Russian learners, where only minimal change occurs during the time of the data collection. In short, the behavior of the L1 Russian learners is largely predictable from the literature on L2 English article acquisition, whereas additional frameworks are required in order to explain the behavior of the L1 English learners. Finally, it is clear from the study as a whole that the multiple approaches taken in the analysis,

which includes both the semantic/pragmatic level, the discourse level, and the level of syntax, have given access to insights that would not have been obtained by one analytical approach alone.

List of abbreviations

ACC	Accusative
ADJ	Adjective
DAT	Dative
DEF	Definite
DEM	Demonstrative
F	Feminine
GEN	Genitive
INDF	Indefinite
INS	Instrumental
IPFV	Imperfective
LOC	Locative
M	Maskulin
N	Neuter
NOM	Nominative
PFV	Perfective
PL	Plural
POSS	Possessive
PRS	Present
PST	Past
REFL	Reflexive

All glossing follows the Leipzig Glossing Rules.

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1. Introduction

This study explores the interaction between L1 related effects and universals in the encoding of grammatical definiteness by L2 learners of Norwegian in retellings of *The Pear Film* (Chafe, 1980a). The retellings were written by seven L1 Russian and four L1 English learners at three data points.¹ The primary goal is to outline how the learners' mapping of the definite, indefinite, and the uninflected bare form onto the underlying semantic and pragmatic conditions that govern how these three forms are distributed, reflect their L1 background. The analytical frameworks offered by Bickerton (1981) and Huebner (1983), and Prince (1981) are combined in the data analysis in an attempt to provide as clear a picture as possible of the semantic and pragmatic variables that might have an impact on the marking of definiteness in L2 Norwegian. Finally, a set of specific NP constructions are investigated in isolation in order to get an impression of how conventionalized grammatical constructions displaying definiteness in Norwegian may affect the learners' L2.

1.1 The objective of the study

In this chapter I will provide the frameworks of the research design and agenda for the present study. First, however, I will introduce the phenomenon which is to be learned, namely the category of grammatical definiteness. The approach, inspired by Lyons (1999), aims to dissect the category step by step through the presentation of various language examples in order to finally arrive at a preliminary understanding of its meaning content, use and associated issues. In the present introduction, examples from Norwegian accompanied by English translations guide the description.

¹ "L1 Russian learners" and "L1 English learners" are here short for "learners of Norwegian with Russian as a first language" and "learners of Norwegian with English as a first language." This meaning is maintained throughout the study.

The noun phrases in bold below exhibit distinct grammatical features that also carry a difference in meaning:

- (1) Jeg snakket med **en mann** i går som fortalte meg om en ny bok om språk.
[I talked to **a man** yesterday who told me about a new book on language.]
- (2) **Kong-en** kjempet for like rettighetene for alle mennesker.
[**The king** fought for equal rights of all men.]

This difference in meaning is expressed linguistically here by the grammatical category of definiteness, realized by the articles *a* and *the* in English, but the article *en* and the suffix *-en* in Norwegian.² This meaning difference is related to the semantic/pragmatic³ category of definiteness.⁴ If we take a moment to think about the difference between (1) and (2), it becomes clear that the speaker most likely has chosen the grammatical form deliberately and means to get something across to the hearer by using the indefinite encoding in (1) and the definite in (2), namely that he/she intends to convey some information indicating whether the hearer knows which man or which king the sentences are about. In (1) it is indicated that the speaker and hearer share no information about this man, whereas in (2) it is presupposed that both the speaker and hearer know and can identify the relevant king-referent.

The effect of grammatical encoding of definiteness in both Norwegian and English on discourse becomes even clearer if we substitute indefinite encoding for the definite and vice versa:

² It is necessary to briefly comment on the notion of “article.” Lyons (1999, pp. 34–36) discusses the diachronic and synchronic status of the indefinite article in English: as in many languages grammaticalizing definiteness, the indefinite article *a* is derived from the numeral *one* (in languages such as Norwegian, the forms are in fact still identical). The argument is that the indefinite article shares too many properties with the cardinal numeral to be counted as a true article by the same means as the definite. Additionally, the indefinite article, in contrast to the definite, cannot occur with other numerals. On this basis, Lyons refers to the English indefinite article as a quasi-indefinite article and as a cardinal article. With respect to Norwegian, it may thus be asserted that the language does not possess any true article, only one quasi-indefinite article and an inflectional suffix marking definites.

³ I realize that the use of “/” is ambiguous since it may indicate both *and* and *or*. In the present context, however, the intended reading is *and*, since the grammatical category of definiteness may be said to incorporate both semantic and pragmatic aspects of meaning.

⁴ My understanding of definiteness as on the one hand a grammatical category, and on the other a semantic/pragmatic category is based on Lyons (1999) and will be outlined in more detail in section 2.4.

- (3) Jeg snakket med **mann-en** som fortalte meg om en ny bok om språk i går.
[I talked to **the man** who told me about a new book on language yesterday.]
- (4) **En konge** kjempet for like rettigheter for alle mennesker.
[**A king** fought for equal rights of all men.]

A follow-up for (3) could be: “You remember I told you about him.” This substitution of the definite for the indefinite article strongly signals that the hearer should at least be able to identify the referent correctly. Of course, the hearer might reply that he/she was not paying attention when the man in question was introduced. In that case, this man has not been established as a referent in a domain of shared knowledge between the speaker and hearer, but needs to be reintroduced in order to be identified properly by the hearer.

For the sentence in (4), the conditions for interpretation are also quite changed, and without more information (for instance, situating the utterance in a fairytale or in ancient history), the listener would most certainly ask: “Okay, but which king?” because a need for identification immediately arises by the connotations surrounding the notion of “king.” That is, normally, there is only one, if any, appropriate referent for a king to be invoked in the cultural knowledge shared between two people talking.

We could go on investigating different scenarios that emerge when adding or taking away linguistic and contextual information, but for now it suffices to say that a distinct meaning is signaled by the use of definiteness encoding in noun phrases as exemplified here for Norwegian and English, and that a correct interpretation is reached through decoding the information found in these grammatical features.

The distinction between identifiability and nonidentifiability reflects the core function of grammatical definiteness (Chafe, 1976; DuBois, 1980; Lambrecht, 1994; Lyons, 1999), and it may further be claimed that the pragmatic concept of referent identifiability is, as Lyons points out, “an element of interpretation in all language use” (Lyons, 1999, p. 278). That is, in processing a linguistic message, the hearer will automatically and necessarily make certain interpretations regarding the identifiability

of the referents involved in the information conveyed. However, it varies to what extent languages encode identifiability systematically and obligatorily by grammar. Many languages possess more or less systematic devices signaling identifiability status that do not take the form of a grammatical category. A universal tendency is found, for instance, in the interplay between given and new information and clause position, where given information tends to precede new (see section 2.4 and chapter 6). The conventional interaction between clause position and givenness status is also reflected in examples (1) and (2) above; that is, the definite NP takes a clause initial position, whereas an indefinite takes a clause final position. This universal principle functions as a relatively stable property of information structuring independent of grammatical encoding of definiteness (e.g. Trenkic, 2004).⁵ Nonetheless it is clear from the four examples above that grammatical marking overrules cues provided by clause position; that is, when the principle of given information preceding new is violated, the hearer will ask for more information or accept that the speaker is talking about something not identifiable to the hearer, instead of relying on the interpretation based on clausal position.

It is not clear, however, to what extent and how the mechanism of decoding definiteness by grammar is automatized by L2 learners with a first language that lacks grammatical encoding, that is, how easily interpretation of, for instance, contextual cues is transferred into the interpretation of grammatical cues.⁶ The same goes for the ability to adopt and internalize the production patterns of use for grammatical

⁵ *Information structure* is perhaps first and foremost associated with the structuring of constituents in a clause, but it is important to note that Lambrecht emphasizes that information structure in fact relates to a wider range of linguistic devices: “Information structure is formally manifested in aspects of prosody, in special grammatical markers, in the form of syntactic (in particular nominal) constituents, in the position and ordering of such constituents in the sentence, in the form of complex grammatical constructions and in certain choices between related lexical items. Information structure thus intervenes at all meaning-bearing levels of the grammatical system” (Lambrecht, 1994, p. 6). Prince’s model, for instance, which will be presented below, is primarily concerned with the relationship between linguistic expressions and the relative degree of givenness, and not with clause position.

⁶ Issues related to how learners without a first language system of grammatical definiteness will process and interpret this category in the L2 are addressed in Trenkic, Mirkovic, and Altmann, 2014, which will be presented in chapter 3.

definiteness. Furthermore, the complexity of the category should not be underestimated; the use of the definite and the indefinite form is also affected by factors beyond that of identifiability, such as specificity and countability. For example, a noncount noun may not be preceded by the indefinite article in Norwegian (nor in English):

- (5) Mary så **snø** for første gang i Norge.
 [Mary saw **snow** for the first time in Norway.]

In addition, what counts as identifiable is not always transparent; for instance, there is a difference between what is identifiable through the previous discourse in (6), and what is identifiable through association to other referents in discourse (7):

- (6) Mikhail lagte **en figure av snø** i går. **Snømann-en** skremte alle.
 [Mikhail made **a figure of snow** yesterday. **The snowman** scared everybody.]
- (7) Nadia leste **en skikkelig dårlig roman** i går, bare fordi hun kjente **forfatter-en**.
 [Nadia read **a really bad novel** yesterday, just because she knew **the author**.]

There are also differences in the distribution of definite and indefinite forms in different languages, reflected in, for instance, the encoding of generics, proper names, and nonreferential and nonspecific NPs. Norwegian and English largely follow the same pattern of allowing generic interpretations of the indefinite singular and plural form and the definite form, but English does not allow a generic reading of definite plurals.⁷ French and Spanish, on the other hand, permit a generic interpretation of the definite plural, but not of the indefinite plural. There are also language-specific differences related to proper names. For instance, Norwegian does not use the definite form for names of countries (8),⁸ while French does (9):

⁷ For Norwegian, Faarlund, Lie, and Vannebo (1997, p. 292) seem to sustain a view that both singular and plural definite and indefinite NPs can receive a generic reading. Others, such as Hagen (2000), emphasize singular and plural indefinite NPs and singular definite NPs as possible forms that can express genericity.

⁸ There are exceptions to this, such as *Elfenbenskyst-en* [Ivory Coast-DEF].

- (8) Russland, Tyskland, England
 (9) **La** Russie, **L'**Allemagne, **L'**Angleterre

Language-specific patterns for the distribution of definiteness encoding of NPs (for instance, in relation to specificity and referentiality) will be touched upon in chapter 5. For now, it is sufficient to establish the universal pragmatic category of identifiability as the core area for the use of grammatical definiteness. It is worth noticing, however, that in terms of the area of use for definiteness encoding, Norwegian and English seem to resemble each other more closely than do Norwegian and French.

Preliminary comparative remarks on the three languages of the present study
 Three languages are of primary interest in the following investigation: the target language to be learned, **Norwegian**, and the first languages of the learners, namely **Russian** and **English**. Norwegian and English both belong to the group of languages in the world exhibiting grammatical definiteness, while Russian falls outside it, and relies on other linguistic and contextual features such as clause position to signalize semantic/pragmatic definiteness. However, Russian does possess lexical features signaling definiteness status, such as the numeral *odin* [one], which may not receive a definite reading, and demonstratives, *étot/tot* [this/that], which are restricted to definites (more examples will be given in section 2.3 and 2.4). Mainly, however, the NP does not exhibit any clear grammatical or lexical markers of definiteness. In the examples below (10–11) taken from Ionin (2003, p.111), we see that the NP remains uninflected for definiteness even though clause position and identifiability status change:

- (10) **Koška** vbežala v komnatu
 cat.NOM ran in room.LOK
- (11) V komnatu vbežala **koška**
 in room.LOK ran cat.NOM

A Norwegian translation, or an English one, illustrates both the obligatory grammatical encoding of definiteness in Norwegian and the universal, but imperfect,

tendency displayed by the Russian examples above for preverbal NPs to be associated with given information and postverbal (subject) NPs to convey new information.

Example (12) corresponds to (10) and (13) to (11).

- | | | | | | | |
|------|----------------|-----|-------------|-----|-------------|--------------|
| (12) | Katt-en | løp | inn | i | romm-et. | |
| | cat-DEF.SG | ran | into | in | room-DEF.SG | |
| (13) | Inn | i | romm-et | løp | en | katt. |
| | into | in | room-DEF.SG | ran | a.M | cat |

Second language article/definiteness acquisition

There exists a vast body of research on the acquisition of English articles among second language learners not familiar with this category from their L1. The topic of second language article acquisition has been investigated from multiple angles and is commonly assumed to be a complex matter both linguistically and pedagogically. This complexity is mainly associated with the opacity of the articles; that is, one form maps onto several semantic and pragmatic functions, in the sense that no perfect absolute one-to-one relationship between form and function may be identified. Moreover, as pointed out in the literature, the articles in English are mostly unstressed and hence not particularly salient features of oral discourse. Previous research has put forward convincing evidence that article acquisition is especially difficult for learners whose L1 does not contain articles compared to learners whose L1 does exhibit grammatical marking of definiteness (Ionin, Zubizarreta, & Maldonado, 2008; Jarvis, 2002; Liu & Gleason, 2002; Master, 1987, 1997, 2003; Pongpairoj, 2007; Tarone & Parrish, 1988; Thomas, 1989; Trenkic & Pongpairoj, 2013). A number of studies have addressed, on a more general level, the acquisition process of learners with an L1 without articles (Austin, Pongpairoj, & Trenkic, 2015; Avery & Radišić, 2007; Butler, 2002; Chaudron & Parker, 1990; Ekiert, 2004, 2007, 2010a, 2010b; Goad & White, 2004, 2006, 2009; Hakuta, 1976; Huebner, 1983, 1985; Ionin & Wexler, 2003; Ionin, Ko, & Wexler, 2004; Leung, 2007; Parrish, 1987; Robertson, 2000; Sharma, 2005a; Thomas, 1989; Trenkic, 2004, 2007, 2008; Trenkic, Mirkovic, & Altmann, 2014; White, B., 2009; Young, 1996).

The research has thus provided solid documentation that accurate article use is a major challenge to learners with L1s that do not possess a category of grammatical definiteness. The challenge is manifested in both omission of articles and substitution of articles, but no full consensus exists as to what causes the troubles met by the learners: On a global level the main question relates to the impact of the first language as opposed to the impact of universal principles of language. More locally, it is a question of whether deviant use is first and foremost caused by semantic and pragmatic factors, by formal features associated with syntax and morphology, or by phonological properties (this topic will be further explored in section 1.3 and in chapter 3). Testifying to the complexity of the category, the evidence is also multifaceted.

Learners with L1 backgrounds not exhibiting any grammatical category of definiteness are most often compared to learners with an L1 that exhibits an article system similar to that of English, such as French and Spanish. Mostly these studies confirm that being familiar with a similar category has a facilitative effect, but errors may occur in contexts where distributional patterns diverge (see, for instance, García Mayo, 2008).

There are, however, few studies addressing article acquisition in a second language that expresses grammatical definiteness partly with free articles and partly by inflection, such as the Scandinavian languages. Axelsson (1994) and Nyqvist (2013, 2014, 2015), and Jin, Áfarli, and van Dommelen (2009) are exceptions studying L2 Swedish and L2 Norwegian respectively. More precisely, most studies seem to involve a target language that expresses definiteness with articles, but not with inflection (these works will be presented in more detail in chapter 3).

The role of the type of grammatical encoding in the target language is therefore still rather underexplored (this topic will be addressed further below). To what extent may learners still benefit from the categories in their first language when the encoding devices diverge? Will learners not familiar with any obligatory encoding from the first language experience the same challenges regardless of the type of encoding?

An additional variable of increasing value pertains to the learners' knowledge of languages other than the target language and the first language. The body of research pointing out that transfer may involve the interaction of all previous language knowledge possessed by the learners is increasing (e.g., Cenoz, Hufeisen, & Jessner, 2001a; Ringbom, 2007, see also section 1.4 in the present study). Cenoz, Hufeisen, and Jessner emphasize the increasingly strong position of English in the world as a central accelerator of third language acquisition. They write:

From a sociolinguistic perspective, the spread of English in the world, the increasing mobility of the world population and the recognition of minority languages have resulted in social and educational situations in which learning more than two languages is not exceptional. (Cenoz, Hufeisen, & Jessner, 2001b:1)

In the present context, it is important to note that all the L1 Russian learners report that they possess knowledge, although of variable proficiency, of a [+ART] language. Six out of seven report this language to be English. The present study does not test directly the possible impact of previous knowledge of a [+ART] language. Yet, the interaction between L1 transfer and transfer from English is addressed indirectly by assuming that if the knowledge of English exerts a stronger influence on the encoding of definiteness in their L2 (L3) Norwegian than do the L1,⁹ the effect would be reflected in the establishment of similar models of definiteness and resembling development in the language produced by both the L1 English and the L1 Russian learners (see sections 1.4, 3.6 and 4.3.1).¹⁰

Theoretical premises for the study of L2 definiteness acquisition

The present study compares the effect of the L1 and the effect of universal principles of discourse in the encoding of definiteness in Norwegian as a second language among

⁹ Even though Norwegian may, strictly speaking, be the L3, or even the L4, for many of the participants in the present study, I will continue to refer to Norwegian as the L2 of the study, since the learners are in fact currently in a process acquiring this language.

¹⁰ Although anecdotal, through my own teaching experience of L1 Russian learners of Norwegian in Moscow where most students also studied, or had studied, English and possibly also other languages, my impression is that even though the learners have received EFL instruction (English as a foreign language), this does not necessarily compensate their challenges with the encoding of definiteness in Norwegian.

Russian and English learners. Russian, as stated above, does not possess a grammatical category that encodes *identifiability*. Even though Norwegian and English encode identifiability by grammatical definiteness, the linguistic realizations of the category are not fully identical first and foremost because Norwegian is a three-gender language with indefinite articles, but definite inflectional forms corresponding to each gender.

- (14) Bank-**en** konfiskerte hus-**et**, hytt-**a** og bil-**en**.
 bank-DEF.SG.M confiscated house-DEF.SG.N cabin-DEF.SG.F and car-DEF.SG.M

[The bank confiscated the house, the cabin and the car.]

But despite formal differences, the mapping of the grammatical category onto core pragmatic and semantic contexts is, as seen above, largely identical in Norwegian and English.

In the tradition of research on L2 English articles (as well as in child L1 acquisition), there has tended to be a focus on the relationship between the articles and the semantic/pragmatic content they encode. For instance, a major question that has been addressed pertains to the encoding of semantic/pragmatic aspects of the definiteness category at different stages of development. Another trajectory pertains to the discourse universals, also relating to the pragmatic level, which holds that learners will model their encoding of givenness based on communicative needs and communicative economy, even though these might diverge from the target model. Both approaches aim to describe and explain deviant patterns, that is, how and why learners omit and misuse the articles. On the basis of previous research, it seems uncontroversial to claim that the grammatical structure of the L1 influences the starting point and development of the L2 in one way or another (L1 transfer and cross-linguistic influence is the topic of section 1.4). However, an unresolved issue is to what extent it may be assumed that the predictions and hypotheses from research on both L1 and L2 acquisition of English, and other languages realizing grammatical definiteness by

articles, are also valid for languages displaying definiteness marking partly by articles and partly by inflection.

On the whole, as stated above, there are few studies that have investigated article and definiteness encoding in a Scandinavian L2, and it has also been questioned whether extrapolating from studies on definiteness acquisition in English to languages such as Norwegian and Swedish is well-warranted. (In general, the link to studies of L2 English articles is weak in most L2 Scandinavian definiteness studies.) The rationale behind such a position is that Scandinavian languages display a much more complex system of noun phrase inflection in its requirement for gender, number, and definiteness agreement (Axelsson, 1994).¹¹ Yet, many of the findings reported in studies of a Scandinavian L2 are in fact highly consistent with those documented in studies of L2 English. Examples such as delayed acquisition of the indefinite article and overgeneralization of the definite form for learners without an L1 encoding definiteness are repeatedly reported in studies on L2 English and also documented in L2 Swedish (and L1 acquisition studies of Norwegian and Swedish) (see Axelsson, 1994; Nyqvist, 2013 for L2 Swedish, and Anderssen, 2005; Kupisch, Anderssen, Bohnacker, & Snape, 2009; Svartholm, 1978, for L1 Norwegian and Swedish). The relatively significant body of overlapping findings, as well as the shared understanding that grammatical definiteness in general has as its primary purpose to encode identifiability amplify the value of building on analytical models and theoretical frameworks that encourage comparison. ESL (English as a Second Language) research on articles today is the result of continuous research conducted over a time span of about 40 years, and may most certainly offer valuable insights also for the acquisition and use of grammatical definiteness in L2 Norwegian.

¹¹ Jin, Åfarli, and van Dommelen (2009) are an exception where two well-known hypotheses from the generative school are tested on Norwegian L2 data (see section 3.5 for a summary of this research).

The theoretical models in the present study

In the present study, two models of analysis are employed in order to explore the encoding of grammatical definiteness in L1 Russian and L1 English learners' L2 Norwegian through a specified period of time. The first model builds on Bickerton's (1981) two binary semantic/pragmatic primes, namely the semantic concept of *specificity* and the pragmatic relation *presupposedness*.¹² The combinations of these two binary categories enabled a general description of possible article distribution patterns. Bickerton's main focus was on the development of Creole languages. In Creoles, article systems generally seem to be restricted to specificity,¹³ and therefore Bickerton concluded, in line with several researchers in child L1 acquisition, that the universal category of specificity is more deeply rooted in human language ability than is presupposedness. (This issue will be elaborated in chapters 3 and 5.) Huebner (1983) adopted Bickerton's model, which came to be known as the *Semantic Wheel of Noun Phrase Reference*, into SLA. His pioneer study of Ge led to a series of subsequent investigations, rendering the notions of [±specific reference] and [±assumed hearer knowledge] mainstream concepts applicable to the description of both target and learner language article systems; that is, the model may be applied in order to detect and analyze systematic discrepancies between the target and the learner language. The universal character of the inventory of the Semantic Wheel of NP Reference also enables its application to Norwegian. The model will be presented in more detail in chapter 5, but the chief argument for its appropriateness is the ability to encompass and distinguish between different types of NP reference through the underlying semantic and pragmatic content, which also ensures universal applicability.

The second model applied in the present study, put forth by Prince (1981), pertains to the discourse level, and how information is conveyed between speakers. The model,

¹² The understanding of presupposedness as a pragmatic concept is related to the conditions under which presupposedness arises, namely in the communication between speaker and hearer.

¹³ Here it is important to be aware of the fact that presupposedness exceeds the area of specificity first and foremost in relation to generics, which would not be encoded by articles in Creoles, but non-generic definites would be encoded.

named the *Taxonomy of Assumed Familiarity* (henceforth also referred to as the Taxonomy), attaches discourse referents' givenness status from *new* to *evoked* information to language structure. The Taxonomy has not been used very widely within SLA, but Sharma (2005a) applied the model to a nonnative variety of English spoken by Indian immigrants in California. Her application of Prince's model was motivated by the idea that the speakers would build their system of English article use on universal pragmatic principles of discourse organization rather than on the target system. This meant that the speakers would follow a principle of communicative economy along the lines of "More continuous, predictable, non-disruptive topics will be marked with *less marking material*: [...]" and vice versa as it was formulated by Givón (1984, p. 126). Although Prince's model has rarely been used explicitly as an analytical tool in SLA studies, the basic tenets of the Taxonomy, namely that degree of givenness affects linguistic structure, are frequently assumed in SLA studies of definiteness (see section 3.1.2.).

In the present study the motivation for applying Prince's model is manifold. First and foremost the model provides a complement to the Semantic Wheel of NP Reference since it allows a breakdown of categories into a more detailed and fine-grained system (see chapters 5 and 6). In fact this breakdown of categories may additionally isolate and identify various relevant grammatical NP constructions, such as partitives, possessive constructions, and genitives. Second, the model permits a closer comparative analysis of L1 Russian and L1 English learners: To what extent may differences between the two learner groups be reflected by and related to adherence to universal principles of the organization of information in discourse? Finally, but importantly, Prince's model also represents an entry to the investigation of a frequently observed tendency in ESL data for learners to omit marking when referent identification has strong support in the context. There is no reason that this observation should not be predicted to be equally valid for Norwegian. If the learners, that is, primarily learners without a grammatical category of definiteness in the L1, model their system of definiteness encoding on universal principles of discourse in L2

English, this may also be expected for L2 Norwegian (see chapter 3, sections 3.1.2 and 3.3.4, and chapter 6 for the “redundancy effect”).

1.2 The overall goals of the study

Sharma (2005a) has been central to the design of the present study. In her study, introduced above, article use in nonnative English oral data was analyzed both within the framework of Bickerton’s (1981) Semantic Wheel of NP Reference and Prince’s (1981) Taxonomy of Assumed Familiarity. The overall question asked in the study was: “If divergence [from the native English norm] is indeed occurring, do new features derive primarily from first language (L1) or from universal principles?” (Sharma, 2005a, p. 535). The main question put forth in the present study ties into Sharma’s, but adds an additional variable.

As have been outlined in the preceding section, the encoding of grammatical definiteness in L2 Norwegian is the primary object of study in the present work. It is also clear that I assume that the L1 is a major force in second language learning. On that basis, the L1 Russian and L1 English learners have been recruited in order to enable a comparison of learners with an article L1 and learners without an article L1 (often referred to as [+ART] and [–ART] learners¹⁴). To ascribe a central role to the L1 is theoretically and empirically motivated by previous research on SLA in general (see section 1.4), and by the substantial body of research conducted on L2 learners of article/definiteness languages (see chapter 3). Yet, as we will see in section 1.4 and in chapter 3, there is also a considerable share of literature addressing the influence exerted on the L2 by universal semantic and pragmatic principles associated with a category of definiteness. On that basis, I further assume that there is competition between L1 structures and universal principles in the models of definiteness encoding

¹⁴ Despite the fact that Norwegian only encodes indefinites with an article (definites are encoded inflectionally), I consider, and refer to, Norwegian as a [+ART] language, since the language possesses a grammatical category encoding the same semantic/pragmatic content as article languages such as English, French, and German.

held by the learners. Up to this point, my assumptions are very much in line with Sharma (2005a).

However, the literature is, as mentioned above, less informative in what concerns the possible impact of structural differences between languages in the encoding of definiteness. It is thus unclear to what degree the formal realization of definiteness in the target language affects the learning process, since mostly one type of definiteness encoding has been explored previously. The study of an L2 exhibiting a structure diverging from that of English invites the inclusion of a third variable addressing the effect of language-specific features of the L2. I then assume that the L2 structural realization of definiteness also will affect the L2 definiteness encoding in one way or another.

The present study aims to answer the following overarching question:

How do L1 effects, universals of discourse, and L2 specific features interact in the encoding of grammatical definiteness by learners of L2 Norwegian with Russian and English L1s?

This question will be further specified through three research questions and three predictions formulated on the basis of the literature review in chapter 3 (see section 3.6). In order to capture the competition between L1 and L2 effects, I have framed my research questions within Ringbom's (2007) approach to cross-linguistic similarities in combination with the types of L1–L2 structural relations emerging from MacWhinney's Unified Competition Model (2005), as operationalized in Tokowicz and MacWhinney (2005). These two approaches to categorization of L1–L2 relationships have helped clarify and systematize the research questions. Moreover, the possible influence of additional [+ART] languages exerted on the L1 Russian learners is accounted for through an alternative prediction. Yet, since these learners' knowledge of additional [+ART] languages is not directly tested, and their proficiency of such a language (mostly English) is reported to range from "basic" to "good," it is mainly predicted that the L1 will be the stronger force in these learners' models of definiteness in Norwegian (see also section 1.4). The research questions and

predictions are explored through the two analytical models presented above; that is, the Semantic Wheel of Noun Phrase Reference and The Taxonomy of Assumed Familiarity.

On the whole, the major findings and hypotheses from the research tradition have been important to the elaboration of the present research design, and the study sets out with an explicit aim to investigate the robustness of previous findings also when target language structures and L1 structures differ from those most frequently investigated in previous research. The present study is explorative in nature and it is designed to explore the complexity of both learner language development and the category of definiteness: The investigation starts out from a broad perspective which is gradually narrowed down in order to look more closely at specific aspects which may affect the encoding of definiteness. In the final chapter of analysis (chapter 7), reporting a post-hoc analysis, the selected units of analysis are motivated both by the literature and by observations in the present data set.

1.3 The development of a scientific study of SLA

In the following sections (sections 1.3–1.5), I will give a brief presentation of the main tendencies of SLA research from the early days of the field and up to today in order to situate the present study within a broader context. The emphasis will be on frameworks in which article acquisition has been studied, even though I also strive to provide the larger theoretical context entailing advances in L2 article research through time. Section 1.4 will address the longstanding controversies associated with the impact of the L1 on the L2, and I will discuss how different approaches to and the dispute related to transfer and cross-linguistic influence may contribute to the understanding and investigation of L2 acquisition of grammatical definiteness. The overarching goal is to frame the present study within the broader context of SLA.

The inception of SLA as a scientific discipline

In the years after the Second World War, the pedagogics of the foreign language classroom was dominated by the Contrastive Analysis Hypothesis (CAH) (see Lado, 1957). The method of contrastive analysis (CA) emphasized focusing on similarities and differences between the first and the target language, and these cross-linguistic observations were held to be predictors of the learning process and outcome. The Contrastive Analysis Hypothesis was linked to behaviorist psychology, and the goal of foreign language teaching was seen as the establishment of correct habits, that is, target language structures, and avoidance of errors. Contrastive Analysis was first and foremost directed at teaching and not learning, and with that background CA is often evaluated as “an important precursor to the discipline of SLA” (see, for instance, Nistov 2001a, p. 13). It seems fair to say that the emergence of modern SLA as a scientific enterprise first came in the wake of the linguistic revolution following Noam Chomsky’s review of Skinner’s *Verbal Behavior* published in 1957 (Chomsky, 1959).¹⁵

The impact, also on SLA, of the cognitive and linguistic revolution that took place in the late 1950s and onwards is thoroughly discussed from a critical perspective in the introduction to Atkinson’s *Alternative Approaches to Second Language Acquisition* (Atkinson, 2011a), and the present description has benefited from those insights. Chomsky’s attack on the behaviorist view of language learning happened at the same time that significant progress was reached in psychology and cognitive science, such as developments in artificial intelligence (see Atkinson, 2011b, pp. 8–9). New insights provided by first language acquisition studies initiated in the 1960s also came to inspire researchers studying adult and child second language acquisition: Brown’s

¹⁵ Even though it is a common understanding that SLA as a scientific discipline dates back to the post-war period, Block (2003) points out that this conception of SLA may be argued to be slightly ahistoric. He refers to Thomas’s (1998) perspective on the matter: “What does concern Thomas is ahistoricity on the conceptual and notional level, in short an ignorance of how present ideas evolved from ideas first formulated centuries ago” (Block, 2003, p. 11). For the present purposes, I will not pursue these issues in more detail, apart from acknowledging that our field indeed has roots that go further back in time than the Chomskyan revolution. (See Block, 2003, for further reference to Thomas, 1998).

study *A First Language* (1973), addressing children's L1 acquisition of English, documented a common order for the acquisition of a set of morphemes. As will be made clear below, Brown's work had a persistent impact on early SLA and served as a direct source of inspiration for the morpheme-order studies conducted in the 70s and 80s hypothesizing a common sequence of acquisition for all learners, and identity between first and second language acquisition (see Atkinson 2011b, pp. 9–11). The cognitivist view of language as a rule-governed, abstract phenomenon paved the way for an academic approach to second language acquisition and raised a new awareness of the mental representation of a second language at different stages, and topics such as to what extent language learning is sequential and predictable and which internal and external variables are at play were addressed.

Articles were among the selected morphemes in Brown's L1 study, but the perspective was strictly formal in the sense that the object of investigation was confined to correct and incorrect suppliance in obligatory contexts, and no overt distinction was made between the indefinite and the definite article. In general, articles were suggested to be acquired later than, for instance, plural *-s*. Both L1 and L2 morpheme-order studies can be subsumed under the rubric of *form-only* approaches to the study of the learner languages (e.g. Dulay & Burt, 1974; see also section 4.1 in the present study for a discussion).

In 1967 the narrow view entertained by CA that learner errors resulted from L1 interference was challenged by Corder. Corder published the article "The Significance of Learner's Errors" and presented the field with an analytic approach, namely "error analysis," which incorporated many of the ideas from contemporary linguistics and psycholinguistics, but through the lens of second language acquisition. Corder assumed that the learner was predisposed to follow a sequential route in the process of learning a language referred to as a "built-in-syllabus", a position reminiscent of Chomsky's nativist position towards the human ability of language acquisition. The main idea was that through the study of learners' errors, the researcher would gain access to the independent language system developing in the learner's mind. The

learners' language systems were systematic, but not necessarily by the norms and requirements of the target language.

A learner's errors, then, provide evidence of the system of the language that he is using (i.e. has learned) at a particular point in the course.... They are significant in three different ways. First to the teacher, in that they tell him, if he undertakes a systematic analysis, how far towards the goal the learner has progressed and, consequently, what remains for him to learn. Second, they provide to the researcher evidence of how language is learned or acquired, what strategies or procedures the learner is employing in his discovery of the language. Thirdly (and in a sense this is their most important aspect) they are indispensable to the learner himself, because we can regard the making of errors as a device the learner uses in order to learn. It is a way the learner has of testing his hypotheses about the nature of the language he is learning. (Corder, 1967, p. 18)

Although, as Nistov (2001a, p. 14) notes, the method of performing contrastive analysis (i.e. CA) in order to predict often came to accompany error analysis, Corder's work represented a major break with the view of errors as the result of failure to establish correct habits or non-corresponding structures between the L1 and the target language, which had been the mainstream position advocated by behaviorism and the Contrastive Analysis Hypothesis (Lado, 1957).

The next milestone came with Selinker's "Interlanguage" (1972). In fact, in her state-of-the-art article published in celebration of the 65th anniversary of *Language Learning*, Ortega (2013) maintains that the inception of "interlanguage" is the generally-perceived point of departure for modern SLA.¹⁶ The idea that the language developing in the learners' minds is an independent phenomenon that can be investigated by the same means as other natural languages was now formulated more precisely. In Selinker's words:

¹⁶ Ortega (2013, p. 2) refers to the celebration of the 40th anniversary of Selinker's article and its status as symbolizing the beginning of SLA. Atkinson (2011b, p. 11), drawing on Gass and Selinker (2001) and Thomas (2004), refers to Corder's "The Significance of Learner's Errors" as the "founding manifesto." (Consult Atkinson, 2011b, for further reference to Thomas, 2004).

...one would be completely justified in hypothesizing the existence of a separate linguistic system based on the observable output which results from a learner's attempted production of a TL norm. This linguistic system we will call 'interlanguage' (IL). (Selinker, 1972, p. 24)

Additionally, Selinker pinpointed processes of potential importance for developing the mental representations of the second language: language transfer; transfer-of-training; strategies of second-language learning; strategies of second-language communication; overgeneralization of rules (Selinker, 1972, pp. 24–25). It seems clear, though, from Selinker's original paper that his main concern was to explore and explain why most adult learners of a second language never reach nativelike competence, rather to the contrary, the interlanguage structures may *fossilize* as a direct consequence of the five processes listed above:

I would like to hypothesize that these five processes are processes which are *central* to second-language learning, and that each process forces fossilizable material upon surface IL utterances, controlling to a very large extent the surface structures of these utterances. (Selinker, 1972, p. 26) [original emphasis]

However, both a researcher and a layman would perhaps argue that those five processes may also contribute to development towards *more* targetlike structures, since, for example, both instruction and the outcome of transfer between closely related languages are commonly assumed to enhance learning.

The research in the 1970s was predominantly directed at conducting error analyses on the one hand, and investigating the correspondence between first language acquisition and second language acquisition on the other (see Atkinson, 2011b). The morpheme-order studies, briefly introduced above, argued that all learners acquired a set of morphemes in the same sequence and that the process of acquiring grammatical encoding was by and large equal in the child L1 learner and in the child and adult L2 learner (Dulay & Burt, 1974). These studies underscored the necessity of an innate language device operative in language learning in general. Articles were included in the collection of morphemes of inquiry, and the findings from Brown (1973) were largely supported: Dulay and Burt's (1974) study of L1 Spanish children's L2 English

acquisition found that articles were acquired before irregular past tense encoding and third person indicative *-s*, but still later than was the plural *-s*. The results were largely corroborated in adult L2 acquisition in a study by Bailey, Madden, and Krashen (1974). Yet, it is worth noting that, despite the relative similarity in difficulty order, in the case of articles, a difference in favor of the Spanish learners seems to be demonstrated (Bailey, Madden, & Krashen, 1974, p. 239).¹⁷

However, the morpheme-order studies were criticized on a number of grounds: for investigating a set of morphemes so different from each other that they seemed almost randomly selected, for documenting a hierarchy of difficulty rather than an order of acquisition, and for ignoring L1 effects (see Cook, 1993, pp. 31–35). The latter is the topic of Hakuta (1976). Based on a study investigating the same set of morphemes, in the L2 of a Japanese child (Uguishu), Hakuta called for a more nuanced approach to common sequences of acquisition which also took the L1 into account. His longitudinal study concluded that the patterns of article use, for instance, appeared to be severely influenced by the fact that Japanese is a [–ART] language. Also, Larsen-Freeman questioned the explanatory models of the morpheme-order studies in two articles (1975, 1976). Rather than assuming a natural order for language acquisition, she speculates that the acquisition order (or the “accuracy order” as she calls it (1976, p. 125)), may also relate to the general frequency of these morphemes in input (1976, pp. 131–134).

In spite of the methodological and theoretical criticism raised against the morpheme-order studies, it seems fair to acknowledge that these studies also provide some interesting insights into article acquisition at least at an empirical level. Even though

¹⁷ Krashen’s highly influential Monitor Model (1981) emerged in the years after the morpheme-order studies. Krashen postulated that L2 acquisition followed a natural order. The link between the morpheme-order studies and Krashen thus seems evident. However, Krashen’s model will not be presented in detail here. The reader is referred to for instance Cook (1993) and Mitchell, Myles, and Marsden (2013) for insightful treatments of the Monitor Model.

the morpheme-order studies leave many questions open as to what extent and how the L1 factor affects L2 learning of articles in English, and we do not know what a morpheme-order would be in a language such as Norwegian, it is still a testable observation that articles seem to range more or less at a mid-level of difficulty for morphosyntactic categories.

Functionalist approaches to SLA

In the 80s the discipline saw a shift in focus from studying the acquisition of isolated morphemes to studying how learners encode and get across communicative meaning. This turn in the research should be seen in relation to the development of functionalist linguistics.¹⁸ A functionalist view of language means that language is first and foremost a tool for communication and not a set of abstract rules, and that language acquisition is a mapping of form-function relations. This position is reflected in the theoretical construct underlying, for instance, Huebner's study of Ge (1983) and later in the ESF project studying untutored second language learning among adult immigrants to several European language communities (Klein & Perdue, 1992, 1997). Both Huebner (1983) and Klein and Perdue's work (1992) is highlighted as mirroring functionalist linguistics in SLA by Mitchell, Myles, and Marsden (2013). Klein and Perdue's work in the 1990s provided a solid empirical foundation for the description of a Basic Variety, namely a functional language description of a rudimentary second language inventory. This shift in focus appears as a clear prerequisite also for the development of more in-depth studies of article acquisition. Indeed, a substantial collection of nongenerative L2 article acquisition studies can be said to originate in this tradition (see chapter 3.1). The challenge of mapping form to function and meaning appears as very salient in the case of definiteness encoding.

¹⁸ Michell, Myles, and Marsden (2013) mention pioneer work by Givón (1979), Halliday (Halliday & Matthiessen, 2004), Langacker (1987), Lakoff (1987), and Talmy (2000, 2008). See Michell, Myles, and Marsden (2013) for further references to these works.

Universal Grammar in SLA

Mitchell, Myles, and Marsden (2013) report on the development and acceleration of a branch of research focused on incorporating the ideas of Chomsky's Government and Binding Theory into SLA in the 80s. The generative research agenda was set mainly on investigating whether or not the principles and parameters of Universal Grammar were accessible also to second language learners. In more general terms, White summarizes the position of UG in second language acquisition: "The question of whether UG mediates L2 acquisition, and to what extent, has been much debated since the early 1980s" (White, 2003a, p. 19). Different positions regarding UG and second language acquisition will be presented in more detail in chapter 3, since the acquisition of grammatical definiteness and articles has been subsequently studied from this perspective.

From Mitchell, Myles, and Marsden's (2013) bird's eye perspective of the development of the research SLA field, it seems clear that the 1980s stand out as a very important period for establishing research goals and developing theories. According to them, the major achievements and perspectives from the 80s have been subsequently continued and refined from then on and to the present day. The topics and approaches from this period have thus for a long time kept defining mainstream SLA. Mitchell, Myles, and Marsden (2013, pp. 49–50) summarize these topics and approaches as the role of internal mechanisms, the role of the first language, the role of psychological variables, the role of social and environmental factors, and the role of input. The present study is mainly concerned with the first two aspects listed.

The Social Turn and recent trends in second language learning

In spite of the robust advances made in the 80s, in the late 1990s a trend began that would destabilize the ubiquitously accepted core tenets of SLA, and strong cognitivist SLA from then on has been increasingly challenged mostly by socially oriented researchers in applied linguistics and SLA (Firth & Wagner, 1997; Block, 2003, *The Social Turn*). I quote at some length from the introduction to Firth and Wagner's landmark article:

This article argues for a reconceptualization of Second Language Acquisition (SLA) research that would enlarge the ontological and empirical parameters of the field. We claim that methodologies, theories, and foci within SLA reflect an imbalance between cognitive and mentalistic orientations, and social and contextual orientations to language, the former orientation being unquestionably in the ascendancy. This has resulted in a skewed perspective on discourse and communication, which conceives of the foreign language learner as a deficient communicator struggling to overcome an underdeveloped L2 competence, striving to reach the “target” competence of an idealized native speaker (NS). (Firth & Wagner, 1997, p. 285)

Firth and Wagner’s article represented the onset of what has been referred to as “the Social Turn” in SLA, which encouraged researchers to look beyond the well-established theoretical constructs of cognitivist SLA and focus on what the learner actually does and achieves with his/her “deficient” L2 (see Firth & Wagner, 1997, p. 296). In their view, the lens of mainstream cognitivist SLA was too narrow to capture the complexity of L2 learning (see also Block, 2003, pp. 3–4).

However, most critical to the present context is perhaps another change happening in parallel to that of “the Social Turn,” also rooted in skepticism towards mainstream cognitivist SLA, driven by established and well-acclaimed scholars such as Diane Larsen-Freeman. This criticism primarily attacked innateness and the cognitivist and static view of language and language learning, but still maintained a focus on the linguistic and cognitive aspects of language learning. Larsen-Freeman’s work on the adaptation of Complexity/Chaos Theory into SLA (1997, 2011) may provide an entry to the new developments and directions of SLA. In her contribution to Atkinson’s anthology (2011a), Larsen-Freeman distance herself from her own past as a cognitivist SLA researcher:

In contrast to my own (generative) training in linguistics, I came to understand language as a complex adaptive system, which emerges bottom-up from interactions of multiple agents in speech communities [...], rather than a static system composed of top-down grammatical rules or principles. (Larsen-Freeman, 2011, p. 49)

The reasons for taking such an explicit position against the research in which she herself had played an important part seem to be found in a distrust of the practice of studying the mind in isolation: “While I certainly endorse a role for cognition in SLA, over time I became disenchanted with the limitation of this focus” (Larsen-Freeman, 2011, p. 48). In her alternative, modelled after Complexity Theory, language is, as evident from the quote above, described as a *complex adaptive system*,^{19, 20} *emerging*²¹ from the dynamic interaction of multiple agents.

Both the social turn and the rejection of strong cognitivism have led to serious question-raising concerning the underlying assumptions of a view of the language learning process, which presupposes, for instance, the independence of mind and the ability to study complex processes by their parts in isolation (see Atkinson, 2011b). Furthermore, dichotomies such as native vs. nonnative speaker, as well as the abstract ideals of learner and interlanguage, are being deconstructed and their appropriateness and contribution to the field are being challenged (e.g. Firth & Wagner, 1997; Kramsch & Whiteside, 2007; see also Ortega, 2011). Instead the discipline has witnessed a renewed interest in the social environment on the one hand, and in more “neo-behaviorist”²² and connectionist approaches on the other (that is, approaches opposing the idea that language learning is primarily an abstract, predetermined

¹⁹ The view of language as a *complex adaptive system* is shared by a number of researchers, and is generally abbreviated as CAS (The “Five Graces Group”: Language Is a Complex Adaptive System: Position Paper, 2009).

²⁰ In her first publication on SLA and Chaos/Complexity theory (Larsen-Freeman, 1997), the notion *complex nonlinear system* is applied.

²¹ Larsen-Freeman (2015b) refers to van Geert (2008) and defines *emergence* as “‘the spontaneous occurrence of something new’ (van Geert, 2008, p. 182) that arises from the interaction of the components of a complex system ...” (Larsen-Freeman, 2015b, p. 227). Importantly, an effect arises as a cause of the interaction of several parts. *Emergentism* thus views change as dynamic and nonlinear processes. (See Larsen-Freeman, 2015b, for further reference to van Geert, 2008).

²² I realize that the term “neo-behaviorist” may invoke negative associations. That is not my intention. The intention is simply to point out that today’s theoretical development incorporates and combines ideas from behaviorism, such as statistical learning, and insights from cognitivism, such as a domain-general, rational cognitive mechanism. N. Ellis (2007) complains that connectionist approaches to SLA are sometimes the object of unwarranted criticism for being behaviorist. With respect to his approach to SLA, The Cognitive-Associative CREED combines associative (statistical) learning, which rightly stems from behaviorism, with cognitive abilities for learning generally recognized by cognitive psychology (Ellis, 2007, pp. 77, 85).

enterprise). In the final paragraphs of this section I will focus on the new psycholinguistic trends in language learning.

As pointed out by Ortega (2013, p. 4), the significance of insights from psychology and cognitive science, such as connectionism²³ and emergentist approaches, has accumulated in SLA from the late 1990s through the present.²⁴ For instance, the number of scholars who hold an emergentist view of language development and draw on the basic tenets of a usage-based approach to linguistics seems to be growing (e.g., De Bot, Lowie & Verspoor on “Dynamic System Theory,” 2007; The “Five Graces Group,” 2009²⁵). Contrary to the generative school, usage-based linguists also view language and language development as a consequence of their systematic *use* both in society and in the individual, and not as an abstract innate rule-system: “The structures of language emerge from interrelated patterns of experience, social interaction, and cognitive mechanisms” (the “Five Graces Group,” 2009, p. 2).

The “Five Graces Group” describes a CAS (Complex Adaptive System) by the following features:

- (a) The system consists of multiple agents (the speakers in the speech community) interacting with each other.
- (b) The system is adaptive; that is, speakers’ behavior is based on their past interactions, and current and past interactions together feed forward into future behavior.
- (c) A speaker’s behavior is the consequence of competing factors ranging from perceptual

²³ *Connectionism* is a type of language modeling, often modelled as computer simulations, that assumes that language develops as an emergent process in a network of simple units. In relation to SLA, Ellis and Wulff writes:

Connectionism is one strand of research in SLA that seeks to investigate how simple associative learning mechanisms ... meets the complex language evidence available to a learner in their input and output. The term connectionism reflects the idea that mental and behavioral models are in essence interconnected networks of simple units (2015, p. 80).

Furthermore, Loewen and Reinders emphasize that in SLA connectionism relates to usage-based approaches to language and describes how input and input reiteration leads to establishment and strengthen the connections between units of language (“words”) and the interlanguage system (2011, pp. 38–39).

²⁴ I believe MacWhinney’s Competition Model (Bates & MacWhinney 1989; MacWhinney, 2005) would also fit into the set of approaches mentioned by Ortega (2013).

²⁵ The “Five Graces Group” consists of Clay Beckner, Richard Blythe, Joan Bybee, Morten H. Christiansen, William Croft, Nick C. Ellis, John Holland, Jinyun Ke, Diane Larsen-Freeman, and Tom Schoenemann. The paper referred to came about after a work shop in Santa Fe in 2007, and laid the ground for the rest of the works published in a special issue in celebration of the 60th anniversary of Language Learning.

mechanics to social motivations. (d) The structures of language emerge from interrelated patterns of experience, social interaction, and cognitive processes. (The “Five Graces Group,” 2009, p. 2)

Language thus does not appear in isolation as a rule-governed independent system; rather, the language system develops gradually in interaction with the environment. In contrast to Universal Grammar, a usage-based approach does not presuppose any boundary between lexis and syntax; on the contrary, language learning is not constrained by the linguistic sub-levels. Furthermore, it is assumed that human knowledge of language is dependent on domain-general cognitive mechanisms, rather than being domain-specific (see The “Five Graces Group,” 2009). In sum, the criticism of strong cognitivist SLA seems to be fundamental and rooted in its limited ability to represent the central concepts of language learning (see, for instance, Ortega, 2005b, for a discussion).

The above-mentioned new directions of SLA theory²⁶ clearly dissociate from the theoretical constructs of generativism and will perhaps lead to an augmented distance between non-generativist and generativist SLA studies of grammatical definiteness. Chapter 3 testifies to a persistent tradition of presupposing a rule-governed learning mind and a cognitivist view of the learning process in article acquisition studies. Only recently have studies clearly drawing on emergentist and connectionist models to language acquisition been published (e.g. Trenkic & Pongpairoj, 2013; Trenkic, Mirkovic, & Altmann, 2014; Austin, Pongpairoj & Trenkic, 2015). However, I believe notions such as competition and processing will become increasingly important to the future study of L2 article/definiteness acquisition, and that more scholars will adopt a usage-based perspective on their research.

²⁶ And also the increased focus on multilingualism (e.g., Ortega, 2013 for the bi/multilingual turn in SLA; May, 2014).

1.4 The impact of transfer and cross-linguistic influence

As stated in section 1.1, the present study assumes that the L1 is a major force in learning an L2, and in that perspective I provide a brief survey of the concept of transfer and cross-linguistic influence in SLA from the field's inception to the present-day views. In the second part of the section, I explore the meanings and uses of transfer and cross-linguistic influence in L2 article/definiteness studies.

The early debates

The controversy associated with the role of the first language versus the role of universal learning sequences and also language universals throughout the history of SLA is of particular interest to the present study, since it is dealing with the acquisition of a grammatical category familiar to one group of learners but not to the other, as it is either present or absent in the first language.²⁷ As noted above, during the time of Contrastive Analysis an undifferentiated and mostly negative view of the L1 as a predictor of the L2 learning outcome dominated the practice of teaching. The first language was regarded as something that *interfered* with the L2. In short, linguistic contrasts (and similarities) between the first language and the target language predicted and determined the learning process. However, the predictive power of Contrastive Analysis was soon proved to have fragile empirical support; not all differences between the first and the second language actually seemed to lead to errors, and likewise, not all similarities resulted in a successful learning outcome (see, for instance, Ortega, 2009, pp. 31–32).

Studies conducting error analysis on L2 production data helped to uncover CA's failure to provide a general account of the L2 learning process (see Ortega, 2009). In error analysis, errors were seen as a valuable source for gaining insights into the learner's internal language system. Even though the all-encompassing role of the L1

²⁷ The notion of "familiar" here means "familiar from the L1," since we know that also the L1 Russian learners can be assumed to have some previous experience with grammatical definiteness in another language.

was considerably downplayed in Error Analysis, Corder did not reject a place for cross-linguistic influence or L1 transfer; rather, he positioned himself towards the basic tenets of the Contrastive Analysis Hypothesis in the following way:

It will be evident that the position taken here is that the learner's possession of his native language is facilitative and that errors are not to be regarded as signs of inhibition, but simply as evidence of his strategies of learning. (Corder, 1967, p. 19)

L1 transfer also occurs among the five processes emphasized in Selinker's "Interlanguage" (1972), but, as pointed out in section 1.3, primarily as a process hindering nativelike language skills in the L2.

The theoretical construct underlying the morpheme-order studies, however, motivated a strong move in the opposite direction to highlight universality, leaving no place for L1 transfer, either positive or negative. Second language acquisition was regarded as a uniform process sharing basic features with first language acquisition (known as the Identity Hypothesis and the Creative Construction Hypothesis, see Cook, 1993). All learners were thus generally hypothesized to follow the same universal learning paths regardless of their L1:

[...] most of the syntactic errors Spanish-speaking children make in English are the result of the developmental linguistic rules children construct to generate the language, rather than the result of first language habits. (Dulay & Burt, 1974, p. 256)

The Contrastive Analysis Hypothesis and the Identity Hypothesis (e.g., Dulay & Burt, 1974) exemplify radical options in each direction.²⁸ A more nuanced picture was, however, soon established in terms of examining the *whats*, *hows*, *wheres* and *whys* of transfer, as Selinker put it (1992, p. 173),²⁹ and most scholars ascribe a role to the first

²⁸ Note also how the rejection of behaviorism and CAH is spelled out in a very direct fashion in the quote from Dulay and Burt above through their use of (negatively loaded) expressions such as "first language *habits*" [my emphasis].

²⁹ Nistov (2001a, p. 28) added a *when* to Selinker's list. The *when* of transfer also represents an appropriate question in terms of grammatical definiteness, since we know that all learners improve and get more targetlike with time (see Trenkic & Pongpairroj, 2013).

language (and to other previously acquired languages), transfer, and universal features of learning.

Below, I will survey some major developments in the research on cross-linguistic influence and some approaches to transfer that may inform the present investigation.

Interlingual identification

An important aspect of cross-linguistic influence relates to the concept of “interlingual identification,” that is, the learners’ conscious or subconscious perception of transferability based on resemblance or differences between languages. In his insightful survey of research on cross-linguistic influence in *The Handbook of Second Language Acquisition* (Doughty & Long, 2003), Odlin notes that “much of what is called cross-linguistic influence today depends on the individual judgment of language learners and bilinguals that there exist certain cross-linguistic similarities” (Odlin, 2003, p. 443). It is further emphasized that the distance between languages affects the inferences drawn with regard to interlingual identification (Odlin, 2003), a perspective associated chiefly with Ringbom’s approach to cross-linguistic influence in relation to studies of L1 Swedish and L1 Finnish learners of English (see Ringbom, 2007) and Kellerman’s notions of *psychotypology* and *transferability* (Kellerman, 1983).³⁰

To Ringbom the driving force for transfer in the L2 learning process is the learners’ perception of similarity, rather than difference. For the present purposes, interlingual identification comes across as particularly relevant to the L1 English learners, since it could be expected that learners who correctly identify the correspondence between Norwegian definite and indefinite forms and the English articles will to a large extent be able to benefit from that in their L2 Norwegian. However, predicting that interlingual identification will be made and followed may be too hasty: Kellerman

³⁰ Psychotypology refers to how the learners perceive the distance or closeness between languages, while transferability is directed at the learner’s perception of his/her L1. If a structure is held as infrequent, irregular, etc., the transferability is low.

(1977, 1979)³¹ includes perspectives on interlingual identifications between Dutch and English that testify to a complexity associated with this topic. By and large, Kellerman discovered that learners sometimes fail to benefit from cross-linguistic similarities because they believe that the distance between the source and target language is larger than it actually is; that is, they do not trust the transferability of the L1 feature. A particular case, referred to in Kellerman (1979), pertained to prototypical and non-prototypical uses of the verb “breken,” where the learners were reluctant to transfer the non-prototypical usage pattern. Even though there is a danger that the L1 English learners will mistrust their own perception of similarity, based on perceived language closeness and distance, we would still expect the L1 English learners to be more prone than the L1 Russian learners to make interlingual identifications and rely on them.

Thinking for Speaking

Not all approaches to cross-linguistic influence emphasize subjectivity to the same extent that the underlying tenets of interlingual identification do. Slobin’s *Thinking for Speaking* (see Slobin, 1991, 1996), originally put forth in relation to first language acquisition, is less concerned with the impact of subjective interlingual identification than with how different languages compel their speakers to encode different aspects of, for example, events and actions. Language-specific categories force the language users to attend to specific features of reality when coding a message. Grammatical definiteness, for instance, requires the speakers to pay attention to the identifiability status of the referent in question in order to select the correct encoding.

Slobin does not claim that the language categories of the L1 determine human thought: the categories of language only affect the process of conceptualizing an utterance. That is, they govern what the speaker needs to notice in order to meet the requirements for completing an appropriate utterance. *Thinking for Speaking* thus relates to the level of planning and conceptualizing an utterance. Slobin makes an important distinction

³¹ Kellerman (1977) also addresses the issues of interlingual identification and the learners’ perception of transferability, but only the 1979 paper mentions “breken.”

between categories that may be perceived directly, such as plurality, and “categories of thinking for speaking.”

Distinctions of aspect, definiteness, voice, and the like, are, *par excellence*, distinctions that can only be learned through language, and have no other use except to be expressed in language. They are not categories of thought in general, but categories of thinking for speaking. (Slobin, 1996, p. 91)

It is the categories of thinking for speaking that are difficult to retrain (Slobin, 1991). Consequently, the L1’s thinking for speaking may have a critical effect on second language learning:

In brief, each native language has trained its speakers to pay different kinds of attention to events and experiences when talking about them. This training is carried out in childhood and is exceptionally resistant to restructuring in adult second-language acquisition. (Slobin, 1991, p. 23)

From Slobin’s framework, we can expect grammatical definiteness to be particularly susceptible to L1 transfer and also particularly difficult to acquire for learners not familiar with the category from the L1.³² Paraphrasing Slobin: an L1 without a grammatical system encoding definiteness has thus *not* “trained its speakers to pay attention to” the relevant semantic and pragmatic features constituting that category.³³

Methodological issues in transfer research

Recently, attention has also been directed to methodological aspects of investigating cross-linguistic influence. The phenomenon of L1 transfer is multifaceted, as seen above, and has suffered from a lack of theoretical and methodological consistency. In

³² In fact, if we read Slobin thoroughly, what seems to be emphasized is the difficulty of *unlearning* to encode certain distinctions. For instance, this implies that L1 Norwegian learners of Russian will show a propensity to force an encoding of identifiability onto their L2 Russian, although this would break with the target norms.

³³ Interestingly in relation to this context, Trenkic (2002a) reasons that while speakers of article languages are entrusted the role of encoding the identifiability status of the referents in question, which requires taking into account the hearer’s assumed familiarity with them, in non-article languages the task of inferring the identifiability status is to a larger extent left to the hearer alone.

his oft-cited article on methodological rigor in studies of transfer, Jarvis summarized the status of cross-linguistic influence in the following way:

Perhaps no area of second language research has received as much attention and remained as elusive as the influence of the first language (L1). Despite the myriad studies that have been conducted in this area over the past four decades, there still remains a surprising level of confusion in the field concerning when, where, in what form, and to what extent L1 influence will manifest itself in learner's use or knowledge of a second language. (Jarvis, 2000, p. 246)

Until now, L1 influence has been treated largely as a you-know-it-when-you-see-it phenomenon, and although most researchers may indeed recognize L1 effects when they see them, the lack of consensus concerning what L1 influence is and how it should be investigated may mean that different researchers have not seen (or even looked for) the same effects. (Jarvis, 2000, p. 246)

Jarvis's main concern was to call for a firmer methodological framework guiding the inquiry of cross-linguistic influence. Central to his proposal is the requirement of comparing different L1 groups, and the researcher is encouraged to document three types of evidence: *intergroup heterogeneity*, *intragroup homogeneity*, and *L1–interlanguage congruity* (Jarvis, 2000). A fourth type of evidence has been added later, namely *intralingual contrasts*, referring to a kind of evidence available when language material that has counterparts in the L1 and the target language, and language features not having corresponding structures in the source and target language, lead to differences in the L2 use (Jarvis, 2010).

Jarvis's fourth type of evidence motivates a hypothesis that there will be a difference in the use of indefinite and definite NPs in the L2 Norwegian of L1 English learners. As seen in the introduction, indefinite NPs in both languages are encoded by articles, but only Norwegian encodes definites by inflection, which implies that at the formal level the categories of grammatical definiteness in English and Norwegian are only partly overlapping. If this distinction is reflected in the L1 English learners' use of Norwegian, we may argue that this is caused by cross-linguistic influence. However, grammatical definiteness is, as seen above, considered a thinking-for-speaking

category by Slobin (1996), and in more general terms a category relating to semantics and pragmatic discourse level features, which suggests that its complexity exceeds the formal level.

Conceptual transfer

Jarvis has also made significant contributions to the theoretical understanding of transfer, particularly through the elaboration of a notion of *conceptual transfer* (Jarvis, 1998; Jarvis & Pavlenko, 2008). In their volume on cross-linguistic influence, Jarvis and Pavlenko write:

The aim of the present chapter [chapter 4 on conceptual transfer] is to point to another potential locus of transfer: similarities and differences in the conceptual categories corresponding to lexical and grammatical categories of the source and the recipient languages. (Jarvis & Pavlenko, 2008, p. 112)

Conceptual differences in the lexicon are illustrated by how members of the category *cup* in English and Russian (*čaška*) differ: paper and plastic cups are, in fact, referred to as *cups* in English, but as *glasses* (*stakany*) in Russian (Jarvis & Pavlenko, 2008, p. 121). Jarvis and Pavlenko's (2008) extensive work on cross-linguistic differences has helped clarify the notion of conceptual transfer, in addition to having widened the general concept of transfer and elucidated new aspects of L1 effects.

Conceptual transfer and thinking for speaking touch the area of linguistic relativity, even though neither of them attributes a determining role to language over thought. Odlin (2003, pp. 464–467) discusses the historical traces of conceptual transfer in linguistic relativism as it is known through, for instance, the Sapir-Whorf Hypothesis, and he expresses a slight skepticism towards the operationalization of a “conceptual level” and furthermore towards “how ‘deep’ transfer may run through those levels” (Odlin, 2003, p. 466). Jarvis (2011a) identifies Odlin's question as one of the “biggest” in relation to conceptual transfer, and he further specifies it by asking, “That is, is it a relatively shallow phenomenon occurring only in processes of micro-planning, as

Levelt (1989) has suggested,³⁴ or does it run even deeper, perhaps even in areas of general cognition that have been of interest to relativists?” (Jarvis, 2011a, p. 7).³⁵

Third language acquisition and transfer

In section 1.1, we briefly introduced the research domain of cross-linguistic influence in third language acquisition. In the present context, this topic is particularly relevant since all the L1 Russian learners report that they possess some knowledge of a [+ART] language. An overall prerequisite for Ringbom’s (2007, pp. 78–79, see also sections 1.4 and 3.6) approach to cross-linguistic influence is that transfer is driven by the learners’ perception of similarity. In relation to third language transfer, he states that if such similarity is more salient between L2 and L3 than between first and target language, the additional language may represent an equally relevant source of transfer as the first language.

A study by Odlin and Jarvis (2004) examined the influence of Swedish in a set of lexical items in L1 Finnish learners’ written English. Based on this study, the authors identified three conditions that can be relevant to transfer from one second language to the next: psychotypology (the perceived closeness between the languages was assumed to promote transfer from Swedish to English rather than from Finnish to English), the learners’ level of Swedish proficiency played a role, and, finally, structures related to Swedish appeared to be overgeneralized also to contexts beyond those licenced by the source language (Odlin & Jarvis, 2004, pp, 138–139).

Furthermore, Cenoz (2001, p. 10) mentions *typology, proficiency, age, mode, and recency* as important factors promoting L2–L3 language transfer. (Proficiency concerns both target language and the additional language (see Odlin & Jarvis, 2004).) From Odlin and Jarvis’s list, we may further add *order of acquisition*. They refer to a

³⁴ Moreover, the level of utterance planning or conceptualization of utterances is also the level relevant to Slobin’s Thinking for Speaking.

³⁵ Gujord (2013) provides an insightful discussion of these issues in relation to a study of Somali and Vietnamese learners’ past tense encoding in Norwegian.

study by Dewaele (1998) who found that English as an L2 influenced L3 French, whereas L2 French was not influenced by L3 English (Odlin & Jarvis, 2004, p. 125). Ringbom notes that most evidence has been gathered from the area of lexis (2007, p. 78). The present Pear Stories also exhibit isolated examples of lexical transfer from English. A very salient example is the use of “kock” referring to *hane* [cock] in Ru-5-3 (paradoxically, Ru-5 is the only participant not reporting any knowledge of English). Moreover, traces of foreign (presumably latin)³⁶ orthography are detectable in some of the L1 Russian learners’ narratives. For instance, lexical forms like “cycle” and “sycle” have replaced the Norwegian noun *sykkel* and the verb *sykle* on several occasions in Ru-5-1 and Ru-7-1.

Transfer and definiteness

The literature on second language article and definiteness acquisition, which will be presented in detail in chapter 3, is on the whole rather consistent in assigning a role to the first language. Trenkic and Pongpairaj (2013, p. 152) write: “Thus, L2 users from L1 backgrounds without articles are consistently shown to experience more problems in L2 article use than their peers from L1 backgrounds with articles ...”³⁷ Hence, the body of research by and large supports a view that having an L1 with articles/definiteness entails a facilitative effect in learning a [+ART] L2, whereas learners whose L1 lacks such a grammatical category are repeatedly shown to experience larger challenges. These challenges are often documented as errors, in terms of omitted articles and substituted articles. Chiefly, at an overarching level a hypothesis holding the L1 as an important variable in the L2 acquisition of articles is uncontroversial. However, the picture is more nuanced if one interprets and investigates transfer in its most direct sense, that is, as transferred linguistic elements from the L1, and not just a corresponding absence of features in the L1 and the L2.

³⁶ However, it should be noted that the phoneme /s/ is spelled as “s” in Norwegian, but as “c” in the Russian Cyrillic alphabet.

³⁷ However, Trenkic and Pongpairaj underscore that the L1 effect also interacts with the learners’ general development in proficiency: with time all learners improve and the traces of the L1 will be less salient.

According to Odlin (2003) transfer is a phenomenon that may manifest itself in all the subsystems of language, from phonology to rhetoric. Ortega also emphasizes that transfer is relevant to all levels of language:

Another fact about L1 transfer that is well worth remembering is that crosslinguistic influences go well beyond form–form and form–function correspondences, and that L1 knowledge across all layers of language can influence L2 solutions at the level of form, meaning and function. (Ortega, 2009, pp. 46–47)

In the present study, the language material we are dealing with is primarily NP morphology realized in the written mode. However, it is evident from the introductory sections that the category is more complex than that, since its function is clearly related to both the semantic and the pragmatic level of language. Furthermore, we have two groups of learners with different L1s: Russian possesses no systematic grammatical encoding of definiteness, while English exhibits a system highly similar to Norwegian in terms of semantic and pragmatic content, only realized as articles in English, but article and inflection in Norwegian. Slobin's position (1991, 1996), referred to above, motivates an assumption that the L1 Russian learners of Norwegian will suffer from a lack of L1 training in encoding definiteness; that is, they will have a thinking-for-speaking challenge that is likely to consist of initial difficulty in recognizing contexts to be encoded, and, subsequently, challenges with respect to automatizing and internalizing the encoding of definiteness.³⁸ The L1 English learners, on the other hand, will be predicted to be guided by their L1 training in detecting the contexts for encoding; negative transfer may manifest itself in overuse and underuse in

³⁸ Yet, it is worth noting that the L1 Turkish [–ART] learners of Norwegian investigated in Nistov (2001a; see section 3.5. for a presentation of this study) is reported not to behave as expected by the thinking-for-speaking approach; rather conversely, these learners did not seem to be particularly challenged by the definite form, and the occurrences of bare nouns in definite contexts were not frequent (Nistov, 2001a, p. 316).

contexts where Norwegian and English depart, such as in relation to certain nonreferential NPs (see chapter 5).³⁹

If we now approach the most concrete language level in search of evidence of cross-linguistic influence and expect transfer to be manifested also in actual transferred L1 structures and material, we are entering an area associated with uncertainty. The research literature on article/definiteness acquisition can be said to follow two main trajectories in this regard. First, transfer into the L2 presupposes that a marking or use of equivalents applied in the L1 is detectable. Young (1996) is an example examining the impact of theme-rheme structures in the L2 English article use of Czech and Slovak learners. The strategy of detecting transfer through an investigation of equivalents has been applied in a more or less direct way by several researchers (see for instance Chaudron & Parker, 1990; Jarvis, 2002; Sharma, 2005a). Moreover, Young (1996) suggested that high rates of demonstratives could be L1 related (however, Trenkic (2004) reports that demonstratives are not applied more frequently in Serbian than in English, which raises some doubts concerning the oft-held assumption that demonstratives may sometimes function as articles in Slavonic languages).⁴⁰

The other trajectory accounts for omitted articles, that is, zero marking/bare nouns,⁴¹ as a result of direct transfer of L1 forms. Omission as an indicator of L1 transfer is frequently an implicit assumption in studies, whereas it is explicitly formulated as such by Trenkic and Pongpairoj (2013) and Austin, Pongpairoj, and Trenkic (2015). In

³⁹ However, as we will see in the literature review in chapter 3, there are also approaches that include notions of L1 influence that would predict the opposite of Slobin, namely Bates and MacWhinney's Competition Model (1989, Tokowitcz & MacWhinney, 2005). This approach is invoked in Trenkic, Mirkovic and Altmann (2014). Compared to each other, the predictions entailed by Slobin's approach on the one hand, and those licensed by Bates and MacWhinney's approach on the other, capitalize on different properties of the category of definiteness: whereas thinking for speaking would emphasize the meaning aspects, the Competition Model highlights formal realization.

⁴⁰ Drawing on Hlebec (1986) and Chesterman (1991), Trenkic asserts "... that in languages without articles, demonstratives are translation equivalents of demonstratives, not of the articles of the languages that do have articles" (Trenkic, 2004, p. 1408). See Trenkic (2004) for the complete reference for Hlebec (1986).

⁴¹ See section 5.2.2 for a brief discussion of the terms "omission," "zero article," and "bare noun."

those two studies, which will be presented in more detail in chapter 3, use of L1 licensed forms is believed to occur when the processing capacity of the working memory is exceeded. The production of L1 forms is thus interpreted as having little to do with the learners' perception of transferability (see above). Goad and White's *Prosodic Transfer Hypothesis* represents another example that clearly predict omission to occur as a result of diverging source and target prosodic features (Goad, White & Steele, 2003, Goad & White, 2004).

Thus, many errors that at first blush might be attributed to the influence of the mother tongue can be, in fact, unrelated to the L1 and instead reflect developmental universal processes that have been attested in the acquisition of human language in general (often in the L1 as well, where no preexisting knowledge of a specific language can be assumed to influence the process). In addition, many interlanguage phenomena are motivated by simultaneous L1 transfer and linguistic universals influences that conspire together to promote certain L2 solutions. (Ortega, 2009, p. 51)

An (un)balanced interaction between the L1, transfer and linguistic universals as proposed above is reflected in Ionin's Fluctuation Hypothesis (2003), and, as will be described in chapter 3, more generally in much of the literature motivated by the employment of analytical models relating to the semantic/pragmatic content of definiteness (for instance, Bickerton's *Semantic Wheel of NP Reference* applied in the present study) and models analyzing degree of familiarity/givenness at the discourse level (such as Prince's *Taxonomy of Assumed Familiarity* applied in the present study).

On the whole, it is well-documented that the L1 matters in the acquisition of grammatical definiteness, but exactly how and in what sense and form still remains an unsettled question.

In 2003, Odlin predicted an increase in attention towards relativistic approaches to cross-linguistic influence, and in 2016 we can agree that he had a point (e.g. Han & Cadierno, 2010; Jarvis, 2011a). However, Odlin, like Ortega above, advocated a position ensuring that the baby remains in the bathtub:

If, as seems likely, future transfer research focuses sharply on questions of relativism, there will still be a need for universalist approaches Categories such as aspect have universal as well as language-specific dimensions, and none should be neglected (Odlin, 2003, p. 467).⁴²

Even though definiteness appears as the perfect intervention point for hypotheses informed by thinking for speaking and conceptual transfer, I recognize the deep complexity of both formal aspects, including linguistic markers of discourse function, and semantic/pragmatic aspects associated with the category. Therefore my research questions (and predictions which will be presented in chapter 3) are formulated without expressing any direct relation to any preset framework or conceptualization of transfer. In general, this chapter has testified to the fact that several approaches to transfer might prove relevant to the study of L2 acquisition of grammatical definiteness. With that background, the theoretical perspectives on cross-linguistic influence presented above will inform the analyses and elucidate the subsequent discussion, but none will be tested as such.

Nor does the present study put forth explicit predictions regarding the manifestation of transfer at the formal level (see section 1.1), but that does not mean that transfer of L1 forms, or direct impact of L1 material from both Russian and English, is held to be an unlikely scenario. The present study does after all compare learners from different L1 backgrounds in order to detect L1 related differences. If such differences are uncovered, their nature, form and explanation will be further explored and discussed.

1.5 A brief note on the terminological debates in SLA

As have been made evident in the preceding sections, the history and development of a scientific study of second language acquisition provide the researchers with warnings of pitfalls and good advice for ideals to pursue. Through the growth of the field, the

⁴² Here, Odlin refers to Chung & Timberlake (1985); Comrie (1976); Slobin (1993). See Odlin (2003) for further reference.

research has seen increased sophistication but also a proliferation of theories and research agendas (see Block, 2003; Mitchell, Myles, & Marsden, 2013; Ortega, 2013). As was also briefly mentioned in 1.3 under the heading *The social turn and recent trends in second language learning*, the field of SLA has, during the past 20 years, witnessed a movement advocating the need for renewing and rethinking the established “truths” of second language acquisition. This criticism has been concerned with bringing to light the theoretical beliefs hidden behind the well-established vocabulary of SLA. Dissection of dichotomies such as native/nonnative and use/acquisition, and notions such as interlanguage have been the topic of Firth and Wagner (1997), Kramsch and Whiteside (2007), Larsen-Freeman (2006a; 2015a) and also partly Ortega (2011). Block (2003) discusses the meanings and metaphors of *second, language and acquisition* in his book *The Social Turn*.⁴³

The criticism has targeted fundamental areas pertaining to epistemological issues in the interface between theory and methods, and ideological aspects relating to the view of science and scientific ideals. The former will be to some extent be addressed further in chapter 4, which outlines methodological aspects of the present study. The criticism targeting the ideological level will not be prominent in the subsequent analysis; nonetheless, it has put its print on the study as a whole through considerate reflections regarding terminology, in addition to having helped clarify the scope and aims for the present study. Moreover, the ideological critique also affects fundamental issues of the epistemology of SLA by alerting that true evidence cannot be isolated to cognition (see section 1.2). This insight renders the present study a piece in a larger puzzle that may hopefully complement and expand aspects of our understanding of second language acquisition.

⁴³ In fact, the book is organized as a stepwise dissection of *second, language and acquisition* where each term is provided a separate chapter.

1.6 Outline of the present study

The present chapter has introduced the scope and frameworks of the study, and a broader context for L2 article/definiteness studies has also been established through a brief presentation of the discipline of SLA and the complex area of cross-linguistic influence. In chapter 2, the focus shifts to outline the noun phrase in the target language Norwegian and compares it to the first languages English and Russian. This chapter ends in a discussion of definiteness equivalents between languages exhibiting grammatical definiteness and languages that do not possess such a category. On the background of Lyons (1999) and Lambrecht (1994), this section also attempts to establish an understanding of the status of definiteness in a language such as Russian. Chapter 3 turns to the study of L2 article acquisition and surveys a broad collection of studies conducted within different traditions. The main focus is on nongenerative studies, and the goal of the chapter is to extract major findings and trends in the research. A separate section attends to studies involving a Scandinavian language. The chapter provides the foundation for the set of research questions and predictions that will be pursued throughout the study. Chapter 4 presents the design of the study, its participants and the methods for data collection. It also discusses methodological issues related to dimensions of form and function, data type, and the advantages associated with longitudinal designs in research on second language acquisition. The chapter concludes by presenting a proficiency level assessment of the data sample as a whole.

Chapters 5, 6, and 7 report the results obtained through three separate but interconnected analyses. In chapter five the data are analyzed within the approach of the Semantic Wheel of Noun Phrase Reference (Bickerton, 1981; Huebner, 1983). This analysis maps the learners' encoding of grammatical definiteness in accordance with the categories of the Semantic Wheel and the target norm. Chapter 6 focuses on the discourse level and examines to what extent the learners' models of encoding of familiarity is based on universal principles of discourse rather than on the target norm. Prince's (1981) Taxonomy of Assumed Familiarity provides the categories of NP use,

and the measure here is marking vs. no marking of definiteness. Prince's categories of familiarity relate degrees of givenness to language structure, and special attention is directed to the phenomenon of a "redundancy effect" observed in L2 article acquisition studies (see Trenkic, 2009). From this analysis, however, it also becomes clear that specific syntactic patterns and constructions play a role in the encoding of definiteness. The specific NP constructions of premodification and possessive constructions are therefore the topic of chapter 7. The final chapter summarizes and discusses the findings the research questions and predictions, and an attempt is made to situate the present study in the broader context of second language acquisition. In short, the study depicts a highly complex picture of factors that may have an impact on the learners encoding of grammatical definiteness in Norwegian, but an impact of the L1 is claimed to affect both L1 learner groups.

2. Norwegian, English and Russian noun phrases

This chapter has as its main goal to outline the formal linguistic foundations for the subsequent analyses, but it also provides a broader linguistic context for the target structures to be learned, in addition to surveying the linguistic resources for NP constructions that are part in the learners' prior L1 knowledge. The first part of the chapter will be devoted to descriptive presentations of the noun phrase structure in Norwegian, English and Russian, and it will reveal that the three languages diverge both in terms of the formal realization of grammatical categories and in terms of which categories are realized at all (see also section 1.1). In the distribution of grammatical categories, the relationship between the languages is asymmetrical: all three languages encode number, Norwegian and Russian possess a three-gender system, Norwegian and English encode definiteness, but only Russian exhibits a comprehensive case system. This asymmetry implies that Norwegian shares categories with both English and Russian that those languages do not share with each other.

In the description of the target language Norwegian, I approach the noun phrase from a topological perspective, in order to establish a clear foundation for comparison of lexical, morphological and syntactic NP features relevant to the use of the NP as a whole. This approach will accompany the description of English and Russian too, but it should be emphasized that language-specific features that underscore contrasts between the three languages necessarily will inform the presentation of each language and thus will entail a slightly different focus in the sections addressing English and Russian.

The presentation of the NP structure in the three languages will establish the frameworks for comparing the encoding of definiteness in the final part of the chapter (section 2.4). Here, I will continue the preliminary presentation of definiteness from the introductory chapter. Attention will be directed to the use of the grammatical category of definiteness and how the participants' first languages equip the learners

with linguistic tools corresponding to the requirements of the encoding of definiteness in Norwegian.

2.1. Norwegian noun phrase structure

As briefly accounted for in chapter 1, Norwegian nouns are affected by three grammatical categories: gender, number, and definiteness. Definiteness is the main object of inquiry in the present study, but in order to get a full understanding of the category, it is necessary to outline its interaction with other grammatical categories relevant to the NP. (The final parts of this chapter will deal with the interaction between definiteness and other linguistic levels above the phrase level, such as sentence structure and the discourse level).

An initial comment on Bokmål and Nynorsk

Norwegian recognizes two different official standards of writing: Bokmål (literally, “book language”) and Nynorsk (“new Norwegian”). In the present study the target norm is based on the Norwegian written standard Bokmål.⁴⁴ Bokmål is used by the majority of inhabitants, while Nynorsk is associated predominantly with the western parts of Norway. Bokmål represents the norm adhered to by approximately 90% of residents, and most teaching of Norwegian as a second language is also conducted in

⁴⁴ Bokmål and Nynorsk are mutually intelligible, and the major differences pertain to morphology. These morphological differences affect definiteness encoding only indirectly: Nynorsk requires more nouns to be assigned the feminine gender, and there is systematic variation in the encoding of bare plural indefinites also primarily dependent on gender (-*ar* for feminine and -*er* for masculine) Finally, nynorsk requires neuter plural definites to end in -*a* (this ending is marginally used in bokmål, but it is allowed with nouns such as *en unge* [a kid] resulting in the following plural definite: *ung-a*). There are also some differences related to loan words, heritage and influence from Danish and German; Nynorsk avoids German affixes and construction patterns stemming from Danish when a Norwegian variant is available. The latter is exemplified by the choice between a prenominal and a postnominal possessive and a general preference for double definiteness, which will be dealt with below and in chapter 7. In order to understand the relationship between Bokmål and Nynorsk, it is important to know that both evolved as a response to the historical period of Danish rule (1537 to 1814) when the Danish language was the only written standard in use. Bokmål and Nynorsk are thus the results of a process of establishing a Norwegian written language: Nynorsk was constructed “from scratch” on the basis of primarily rural Norwegian dialects, whereas Bokmål was created by gradual changes to the original Danish in the direction of primarily urban Norwegian dialects.

Bokmål. However, these two sets of writing standards do far from completely reflect the variation in the spoken language; Norwegian does not have an officially recognized spoken standard, and the language community is generally tolerant of a widespread use of local dialects. The participants in the present study were all recruited from municipalities recognizing Bokmål as the written standard, but that does not mean that they do not meet variation in the spoken language.

Grammatical categories relevant to noun inflection

Norwegian common nouns belong to one of three genders: masculine, feminine and neuter. Gender assignment is reflected through agreement between nouns, adjectives, possessives and demonstratives, but the assignment of gender in itself is largely arbitrary and generally nontransparent; that is, neither formal nor semantic cues may fully guide the learner to accurate gender assignment.⁴⁵ Hagen (2000) gives the following definition of gender:

Med genus menes en inherent (=iboende) kategori ved substantivet, som bidrar til å bestemme hvordan substantivet styrer kongruens. (Hagen, 2000, p. 62)

By gender is meant an inherent (=immanent) category of the noun, which contributes to how the noun governs agreement. (Hagen, 2000, p. 62) [my translation].

Hagen emphasizes that although gender is a formal category first and foremost identified by its role in NP agreement, there are historical relations between semantic sex and the gender of the noun; for instance *kone* [wife], *jente* [girl], *ku* [cow] and *høne* [hen], all belong to the feminine gender, while *mann* [man] and *gutt* [boy] are masculine (Hagen, 2000, p. 63). Further, Faarlund, Lie, and Vannebo (1997, p. 152) report that masculine gender encompasses most nouns in Norwegian. This imbalance is reinforced by the trend of treating traditionally feminine nouns as masculine,

⁴⁵ Some tendencies and correspondences do exist. For instance, Faarlund, Lie, and Vannebo (1997, p. 153) notes that there is a certain correspondence between derivational suffixes and gender: For example nouns suffixed by *-ing*, will be feminine while nomina agentis suffixed by *-er* will be masculine.

rendering, for instance, *ei kone* [wife.F] and *en kone* [wife.M] equally acceptable.⁴⁶ The alternation between a two- and a three-gender system will be explored further below.

Whereas number, singular and plural, generally affects the NP in terms of agreement, gender is only relevant to singular forms and singular NPs. Plural nouns never signal gender unequivocally in Norwegian, and the definite singular noun is the only form directly reflecting gender; that is, for indefinite singular nouns gender is only expressed by the choice of article, not by the form of the noun itself. Consequently, gender is a largely covert feature of Norwegian nouns. The numeral quantifier *én* [one] is the only numeral affected by gender agreement.

Common nouns can be count and non-count, and only count nouns can be preceded by the indefinite article. Similar to English, there is a certain level of flexibility associated with countability: noncount nouns may sometimes receive a count reading and vice versa.⁴⁷ (This topic will be explored further in section 2.2.)

Examples below are taken from Faarlund, Lie, and Vannebo (1997):

- (1) Det var flere **skjønnheter** i byen (1997, p. 145)
[There were several **beauties** in town]
- (2) I fjellet var det både **rev-Ø** og **ulv-Ø** (1997, p. 148)
[In the mountains there were both **foxes** and **wolves**]

In addition, noncount nouns are obligatorily encoded in accordance with the definiteness category.

Table 2.1 below illustrates the traditional paradigm for noun phrase inflection:

⁴⁶ It should be noted, though, that the feminine definite suffix *-a* seems to be more resistant to change than the feminine article. Hagen suggests that for some traditionally feminine nouns the feminine definite suffix is more stylistically neutral than the masculine suffix (Hagen, 2000, p. 66).

⁴⁷ Quirk, Greenbaum, Leech and Svatholm (1985, hereafter: Quirk et al., 1985) refers to this as dual count and reclassification, indicating that some nouns may naturally be used as both count and noncount, while others can be reclassified as either count or noncount. The former type may be exemplified with *beauty*, and the latter by *cheese* in utterances such as “What cheeses have you got today?” (Quirk et al., 1985, pp. 247–248).

COMMON NOUNS		SINGULAR		PLURAL	
		INDEFINITE	DEFINITE	INDEFINITE	DEFINITE
MASCULINE	Weak [a kid]	en unge	ung-en	ung-er	ung-ene
	Strong [a car]	en bil	bil-en	bil-er	bil-ene
FEMININE	Weak [a girl]	ei jente	jent-a	jent-er	jent-ene
	Strong [a goat]	ei geit	geit-a	geit-er	geit-ene
NEUTER	Weak [an apple]	et eple	epl-et	epl-er	epl-ene/-a
	Strong [a house]	et hus	hus-et	hus	hus-ene/-a

Table 2.1. Inflectional paradigm for Norwegian common nouns.

A few comments should be made with regard to Table 2.1. First, the plural forms do not exhibit isolated morphemes indicating plurality and definiteness.⁴⁸ Second, Norwegian nouns are categorized as weak or strong according to whether they end in an unstressed *-e* (weak) or in a vowel (strong). The weak-strong distinction first and foremost affects the indefinite plural form of strong neuter nouns which is realized as an uninflected, bare form: *et hus, to hus* [a house, two houses].

Additionally, as briefly mentioned above, it is important to know that the feminine gender is losing terrain to the masculine. There is an increasing tendency for traditionally feminine nouns to be preceded by the masculine article; for instance, it is not uncommon for the traditionally feminine noun *jente* [girl] to be used with a masculine indefinite article, but a feminine definite suffix:

(3) **en jente – jent-a**

According to Hagen (2000, p. 63), if the feminine article ceases to be employed, there are reasons for regarding masculine and feminine as a common gender with two possible suffixes, *-en* and *-a*, designating definite singular. Faarlund, Lie, and Vannebo (1997, p. 151) approach the question of common gender from a slightly different angle

⁴⁸ In this aspect, Norwegian and Swedish diverge, since plurality and definiteness correspond to separate morphemes in the Swedish inflectional forms: *bil-ar-na* [car-PL-DEF].

and assert that a three-gender system on the one hand, and a two-gender system on the other largely correspond to radical and conservative Bokmål (see also above).

Kulbrandstad (2005, p. 141), on his part, points to a tendency for the feminine gender to be more commonly used with concrete, “every-day use” nouns. Most important in the present context is that, considering the degree of variation in gender assignment and agreement among speakers of Norwegian, learners of Norwegian as a second language run the risk of being taught a system in the classroom that is not consistently supported by either the free writing or the free speech of their co-citizens. For instance does the spoken dialect in Bergen to a much larger extent than the one spoken in Oslo favor a two-gender system.

Finally, the category of definiteness in Norwegian has traditionally been conceived of as a bipartite system consisting of definite and indefinite marking. However, for English there is a tendency to refer to the article system as a three-way system in which a zero article that is primarily used for mass and non-count nouns is included as the third “article” (see, for instance, Lambrecht, 1994, p. 80). The concept of a tripartite system would also capture important aspects of Norwegian since, as in English, mass and non-count nouns do not take the indefinite article, but are realized as bare nouns. However, the bare noun is also frequent when the NP is non-referential, as will be described in more detail in chapter 5. In the present study, I have chosen to remain loyal to the traditional bipartite distinction. Even though there might be good reasons for a tripartite approach, there are also arguments for keeping to a bipartite system, chief among them the fact that the bare noun is largely associated with nonreferential NPs that do not correspond to the identifiability contrast. That is, an inclusion of a zero article would destabilize the relationship between the core semantic contrast and a definite and an indefinite noun, namely, its identifiability status, and the grammatical forms, because the bare/zero form also relates to a distinction between referential and nonreferential. There is thus a slight danger of concealing the distinction between referentiality and nonreferentiality, the latter also often being

expressed by a bare form, but which is impervious to the definite/indefinite contrast (see Du Bois, 1980).

The topology of the NP

In the following section, Hagen's (2000) topological presentation of the noun phrase will be applied in order to show how the grammatical categories outlined above affect the noun phrase as a whole. The subsequent description largely draws on Hagen's chapter on the noun phrase in his grammar for teachers of Norwegian as a second language (Hagen, 2000, ch. (S), pp. 371–388).

Table 2.2 below shows that both pre- and postmodification occur in the noun phrase. In Norwegian, attributes taking the form of a clause, such as relative clauses and nominal subclauses, are postposed, while adjectives, quantifiers, and demonstratives are preposed. Possessives can either precede or follow the head noun. The following description of the internal mechanisms for agreement in the NP will take Hagen's (2000) schema as a point of departure.

NOUN PHRASE TOPOLOGY SCHEMA (HAGEN 2000)								
	QUANTIFIERS (TOTALITY)	DEFINITE MODIFIERS	QUANTIFIERS (PART)	DESCRIPTIVE MODIFIERS	HEAD NOUN	POSSESSIVES	LOCATION ATTRIBUTES	ATTRIBUTIVE CLAUSES
(a)	Alle all.PL	de the.PL	tre three	stor-e big.PL./DEF	bil-ene car-DEF.PL	hans his	i garasj-en in garage- DEF.SG.M	som han aldri kjører that he never drives
(b)		disse these		fin-e nice.PL./DEF	bild-ene picture-DEF.PL		på vegg-en on wall-DEF.SG.M	
(c)					kanonene cannon.DEF.PL		på Navarone on Navarone	
(d)			to kilo two kilo	god-t good-N	smør butter			
(e)	Begge Both	Betty-s Betty-GEN	to two		kjærest-er boyfriend.PL			
(f)		det the			faktum fact.N			at jord-a er rund that earth- DEF.SG.F is round
(g)		min my.SG.M/F		største biggest	drøm dream.SG.M			

Table 2.2. Noun phrase topology schema (Hagen, 2000, p. 371). (Example (g) is mine. All translations and glossings are mine.)

Quantifiers of totality and definite modifiers

The first two positions in the schema are occupied by quantifiers marking totality and definite modifiers. The first category is rather minor and contains quantifiers such as *all/alt/alle* [all], *begge* [both] and *hele* [the whole]. Normally, as illustrated by example (a), quantifiers designating totality are followed by a definite noun (example (e) illustrates a break with this pattern where the head noun has taken the indefinite form because of the preceding genitive phrase). Of the three quantifiers designating totality, only “all” is inflected for gender and number: *all* (M./F.SG.NONCOUNT), *alt* (N.SG.NONCOUNT), and *alle* (PL.COUNT).

The definite modifiers encompass several different types: demonstratives, possessives, and genitives. Determiners such as demonstratives and possessives signal definiteness and they agree in gender and number, as displayed by table 2.3 and 2.4 below. Note that Norwegian also has a reflexive possessive *sin* corresponding to third person singular and plural, applicable in all functions except for the subject.

Demonstratives are normally followed by a definite noun.⁴⁹ This is often referred to as “double definiteness.” Single definiteness is possible; that is, the noun may be left uninflected, but restricted by, for instance, style (“Double definiteness” and the alternation between double and single definiteness will be discussed in more detail in chapter 7.)⁵⁰ Note that demonstratives preceding a premodifying adjective take the form of *distal* demonstratives, displayed in table 2.3 below (without any requirement for a deictic or demonstrative meaning).⁵¹ For pronominal possessives and genitives

⁴⁹ In the Norwegian grammatical tradition, demonstratives, possessives, and quantifiers are subsumed under the word class (part of speech) *determiners*, whereas adnominal demonstrative determiners may modify a noun without having a deictic or a demonstrative reading. In fact, when a definite noun is premodified by an adjective, the suppliance of a demonstrative determiner is obligatory regardless of demonstration and deixis. Demonstratives used nominally are classified as pronouns.

⁵⁰ Single definiteness can merely be considered grammatical in NPs consisting of a demonstrative and noun alone, such as *den mann* [the/that man-Ø]. The construction is more relevant when a premodifier in the form of a quantifier or an adjective is added.

⁵¹ It is important to note that Norwegian does not have true definite articles as English does: the “definite article” is hence a demonstrative determiner.

there is no choice involved in the form of the head noun; possessives and genitives precede a bare or an indefinite plural noun. In contrast to adjectivally premodified definite NPs, the definite form of the noun in phrases such as (g) would be strictly ungrammatical.⁵²

DEMONSTRATIVES	Singular		Plural
	M./F.	N.	All genders
Proximal referents	denne	dette	disse
Distal referents	den	det	de

Table 2.3. Demonstrative determiners. Table adapted from Hagen (2000, p. 209).

Possessives		Singular			Plural
		Masculine	Feminine	Neuter	All genders
1. person.SG		min	mi	mitt	mine
2. person.SG		din	di	ditt	dine
3. person.SG	M.	hans	hans	hans	hans
	F.	hennes	hennes	hennes	hennes
	REFL	sin	si	sitt	sine
1. person.PL		vår	vår	vårt	våre
2. person.PL		deres	deres	deres	deres
3. person.PL	PL.	deres	deres	deres	deres
	REFL	sin	si	sitt	sine

Table 2.4. Possessives in Norwegian.

Table 2.4 shows that some possessives, apart from 3. person, agree in gender and number. The forms are identical for the prenominal and postnominal position.

Quantifiers designating part and adjectives

Quantifiers designating part and adjectives in the NP, with certain exceptions that will be illustrated below, are similar in that when they modify a definite noun, they are also obligatorily preceded by a determiner (sharing the formal expression with a distal demonstrative) (*den, det, de*) or other quantifiers or determiners signaling definiteness.

⁵² Interestingly, Nyqvist (2014) reports that oversuppliance of the definite form is regarded among the definiteness-errors found most disturbing in the L2 Swedish of L1 Finnish learners.

This pattern encompasses cardinal numbers and adjectives, but not quantifiers such as *noen*, *noe* [some], as pointed out in the examples below by Hagen (2000, p. 377):

(4) * Begge mine **noen** fin-e biler
both my.PL some nice-PL car-PL

(5) Begge mine **tre** fin-e bil-er
both my.PL three nice-PL car-PL

That is, indefinite quantifiers and definite modifiers mutually exclude each other.

The system for adjectival inflection and the effect of adjectives in the NP are displayed in example (6) to (9) below:

Masculine indefinite and definite singular:

(6) en stor bil **den** stor-e bil-en
a.M big car the.M big-DEF car-DEF

Feminine indefinite and definite singular:

(7) ei stor jente **den** stor-e jent-a
a.F big girl the.M/F big-DEF girl-DEF

Neuter indefinite and definite singular:

(8) et stor-t hus **det** stor-e hus-et
a.N big-N house the.N big-DEF house-DEF

Plural indefinite and definite:

(9) stor-e bil-er, jent-er, hus.
big-PL car-PL girl-PL house

de stor-e bil-ene, jent-ene, hus-ene.
the.PL big-PL car-PL.DEF girl-PL.DEF house-PL.DEF

Examples (6) to (9) above reflect adjectival inflection in accordance with gender, number, and definiteness. The suffix *-e* is polyfunctional and encodes both definiteness and plurality. For the indefinite singular NPs only adjectives modifying neuter nouns are suffixed.⁵³ Two suffixes are thus relevant for adjectives to agree with nouns: *-t* and *-e*. The examples also display the “double definiteness” construction.⁵⁴

Summed up, when adjectives and quantifiers designating part modify the noun (except for indefinite quantifiers such as *noen* [some]), the definiteness inflection on the noun and the employment of definite determiners are dependent on the general semantic and pragmatic environment. That is, both definite and indefinite NPs may be modified by cardinal numerals and adjectives, while nouns modified by demonstratives/determiners, quantifiers of totality, possessives, and genitives in Norwegian presuppose a definite reference. Finally, the definite inflection of the adjective (*-e*) is impervious to gender and number, and it is identical to the suffix added to adjectives modifying plural indefinites.

Postnominal modifiers and attributes

The only postnominal modifiers that affect the definiteness inflection by grammatical rules are postposed possessives. This will be dealt with in more detail in chapter 9. Suffice it to say here that the “double definiteness” construction is also applied, as in example (a) above, and (10) below:

⁵³ The adjective *liten* [small] is an exception and has a separate feminine form: *lita*.

⁵⁴ Lyons (1999, p. 85) comments on the function of the obligatory encoding of definiteness of Swedish adjectives, which is largely parallel to that of Norwegian. He concludes that since it cannot bear the encoding of definite reference in the NP alone (that is, the definite NP will always be accompanied by a demonstrative or a head noun inflected for definiteness), it is better regarded as a feature of agreement than as a primary means of encoding definiteness:

In general the adjective form must be accompanied by a definite determiner or article, and, given that one of these can mark a noun phrase as definite in the absence of any adjective, it is clear that the adjective ending plays only a secondary role in the expression of definiteness. Definiteness marking on adjectives in Swedish is essentially an agreement process. (Lyons, 1999, p. 85).

- (10) Han stjal kon-**a** **mi**, hus-**et** mi-**tt** og barn-**a** mi-**ne**.
 He stole wife (F)-DEF my.F house-DEF.SG my-N and child-PL.DEF my-PL
 [He stole my wife, my house and my children.]

On the other hand, postnominal attributes such as relative clauses, descriptive prepositional phrases, etc., do not show any traces of agreement with the head noun. However, the employment of such attributes may have a decisive effect on the definiteness status of the NP as a whole, since many definite referents can only be identified by their added relative clause. This may be illustrated with English examples:

- (11) The girl **I told you about yesterday**. Remember?

- (12) The dog **in the neighbor's garden** barked when I passed today.

A note on partitives and NPs without an explicitly expressed head noun

Hagen (2000, p. 81) lists several types of headless NPs; for the present study one type is particularly relevant, namely partitives, such as:

- (13) en av gutt-ene
 one.M of boy-DEF.PL
 [one of the boys]

In this frequent partitive construction the head noun is left out from the position between the quantifier and the postnominal prepositional phrase. To express the head noun in such contexts would be perceived as ungrammatical, but constructions such as (14) do occur in second language use:

- (14) * en **gutt** av gutt-ene
 one.M boy of boy-DEF.PL
 *[one boy of the boys]

Summary and closing remarks

In brief, when a speaker is to signal the identifiability status of the referent in Norwegian, he/she will have to consider, after having evaluated the semantic/pragmatic status of the referent, first the singular/plural distinction, and second, if the referent is singular, the correct assignment or inflection for gender. If the

noun phrase is definite, that is, if it is considered identifiable, and is premodified by an adjective, an obligatory determiner agreeing in gender and number should also be attached, realized as either a demonstrative, a totality quantifier, or a possessive. These pronominal modifiers necessarily render the NP definite in Norwegian, and a preposed demonstrative may thus optionally be followed by an uninflected noun. But, in all cases, the adjective will signal definiteness by inflection. A pronominal possessive, a definite quantifier, and a proximal demonstrative will independently add meaning to the NP, whereas a pronominal distal demonstrative may signal distal deixis, but it may also (as is most often the case) be neutral in terms of deixis and demonstration. In other words, its presence can be purely formal. However, importantly, a definite noun modified by an adjective alone is not normally perceived of as a grammatical NP.

The grammar of the NP is a little less complex when the referent is not considered to be identifiable, that is, when it is indefinite. However, a pronominal adjective modifying an indefinite head noun needs to be inflected for neuter and plural. Moreover, pronominal quantifiers, which are normally largely transparent in terms of number, must also reflect the grammar of the head noun in terms of singular and plural inflection.

Despite the relative grammatical complexity of the Norwegian noun phrase, in actual communication the first and most basic choice the speaker faces when referring to an object with an NP is the assessment of definiteness (identifiability) status; only after that can he/she direct attention to gender, number and subsequent agreement.

2.2. English noun phrase structure

In the next sections, I will give a brief contrastive description of the noun and noun phrase in English. The presentation will take the description of Norwegian as its starting point, and English NP structure will be contrasted with Norwegian NP structure. Examples will be given when useful, but it is assumed that the reader has some knowledge of English language structure. The present section primarily deals

with certain formal grammatical features, and by no means does justice to the complexity of the use and pragmatics of English noun phrases. As a whole, Norwegian is considered a more synthetic language than English.

It was mentioned earlier that Norwegian and English share the feature of having a grammaticalized category for definiteness. Moreover, both languages exhibit inflection that signals number.

Number inflection is generally reflected in prenominal attributes in Norwegian, but only partly so in English; that is, for the most part only demonstratives display number:

(15) **These bugs** bother me!

Adjectives, possessives, and other determiners, such as articles, do not have independent plural forms:

(16) I like **my dog**, but I like **my cats** more.

(17) Mathilda wore **green earrings**, and **a green scarf**.

The English demonstratives are displayed in Table 2.5 below:

DEMONSTRATIVES	SINGULAR	PLURAL
Proximal	this	these
Distal	that	those

Table 2.5. English demonstratives. Based on Quirk et al. (1985, p. 372).

Nor does English possess a grammatical category of gender, so there is no agreement in the NP based on the grammatical gender of each noun. Quirk et al. (1985) explain in their authoritative *A Comprehensive Grammar of the English Language*:

Gender in English nouns may be described as ‘notional’ or ‘covert’ in contrast to the ‘grammatical’ or ‘overt’ gender of nouns in languages such as French, German, and Russian; that is, nouns are classified not inflectionally, but semantically, according to their coreferential relations with personal, reflexive, and *wh*-pronouns. (Quirk et al., 1985, p. 314)

Personal pronouns have, as in Norwegian and Russian, distinct forms corresponding to natural gender (he/she), and so do third person singular possessives (his/her).

However, animacy is reflected in English relative clauses through the relative pronouns *who* and *which* (example (19) is from Quirk et al. (1985, p. 365):

(18) I know a girl **who lives in England**.

(19) A book **which used to be my favorite** has been reprinted.

The impact of animacy on English relative clause constructions does not have any corresponding structure in Norwegian.

The distinction between count and noncount nouns, and the use and function of countability, are largely parallel between Norwegian and English: Only count nouns may take the indefinite article, but, in accordance with the grammatical and contextual environment, both count and noncount nouns can be preceded by the definite article.

Accounting for number, definiteness, and count, English nouns can be illustrated by the following table taken from Quirk et al. (1985, p. 253):

ENGLISH NOUNS		COUNT	NONCOUNT
SINGULAR	definite	the book	the furniture
	indefinite	a book	furniture
PLURAL	definite	the books	
	indefinite	books	

Table 2.6. Inflectional paradigm for English nouns.

As mentioned previously, there is a certain flexibility associated with the feature *count*; some nouns are classified as having dual membership, that is, they may be both count and noncount. Moreover, reclassification of the general countability status of a noun is also possible.⁵⁵ Quirk et al. (1985, p. 248) underscore that the count/noncount distinction has language-specific aspects, and that it is not “fully explainable as

⁵⁵ Lately, there has been an increased focus on the impact of (variable) countability status on the acquisition of articles by L2 learners of English (Butler, 2002; Snape, 2005, 2008; B. White, 2009).

necessarily inherent in ‘real world’ denotata.” *Furniture* is, for instance, noncount in English while its equivalent *møbel* in Norwegian is count.

The distinction between count and noncount also points to important aspects of the use and conception of articles in English. As already mentioned, noncount nouns do not take the indefinite article, and in the literature the English article system is often described as a three-way distinction consisting of the definite, the indefinite, and the zero article (see also section 2.1). Noncount and bare count plural contexts are regarded as zero-article contexts. This contrasts with the traditional Norwegian description of the count plural, which is normally referred to as the *indefinite* plural. It is beyond the scope of this chapter to go into a detailed discussion of whether this discrepancy between Norwegian and English is solely a matter of terminology or whether it is motivated by actual linguistic differences, but the reader is referred to Halmøy (2008) for a contrastive discussion of the Norwegian indefinite plural. Halmøy argues against an understanding of Norwegian bare plurals as, in line with English bare plurals, neutral in terms of definiteness.⁵⁶

Finally, it should be noted that a distinction between *zero* and *null* article has also become rather well-established in the general description of English article use in SLA studies. The division of the zero article into a zero and a null article is associated with Chesterman (1991), and is motivated by an underlying difference in definiteness status: the *indefinite zero* article and the *definite null* article. Noncount and bare count plurals fall into the zero article category (see table 2.6 above), whereas examples such as (20) and (21) below illustrate the definite null article:

(20) What did you have for Ø **lunch** today?

(21) Ø **Europe** is bleeding.

⁵⁶ As evident from table 2.6, Quirk et al. (1985) do not fit into this pattern, as they refer to a “indefinite plural.”

In summary, English nouns are only inflected for number. Definite and indefinite meanings are expressed by the articles alone, and by other determiners such as *some*. Demonstratives by logic accompany identifiable referents and have distinct forms expressing the plural, but neither definiteness nor number is exhibited through prenominal descriptive attributes.

The noun phrase

The structures of English and Norwegian noun phrases are by and large very similar, if we look beyond the requirement for agreement in Norwegian. Relative clauses and prepositional phrases are normally postposed, while adjectives, possessives, and genitives are preposed. The English NP does not have a postnominal position for possessives. However, a wider range of postnominal clauses seems to be permitted in English than in Norwegian, for instance, by employment of participles. Quirk et al. (1985, p. 1263) mention nonfinite clauses with *-ing* and *-ed* participles. In Norwegian, the semantic equivalent would normally have to be expressed by a relative clause. Example (21) below, taken from Quirk et al. (1985, p. 1263), would need to be translated into Norwegian by a relative clause, while both a nonfinite and a relative clause would be possible in English (however, nonfinite clauses with *-ing* and *-ed* are restricted to relative pronouns representing the subject of the clause in English):

(22) You should look for a man **carrying a large umbrella**.

The English relative clause equivalent would be:

(23) ...who **will be carrying** a large umbrella (Quirk et al., 1985, p. 1263).

Summary and closing remarks

English and Norwegian NPs largely evolve around the same structures for constructing meaningful NPs. Additionally, there are lucid parallels between the two languages with regard to article use and countability, and in the way genitive relations are expressed. However, whereas English seems to be less restrictive in the use of participles than Norwegian is, Norwegian displays larger variation with respect to the possessive construction, that is, both a prenominal and a postnominal type are

permitted. Perhaps most importantly, the requirements for agreement are more comprehensive in Norwegian.

Ringbom (2007, p. 1), introduced in 1.3, emphasizes the importance of how all L2 learning builds on previously acquired knowledge, and he also stresses the learner's search for similarity as the driving force of the learning process. For the L1 English learner of Norwegian, there is thus, as already noted in section 1.3, a potentially great benefit in identifying the similarities in the NP structure of the L1 and the L2, and furthermore in relation to the impact and functions of countability. However, it would also be instrumental to the learner to uncover the requirements for agreement prevalent in the Norwegian NP.

2.3. Russian noun phrase structure

Russian does not exhibit any category for obligatory encoding of definiteness, but the Russian language is highly synthetic and it has, without doubt, the most complex system of NP morphology and inflection among the three languages compared in the present context. Nouns are inflected for gender, number, and case, and the NP generally requires agreement in all instances.

The subsequent paragraphs aim to provide an overview of the grammar of Russian nouns and noun phrases. It does not claim to be an exhaustive description of all aspects of the Russian NP, rather the purpose is to provide the reader with a surface impression of the differences and similarities between Norwegian, English and Russian, in addition to building an understanding of the linguistic resources L1 Russian learners bear with them in relation to nominals and noun phrase structure. Nonetheless, the Russian NP grammar requires a more thorough description than does the English because the reader can be assumed to have a higher level of familiarity with the grammar of English than with that of Russian, but also because the morphological complexity of the Russian NP exceeds that of both English and Norwegian.

Gender

Russian possesses a three-gender system consisting of masculine, feminine, and neuter gender. To a certain extent gender assignment is transparent through formal cues on the noun in nominative case: the masculine nouns tend to end in a consonant, the feminine in *-a/ǎ*, and the neuter nouns in *-o* or *-e/ě*. However, this correspondence is far from complete; for instance nouns ending in *ь* (‘⁵⁷) belong to either the masculine or the feminine gender.⁵⁸

Apart from the important role ascribed to gender for determining agreement in the NP, gender is also reflected in the finite past time forms of the verbs, that is, both natural and grammatical gender are encoded in the past time forms of the verb (24 and 25 below):

- | | | | | |
|------|-------------------------------------|----------------|-----------------|----------|
| (24) | Мальчик | чита-л | интересн-ую | книг-у. |
| | Mal’čik | čita-l | interesn-uŭ | knig-u |
| | boy(M).NOM | read-PST.M | interesting-ACC | book-ACC |
| | [The boy read an interesting book] | | | |
| | | | | |
| (25) | Девушка | чита-ла | интересн-ую | книг-у. |
| | Devuška | čita-la | interesn-uŭ | knig-u |
| | girl(F).NOM | read-PST.F | interesting-ACC | book-ACC |
| | [The girl read an interesting book] | | | |

Number

Russian nouns are inflected for number, and like gender, number resonates through the NP as a whole in terms of agreement. In addition to indicating singular and plural, Russian exhibits a particular system for number inflection, which has diachronic roots in dual number, applying to nominal uses. In this use, the numeral determines the case assignment of the head noun based on a tripartite system consisting of singular numbers, numbers from two to four, and plural numbers above five. The numeral for *one* takes the nominative case, while numerals from *two* to *four* take the genitive

⁵⁷ Ь, or мягкий знак (mǎgkij znak) [soft sign] is used to signal that its preceding consonant is to be pronounced as soft. That is, most Russian consonants alternate between a soft or hard articulation. Some consonants are inherently soft, but for most consonants soft articulation must be indicated.

⁵⁸ The transliteration of the Cyrillic alphabet follows ISO 9.

singular case, and numerals from *five* and above require the head noun to be assigned the genitive plural:

(26)	один	год,	два	год-а,	сто	лет.
	odin	god	dva	god-a	sto	let
	one.M	year(M).NOM	two.M	year(M)-GEN.SG	hundred	year.GEN.PL
	[one year, two years, hundred years.]					

Furthermore, Mathiassen (1996, p. 172) emphasizes that the division of numerals in singular, two to four, and plural, and their role in determining the case of the noun is only relevant for nominal uses of numerals, that is numerals following nominal syntax. In other contexts numerals are used with adjectival syntax and are thus subsequently inflected for case in accordance with the linguistic and contextual environment.

Example (27) below displaying adjectival use is taken from Mathiassen (1996, p. 172):

(27)	Он	говор-ит	о	пЯТ-и	нов-ых	книг-ах.
	On	govor-it	o	pät-i	nov-yh	knig-ah
	He	speak-PRS.3	about	five-LOC	new-LOC.PL	book(F)-LOC.PL
	[He talks about five new books.]					

Case

The Russian language marks six cases: nominative, accusative, genitive, dative, instrumental, and locative, all realized in singular and plural. Case is perhaps the most predominant and salient feature of Russian noun and nominal phrase grammar. Premodifiers such as adjectives, demonstratives, possessives, and quantifiers agree with the noun in gender, number, and case. Likewise do relative pronouns and postposed attributes in the form of gerunds and participles reflect the grammatical features attached to the referent they represent.

The following noun phrase paradigm exemplifies regular common nouns belonging to the first and the second declination (Table 2.7):

RUSSIAN NOUNS	MASCULINE (1st declination) [TABLE]	NEUTER (1st declination) [FACE]	FEMININE (2nd declination) [ROOM]
Nominative. SG	стол stol	лицо lico	комната komnata
Accusative. SG	стол stol	лицо lico	комнату komnatu
Genitive. SG	стола stola	лица lica	комнаты komnaty
Dative. SG	столу stolu	лицу licu	комнате komnate
Instrumental. SG	столом stolom	лицом licom	комнатой komnatoj
Locative. SG	столѐ stole	лицѐ lice	комнатѐ komnate
Nominative. PL	столы stoly	лица lica	комнаты komnaty
Accusative. PL	столы stoly	лица lica	комнаты komnaty
Genitive. PL	столов stolov	лиц lic'	комнат komnat
Dative. PL	столам stolam	лицам licam	комнатам komnatam
Instrumental. PL	столами stolami	лицами licami	комнатами komnatami
Locative. PL	столах stolah	лицах licah	комнатах komnatah

Table 2.7. Paradigm for Russian noun inflection. Paradigmatic nouns belonging to each gender inflected for case and number. Table modelled after Mathiassen (1996).

The usage patterns related to the oblique cases will not be outlined in any further detail.

Below, I will focus on NP agreement and structural features of the Russian NP from a contrastive perspective with the purpose of acquainting the reader with what an L1 Russian knowledge consists of in relation to the grammar and structure of the NP. Focus is also directed at illuminating the relative distance (or closeness) between Russian and Norwegian.

The noun phrase

In general, the structure of the NP in all three languages runs along the same lines: demonstratives, possessives,⁵⁹ quantifiers, and adjectives are preposed, whereas relative clauses and attributive finite clauses are postposed:

(28)	POSSESSIVE	PREMODIFYING ADJECTIVE	HEAD
	Ма-я	чудесн-ая	подруга
	Ма-я̃	čudesn-aã	podruga
	my-F.NOM	fantastic-F.NOM	friend(F).NOM
	[My fantastic friend]		

The example below displaying the postnominal position of relative clauses is taken from Mathiassen (1996, p. 147). Note that the realization of relative clauses affirms the pervasiveness of the agreement patterns in Russian: the most frequent relative pronoun *который* (*kotoryj*) is also inflected for gender, case and number.⁶⁰

		HEAD	ATTRIBUTIVE CLAUSE (RELATIVE)			
(29)	Вот	мальчик,	котор-ого	мы	виде-ли	вчера.
	vot	mal'čik,	kotor-ogo	my	vide-li	včera
	Here	boy(M).NOM	who-M.GEN.SG	we	see-PST.PL	yesterday
	[Here is the boy we saw yesterday.]					

Furthermore, Russian diverges from Norwegian and English in terms of the realization of the genitive function: The Russian genitive phrase is constructed with the head noun followed by the possessor in the genitive case:

				HEAD	GENITIVE	
(30)	На	улиц-е	она	встрети-ла	подруг-у	Елен-ы.
	na	ulic-e	ona	vstreti-la	podrug-u	Elen-y
	on	street-LOC	she	meet-PST.F	friend-ACC.SG	Elen-GEN.SG
	[Outside she met a friend of Elena/Elena's friend.]					

⁵⁹ Recall, however, that possessives may be both prenominal and postnominal in Norwegian.

⁶⁰ There are several other possible relative pronouns in Russian, in principle all interrogative pronouns may fill a relative function.

		HEAD	GENITIVE
(31)	Во	время	войн-ы
	vo	vremĭa	vojn-y
	at	time	war(F)-GEN.SG
	[During war/the war.]		

Demonstratives

In all three languages demonstratives, possessives, and quantifiers precede the head noun. Russian demonstratives are, like demonstratives in Norwegian and English, polyfunctional in the sense that they can be used both independently (nominally) and attributively (adjectivally). Considering the possible independent (nominal) use of demonstratives, there are arguments supporting a categorization of demonstratives as pronouns (see, for instance, Hagen, 2000; Kinn, 2012). For the present purposes, however, the attributive (adjectival) use is of most interest, which corresponds to the Norwegian demonstratives treated as determiners.⁶¹

Table 2.8 below displays the inflectional paradigm of the proximal and distal demonstratives, *этот* and *тот*, respectively. (Такой (takoj) and таков (takov) are also listed as demonstratives, but they are inflected as adjectives).⁶²

⁶¹ The description of the Norwegian system for parts of speech has gone through major revisions the past 20 years. The agenda was set by the publication of *Norsk Referansegrammatikk* [Norwegian Reference Grammar] (Faarlund, Lie, & Vannebo, 1997). Among the most important changes we find the reclassification of words previously belonging to pronouns, but which are now treated as demonstratives, possessives and quantifiers within the word class of “determiners.” Mathiassen (1996), however, applies the previous categorization for parts of speech in Norwegian, and demonstratives are thus categorized as pronouns in his Russian grammar. In the present description, I use the labels of Norwegian present-day grammar.

⁶² The use of такой (takoj) involves a deictic element, and it is often used in constructions equal to “so” in English: “She is **so** nice.”

RUSSIAN DEMONSTRATIVES	Masculine SG	Neuter SG	Feminine SG	PL
NOM	этот/тог ètot/tot	это/то èto/to	эта/та èta/ta	эти/те èti/te
ACC	N/G*	это/то èto/to	эту/ту ètu/tu	N/G
GEN	этого/того ètogo/togo	этого/того ètogo/togo	этой/той ètoj/toj	этих/тех ètih/teh
DAT	этому/тому ètomu/tomu	этому/тому ètomu/tomu	этой/той ètoj/toj	этим/тем ètim/tem
INST	этим/тем ètim/the	этим/тем ètim/tem	этой/той ètoj/toj	этими/теми ètimi/temi
LOC	этом/том 'ètom/tom'	этих/том 'ètih/tom'	этой/той 'ètoj/toj'	этих/тех 'ètih/the'

Table 2.8. Proximal and distal demonstratives in Russian. Table after Mathiassen (1996, p. 143).

* The choice between nominative and genitive form for accusative case here depends on animacy: nominative for inanimate and genitive for animate referents.

Demonstratives used attributively (adjectivally) precede numerals, premodifying adjectives and the head noun:

			DEMONSTRATIVE	PREMODIFYING ADJ.	HEAD
(32)	Мне	нрав-ит-ся	это	красн-ое	здание.
	mne	nрав-it-să	èto	krasn-oe	zdanie
	I.DAT	please.PRS-REFL	this.N.NOM	red(N)-NOM.SG	building(N)NOM
	[I like that red building.]				

			DEMONSTRATIVE	HEAD
(33)	Маша	завиду-ет	тех	девуш-ек.
	Maša	zavidu-et	teh	devuš-ek
	Masha	envy-PRS.3	those.GEN.PL	girl(F)-PL.GEN
	[Masha envies those girls.]			

Possessives

Possessives are also inflected for gender, case and number, except third person singular, еѐ (eě) and еро (evo) [her/his], and third person plural их (ih) [their]. This feature is shared with Norwegian. Furthermore, both Norwegian and Russian have reflexive possessives: *sin* (Norwegian) and *свой* (svoj) (Russian), but whereas *sin* can only be used for third person, there are no restrictions concerning person attached to *свой* (svoj).

Table 2.9 below exemplifies the inflectional paradigm for possessives in Russian, showing мой (moj, [my]) in oblique cases for all three genders and the plural (for which gender is not exhibited).

RUSSIAN POSSESSIVES	Masculine. SG	Neuter. SG	Feminine SG.	PL (all genders)
NOM	мой moj	моё moë	моя moã	мои moi
ACC	N/G*	моё moë	мою moÿ	N/G
GEN	моего moego	моего moego	моей moej	моих moih
DAT	моему moemu	моему moemu	моей moej	моим moim
INST	моим moim	моим moim	моей moej	моими moimi
LOC	моём moëm	моём moëm	моей moej	моих moih

Table 2.9. Russian 1st person possessives. Table after Mathiassen (1996, p. 138).

*The choice between nominative and genitive for accusative case here depends on animacy: nominative for inanimate and genitive for animate referents.

Quantifiers

Russian quantifiers designating part (many of them traditionally called indefinite pronouns) can be used independently (nominally) and/or attributively (adjectivally) (Mathiassen, 1996). When used attributively, they contribute to add a quantificational meaning to the NP, and most often they are inflected after the same patterns as adjectives and demonstratives (a few exceptions to this is given below). Their position in the NP structure is prenominal.

Russian indefinite pronouns/quantifiers, некто (neкто [some(one)]), нечто (neчто [some(thing)]), некоторые (nekotorye [some(one)]), несколько (neskol'ko '(less than) [many/more]), may be used both nominally as pronouns and adjectivally as NP modifiers. Quantifiers such as несколько can thus be applied in two different ways: An adjectival use will imply a full inflectional paradigm, whereas a nominal use takes the genitive plural (much in the same way as numerals above four). The linguistic and contextual environment determines the application of one or the other, for instance

prepositions governing case will require the adjectival use. Много (mnogo) [many/much]) behaves in the same way as несколько.

(34) and (35) below illustrate the two alternative uses of много (mnogo) and несколько (neskol'ko):

			QUANT.	PREMODIFYING ADJ.	HEAD
(34)	Маша	бы-ла	в мног-их	красив-ых	стран-ах.
	Maša	by-la	v mnog-ih	krasiv-yh	stran-ah
	Masha	be-PST.F	in many-GEN.PL	beautiful-GEN.PL	country-GEN.PL

[Masha have been to many beautiful countries.]

			QUANT.	HEAD		
(35)	Борис	увиде-л	несколько	студент-ов	на	улиц-е.
	Boris	uvide-l	neskol'ko	student-ov	na	ulic-e
	Boris	see.PST.M	some	student-GEN.PL	on	street.LOC.SG

[Boris saw some students outside.]

A particular construction type of attributive indefinite pronouns/quantifiers of part is relevant to the present context, namely the construction consisting of какой (kakoj, [which/what]) and the attached endings -то (-to), -нибудь (-nibud'), -либо (-libo), both expressing indeterminateness. The semantic difference between them pertain to degree of indeterminateness, and generally they will have translation equivalents such as [whoever], [anything], [anyone], [some(one) or another], etc.⁶³ According to Mathiassen (1996, p. 157), the translation equivalents in Norwegian of -то and -нибудь will in fact not always be able to capture the semantic difference, but generally -нибудь does express a larger degree of indeterminateness. The suffixes -нибудь and -либо are semantically equal, but -либо is traditionally more strongly associated with a “literary” language style (Mathiassen, 1996, p. 157).

The following examples are taken from Mathiassen (1996, pp. 158–159):

⁶³ Mathiassen (1996, p. 159) rejects that there is a one-to-one correspondence between -то and -нибудь and “some” and “any.”

				QUANTIFIER	HEAD
(36)	...,	чтобы	купить	какую-нибудь	книг-у.
	...,	čtoby	kupit'	kakuĭ-nibud'	knig-u
	...,	(in order) to	buy	some (or another).ACC.SG	book(F)-ACC.SG
	[..., in order to buy some book or another.]				

				QUANTIFIER	HEAD
(37)	Они	хоте-ли	купить	какую-то	hibark-y,
	oni	hoteli	kupit'	kakuĭ-to	hibark-u,
	They	want-PST.PL	buy	some (a)	hovel(F)-ACC.PL
	но	не	наш-ли	её.	
	no	ne	naš-li	eĭ	
	but	not	find-PST.PL	her.ACC	
	[They wanted to buy a hovel, but they did not find it.]				

Although it may be difficult to clarify the semantic difference between the two quantifiers, Mathiassen (1996, pp. 158–159) points out that the translation into Norwegian of the sentences in (36) and (37) reveals a semantic difference. In fact, the quantifier in (37) may as an option be translated into the indefinite article *en* [a/an], but such an option is not available for the indefinite quantifier in (36) which would necessarily require a reading along the lines of [some or another/just anyone]. Mathiassen does not make any claims regarding referentiality, but it seems like the two sentences also testify to differences in specificity status; whereas (36) most certainly cannot have a specific referential reading, (37) could perhaps rather be interpreted as specific. This is affirmed in Christensen's grammar of Russian (Christensen, 1996, p. 87) where *-to* (*-to*) is assumed to presuppose existence, and by Lyons (1999) who relates the difference to distinctions in scope.⁶⁴

Finally, the Russian quantifiers *весь* (*ves'* [all/the whole]), *целый* (*celyj* [all, [the/a whole]) designate totality. Mathiassen (1996, p. 163) suggests that *целый* (*celyj*) is

⁶⁴ That *-to* and *-nibud'* involve a difference in terms of specificity is also confirmed by Lyons (1999, p. 174). In his account, *-to* entails wide scope; that is, specific reference, while *-nibud'* entails narrow scope implying a non-specific reading.

more inclined to receive an indefinite reading and *весь* (*vesʹ*) a definite. Both are inflected for gender, number, and case. The Russian translation equivalents for *every* is *каждый* (*každyj*) and *всякий* (*vzākij*). Their positions are prenominal and they precede possessives, numerals and adjectives in that sequence, respectively. Quantifiers designating totality and demonstratives on the one hand, and quantifiers designating part on the other, mutually exclude each other. Russian genitive constructions, however, do not presuppose definite reference (see example 30 above).

Summary and closing remarks

It is beyond doubt that the Russian language is complex in terms of inflection and agreement: The NP generally requires internal consistency between all modifiers and the head in case, gender, and number inflection. The choice of case points outside the NP, of course, with the exception of certain quantifiers and numerals, and relates to the sentence and the discourse as a whole. The internal structure of the NP is, however, highly similar to that of Norwegian and English, following a general sequence of quantifiers designating totality, demonstratives and possessives, numerals and quantifiers designating part, and finally adjectives directly preceding the noun. Relative clauses and other attributive clauses are postposed in all three languages. However, Norwegian and English exhibit a prenominal genitive construction, while Russian expresses genitive relations postnominally.⁶⁵

The tables above displaying Russian noun inflection, and inflection of demonstratives and possessives, reveal that a rather large proportion of predictability is associated with agreement: the suffixes are more or less parallel across the different types of modifiers. Note the consistency and iteration of the suffixes in, for example, the following NP in the instrumental case:

⁶⁵ I am of course aware of an alternative preposed genitive pattern constructed by a possessive adjective and the head noun (see, for instance, Christensen, 1996). This construction is however limited and only applicable whenever the possessor is a proper name or a referring to a person: *мамина книга* (*matina kniga*, [mum's book]).

- (38) Профессор встрет-ил-ся с сво-ими нов-ыми студент-ами
 Professor vstret-il-să s svo-imi nov-yimi student-ami
 Professor meet-PST.M.REFL with his-INS.PL.REFL new-INS.PL students-INS.PL
 [The professor met with his new students.]

If we for a moment reverse the roles and imagine Russian to be the L2 and Norwegian or English the L1, it seems like the greatest initial challenge for the learner would be to assign the right case (and gender) to the NP, but when that choice is made the phrase-internal agreement can be almost mechanically completed by assembling the remaining pieces into their right form by the model of the head. If we now turn the roles back and subsequently regard the topic through the lenses of a usage-based approach (see section 1.3), we could hypothesize that since such an assembling of pieces into its right slots is firmly entrenched in the language experience of L1 Russian speakers, this experience will accompany them into the process of learning a new language. When the definiteness status of the referent and the gender of the head noun are set in the Norwegian L2, the L1 Russian learners may be expecting this to be reflected in the attributes of the NP as well. Perhaps the Russian learners will in fact be able to benefit from the requirements for consistent agreement in their L1 when they encounter Norwegian NP structure.

Albeit largely simplified and incomprehensive, Table 2.10 below provides an overview of central features of the NP structure in all three languages.

NOUN PHRASE TOPOLOGY SCHEMA - MODIFIED VERSION OF HAGEN (2000)						
	QUANTIFIERS (TOTALITY)	MODIFIERS (DEFINITE) Demonstratives Possessives Genitives	QUANTIFIERS (PART) DESCRIPTIVE MODIFIERS* Numerals Indefinite pronouns Adjectives	HEAD NOUN	POSSESSIVES GENITIVES	ATTRIBUTIVE CLAUSES
NORWEGIAN:	Alle	mine	nye	venner		som jeg har møtt på skolen. who I met at school.
ENGLISH:	All	my	new	friends		
RUSSIAN:	Все vse	мои moi	новые novye	друзья druz'ja		которых я встретил в школе. kotoryh ja vstretil v škole.
NORWEGIAN:		Annas	interessante	venner		
ENGLISH:		Anna's	interesting	friends		
RUSSIAN:			интересные interesnye	друзья druz'ja	Анны Anny	
NORWEGIAN:		noen	vakre	land		som jeg har vært i
ENGLISH:		some	beautiful	countries		that I have been to.
RUSSIAN:		несколько neskol'ko	красивых krasivyh	стран stran		в которых я был. v kotoryh ja byl.

Table 2.10. Noun phrase topology schema. Modified version of Hagen (2000). *Quantifiers designating part and descriptive modifiers are here collapsed into one category, because there is a certain flexibility in all three languages regarding the positions of numerals and adjectives. All languages will in certain contexts allow the numeral to precede the adjective (my best three friends). Additionally, considering the variation in classifying words with partly adjectival, partly quantificational function and meaning in parts of speech, the motivation for two separate positions appeared to be weakened.

2.4. Definiteness: Universal and language-specific aspects

The previous sections focused on formal features associated with nouns and the noun phrase in Norwegian, English and Russian. Several differences between the languages were uncovered, and it is manifest that no complete overlap between the three languages in terms of grammaticalized concepts may be identified. The most critical difference in the present context is that only Norwegian and English encode definiteness grammatically. Section 1.4 briefly introduced Ringbom's focus on language distance and closeness and the learners' perception of linguistic contrasts between languages as critical to transfer. Ringbom's (2007) categorization of crosslinguistic relations as *similarity relations*, *contrast relations* and *zero relations* may be applied in order to describe the contrast between the three languages in the encoding of definiteness.⁶⁶ The relation between grammatical definiteness in Norwegian and English could thus be understood as a similarity relation in terms of function, but also partly as a contrast relation if we consider the differences in linguistic realization. The relation between Norwegian and English on the one hand and Russian on the other would necessarily correspond to a zero relation since Russian does not possess any systematic grammatical category to encode definiteness. However, the subsequent sections will explore to what extent there are structural properties of Russian that may qualify as a contrast relation.

Outline

The contrastive description of the formal inventory of the NP provided limited information about patterns of use, and the semantics and pragmatics of the NP.

However, if we recapitulate from the introductory pages of chapter 1, it was asserted

⁶⁶ Ringbom's notions are originally meant as descriptions of the learners' perceptions of interlingual and cross-linguistic similarity. However, I believe that they may also successfully be applied in order to describe contrastive linguistic relations theoretically. Gujord (2013), which will be returned to in chapter 4, also approaches the topic of language comparison through Ringbom (2007).

that grammatical definiteness can roughly be viewed as the linguistic realization of the meaning concept of *identifiability* (see section 1.1), and that identifiability is seen as an element in interpretation in all languages independently of being conventionalized through a grammatical category or not.⁶⁷ The fact that grammatical definiteness encodes a pragmatic concept present at one level or another in all language use, testifies to a universal dimension associated with definiteness which may hardly be found in relation to grammatical categories such as for instance gender. Yet, the interplay and various correlations between grammatical and semantic/pragmatic aspects of definiteness are complex and leave us with several unresolved issues which will be addressed below. For the present purposes, they may by and large be captured by the following two questions:

1. What is definiteness, understood as a grammatical category encoding a universal semantic/pragmatic category?
2. What is definiteness, understood as the realization of the concept of identifiability, in a language that does not encode it obligatorily in the grammar, such as Russian?

In the subsequent sections, I primarily draw on Lyons (1999) and Lambrecht (1994) in order to explore these issues.

Definiteness and identifiability

The aim of the subsequent sections is to examine the concepts of meaning underlying the category of grammatical definiteness, and to provide a fundament for how this category is to be understood and interpreted in languages not encoding it grammatically, such as Russian. Two main topics can be pointed out as most central in Lyons's authoritative volume *Definiteness* (1999). Lyons's investigation is carried out in order to establish a well-informed account which unifies the meaning content of definiteness across languages, and in order to outline to what extent definiteness can

⁶⁷ Thorough and more detailed analyses of the various uses of the definite and the indefinite forms will be given in the chapters focusing on the analyses of data, that is, chapters 5, 6 and 7.

be understood as a universal phenomenon. Through the examination of both cross-linguistic evidence and the research literature, Lyons traces the various linguistic expressions of definiteness in a large sample of languages, and, in parallel, the various theoretical notions of definiteness prevalent in the research history from the tradition of philosophy and logic (Russel, 1905) to accessibility and relevance theory (Ariel, 1990; Sperber & Wilson, 1986). The most widely applied notions that have been used to model a unified account of article use in English, namely *uniqueness* (Russel, 1905), *familiarity* (Christophersen, 1939), and *inclusiveness* (Hawkins, 1978), in addition to *identifiability*, are all thoroughly discussed, but *identifiability* is finally judged to be the most appropriate.

In the following pages, I will not go into the details of what unifies and distinguishes one from the other, apart from underlining that according to Lyons, *identifiability* largely seems to be the preferred term for pragmatically oriented researchers (Lyons, 1999, p. 253), since it focuses on definiteness as primarily a discourse phenomenon. However, since most models of grammatical definiteness contain an account of concepts that may be understood as semantic as well such as uniqueness and specificity, I will continue to refer to the content of definiteness as semantic/pragmatic, in the sense that it involves elements of both.

It is important and often cited in SLA studies of article acquisition that Lyons draws a firm line between definiteness as a grammatical category and definiteness as a semantic/pragmatic category (see section 1.0). The boundary between a grammatical category of definiteness and its semantic/pragmatic content, where only the latter carries a potential for being a universal category of meaning, is substantial to Lyons (1999), but it is also of crucial importance to studies within SLA since it may contribute to a clarification of the fuzzy domain of equivalents and transferability. That is, a distinction between grammatical definiteness and semantic/pragmatic definiteness contributes to identify the plausible area of parallels, at the same time as it acknowledges language-specific traits which fall outside and are impervious to the core content contrasting definite and indefinite. Lyons's position is supported by

Lambrecht (1994) who also advocates a view separating the grammar of definiteness from the semantics and pragmatics of definiteness. For both, this view is motivated by the lack of a consistent one-to-one relationship between the application of grammatical definiteness and a semantic/pragmatic concept in languages possessing such a grammatical category. This discrepancy is reflected for instance in the distribution of marking in Norwegian, English and French: In contrast to English, Norwegian mostly does not allow the indefinite article to co-occur in predicative NPs, while French requires articles to occur also with nongeneric plural indefinites.

Nonetheless, cross-linguistic evidence and the observation that all languages grammaticalizing definiteness generally seem to include “a large central core of uses relatable directly to identifiability” (Lyons, 1999, p. 278) motivate Lyons’s claim that *identifiability* indeed captures the core content of grammaticalized definiteness. Lyons is rather careful in his claims concerning the universality of definiteness as a meaning category, but based on the presence of demonstratives in all languages and the universal tendency to organize given and new information (topic and comment) in discourse after certain recognizable patterns, he reasons: “It may be that identifiability is an element in interpretation in all languages, but in many it is not grammaticalized” (Lyons, 1999, p. 278). That is, *identifiability* can be conceived of as a universal category of meaning represented by various means in all languages, but definiteness is not *universally* grammaticalized or encoded.

Lambrecht is more specific in his *Information Structure and Sentence Form* (1994), and asserts that:

...I prefer not to think of definiteness as a universal linguistic category. What is presumably universal is the COGNITIVE category of IDENTIFIABILITY, which is imperfectly and non-universally matched by the grammatical category of definiteness. (Lambrecht, 1994, p. 87 [emphasis original])

In short, no grammatical category of definiteness is found in Russian, but a certain presence and impact of the semantic/pragmatic category of definiteness can be

presupposed, for instance in the use of demonstratives, and it can be expected that identifiability will play a part in discourse. That is to say, a universal meaning category of definiteness understood as identifiability implies that it is first and foremost reflected in pragmatic aspects of language rather than in semantic. Further, identifiability does not primarily describe either a language internal concept of meaning or a real-world denotatum; rather, it describes a function whose occurrence is connected to discourse and is dependent on the speakers' use of language.

Definiteness equivalents expressing identifiability

It is clear that definiteness can on the one hand be defined as a possible grammatical category, and on the other as a possible semantic/pragmatic category, both, however, involving the same meaning concept of identifiability. In Norwegian and English identifiability is exhibited through the grammatical category of definiteness, whereas in Russian it is expected that the pragmatic concept of identifiability plays a role at one level or another, albeit underspecified as such. I quote Lambrecht:

Certain languages arguably have no grammatical category for the expression of identifiability, for example Russian (Johanna Nichols, p.c.). This does of course not mean that speakers of Russian have no CONCEPT of pragmatic identifiability and could not signal it in some indirect way. (Lambrecht, 1994, p. 79) [emphasis original]

The topic of equivalents, or indirect ways for signaling definiteness, in languages which do not encode definiteness grammatically has been thoroughly studied, and below I will try to survey some of the most important and robust tendencies as they are referred in grammars and the literature. However, my aim is not to trace a complete correspondence between grammatical definiteness in Norwegian and equivalent structures in Russian, but rather to identify some linguistic resources available to the L1 Russian speaker which may pertain to the concept of identifiability.

The first corresponding structures to be mentioned relates to the lexico-grammatical domain. Section 2.3 described a set of lexico-grammatical devices which will necessarily entail a reading determining the definiteness status of the NP, such as demonstratives, personal pronouns and indefinite pronouns/quantifiers. This implies

that identifiability is present in the grammar of Russian, although it is not exposed in nouns and noun phrases to the same extent as in [+ART] languages. Moreover, identifiability seems to be only secondarily expressed by demonstratives, that is, it is an inherent side-effect of demonstration and distal/proximal deixis more than a conveyer of definiteness per se.⁶⁸

Secondly, Russian exhibits devices which may signal identifiability at the discourse level: Word order is, as illustrated in chapter 1, widely held to be a device that can indicate identifiability status (see Ionin, 2003; Lambrecht, 1994; Lyons, 1999; Mathiassen, 1996), and its relevance has also been investigated in SLA article acquisition studies (see section 1.4.). The observation that there is a correspondence between word order, theme-rheme structure and definiteness in Slavonic languages without a grammatical category of definiteness was initially associated with the Prague School (e.g., Daneš, 1974).⁶⁹ The rationale behind this is that initial parts of the clause normally carry given/old information, whereas new information will conventionally occupy the final position of the clause. Furthermore, old/given information coincides with identifiability, while new information normally coincides with nonidentifiable referents. Consequently, the *theme* refers to sentence elements carrying old/given information, while the *rheme* carries new information. However, the position advocated by the Prague School (among others) has been criticized for not being sufficiently specific; themes can also carry new information and it is doubtful whether word order can be claimed to represent a complete equivalent. Trenkic (2004) discusses the impact of word order on the interpretation of identifiability in Serbian, and she concludes that the correspondence is imperfect and does not qualify as a grammaticalized device for encoding definiteness.⁷⁰ Also Jarvis (2002) points out that

⁶⁸ Ionin (2003, p. 108) also notes that demonstratives may be used with “already-mentioned” referents. But recall from section 1.4 that Trenkic (2004) evaluates use of demonstratives in Serbian not to be more frequent than in English.

⁶⁹ Li’s volume *Subject and Topic* (1976) is an authoritative work addressing similar tendencies in other non-definiteness languages (i.e. [-ART] languages) like Chinese.

⁷⁰ Rather, she reasons that what is encoded by word order seem to resemble more closely to given and new information as they are described by Chafe (1976) (see chapter 6 in the present thesis).

the correspondence between themes (topics) and old information is fragile and may be misleading since thematic clause elements may also carry new information. In conclusion, theme-rheme (topic-comment) contrasts should be considered a device in principle operating independently of identifiability.

Nonetheless, particularly in relation to the sentence subject, as a minimum, a correspondence between clause position and definiteness status may be presupposed. The examples below are taken from Mathiassen (1996, p. 20):

- (39) На стол-е лежит книга
 na stol-e ležit kniga
 on table-LOC lies book(F)NOM
 [On the table there is a book/A book is lying on the table.]

- (40) Книга лежит на стол-е
 kniga ležit na stol-e
 book(F).NOM lies on table-LOC
 [The book is lying on the/a table.]

Thirdly, case may also in certain instances contribute to the interpretation of specificity and definiteness: Alternation between the accusative and genitive case is often pointed out as a means signaling the referential status of the direct object in languages without grammaticalized definiteness (see Lyons 1999, for Slavonic languages see for instance Ekiert, 2010b; Mathiassen, 1996). But also other case alternations may be relevant, such as in Turkish where direct objects in the accusative case (in place of the nominative case), signals a definite⁷¹ object (Lyons, 1999, p. 202). However, with respect to Russian, Mathiassen (1996, p. 20) emphasizes that the relevance of case alternation for objects is limited and only applicable “in certain environments.” The accusative case is associated with definites and the genitive case

⁷¹ There seems to be some disagreement concerning whether the use of accusative signals a definite object or rather a specific object (see Brendemoen & Hovdhaugen (1992, p. 48), for an account of accusative as a signalizer of specific reference).

with indefinites and nonspecificity. The examples below are taken from Mathiassen (1996, p. 20):

- (41) Она принесла нам конфет-ы
 ona prinesla nam konfet-y
 she brought us sweet-ACC.PL
 [She brought us the sweets.]

- (42) Она принесла нам конфет
 ona prinesla nam konfet
 she brought us sweet.GEN.PL
 [She brought us sweets.]

The genitive case is also employed when the referent is negated, which amplifies an association between genitive and nonreferentiality.

The fourth feature important to mention, which is, perhaps, less frequently referred to in the literature, is the interaction between verbal aspect and the referential status of the direct object.⁷² Ekiert (2010b, p. 58) illustrates the effect of verbal aspect on the definiteness status of the noun by showing how the sentence “I wrote a/the letter” would receive different translations in Polish. The examples may elucidate the same effect in Russian:

- (43) Маша на-писа-ла письмо
 Maša na-pisa-la pis'mo
 Masha PFV-write-PST.F letter.N.ACC
 [Masha wrote **the letter**.]

- (44) Маша писа-ла письмо
 Maša pisa-la pis'mo
 Masha pisa-la.PST.F.IPFV letter.N.ACC
 [Masha wrote **a letter**.]

⁷² See Lindvall (1998) for a Swedish dissertation which addresses correspondence between definiteness and aspect in translations between Polish, Swedish and Greek.

There is thus a tendency for imperfective verb phrases to take a nonspecific (indefinite) complement, and for a perfective verb phrase to take a specific (definite) complement. But also here the correlation is a tendency rather than an absolute device.

Summary and closing remarks

The comprehensive works of Lyons (1999) and Lambrecht (1994) allow us to conclude that both Norwegian and English possess a grammaticalized category of definiteness sharing a semantic/pragmatic core of identifiability. Even though identifiability is not universally grammaticalized, we may further assume that it is represented also in [-ART] languages by the employment of a variety of different structures. Word order is perhaps the most well-documented device cross-linguistically, although this is also an imperfect correlation first and foremost associated with subjects. Other devices mentioned for Russian, such as case alternation and aspectual distinctions, seem to be more tightly intertwined with the concept of specificity than with identifiability. Word order is thus to be conceived of as the most reliable cue to identifiability, apart from that, the identifiability status of referents in discourse must be inferred pragmatically through contextual cues.

When acquiring a new language, it seems evident that the degree of grammaticalization of a given phenomenon in the first language may have an impact on the learning process (see section 1.4 on cross-linguistic influence and transfer). That is, even though identifiability is implicitly inferred from word order and context, to encode it obligatorily in every NP is a substantially different process, both in terms of conceptualization and formulation of utterances (see Slobin, 1996; Trenkic, 2008, 2009; Trenkic & Pongpairoj, 2013). As discussed above, there are parallels between Norwegian and Russian in the domain of expressing identifiability in discourse, but the linguistic resources available in Russian are limited in number and applicability. Moreover, it should not be forgotten that the conventional sequence in discourse for given information to precede new is a universally valid device for discourse organization also relevant to languages exhibiting a grammatical category of definiteness, although, as seen in chapter 1, grammatical encoding will overrule

conventions of information structuring. In terms of Ringbom's categories referred to above, it seems fair to once again conclude that we are dealing with a similarity relation with elements of contrast between Norwegian and English, and with a zero relation with certain elements of contrast for Norwegian and Russian.

3. Definiteness and second language acquisition

As pointed out in the introductory pages, the literature on article/definiteness acquisition within SLA is extensive, and the approaches taken by researchers are varied. In the present chapter, I will survey the literature on L2 acquisition of articles and definiteness, with the purpose of identifying some major tendencies and pointing out the most robust results. I will also, although not in equal detail, visit the research on child first language acquisition of articles/definiteness since this research in many ways has been an important source for the generation of hypotheses in L2 studies. Particularly with the Scandinavian languages, where the L2 research on adult definiteness acquisition is relatively scarce, it is fundamental to survey the results obtained in studies of child L1 acquisition. However, I will embark on reviewing and systematizing the SLA literature in general before I focus specifically on the Scandinavian context. The chapter is concluded with the presentation of a set of research questions and predictions specifying further the overarching goal of the study presented in 1.2.

3.1. Theoretical orientations in the study of article acquisition

It seems fair to draw an initial crude line between studies conducted within the generative paradigm on the one hand, and studies addressing the acquisition process from other perspectives on the other. Yet, there are also studies that draw on methods and theories from both strands and that are therefore difficult to classify. Furthermore, categories such as generative and nongenerative are not uniform: The generative approach may include several competing hypotheses, and likewise, nongenerative research may incorporate a range of different perspectives, from traditional mainstream cognitivist approaches to emergentist usage-based perspectives on language acquisition to research conducted with a stronger educational ambition. However, as Ortega (2009, p. 111) points out, and as will be addressed further in

chapter 4, the focus of generative SLA research on the whole seems to be on the mental representation of the learner's linguistic competence, while the mainstream cognitive (non-generative) school comes across as largely concerned with learner language development.

In the subsequent sections, I start out with a brief overview of the generative approach before I move on to review studies conducted without a clear generative research agenda. On the whole, since the present study ties into the category of mainstream SLA studies focusing on learner language development, this will also be the overall focus in the present chapter.

Generative perspectives

The overarching questions within the generative approach to SLA are to what extent the L2 acquirer may access Universal Grammar (UG), and in what ways the L1 may interact with UG. As we saw in section 1.2, the appearance of Universal Grammar in SLA dates back to the 1980s, and White resumes the motivation for generative SLA research in the following way:

Researchers looked for evidence that L2 learners could (or could not) apply principles of UG, and set or reset parameters, as well as investigating the extent to which the L1 was involved, in the form of L1 parameter settings in interlanguage grammars. Hypotheses varied as to whether learners had no access, partial (indirect) access, or full (direct) access to UG, and there were differing views on the role of the L1 grammar. But although the issues were phrased in terms of access to UG, the question was then, and remains, whether interlanguage representations show evidence of being constrained by principles of UG; that is, whether interlanguage grammars are restricted in the same way as the grammars of native speakers are restricted. (White, 2003a, p. 23)

From the present-day perspective on generative research on L2 article/definiteness acquisition, two main approaches to the overarching UG question seem most relevant: one school investigating different hypotheses entertaining the Full Transfer Full Access hypothesis (henceforth FTFA) (Schwartz & Sprouse, 1996), and another claiming that the L2 grammars of learners acquiring the L2 after the critical period will remain impaired because of a restricted access to UG. This latter approach is more

recent and is referred to as the Failed Functional Feature Hypothesis (FFFH) (see Franseschina, 2001; Hawkins, 2001; Jin et al., 2009).⁷³ According to FTFA, the starting point for the L2 learner is the grammar of the L1, but importantly, the L2 grammar development is constrained by the same UG principles as are other languages. White explains the role of UG in FTFA as “When the L1 representation is unable to accommodate to the L2 input, the learner has recourse to options made available through UG” (White, 2003a, p. 31). Researchers working within FTFA hold that parameter values can also change in the grammars of adult learners. This point contrasts with the Failed Functional Features Hypothesis, which maintains that only interpretable features⁷⁴ may undergo change after the critical period (e.g., Fransechina, 2001; Hawkins, 2001). To my knowledge, the collection of studies primarily investigating L2 article and definiteness acquisition from the FFFH -perspective is relatively limited, but see Tsimpli (2003) and Tsimpli and Mastropavlou (2007) for representative studies of definiteness acquisition in the L2 Greek of bilingual Russian/Turkish learners. Moreover, in section 3.5 I will review a study of L2 Norwegian DP acquisition by Jin, Åfarli, and van Dommelen (2009), who compare their results to both a hypothesis postulating FTFA (see The Missing Surface Inflection Hypothesis below) and the FFFH.

The acquisition of articles has been studied within The Missing Surface Inflection Hypothesis associated with, for instance, Lardiere (1998a, 1998b) and Prévost & White (2000), and which postulates the validity of FTFA. The Missing Surface Inflection Hypothesis holds that since variability in production of functional material (morphology) seems to go hand in hand with fully acquired syntax, variability may not be caused by a restricted access to UG; on the contrary, variability in morphology is viewed as a surface phenomenon, whereas the establishment of the syntactic features

⁷³ For an overview in Norwegian of generative approaches to SLA, the reader is referred to Melum Eide (2015).

⁷⁴ The distinction between interpretable and uninterpretable features stems from Chomsky’s Minimalist Program. Interpretable features include language features with semantic “effects,” while uninterpretable features only possess formal “effects.” Within this framework, articles are considered uninterpretable features.

of language within this framework implies access to UG. Furthermore, as an elaboration of the Missing Surface Inflection Hypothesis, Goad, White and Steele (2003) and Goad and White (2006) have proposed the Prosodic Transfer Hypothesis, which will be explored further in section 3.5 (and 3.3.3) below, hypothesizing that L1–L2 differences in prosody may be critical to the learners’ ability to acquire target morphology.

Finally, perhaps the most well-known hypothesis maintaining a FTFA approach to SLA and UG, which was explicitly developed to account for the acquisition of article systems, is the Fluctuation Hypothesis and the Article Choice Parameter, associated with and elaborated by Ionin and colleagues (Ionin, 2003; Ionin & Wexler, 2003; Ionin, Ko & Wexler, 2004; Ionin, Zubizarreta & Maldonado, 2008). The main idea of the Fluctuation Hypothesis is that [–ART] learners fluctuate between two possible parameter settings before adjusting to the one of the target language. Ionin’s proposal has been highly influential, and it has been replicated in a number of studies (see section 3.3.5 below for a more elaborate presentation). However, the parameter categories of the Article Choice Parameter also appear as analytical categories in studies not claiming to investigate access to UG (Tanaka, 2013; B. White, 2009).

Nongenerative perspectives

Nongenerative research on article acquisition must here be perceived as an umbrella label for approaches to article/definiteness acquisition that do not claim adherence to UG, and that are not conducted within the theoretical models stemming from Chomsky’s theory. As already discussed in section 1.4 on the role of transfer in L2 article studies, much research conducted by scholars outside the UG paradigm has focused on the impact exhibited on L2 development by universals of language and cognition vs. language-specific traits, that is, transfer and cross-linguistic influence. The focus in these studies clearly departs from that of the preponderance of studies conducted within a generative approach, and many studies ascribe no position at all to an innate domain-specific language module in language learning. Yet, in the same way that the Interlanguage Hypothesis (Selinker, 1972) has motivated the general cognitive

approach to SLA, White points out that the Interlanguage Hypothesis is also the root of the generative perspective on second language acquisition: “The current generative linguistic focus on interlanguage representation can be seen as a direct descendent of the original hypothesis” (White, 2003, p. 19).

To my knowledge, insights directly originating in cognitive linguistics has reached article/definiteness acquisition studies perhaps most clearly through the incorporation of Slobin’s *Thinking for Speaking* (1991, 1996) in Ekiert’s Ph.D. work (Ekiert, 2010b) and in a recent article published in a volume explicitly addressing thinking-for-speaking approaches to SLA (Ekiert, 2010a). Nistov’s study of referential expressions in Norwegian (2001a) also incorporates elements of cognitive linguistics through Slobin’s thinking for speaking. Ideas developed within the emergentist and usage-based approaches (see section 1.3 for a brief introduction to the basic tenets of usage-based approaches to SLA) may perhaps best be detected in Trenkic’s recent co-authored works on definiteness acquisition, which all address different aspects of the role of saliency and processing in the L2, and also L1–L2 competition in L2 production (Trenkic & Pongpairroj, 2013; Trenkic, Mirkovic & Altmann, 2014; Austin, Pongpairroj & Trenkic, 2015). The 2015 publication proposed the development of a model for L2 language processing subsumed under a constraint-satisfaction model (Austin, Pongpairroj & Trenkic, 2015, p. 689).⁷⁵

3.1.1. Specific referent and assumed hearer knowledge

Huebner’s (1983) seminal study of Ge, a Hmong speaker learning English, has already been mentioned several times (see chapter 1). The study involved a thorough investigation of the article *da* (the), and it has paved the way for many subsequent studies of article acquisition. The study was innovative in the sense that it did not limit

⁷⁵ Constraint-satisfaction models stem from work on artificial intelligence. In the domain of language learning they are primarily developed and used to account for processing in L1 acquisition. See section 3.3.3 in the present thesis.

the investigation to correct article suppliance or omission in obligatory contexts, which had been the focus of the morpheme-order studies (e.g., Dulay & Burt, 1974). Rather on the contrary, Huebner's study pursues a form-to-function approach where the point of departure is the development of the article *da* in Ge's L2 English (section 4.1 discusses the dimensions of form and function from the perspective of methodology). Bickerton's (1981) binary categories of [±specific referent] and [±assumed hearer knowledge],⁷⁶ ⁷⁷ briefly presented in chapter 1, were applied as an analytical framework against which Ge's use of *da* was measured. On the whole, Huebner's study is considered one of the groundbreaking, and now classic, functionally oriented works in SLA (see Mitchell, Myles, & Marsden, 2013; Ortega, 2009).

Huebner's study was a longitudinal study of an untutored beginner-level learner, and data was recorded from a series of informal conversations. Huebner's study also included the investigation of linguistic features other than the definite article, such as the topic marker *isa*. However, the part of the study addressing *da* focused on how the article was variously employed to mark the semantic/pragmatic features of [±SR] and [±HK]. Huebner documented that Ge followed a path of six stages, from no marking in topic position, through what was called "the-flooding"⁷⁸ to a near-target-like marking of [±SR] and [±HK] (Huebner, 1983, p. 146). In fact, the results from early recordings (Tapes 3, 5 and 7) in the study⁷⁹ demonstrate that *da* is applied to a very large extent across all four contexts. In Tape 3, the percentages for *da* are 93% in [+SR, +HK], 86% in [+SR, -HK] and 85% in [-SR, -HK]. By Tape 17, however, the "the-flooding"

⁷⁶ Originally [±presupposedness] in Bickerton (1981).

⁷⁷ Bickerton (1981, 1984) takes an innatist position towards the human language capability; that is, he presupposes the existence of a prespecified language module functioning independently of general cognition. This perspective is not very salient in Huebner (1983), and it is clear that Huebner does not overtly state any opinion on this matter. In relation to Ge's use of *da*, Huebner concludes that Ge's language production may be a result of universal tendencies or it may be a result of Ge's L1, which is a [-ART] topic-prominent language.

⁷⁸ The term "the-flooding" was coined by Huebner (1983) and has since then been applied in order to describe overgeneralization of *the* to contexts other than [+SR, +HK], mostly to [+SR, -HK] contexts. However, it is not clear in Huebner (1983) exactly how pervasive the overgeneralization must be to qualify for the description of "flooding".

⁷⁹ The study includes 9 tape recordings, labeled Tape 1, 3, 5, 7, 9, 11, 13, 15, 17.

has diminished; only 17% of the [+SR, -HK] NPs and 7% of the [-SR, -HK] contexts are encoded with *da*. If we look at [+SR, +HK] independently, *da* is supplied in more than 88% of contexts, except in Tape 1 (64%) and Tape 5 (69%) (Huebner, 1983, p. 136).

In contrast to Bickerton who claimed that specificity was more primary than presupposedness, Huebner concluded that [\pm HK] seemed to be the prior distinction marked by *Ge*, and not [\pm SR]. Evidence for a prior marking of [+HK] was, however, corroborated by only a few occurrences of generic NPs in the material.

The discussion of the relationship between specificity and presupposedness (hearer knowledge) resonates through a lot of the literature on both L1 and L2 acquisition of the 70s and 80s. Bickerton (1981, 1984) claimed that specificity necessarily was the primary semantic distinction between the two because article use in Creole languages was restricted to encoding specificity (his claim also included the L1 acquirer). Maratsos' (1974) work on L1 article acquisition, which seems to have been an important precursor to Bickerton's semantic wheel (see Bickerton 1981, pp. 147–152; Ekiert, 2010b, p. 31), also suggests that children encoded specificity before presupposedness. Cziko's research synthesis (1986), which subsumed a number of L1 works including Maratsos (1976), Warden (1976), and Karmiloff-Smith (1979), addressed the same categories and concluded that [\pm HK] was not acquired before the fourth and final stage. Hence, children seemed to encode [\pm SR] first. This line of research has also been studied in depth within the frameworks of SLA and will be explored further in chapter 5.

The debate of the prior acquisition of specific reference or hearer knowledge was pursued in Parrish (1987) and Thomas (1989). Neither of these studies supported Huebner's conclusion; instead, they pointed in the opposite direction; specific reference seemed to be marked prior to hearer knowledge. These conclusions were corroborated by evidence showing that the learners overgeneralized *the* to specific

indefinite contexts, but not to nonreferential/nonspecific contexts. However, all three studies documented the use of *the* prior to the use of *a*.

Huebner (1983, 1985)⁸⁰ and Parrish (1987) were case studies involving only one participant with a [-ART] first language background. Parrish's study investigated the L2 English of a Japanese learner, Mari. Parrish examined Mari's encoding of the categories of the Semantic Wheel in 12 recordings during a period of four months. Mari had received instruction in Japan, but was nonetheless considered a beginner-level learner. By the last recording, Mari's suppliance of the definite article reached 84%, whereas the accuracy level of the indefinite article was limited to 50%. Thomas's (1989) study was cross-sectional and included 30 adult participants from nine different L1 backgrounds, with a majority of [-ART] learners ([-ART] N=21, [+ART] N=9). Thomas's main concern was to compare the results from child L1 acquisition to adult SLA. As mentioned above, several studies of child L1 acquisition had claimed a prior development of the category of specific–nonspecific reference. Thomas's study concludes that a slight tendency to associate *the* with [+SR] rather than [+HK] can also be detected in SLA, but this conclusion is depending on interpreting the accurate use of the indefinite article in existential constructions as a fixed memorized formula. Finally, Thomas's results demonstrated a clear difference between [+ART] and [-ART] learners: Whereas the [+ART] learners correctly supplied the definite article in 96.7% of the definite contexts and the indefinite article in 77.9% of the indefinite contexts, the [-ART] learners provided definite articles in 80.9% of the anticipated contexts, but indefinite articles in only 59.0% of the anticipated contexts (Thomas, 1989, p. 347). When the proficiency level of the [-ART] learners is taken into account, an enhanced article suppliance is documented for both the indefinite and the definite article from low level to higher level learners (the increase amounts to approximately 10% for both articles). Interestingly, the

⁸⁰ Huebner (1985) follows up on Ge's development of referential expressions in data recorded 20 months after the endpoint of the initial study.

substitution of definite for indefinite articles does not see an equally rapid development (Thomas, 1989, p. 348).

Master's dissertation (1987) belongs to the same family of studies. He studied article use and development among learners from five different L1 backgrounds (Japanese, Chinese, Russian, Spanish, and German) through the lens of Cazden et al.'s (1975) developmental stages referred to as baselang, low mesolang, mid-mesolang and high mesolang.⁸¹ The study is pseudo-longitudinal and analyzes data from 20 speakers from five different L1 backgrounds at different stages of English interlanguage development. The study documented a clear L1 effect in the development of article use: The [-ART] learners in Master's study experienced challenges that differed from those of his [+ART] learners. For instance, the [-ART] learners applied \emptyset in all contexts at initial stages, whereas the [+ART] learners initially overgeneralized *the* to other contexts. Master concluded that the distinction of *a*/ \emptyset and *the* seemed to rely on the feature of [\pm HK]. These results were thus interpreted as corroborating Huebner's findings that [+HK] was marked prior to [+SR]. On the whole, although Master (1987:81) reports that the L1 Russian learners departed from the other [-ART] learners in a "less steep climb" with *the* and a "more steep climb" with *a* (Master, 1987, p. 81),⁸² the results from Master's pseudo-longitudinal case study amplify the legitimacy of grouping (and comparing) [+ART] and [-ART] learners:

What is clear from the foregoing description of article acquisition by representatives of the five language groups is that speakers whose first language contains an article system behave roughly in the same manner and that speakers whose first language does not contain an article system behave in roughly the same manner. (Master, 1987, p. 81)

⁸¹ Cazden, Cacino, Rosansky and Schumann (1975) outlined four stages of L2 development based on the learners' pattern of negation. See Master (1987) for a complete reference to this work.

⁸² This measure does not take accuracy into account and therefore Master's description above means, for instance, that the amount of "the-flooding" is less predominant in the L2 English of the Russian learners compared to the Chinese and Japanese learners. Master (1987, p. 81) suggests that this discrepancy might be due either to the fact that several of the L1 Russian learners are also familiar with Yiddish (but the author cannot with certainty confirm this), or simply to the fact that Russian is Indo-European and thus indeed more similar to German and Spanish than to Chinese and Japanese.

Finally, Master documented that the two groups reached 90% accuracy at different developmental stages: The [+ART] learners reached 90% accuracy at the mid-mesolang level, and the [-ART] learners at the high mesolang level (Master, 1987, p. 29).

3.1.2. Discourse level features and communicative redundancy

A late development of *a* and overuse of *the* in contexts normally reserved for indefinite articles were also observed by Chaudron and Parker (1990) in their sample of L2 English production from 40 adult Japanese learners at different proficiency levels. Chaudron and Parker's study was innovative in the sense that they included measures of discourse contexts, namely those of *current*, *known*, and *new* topics. That is, they postulated that the status of the NP as current, known, or new in discourse would be reflected in the encoding. The results indicate that learners do distinguish between discourse contexts and that discourse function can be connected to linguistic form. The inclusion of discourse features in Chaudron and Parker's study may be said to have captured an important tendency in the contemporary functionalist approach to language. The study draws on Givón's work on topic accessibility (1983a, 1983b, 1984).⁸³ Universal features of discourse, information processing, and the linguistic realization of these features are also emphasized as major driving forces in L2 development in Klein and Perdue's pioneering work conducted within the ESF project, introduced in section 1.3, on the Basic Variety (1992). Klein and Perdue documented that, despite very rudimentary L2 resources, the learners organized utterances in accordance with universal discourse principles, such as having the topic precede the focus (Klein & Perdue, 1992, p. 312).

⁸³ Slightly simplified: Givón's Topic Accessibility Hierarchy relates the distribution of zero anaphora, pronouns, and full noun phrases in discourse to topic accessibility. Givón's Quantity Universal predicts that the more accessible the topic, the less marking material is needed: "More continuous, predictable, non-disruptive topics will be marked with *less marking material*, while less continuous, unpredictable/surprising, or disruptive topics will be marked by *more marking material*." (Givón, 1984, p. 126) [original emphasis].

The ideas of a co-occurrence between universal principles of information structure and grammatical marking also have roots in cross-linguistic observations of regular tendencies in discourse for given information to precede new. This is particularly salient in languages without a grammatical encoding of definiteness. In a study of three L1 Czech and three L1 Slovak learners of English, Young observed an effect assumed to be related to the *redundancy* of grammatical encoding (Young, 1996, p. 168; see also chapter 6) in the learners' use of the definite and the indefinite article when he controlled for article suppliance, word order, and theme-rheme relations. He documented that when theme-rheme organization coincided with conventional word-order organization of given and new information (see chapter 1 and section 2.4), the learners were more inclined to leave initial themes and final rhemes unmarked. Young reported that 73% of all final rhemes and 41% of non-final themes in the material were marked with zero (1996, p. 168). This was interpreted as a transfer effect from the Czech and Slovak L1s, where word order functions as an indicator of given and new information (see section 2.4 in the present study for examples in Russian) (Young, 1996, pp. 171–172). The idea is thus that stable cues provided by word order render grammatical marking redundant.⁸⁴ Young's (1996) results also show that the indefinite article appears later than the definite article does. Finally, he uncovered, as noted in section 1.4, a tendency for definite determiners such as demonstratives to replace *the* in anaphoric contexts.

Avoidance of redundancy, or redundancy as a factor allowing grammatical encoding to be superfluous, was also the explanation proposed by Jarvis (2002),⁸⁵ who reported on unmarked NPs in the L2 English of Finnish adolescents:

In the Finns' data, on the other hand, the use of \emptyset probably does not represent a simplified register as much as it represents the L1 Finnish convention of avoiding (what Finns perceive

⁸⁴ It should be noted that Jarvis (2002, p. 389) discovered an analytical error in Young's study, namely that themes were equated with old information. Compared to Givón's notion of topics, Young's approach would thus be too narrow, and would consequently be investigating a slightly different object.

⁸⁵ Jarvis (2002) will be reviewed in more detail in section 3.5.

to be) redundant markers of definiteness and indefiniteness when these properties of an NP are already salient in a given discourse context. (Jarvis, 2002, p. 416)

Perceived redundancy may also possibly explain the omission of definite marking in topic position in early stages of Ge's interlanguage, although Huebner does not conclude in favor of either L1 transfer or universals (Huebner, 1983). A larger number of article omissions when the NP is coreferential and when the identity of the NP is "recoverable" from the context is also documented in Robertson's (2000) study of variable article use among L1 Chinese learners of English. In fact, Robertson outlined two principles that he assumed to govern omissions of the definite article: a linguistic "determiner-drop" principle relevant to coreferential NPs, and a pragmatic "recoverability principle" allowing articles to be dropped whenever "the information encoded in this feature is recoverable from the context" (Robertson, 2000, p. 169).⁸⁶ (The overall accuracy rates in Robertson's study are 79.9% for definite contexts and 72.1% for indefinite contexts (Robertson, 2000, p. 157). The same tendency for articles to be omitted when they encode subsequent mentions is pointed out in Trenkic's (2002b) paper on non-target form-function connections in the L2 English of L1 Serbian learners. Trenkic reports that in the two least proficient learner groups in her cross-sectional study (secondary school students having received English instruction for 7 and 8 years, group A and B respectively), the rate of omissions in second mention contexts reaches 35% and 23%, compared to 19% and 16% for first mention definites for group A and B, respectively. The picture is even more apparent for topic and non-topic referents: 52% omission in group A and 37% omission in group B in topical position versus less than 20% for both groups in non-topic positions.

⁸⁶ Robertson's study is a little peculiar in design and data analysis. He instructed pairs of learners to complete a map task where one of the participants instructs the other to draw a replica of a figure only visible to the former participant. This technique naturally elicited both a large amount of adjectivally premodified NPs, and an interaction involving frequent repetition. Consequently, Robertson separates the data into two categories of "echo contexts" and "non-echo contexts." Robertson regrets that control data from L1 speakers was not collected. And it is unfortunate that such data was not provided especially given the elicitation technique, when L1 data could have confirmed that the results were indeed specific to L2 grammars. My suspicion is that L1 speakers would also occasionally delete articles in such environments.

The idea that definite encoding will be omitted in contexts where such explicit marking may be communicatively redundant (that is, where the definite meaning is easily interpretable from the context), partly ties into Grice's Principle of Quantity⁸⁷ and partly into L1 (and universal) patterns of information structuring. This explanation is challenged in Trenkic and Pongpairaj (2013), who suggest that the high correlation between redundant/salient NPs and zero marking is due to processing capacity. They propose that the cognitive processing load of salient discourse referents makes the learners unable to repress the first language in these contexts, because a salient discourse referent occupies too much capacity in the working memory. Trenkic and Pongpairaj (2013) will be explored further below (section 3.3.4), and the "redundancy hypothesis" will be presented in more detail in chapter 6.

3.2. Part summary and discussion of research achievements

Although the findings from the research on L2 article acquisition are far from consistent, some predictions concerning [-ART] learners in particular can be identified:

- *The* appears earlier than *a*
- *The* is overgeneralized
- *A* has a delayed appearance
- Avoidance of redundancy licensed by universal principles of discourse organization (or L1 structures) may cause omission of the definite article

One of the findings referred to above concerns the overgeneralization of and the earlier acquisition of the definite article, which seems to be a well-attested characteristic of learner language. Yet, there has also been evidence contradicting this claim: In a study

⁸⁷ Grice's (1975) Principle of Quantity consists of two maxims: "1. Make your contribution as informative as is required (for the current purposes of the exchange). 2. Do not make your contribution more informative than is required." (Grice, 1975, p. 45)

conducted within the generative framework, Leung (2007, p. 141) reports that L1 Cantonese learners of L2 English (and L3 French) at initial stages seem to overgeneralize the indefinite article to definite contexts. Additionally, they are less accurate with the definite than with the indefinite article. At intermediate and advanced levels the learners remain less accurate in their encoding of definite NPs than of indefinite NPs in both the L2 and the L3 (Leung, 2007, p. 144). However, Leung (2007, p. 141) admits that there might be some task-related variation at play that negatively affects the use of the definite article. Moreover, a crucial claim and observation in Ionin and colleagues' research is that substitution goes both ways (Ionin & Wexler, 2003, Ionin, Ko, & Wexler, 2004). Taking this into account, it does not seem entirely clear how *the* is overgeneralized or how definite encoding develops through the different subcategories of the definite area of the Semantic Wheel of NP Reference.

However, with time [-ART] learners and [+ART] learners come to resemble each other more, and the documented patterns of inaccuracy lose significance. The effect of time and increased proficiency shown in the literature are summarized as follows in Trenkic and Pongpaioj (2013, also quoted in section 1.4):

Thus, L2 users from L1 backgrounds without articles are consistently shown to experience more problems in the L2 article production than their peers from L1 backgrounds with articles, but all learners are shown to improve in their article production with their overall L2 proficiency (Trenkic & Pongpaioj, 2013, p. 152).

Most general cognitive SLA research on article acquisition primarily seem to study learners who are still considered to be in a state of progress, mainly across the categories of beginner, intermediate, and advanced. The generative research community, on the other hand, has focused on the challenge of persistent problems in the grammars of very late or even end-state learners (e.g. Goad & White, 2004; Jin et

al., 2009; White, 2003b),⁸⁸ and this line of research has provided evidence illustrating that the adult learner may in fact exhibit structures deviating from the target language also after years of residency in the L2 community.

3.3. Towards the current research topics

Ekiert (2010b) characterized Huebner (1983) and the studies in the 80s and early 90s building on his work on article acquisition as “early article acquisition studies.” However, more recent studies also pursuing the same tradition have provided new and interesting results. The category of [+HK, +SR] has been subject to more detailed analyses, and, in addition, an increased attention to a larger collection of constructions and syntactic environments has emerged. Important in the present context is Sharma (2005a), who explored the use of English articles in a nonnative variety of English, namely Indian English used among immigrants from India to the U.S. Sharma applied Bickerton’s categories (1981) as an analytical framework.⁸⁹ The study documented that the participants marked specific indefinites more consistently than nonspecific indefinites (48% null article versus 81% null article (Sharma, 2005a, p. 551)), and this result was interpreted as a transfer effect from the L1 because the participants’ L1s encode specific indefinites (all Indo-Aryan L1s). On the whole, the discrepancy in this material between encoding of [+SR, +HK] and [+SR, –HK] is minimal: For “low proficiency” speakers the accuracy rate of definite and indefinite articles was 56% and 52% respectively, for the “mid-proficient” group 60% versus 69%, and for the “highly proficient” users the definite article was supplied in 81%, and 84 % of the indefinite

⁸⁸ The notion of “end-state” should be seen in relation to the concept of “ultimate attainment” which refers to a fully developed normal native language resulting from unimpaired L1 acquisition. However, the notion is a constant challenge to SLA: What is ultimate attainment in L2 acquisition? Is ultimate attainment in SLA always native-like competence? Is native-like competence even within the scope of possible L2 end-state levels? (see VanPatten & Benati, 2015, pp. 17–28 for an overview).

⁸⁹ Sharma’s approach to Bickerton (1981) is more direct than what is the case in Huebner (1983) and subsequent SLA-studies: The article production of the Indian speakers of English is directly hypothesized to follow Bickerton’s description of the tripartite article system of creoles.

contexts were supplied with the indefinite article.⁹⁰ Sharma also pursued the research tradition on discourse function by analyzing the data through Prince's Taxonomy of Assumed Familiarity (1981). Prince's Taxonomy enabled a more detailed study of how and in which discourse contexts the NPs were actually encoded, in addition to exploring in more general terms the relationship between degrees of givenness and encoding. Results from previous research were largely confirmed: The study documented that *the* was often omitted in evoked phrases (73% in the lowest proficiency group, 60% and 43% in the mid- and highly proficient groups, respectively, versus 49%, 37% and 17% in inferrable contexts).⁹¹ In conclusion, Sharma identified two factors "strongly favoring null use of definite articles," namely discourse givenness and modification (Sharma, 2005a, p. 561). Sharma's results were taken in support for the Syntactic Misanalysis Account in Trenkic (2008), which will be presented in section 3.3.3.

3.3.1. A hierarchy of difficulty for the definite article

Ekiert has published several articles (Ekiert, 2004, 2007, 2010a) and has also earned a Ph.D. on the topic of article acquisition among Slavonic learners of English (Ekiert, 2010b). I will not review all her work in detail, but concentrate on Ekiert (2010a), which reports on article use among three adult Polish learners of English. The results from this study indicated that article production is affected by the distinction between textually conditioned definite NPs and NPs that are definite due to the situational context; textually conditioned NPs (here, the category includes second and subsequent definite NPs *and* first mention indefinites) were more frequently marked than situationally conditioned definite NPs. A similar pattern is also documented in Master

⁹⁰ The three groups in Sharma's study are partly based on formal language mastery, and partly on the speakers' use and generally perceived functionality in English. For instance, group 3 (which is the most proficient) consists of speakers who consider their English to be on "equal footing with other L1s" (Sharma, 2005a, p. 550). Sharma (2005b) presents in more depth the basis for the grouping of participants.

⁹¹ In Prince's Taxonomy (1981), (textually) evoked NPs correspond to anaphoric NPs, while inferrable corresponds to associative anaphora in Hawkins's (1978) terminology. See chapter 6 for an in-depth description.

(2003) for [-ART] learners. Master reports that the overuse of \emptyset is second lowest (11.6%) in contexts for subsequent-mentioned definite referents (Master, 2003, p. 9). Ekiert's result is interesting because it may be said to contradict the well-attested finding that definite encoding is omitted in anaphoric contexts because it may be perceived as redundant. However, Ekiert's study elicited both written narratives and fill-in-tasks, and it may be that the learners "monitored" their production carefully and thereby benefited from the ability to calculate and detect a previous and thus subsequent mention of a referent. Ekiert reasons: "Textual uses, being categorical and rule-dependent, may have also been most amenable to change" (Ekiert, 2010a, pp. 148–149). Finally, the study also included a retrospective interview (stimulated recall) addressing the metalinguistic knowledge applied by the learners when performing the fill-in-task. The answers provided by the learners revealed awareness of the rules for first and second mention. In addition, the stimulated recall task indicated a tendency to confuse specificity and hearer knowledge. This finding supports Butler (2002), who also demonstrated in a stimulated recall task that [-ART] learners (wrongly) associate "specificity" and the definite article.

Ekiert's (2010a) study applied an analytical model elaborated in Liu and Gleason (2002). Liu and Gleason's classification model is based on the eight non-generic uses of *the* in Hawkins's Location Theory (1978).⁹² In their adaptation, J. Hawkins's eight categories are collapsed into four: textual uses, structural uses, situational uses, and cultural uses. Liu and Gleason (2002) discovered that the learners in their study marked situationally locatable definites most consistently, followed by textually and structurally locatable definites. Definite NPs within the category labelled "cultural uses" appeared to be the most difficult. Unfortunately, Liu and Gleason do not distinguish between [-ART] and [+ART] learners beyond performing a post-hoc

⁹² J. Hawkins's theory (1978), mentioned in 2.4, known as The Location Theory, is among the most acclaimed and comprehensive accounts of definiteness in English. The study examines and outlines eight categories for non-generic uses of *the*. The critical point is that definite uses can, to a very large extent, be unified under a principle of referent location in a shared knowledge set between speaker and hearer (see sections 2.4, 5.1.2 and chapter 6 in the present study for more details on Hawkins (1978)).

analysis based on the variable Indo-European and non-Indo-European. However, Indo-European can hardly pass as a valid measure in relation to languages encoding grammatical definiteness; rather, this categorization may in fact be misleading in terms of definiteness.

Liu and Gleason's study was replicated by García Mayo (2008) in a group of Spanish high school and university level EFL learners. This study confirmed the difficulty hierarchy, a finding indirectly supporting a null hypothesis concerning the impact of [\pm ART] L1. García Mayo's results must be considered slightly unexpected in the degree to which they support Liu and Gleason's results, the latter stemmed from a group of participants with differing L1 backgrounds. García Mayo points to the idiomatic and language-specific content of "cultural uses" as a possible cause, in addition to the possibility of a bias entailed by the collapse of anaphoric and associative anaphoric uses⁹³ into one category. Almost half of the textual contexts in the test items represent associative anaphora, which García Mayo implicitly evaluates as likely to correspond to different levels of difficulty (García Mayo, 2008, pp. 557–558). However, García Mayo demonstrates that the L1 Spanish learners, in contrast to Liu and Gleason's participants, improve across-the-board as proficiency increases.

Similar findings are also demonstrated by Chrabaszcz and Jiang (2014) in a triangulation of Liu and Gleason's (2002) study. Chrabaszcz and Jiang's (2014) study, which compared L1 Spanish and L1 Russian learners of L2 English, largely confirms García Mayo's (2008) results displayed by L1 Spanish learners, but warrants a slight adjustment to the difficulty hierarchy initially proposed: L1 Russian learners seem to mark textual and structural uses most accurately, followed by situational and cultural/conventional uses. (The original category of "cultural uses" in Liu & Gleason (2002) was broken down into "cultural" and "conventional" uses in Chrabaszcz & Jiang (2014).) This finding is consistent with Ekiert (2010a), who, as noted above,

⁹³ The different uses of the definite inflection will be presented in more depth in chapter 5 and 6. However, for an example of associative anaphoric use see example (7) chapter 1.

documented a tendency for L1 Polish learners to be more accurate when the definite article use is licensed by the previous textual discourse.

3.3.2. Countability

As described in chapter 2, the distinction of countability refers to noun *type* in the sense that nouns may be divided in count and noncount nouns, where each type exhibits different grammatical features. Countability first and foremost affects indefinites: only countable nouns can take the indefinite article, whereas both count and noncount nouns can take the definite article. This asymmetry between count, definite and indefinite NPs is valid for both Norwegian and English (see section 2.1 and 2.2 for a more details). The fact that learners must pay attention to countability in addition to identifiability is considered a possible explanatory factor for less accurate production of indefinite NPs. Trenkic suggests that countability may be responsible for a less consistent encoding of indefinite NPs in Goad and White's data (2004) and in her own L1 Serbian/L2 English material:

This [more inconsistent suppliance of indefinite articles] should not be surprising if article production is determined at the level that is sensitive to the limitations of attentional resources: in order to produce a definite article in English, these learners need to monitor for the identifiability status only. But to produce the indefinite article, additional considerations of countability and number are also required, making monitoring more costly, and so omissions more likely. (Trenkic, 2007, p. 317)

Studies in SLA explicitly addressing the category of countability have pointed out that this variable indeed may influence and complicate the learners' choice and suppliance of articles. This insight also affects the researcher and the teacher since what first looks like failing sensitivity to semantic/pragmatic environment might in fact be the result of a misdetected countability status.

Countability was incorporated as an independent variable in Butler (2002), Master (1987), Snape (2005, 2008), Trenkic (2002b), Young (1996) and B. White (2009). I will here review only Butler (2002) and Snape (2008).

Butler (2002) approached the learners' conception of countability and article use through a stimulated recall task presented to a group of 80 Japanese learners after they had completed a fill-in missing-article task. The purpose of the study was to investigate the learners' metalinguistic knowledge of article choice, based on the features of the Semantic Wheel (Bickerton, 1981; Huebner, 1983) and countability. On the whole, Butler (2002, p. 472) concluded that the mapping of form onto semantic/pragmatic features exerted the strongest influence on the learners's article use, however, the study also revealed that the learners seemed to entertain a hypothesis holding countability to be a static variable, inherent in each noun; that is, they did not realize that countability status may change in accordance to the context (consult chapter 2 in the present thesis).

The primary objective in Snape (2008; also in Snape, 2005) is how countability status in turn affects the suppliance of definite encoding.

In Snape (2008) two groups of L1 Japanese (N=30) and L1 Spanish learners (N=30) of English are tested in the use of definite articles across the countability distinction in a task based on Hawkins's (1978) nongeneric uses.⁹⁴ The L1 Japanese learners show a persistent tendency to omit definite articles in mass contexts: 34.4% of the contexts in the group of intermediate learners, and 32.8% of the definite articles in mass contexts are omitted in the group of advanced learners. Conversely, the intermediate L1 Spanish learners omit definite articles in 13.3% of the mass contexts, but only in 6.1% of the definite mass contexts at advanced stages (Snape, 2008, p. 73). Moreover, when comparing the results for count and mass nouns to Hawkins's uses of the definite article, Snape concludes that the challenge of count and mass is more persistent in the L2 English of the L1 Japanese learners than is the different pragmatic uses of *the*

⁹⁴ Snape draws on the categorizations outlined in Liu and Gleason's study (2002), but he settles on only three categories: anaphoric, encyclopaedic and cultural definite uses. See sections 2.4 and 5.1 for more details on Hawkins's Location Theory (1978).

(Snape, 2008, p. 75). The theoretical orientation in Snape (2008) is generative, and an overall aim is to validate the Nominal Mapping Parameter (Chierchia, 1998).⁹⁵

The present data are not well-suited for a study of countability inasmuch as there are by and large rather few noncount nouns occurring in the retells; but occasional uses of *vær* [weather] and *gress* [grass], in addition to certain tentatively noncount uses of *pære* [pear] are attested (see section 6.3.5).

3.3.3. NP modification

An observation in the literature that has not yet been described is the tendency for articles to be omitted in pre-modified NPs. As noted above, Sharma (2005a) reported that in the English of her Indian participants, preposed quantifiers could be seen as a predictor of full omission, while preposed adjectives led to variable article suppliance: “... Whereas bare nouns require overt articles, modified nouns are more likely to be associated with omission of the article, and quantified nouns actually favor null articles” (Sharma, 2005a, p. 558). Sharma argues that the principle of disambiguation, that is, the idea that articles are redundant whenever they are not needed for disambiguation, may be governing article omission in modified contexts since the suppliance of an adjective or a quantifier will often provide the required information for correct identification. Robertson (2000), presented above, reported a tendency for articles to be omitted when the meaning is recoverable from the context. This recoverability could, for instance, be licensed by the information provided by postmodification or by the situational context, such as in NPs modified by associative clauses in Hawkins’s terminology (Robertson, 2000, pp. 157–158). Jarvis also observed the high rate of article omission in pre-modified NPs (Jarvis, 2002, p. 413).

Goad and White (2004) report higher levels of article deletion in adjectivally modified NPs in the end-state L2 English of a Turkish learner called SD. The effect of adjectival

⁹⁵ Snape (2005) compared the results to both the Fluctuation Hypothesis (Ionin, 2003; see also sections 3.1 and 3.35 in the present study) and the Nominal Mapping Parameter.

premodification on the suppliance of articles is particularly significant for indefinite NPs: For definites the rate of suppliance was 77% for Art + N contexts and 67% for Art + Adj + N, contrasted with 70% suppliance of indefinite articles in Art + N NPs, and only 49% suppliance of indefinite articles in Art + Adj + N NPs (Goad & White, 2004, p. 11). Goad and White explained their results in terms of diverging prosodic structures in English and Turkish (The Prosodic Transfer Hypothesis, see sections 3.1 and 3.5 in the present chapter).

Pongpairoj (2007) compared the article production of L1 French and L1 Thai learners of English in Art + N contexts and Art + Adj + N contexts. Her results revealed that both groups omitted more articles when the noun was premodified by an adjective, but the result was only significant in the L1 Thai group. In a spoken production task, the intermediate L1 Thai learners omitted articles in 6.25% of the Art + N contexts, versus 16.48% of the Art + Adj + N contexts; for advanced L1 Thai learners the numbers were 3.06% and 7.98% respectively. For the L1 French learners, also advanced, the rate of omitted articles was below 1% in Art + N contexts and 2.33% in Art + Adj + N contexts (Pongpairoj, 2007, p. 112). The results were confirmed with minor adjustments in a written production task. On the whole, far more articles were omitted in the L1 Thai group than in the L1 French group.

A higher rate of omission in premodified contexts is one of the most documented observations in the literature, and it has paved the way for The Syntactic Misanalysis Account, put forth by Trenkic (2007, 2008), who observed this tendency in data produced by L1 Serbian (2004, 2007) and L1 Mandarin Chinese learners of English (2008). The learners in these studies were across-the-board more likely to omit articles when the NP was accompanied by a preposed modifying adjective. The Syntactic Misanalysis Account has been developed through a series of publications, starting from 2004 (although not defined in such terms before 2007). The 2004 paper set out to examine the possibility of the existence of a grammatical category of definiteness in Serbian/Croatian/Bosnian (this was rejected). The paper included a study of L1 Serbian learners of English who were shown to consistently omit more articles in

premodified NPs. The least proficient learners (secondary school students with 7 years of instruction) omitted *the* in almost 60% of the Art + Adj + N contexts, in contrast to just above 20% omission in Art + N definite contexts (Trenkic, 2004, p. 1420). The tendency was replicated in contexts requiring indefinite articles, and in the L2 data produced by the group of learners with 8 years of English instruction (also secondary school students).

In order to account for this result, a highly syntactic explanation was developed that emphasized linguistic differences in the nominal phrase between [-ART] and [+ART] languages: The lack of a determiner position for articles in Serbian may cause adjectives and articles to compete for the same slot in the NP.⁹⁶ Trenkic (2007) discovers that the tendency for more articles to be omitted in pre-modified contexts is sustained also in the production of two groups of higher level learners (Serbian university students training to become EFL teachers): In definite Art + N contexts they perform almost at ceiling, whereas omission errors still occur in Art + Adj + N contexts (15% omission in the least proficient group and 6% in the most proficient group). The 2007 article elaborates on these findings and explains article production asymmetries as a result of limited processing capacity reinforced by the lack of a syntactic position for determiners, which forces the learners to add lexical (adjectival) meaning to the articles. In sum, this augments the pressure on the learners' processing resources.

Trenkic's model (2007, 2008, 2009) is devoted to explain why articles are more frequently omitted in adjectivally premodified NPs: Adding an adjective demands more cognitive resources than just an article and a noun, which thus may prohibit the learner from applying both. An underlying rationale explaining why articles are omitted instead of adjectives, which can also be inferred from, for instance, Robertson (2000) and Sharma (2005a), is that the learners' language priorities are affected by the limited informative weight of the article. In short, the Syntactic Misanalysis Account is

⁹⁶ The theoretical basis for this analysis is Lyons's (1999) account of the determiner phrase.

catalyzed by syntax, but combines L1–L2 syntactic features, semantic/pragmatic meaning, and processing capacity (see also chapter 7).

The same structure of determiner, adjective and noun is also represented in Norwegian, but in contrast to English, a prenominal position for a determiner marking definiteness is only relevant when a modifier is present, and the prenominal determiner is only in some cases alone in marking the definiteness status of the NP as a whole; most frequently the noun is also inflected for definiteness.⁹⁷ This means that the learners may violate the grammar of definiteness in Norwegian in several different ways when an adjective is present: the determiner may be omitted, the inflection may be omitted, the adjectival inflection may be omitted; or both or all may be omitted. If applied to Norwegian as a target language, the pragmatic aspects of the Syntactic Misanalysis Account would only be valid if both determiner and inflection were omitted simultaneously. If one encoding position seems to be favored by the learners, the value attributed to syntax and pragmatics as explanatory factors in Trenkic's account would need to be rebalanced, again lending more weight to syntax, in addition to accounting for the processing equality or inequality of producing a suffix or an article. Thus, what remains to be addressed is what would ultimately count as evidence corroborating the Syntactic Misanalysis Account in L2 Norwegian. The challenge of validating Trenkic's account lies in the interface between the explanation's very general principles of cognition and meaning, and its mildly language-specific linguistic model; the former feature invites generalization and universality, while the latter fixes the model to one language structure.⁹⁸

⁹⁷ See chapter 7 in the present thesis for a description of the double definiteness construction in Norwegian.

⁹⁸ Lyons's (1999) elaboration on the determiner phrase may also account for languages expression definiteness inflectionally, yet, it is unclear how this aspect may be incorporated in Trenkic's model, since it primarily focuses on definite articles.

3.3.4. Saliency, processing, and L1–L2 competition

The line of reasoning fueling Trenkic’s earlier research (Trenkic, 2007, 2008, 2009) may be summarized as follows: The underlying idea is that syntactic differences and limited processing capacity force the learner to prioritize meaning, a process that consequently renders redundant language material a good candidate for omission. However, the focus on article misanalysis and syntax seems to diminish slightly in the latest publications, where processing capacity and the competition between L1 and L2 forms have moved to center stage. The more recent developments appear to provide a more sophisticated model addressing the role of the working memory and general processing limitations as catalysts for the L1 and L2 in the production process. Trenkic and Pongpairaj (2013), mentioned in 3.1.2, propose that missing definiteness marking of salient referents in discourse can be due to processing overload; that is, since salient referents are more demanding to process, the learner is not always able to repress the L1, which in turn causes the production of bare forms. An important underlying tenet is that both languages of a bilingual speaker are simultaneously activated; that is, their co-activation leads to *structural competition* between the two languages, also in the adult L2 learner.⁹⁹

Trenkic, Mirkovic, and Altmann (2014), and particularly Austin, Pongpairaj, and Trenkic (2015) seem to display an understanding of language learning that draws on the usage-based/emergentist/connectionist approach.¹⁰⁰

First, language learning involves both contingency learning of constructions that relate meanings which are to be expressed to forms that express them and learning of the strength of

⁹⁹ The tenets of co-activation is maintained and described in more detail in Austin, Pongpairaj and Trenkic (2015, p. 692), where references are provided to both the initial research on the lexicon and a collection of works suggesting that simultaneous activation might be equally valid for structural features of language that in turn legitimates their approach.

¹⁰⁰ Austin, Pongpairaj, and Trenkic (2015, p. 692) also quote N. Ellis (2004, p. 51) in relation to theoretical point of departure “piecemeal learning of many thousands of constructions and the frequency-based abstractions of regularities within them.”

these associations....Second, two languages in a bilingual speaker are often simultaneously activated and compete for selection. (Austin, Pongpairroj, & Trenkic, 2015, p. 692).

In Austin, Pongpairroj, and Trenkic (2015) the main focus is to explore processes that prohibit learners with L1s exhibiting minimal grammatical marking from producing articles and plural inflection in L2 English. The model proposed seeks to expand in relevance beyond the domain of articles. Plural and definiteness encoding are investigated in the L2 English of 20 L1 Thai speakers at the intermediate level. The authors predict that the more complex the NP, the more omissions will occur. That is, articles will be omitted more often in plural definite contexts than in singular definite contexts, and the plural *-s* will be more prone to omission in NPs that are also definite. The predictions are affirmed, but asymmetrically in two different tasks: A difference between singular and plural definites was only detectable in the story recall task (omission rates of almost 36.64% and above 51.79% respectively), whereas a difference between simple plural and plural definite NPs was only documented in the elicited imitation task (approximately 39.61% omission of simple plurals compared to 54.25% omission of plural definites) (Austin, Pongpairroj, & Trenkic, 2015, pp. 701–702).

Finally, Austin, Pongpairroj, and Trenkic (2015) propose a new model for L2 production that extends the L1–L2 structural competition model by also including a concept of L2 statistical regularities. The model is based on a constraint-satisfaction approach to language processing, stemming from first language research, recognizable in, for instance, MacWhinney’s Competition Model (Bates & MacWhinney, 1989; MacWhinney, 2005) among others.¹⁰¹ A constraint-satisfaction model may help incorporate how L2 learning is a process of extracting regularities and interpreting cues from the L2 input, in addition to a process of navigating L1–L2 differences.

¹⁰¹ The main reference provided in the article is MacDonald, Pearlmutter, and Seidenberg (1994).

“Constraint-satisfaction model” was also mentioned in Trenkic, Mirkovic, and Altmann (2014), but without any details. The goal of this study was to test and compare predictions based on the Competition Model (Bates & MacWhinney, 1989; Tokowicz & MacWhinney, 2005) for L2 comprehension of articles by [–ART] learners to predictions based on a blocking/overshadowing account (e.g. N. Ellis, 2006a; Luk & Shirai, 2009) or as described in the Shallow Structure Approach (see Clahsen & Felser, 2006).^{102, 103} In such a case, the Competition Model predicts that new categories can be established in the L2 as long as there is no competition between the L1 and the L2 realizations of the same feature. Consequently, the L1 Mandarin learners participating in the study will be able to develop target-like processing of articles. A blocking/overshadowing account conversely predicts that the learners will rely on their L1 resources instead of processing the information from the articles (Trenkic, Mirkovic, & Altmann, 2014, p. 241). The results obtained from the experiment did provide clear support for a Competition Model account, inasmuch as the learners’ comprehension was very similar to (but slightly slower than) that of L1 English speakers.

Austin, Pongpairoj, and Trenkic’s emerging proposal is directed at complexities in structural features of language and the effect of such complexities when there are differences between the L1 and the L2. An advantage associated with this approach is that the explicit focus on language structure readily permits triangulation with data from different L1s and target languages other than English. Compared to, for instance,

¹⁰² Trenkic, Mirkovic, and Altmann summarize the predictions entailed by the blocking/overshadowing account and the Shallow Structure Hypothesis in the following way: “In sum, previous literature suggests that problems that are often observed in L2 grammar may be associated with more extensive reliance on lexical and contextual elements, either as a consequence of L1 transfer (N. Ellis, 2006a; Luk & Shirai, 2009) or a more general L2 processing effect (Clahsen & Felser, 2006).” (Trenkic, Mirkovic, & Altmann, 2014, p. 238)

¹⁰³ As Tokowicz and MacWhinney (2005) pointed out in their article on L2 processing in the L2 Spanish of L1 English learners, there was an ongoing debate at the time addressing questions such as “Do adult second language (L2) learners process their new language in a native-like way?” (Tokowicz & MacWhinney, 2005, p. 174). Trenkic, Mirkovic and Altmann (2014) tie into this debate as they compare different approaches to how L2 processing works.

the Syntactic Misanalysis Account, a constraint-satisfaction model for L2 production seems promising.¹⁰⁴

3.3.5. The Article Choice Parameter

Trenkic and, more recently, Trenkic and colleagues, have largely focused on article omission in different syntactic and pragmatic contexts. Another line of research has emerged in works on article acquisition conducted by Ionin and colleagues (Ionin, 2003; Ionin & Wexler, 2003; Ionin, Ko, & Wexler, 2004; Ionin, 2006; Ionin, Zubizarreta, & Maldonado, 2008), whose research agenda first and foremost counts substitutions as interesting evidence. Ionin and colleagues try to explain variability in article production by [-ART] learners of English by initial fluctuation between two different parameter settings, namely [\pm specificity] and [\pm definiteness]. That is, learners will pass through stages where they employ the articles to mark both settings, until they finally settle on the value supported by the target language input. Evidence was put forth through investigations of L1 Russian learners (Ionin & Wexler, 2003), L1 Russian and L1 Korean learners (Ionin, Ko, & Wexler, 2004) and later L1 Russian learners in comparison to L1 Spanish learners (Ionin, Zubizarreta, & Maldonado 2008), where the authors concluded that the L1 Russian learners fluctuated, while the L1 Spanish learners successfully transferred their L1 parameter setting. Importantly, [-ART] learners seemed to substitute both indefinite and definite articles, contrary to much previous research documenting that definite articles are overgeneralized to a larger extent than indefinite ones. However, the 2004 study showed that the overuse of *the* exceeded that of *a* in specific contexts; that is, *a* was rarely used in specific definite NPs (8% in the L1 Russian group and 4% in the L1 Korean group), whereas *the* was relatively frequently overgeneralized to specific indefinite contexts (36% in the L1 Russian group and 22% in the L1 Korean group) (Ionin, Ko, & Wexler, 2004, p. 30).

¹⁰⁴ The authors overtly welcome replications with other more inflectionally rich L2s (Austin, Pongpairaj, & Trenkic, 2015, p. 713).

In the 2008 paper, we see that errors of overuse were generally rare in the L2 English of L1 Spanish speakers (Ionin, Zubizarreta, & Maldonado, 2008). Finally, even though omissions occurred, they were not attributed any value in the model, which I believe is unfortunate because it narrows the zone of applicability and limits the general value of the results.

The Fluctuation Hypothesis has, as mentioned initially (section 3.1), led to a number of replications and studies where the Article Choice Parameter has been instrumental (García Mayo, 2009; R. Hawkins et al., 2006; Kim & Lakshmanan, 2009; Leung, 2007; Sarko, 2009; Snape, 2005; Tanaka, 2013; Trenkic, 2008; Tryzna, 2009; White, B., 2009; Zdorenko & Paradis, 2008), and the results have corroborated the hypothesis to varying degrees. Some researchers, such as Trenkic, have also suggested that distinctions other than specificity and definiteness as operationalized by Ionin and colleagues may be more appropriate in the description of the learners' fluctuation. That is, Trenkic (2008) suggests that the learners are guided by explicitly stated or denied familiarity instead of subtle distinctions of specificity. Others have criticized the theoretical and empirical foundation: R. Hawkins et al. (2006, p. 24) question the idea that second language learners access UG differently than L1 learners do, that is, by initial *fluctuation* between parameter values, while Tryzna (2009) raises doubts concerning the empirical evidence for the specificity setting from Samoan. Tryzna's Samoan data did not corroborate a category for nonspecific definites. Despite its unquestionable impact and influence, the Article Choice Parameter seems to be standing on shaky grounds. However, the results have reinforced earlier findings that [-ART] learners face more difficulties in acquiring the grammatical category of definiteness, and there is also a tendency of inadequate use, which perhaps indicates that learners favor encoding of specificity instead of definiteness at certain stages.

In her most recent co-authored publications, Ionin has turned to investigate the effect of more fine-grained differences between languages, such as the divergences in the encoding of generics in Spanish and English (Ionin & Montrul, 2010; Ionin, Montrul,

Kim, & Phillipov, 2011), but also the perception and encoding of generics in the L2 English of [-ART] learners (Ionin, Montrul, & Crivos, 2013).

3.4. Summary and discussion of the research achievements

Current research on article/definiteness acquisition appears to fall in two major empirical categories: studies focusing on omission of encoding and studies focusing on substitution of articles. There seems to be an overarching consensus that [-ART] learners face more challenges than [+ART] learners. A closer look at studies focusing on omission reveals, as pointed out by Trenkic (2009), two contexts of particular importance, namely premodification contexts and redundant/salient contexts. Additionally, the literature reviewed above seems to allow the inclusion of countability as a possible factor complicating the choice of supplying an article. Likewise, the possible impact of different conditions for uses of definite encoding may appear as an avenue worth pursuing. This latter perspective is, to a large extent, also relevant to redundancy/saliency and modification, because both textual and structural uses are more likely to be perceived as redundant. However, a discrepancy in results seems to be detectable; in particular, the omission of redundant definite encoding in subsequent mentions and an increased accuracy in textually-evoked contexts point in opposite directions.

The findings related to article substitution are even less consistent, since some studies hold that the definite article is more prone to overgeneralization, while others report an equal substitution of both definite and indefinite articles, and still others maintain the dominance of the indefinite article. Generally, however, in studies focusing on substitution, specificity as a category cross-cutting identifiability has been of major importance (this goes for studies applying both The Semantic Wheel and the Article Choice Parameter).

The above sections reviewing more recent research permit the inclusion of several new variables, in addition to the points listed above, that address and summarize findings particularly relevant to [-ART] learners:

- Articles are more likely to be omitted when the noun is premodified.
- A hierarchy of difficulty within the category of definite reference is attested in several studies.
- Countability and, in particular, the variability of countability may have an impact on suppliance and omission of encoding.
- Substitution is still an elusive element. Although most research identifies the overgeneralization of the definite article, substitution may go both ways.

The findings emerging from the large body of research on definiteness/article acquisition reveal a deeply complex picture, in which all studies naturally must navigate to find their own path. Incorporation of all aspects into one single study initially seems flawed, even though each study should aspire to account for, and isolate, variables generally acknowledged to have an impact on the learners' production, such as modification and countability.

The body of research conducted on definiteness in Norwegian as a second language is still limited. I have therefore chosen to take as a point of departure the underlying semantic and pragmatic features constituting the category of grammatical definiteness, which are shared across different languages exhibiting such a category, because this is the point where generalization among languages may most easily be attained. That is, the analyses to follow claim that a shared semantic and pragmatic foundation is, as outlined in section 2.4, relevant to category description, comparison between languages, and ultimately to second language use. Lyons's (1999) analysis (see section 2.4) warrants the universality of the underlying semantic/pragmatic meaning of definiteness. The generalization of a universal meaning basis for definiteness across languages is the fundamental principle that must be presupposed in order to compare different target languages and different learner populations.

3.5. Comparability across target languages

The subsequent pages prepare for the presentation of the research questions and predictions. Consequently, the focus now narrows down to the immediate context for the present study in order to clarify the intersection of theoretical and empirical comparability across L1s and L2s, that is, the context of Scandinavian, English, and Slavonic languages and language learners.

Even though grammatical definiteness to a large extent is understood to encode a meaning content that is universal (see section 2.4.), a perspective that takes the L1 into account indicates that different learner groups have distinct starting points (see section 1.4). In an early study addressing the challenges met by Polish learners of English, Kałuza (1963, p.133) described grammatical definiteness in English, specifically articles, from the point of view of Slavonic speakers: "...the idea of their existence and use is entirely strange to speakers of these languages." Contrary to the situation facing the L1 Russian learners, one could assume that, much like [+ART] learners of English, L1 English learners of Norwegian would benefit from their L1 background. This assumption is easily justified theoretically both within a generative and nongenerative framework. Even though scholars approaching SLA from a UG perspective may, as mentioned in section 3.1, differ with respect to how they perceive concepts such as transfer and access to UG, all seem to maintain that it is easier to acquire a functional category in the L2 if that category is also part of the L1; the challenge is to explain the acquisition process of those learners without a category representation in the L1. From the nongenerative perspective, on the other hand, it seems uncontroversial to conclude that transfer is an acknowledged factor which may facilitate or inhibit the acquisition of the L2 (e.g., Larsen-Freeman, 2011; Ringbom, 2007; the "Five Graces Group," 2009; see section 1.3 in the present thesis).

On the whole, direct empirical support for extrapolating from studies conducted on English as a target language to L2 Norwegian is rather sparse, and such extrapolation would thus need to build on a set of premises that will be gradually outlined below. As

seen in chapter 1, there are relatively few studies that investigate definiteness in an L2 Scandinavian language; there are even fewer that combine a Scandinavian language and English, particularly with a Scandinavian target language. In the following section, I will survey a set of studies conducted on both L1 and L2 Scandinavian in order to outline a possible foundation of comparability.

Jin, Åfarli, and van Dommelen (2009) were mentioned in chapter 1 and in section 3.1 as an example of a study addressing definiteness in L2 Norwegian. This study tests the validity of the Failed Functional Feature Hypothesis and the Missing Surface Inflection Hypothesis (see section 3.1) in an investigation of three L1 English and five L1 Chinese end-state learners of Norwegian. The test instrument consisted of audio-recorded simple sentences, where the participants were instructed to change the sentence by adding an already given adjective. The focus is on definite DPs modified by attributive adjectives, a construction requiring full internal agreement in gender, number, and definiteness in Norwegian. The authors report that with respect to agreement both learner groups perform “around chance level” (Jin, Åfarli, & van Dommelen, 2009, p. 195), but the L1 Chinese learners supply more target determiners than the L1 English speakers do. The L1 English outperform the L1 Chinese speakers in number marking.

Recall that determiners in Norwegian agree in gender (see section 2.1). It is nonetheless unexpected that the L1 English learners to such an extent fail to supply definite determiners; the suppliance of *den* (M./F.SG.) reaches 41.2%, whereas *det* (N.SG.) and *de* (PL.) are used in scarcely 15% and 28.6% of the relevant contexts (Jin, Åfarli, & van Dommelen, 2009, p. 193). Further, the result cannot be explained by substitution based on gender agreement; rather conversely, the L1 English learners omit determiners in more than 50% of the contexts requiring a definite determiner. The simple sentences also displayed gender, implying that the gender was not concealed for the learners. The authors do, however, report a 25% overuse of *den* in contexts requiring *det*. In the L1 Chinese group the suppliance rates are considerably higher: *den* is used in 74%, *det* in 34.9%, and *de* in 54.8% of all anticipated contexts.

Omissions of determiners are limited to approximately 15%. However, the L1 Chinese learners seem to be more prone to overgeneralization; *den* is used for *det* in 27.9% of the contexts, whereas *den* is substituted for *de* in 25.8% of the contexts. The latter finding testifies to the L1 Chinese learners' struggle with number.¹⁰⁵

Two caveats are in order: First, Jin, Åfarli, and van Dommelen (2009) do not compare determiner use with suppliance of the definite suffix.¹⁰⁶ Second, the study originally included six L1 English learners of Norwegian, of which three were excluded from the experiments because they performed close to ceiling (98% or above) (Jin, Åfarli, & van Dommelen, 2009, p. 191).

Bilingual and monolingual L1 acquisition of definiteness in Norwegian

There are also some case studies of bilingual Norwegian-English first language acquisition that report on definiteness encoding, although the results to a certain extent seem to point in several directions. Anderssen and Bentzen (2013) report on the production of complex NPs (i.e., modified NPs) in the Norwegian language of a nearly three-year-old child, Emma, and they claim that frequent omissions of the definite suffix but suppliance of determiners in early recordings of Emma's DP use (age 2;7.10–2;8.20) may result from Emma's exposure to English.¹⁰⁷ However, Emma's DP system changes radically through the last three recordings (age 2;9.11–2;10.9): first she goes through a stage of constructing Mod + N + suffix DPs before the complete Art + Mod + N + suffix structure appears in the last two recordings.

A similar study is presented in Rodina and Westergaard (2013). Here the data consist of two Norwegian-English bilingual children (one of them Emma from Anderssen &

¹⁰⁵ Jin, Åfarli, and van Dommelen (2009) interpret their results in favor of the Failed Functional Feature Hypothesis (see section 3.1). However, a framework which is not considered in their paper is the Competition Model (Bates & MacWhinney, 1989; MacWhinney, 1997, 2005). In fact, the results come across as readily predictable also within this framework: The discrepancy between the L1 English and the L1 Chinese group in terms of suppliance of definite determiners is neatly predicted by the Competition Model advocating that challenges typically arise when an L1 system needs to be revised rather than when a L2 structure absent in the L1 is to be acquired.

¹⁰⁶ Recall from section 2.1 that premodified Norwegian NPs require the double-definiteness structure.

¹⁰⁷ See footnote 97.

Bentzen, 2013) and two Norwegian monolingual children (Ole, age 2;6.2–2;10.00, and Ina, age 2;10.2–3;3.18). The study cannot confirm the behavior of Emma in either the Norwegian DP production of the second bilingual child, Sunniva, or in the two monolingual children. Rodina and Westergaard write: “...suffix drop is hardly attested in the other children’s grammars.” (2013, p. 65). However, the recordings of Sunniva are from age 1;8.8 to 2.7.24, and there is thus practically no age overlap between the two girls. On the whole, it is important to emphasize that Emma’s behavior, that is, omission of inflection but suppliance of a determiner, differs from what is expected in relation to monolingual L1 Norwegian acquisition (see Anderssen, 2005, 2007 below).

Finally, Anderssen’s (2005, 2007) work on monolingual L1 Norwegian definiteness acquisition has generated valuable insights. Most importantly, Anderssen documents a very early acquisition of the definite suffix in Norwegian both compared to the indefinite article and compared to other Germanic languages, such as German and English (but not compared to Spanish (Anderssen, 2005, p. 288)). Anderssen’s (2005) dissertation addresses the acquisition of compositional definiteness in Norwegian of three monolingual children, Ina (1;8.18–3;3.18), Ann (1;8.20–3;0.1) and Ole (1;9.19–2;11.23). The acquisition of simple definites is studied only in the case of Ina, whereas the acquisition of modified NPs, that is, the double definiteness construction, is studied in all three children (see below). During the 27 recordings of Ina’s language there is only one point where the production of indefinites equals that of definites (recording three), and from recording five and onwards, the production of target-like definites stabilizes above 80% (mostly above 90%) (Anderssen, 2005, pp. 175–176). Indefinites, on the contrary, do not reach 70% accuracy until the last seven recordings (2005, pp. 175–176). Anderssen explains Ina’s early acquisition of definites with reference to the prosodic structure of Norwegian definites; that is, Norwegian disyllabic definites follow the prosodic pattern of a trochee (Anderssen, 2005, ch. 7; see also Kupisch, Anderssen, Bohnacker, & Snape, 2009, mentioned below).

Anderssen (2007) (based on parts of the dissertation from 2005) reports on the acquisition of the double definiteness construction in the language production of all three children. The results show that in premodified definite NPs, which require the double definiteness structure, the children across-the-board omit more definite determiners than definite suffixes: 45.7% of the modified NPs produced consist of Mod + N + suffix; 13.6% exhibit the Det + Mod + N construction, whereas 35.7% are targetlike (Anderssen, 2007, p. 264). The Norwegian double definiteness construction will, as already mentioned, be explored further in chapter 7.

Scandinavian as an L2 and L1 Scandinavian L2 learners

Several nongenerative mainstream SLA studies that address reference and definiteness issues among L2 learners of a Scandinavian language have also been conducted.

Nistov's (2001a) dissertation and subsequent paper (Nistov, 2001b) report a longitudinal multiple-case study addressing referential expressions in the Norwegian L2 of Turkish adolescent learners. In a sample of written Pear Story retellings,¹⁰⁸ Nistov traces the introduction and continuation of discourse referents. Nistov's framework was explicitly functionalist, and she examines the learners' referential solutions from a function-to-form perspective (see also section 4.1). Moreover, the predictions related to L1 influence were informed by Slobin's thinking for speaking (1991, 1996; see also section 1.4 in the present study). In general, the study does not document a largely deviant use of noun phrases either for introduction or for continuous reference (Nistov, 2001a, p. 167, 316). In fact, with regard to definiteness, Nistov comments:

When it comes to the type of full NPs applied, the three L2 learners seem to have acquired the marking of definiteness in Norwegian very early. Very few instances of bare nouns were found for reference continuation, which suggests little L1 transfer in this domain. (Nistov, 2001a, p. 316)

¹⁰⁸ The study additionally elicited data from two three short picture stories.

Nistov's findings may thus perhaps seem to reflect those of first language acquisition of Norwegian, sustaining that the definite forms appear early. Another study representing taking an approach similar to that of Nistov is Lindberg (1995) who explored referential expressions in L2 Swedish. I will not review this study in detail, but the reader is referred to Lindberg (1995) or Nistov (2001a) for more details.

Nordanger's (2009) MA study addressed definite encoding in the L2 Norwegian in test essays written by 100 Russian and 100 English learners. The study was based on corpus data retrieved from ASK (Norwegian Second Language Corpus; see also section 4.4). The study reported on a more accurate encoding in anaphoric contexts but higher rates of inaccurate encoding of definites among the L1 Russian learners. The analyzed essays were originally written as answers to the written part of Norwegian Higher Level test, measuring at the B2 level. Unfortunately, the study investigated only definite NPs and not indefinites. Furthermore, the categories applied are somewhat broad and underspecified, and the reliability of the study suffers from this.

Finally, Axelsson (1994) investigated noun phrase development and definiteness encoding in L2 Swedish. Axelsson studied 60 learners of L2 Swedish in two recorded interviews over a period of five months. The learners' L1s were Finnish, Polish, and Spanish, and all L1 groups were equally divided between high and low level learners (10 high level and 10 low level learners in each L1 group). The accuracy rates allowed Axelsson to outline three acquisitional stages: At stage one bare nouns, quantified indefinite plurals, and possessive NPs are acquired; stage two involves the acquisition of simple definites and simple indefinites; and stage three includes the acquisition of premodified definite and indefinite NPs (Axelsson, 1994, p. 99). Hidden behind the stages, we find that the overall mean accuracy rate of premodified indefinite NPs reaches only 33.5%, and only 21.7% for premodified definite NPs. The mean accuracy rates for simple definites and indefinites are also rather low; 61.4% and 60.6%, respectively. However, Axelsson (1994, pp. 101–103) reports that the mean accuracy scores conceal several important differences connected to L1 group. Based on the material as a whole, the L1 Spanish group seems to acquire simple indefinites before

simple definites, whereas the L1 Finnish learners display the opposite pattern: Definites are encoded more accurately than indefinites are. The major challenge to the L1 Polish learners seems to be complex NPs. Moreover, omission is very prominent in the L1 Polish group, and Axelsson (1994, p. 102) describes the strategy of the L1 Polish learners as *simplification*. By and large, Axelsson's results tie into the vast body of studies signaling the difficulty that [-ART] learners have with modification and the indefinite article. However, in relation to the present context, it is worth noting that the L1 Spanish learners in fact were more challenged by the simple definites, encoded inflectionally in Swedish and Norwegian, than were the L1 Finnish learners.

In a recent dissertation, Nyqvist (2013) investigates the acquisition of grammatical definiteness in a longitudinal study of the L2 Swedish of L1 Finnish adolescent learners (grades 7–9). Her study identifies several obstacles met by the learners that she argues are caused by the relative grammatical complexity of the Swedish NP (for instance, oversuppliance of the definite suffix in possessive NPs), in addition to overuse of the definite form and omission of the indefinite article in particular. Based on the accuracy rates in the material, Nyqvist also proposes a hierarchy of difficulty, which largely corroborates Axelsson's (1994) findings, starting with the acquisition of bare nouns,¹⁰⁹ followed by indefinite plurals and NPs with a possessive attribute, followed next by singular definites, and finally, by indefinite singular and definite plurals, which appear to be the most difficult constructions (Nyqvist, 2013, p. 186).

Nyqvist's (2015) paper compares the written L2 Swedish of 159 L1 Finnish university students to that of 60 9th grade students. The results corroborate previous findings on L2 English documenting a lower level of accuracy when the NP is accompanied by a pre-modifying adjective: For both singular pre-modified indefinites and singular pre-modified definites, the level of accuracy is 68% and 61%, respectively, for the

¹⁰⁹ This conceptualization of bare nouns as more readily acquirable is reminiscent of the thinking in Master (1987). See section 5.2.10 for a discussion of the interpretation of zero article and bare nouns in L2 article acquisition studies.

university students, compared to 64% and 38% for the 9th graders. For non-modified NPs, the university students encode 72% of the singular definite NPs and 74% of the singular indefinite NPs. The results reach 66% and 84% for the school students. In comparison to research previously presented on L2 English, Nyqvist's results tie into a broader picture of higher amounts of omission in adjectivally premodified NPs. However, the oft-attested pattern of higher rates of zero marking in indefinite contexts is only supported in the 9th graders' L2 Swedish and not in the university students' production (Nyqvist, 2015, p. 85).

Jarvis's (2002) comprehensive study of L1 Finnish and L1 Swedish learners of English, briefly introduced in 3.1.2, compared the learners' sensitivity to discourse universals and reported that the Swedish-speaking adolescents in the investigation were fairly confident in their use of referential expressions in English, including the articles. The quantitative part of Jarvis's study concentrates on the tracking of the female protagonist in a *Modern Times* excerpt. In terms of general article use, the results from this analysis reveal an indisputable difference between the L1 Swedish and the L1 Finnish learners of English. Within the L1 Finnish group of learners, the rates of zero marking are high, perhaps in particular in contexts for known topics, ranging from 31% to 52% within the four L1 Finnish/L2 English learner groups (Jarvis, 2002, p. 407).¹¹⁰ Among the L1 Swedish learners of English, zero marking is practically nonexistent (reaching at most 3% in contexts for known topics) (Jarvis, 2002, p. 402).¹¹¹ On the whole, Jarvis's results are important in this context because they suggest that English and Scandinavian languages at this point are equal enough to entail a positive transfer effect, at least when the L1 is Scandinavian and the target

¹¹⁰ The groups of learners are compiled on the basis of years of schooling and years of English instruction. The groups of Finnish learners of English range from 5th to 9th grade and the duration of EFL instruction varies between two and six years. The 9th graders are split into two groups due to opposite profiles in terms of English versus Swedish instruction. One group attended two years of English classes and six years of Swedish classes, whereas the other group displayed the opposite language biography (Jarvis, 2002, p. 392).

¹¹¹ See sections 3.1.2, 3.1.3 and section 6.3 for comments on the findings reported in the qualitative part of the analysis (Jarvis, 2002).

language is English. Moreover, he reports that Finnish learners having studied Swedish in school for six years seem to be less challenged by the English articles than those L1 Finnish learners having received only two years of Swedish instruction. Jarvis speculates that the reason for this L3 advantage may relate to an awareness of the function of articles entailed by their knowledge of definiteness encoding in Swedish: “So, the learners in group F9B [Finnish L1, six years Swedish instruction] may be more aware of article functions and of the fact that they are obligatory in certain contexts in Swedish, and they might transfer this awareness into their use of English” (Jarvis, 2002, p. 406–408).

The observation that L1 Scandinavian learners of article languages may benefit from the functional similarities between the L1 and the L2, is also further legitimated by Granfeldt’s study (2000) of four adult L1 Swedish (mainly naturalistic) learners of French.¹¹² Granfeldt’s longitudinal data for two of the participants, Martin and Johan, show a substantial decrease in omission of D-elements¹¹³ the time of onset (7 and 8 months in France, respectively) to the end of the data collection period (16 and 12 months).¹¹⁴ In the first recording, Martin omits D-elements at a rate of 31%, but only 4% by the end of the study. For Johan, the initial omission rate is 13% versus 2.5% by the end of the study (Granfeldt, 2000, p. 276). Finally, Granfeldt reports that omission rates are also low in DPs with adjectival premodifiers. Even though the participants develop at an unequal pace, the tendency of rapid improvement seems clear.

In conclusion, the similarity relation with elements of contrast between Norwegian and English pointed out in section 2.4 may entail appropriate interlingual identifications among the learners: An L1 encoding definiteness partly with articles and partly with

¹¹² The study also included Swedish-French bilingual children, but for the present purposes I confine the presentation to the results from the adult L2 acquisition.

¹¹³ D-elements include articles, demonstratives, possessives, and cardinal numbers (Granfeldt, 2000, p. 265).

¹¹⁴ Data from two female participants were also collected with one data point. Sara was recorded after 3 months in France, while Petra was recorded after 5 months of residency. Even at that point, the rates of determiner omission were, in fact, already very low: 6.5% and 10% (Granfeldt, 2000, p. 276).

inflection does not seem to inhibit the acquisition of an L2 grammatical definiteness system that relies on articles alone.

Comparability of Norwegian and English as target languages

To my knowledge, there are not many studies explicitly addressing the compatibility between studies conducted on Scandinavian and English as target languages. What complicates such a comparison is, after all, the underexplored difference between definiteness expressed by an article and definiteness expressed inflectionally. Axelsson (1994) advocated carefulness in comparing L2 acquisition of definiteness in Swedish to previous research conducted on English as target language:

A brief comparison between the English and Swedish systems for definiteness shows strong similarity in semantic-pragmatic function, but very different form systems. The differences in the form systems make a comparison between earlier studies and the present study difficult, but still some comments can be made. (Axelsson, 1994, p. 151)

There is little to hold onto in validating or rejecting this objection when determining the impact of formal realization, nonetheless, I will briefly survey an L1 acquisition study by Kupisch, Anderssen, Bohnacker, and Snape (2009, henceforth: Kupich et al., 2009), already referred to several times, which ties into Anderssen's (2005) findings presented above on early L1 Norwegian acquisition of definites.

Kupisch et al. (2009) addressed the comparability of acquisition of grammatical definiteness between English, German, Swedish, and Norwegian in child first-language learning. Based on formal, and thus phonological, differences, they expected to find different acquisition patterns. They reported that the Scandinavian languages had similar results; compared to the English and German children, the Scandinavian children appeared to acquire the definite article early. However, like their English and German peers, the Scandinavian children omitted indefinite articles more frequently than definite encoding. Moreover, the authors demonstrate that when the MLU¹¹⁵

¹¹⁵ Mean Length of Utterance.

exceeds 3.0, all children had reached the same stage in terms of article suppliance (above 80% suppliance) (Kupisch et al., 2009, p. 229). Conversely, for utterances with an MLU below 2.49, the differences are striking: The English and German children constructed less than half as many definite NPs as their Scandinavian peers (Kupisch et al., 2009, p. 230). The early frequent use of NPs encoded as definite among the Scandinavian children was argued to be explainable in reference to prosodic bootstrapping of lexical models. Additionally, research (Kupich et al. refer to Lleó & Demuth, 1999) on child language acquisition also suggests that children more readily perceive a strong–weak prosody: They are more likely to preserve a weak syllable following a strong one. Scandinavian definites largely fit into a trochaic pattern (strong–weak), while German and English definites do not. Indefinites in all four languages are iambic (weak–strong). In line with Anderssen (2005), prosodic structure was put forth as a possible, although not all-encompassing, explanation for an earlier acquisition of definites in Norwegian and Swedish.

On the whole, the L2 pattern of [–ART] learners acquiring definites prior to indefinites is generally mirrored in child L1 acquisition studies of [+ART] languages (e.g., Karmiloff-Smith, 1979; Maratsos, 1974), including Swedish (Svartholm, 1978). This does not downplay the role of form, but it does, however, indicate that form-independent processes might also be at work. Furthermore, these studies do not provide any evidence directly relevant to adult L2 acquisition, which is in many aspects a different matter, inasmuch as adults have already acquired a language and may rely on strategies and mechanisms different from those of children.

Ultimately, if we revisit the Prosodic Transfer Hypothesis, introduced briefly in sections 1.4 and 3.1, to address the impact of phonology on the acquisition of grammatical inflection (Goad, White, & Steele, 2003; Goad & White 2004), we see that this hypothesis will indeed generate predictions which are very different from those of Anderssen (2005) and Kupisch et al. (2009). The Prosodic Transfer Hypothesis predicts a failure to acquire functional morphology when the L2 prosodic structure is not supported in the L1. According to Goad and White (2004), the

approach may account for the imperfect acquisition of articles in the end-state L2 English grammar of an L1 Turkish woman named SD (see section 3.3.2). SD deleted articles most frequently in English Art + Adj + N contexts, which are represented in English by a prosodic pattern not compatible with Turkish. Not surprisingly, the impact of prosody seems to be hypothesized to run along universal lines for L1 acquisition, but along language-specific lines for adult L2 acquisition.

General remarks on the comparability of L1 and L2 acquisition

Even though the theories applied to L2 acquisition often originate from the field of L1 acquisition, the research on SLA does not provide any clear-cut answers with respect to comparability of first and second language acquisition. The motivation for drawing on L1 acquisition research when studying adult L2 acquisition is thus not fully settled. In adult second language acquisition, a number of competing variables interact with pure saliency patterns and prosodic patterns, such as the first language, an already developed conceptual basis (see von Stutterheim, 1991), the support of written language and explicit instruction, and so forth; hence, the contexts of acquisition are clearly different. However, the literature on, for instance, specificity and definiteness in SLA research is nonetheless a clear reflection of the impact of L1 studies on predictions pursued in SLA (e.g., Bickerton, 1981; Huebner, 1983; Thomas, 1989; see section 3.1.1. in the present thesis). The same is true of the morpheme-order studies, briefly discussed in 1.3, which were largely inspired by the Chomskyan approach to language acquisition of the time (e.g., Dulay & Burt, 1974). Even though the literature may empirically identify intersections between first and second language acquisition, there does not seem to be a complete consensus regarding the unifying or diverging mechanisms that lead toward similar production.

In summary, the extent to which similar behaviors have similar causes is probably better left an open question, as is the issue of whether insights from first language and second language acquisition may uncover regularities generally valid for language learning.

Brief summary and closing remarks

The purpose of the present section has been to evaluate the foundation for comparing Scandinavian languages and other [+ART] languages, primarily English. In order to do so, evidence, from both L2 and L1 acquisition studies, although scarce, have been provided and discussed.

If we accept that acquiring the definiteness category primarily means mapping grammar onto semantic and pragmatic features of language, as is presupposed in, for instance, Bickerton's model for article distribution (1981), explicit linguistic realization will take a secondary role. The point of comparison between first and second language acquisition, and between different first languages and target languages, will lie in the development and realization of the semantic/pragmatic meaning concepts of definiteness as presented in section 2.4.

Yet, it is worth keeping in mind Anderssen's (2005) and Kupisch et al.'s (2009) suggestion that properties connected to Scandinavian inflectional definites can, in fact, enhance the learning process. Most importantly, we do not know which variables will be stronger in every context, since research seems to focus on one side exclusively (e.g., the Huebner tradition on form-function; the Article Choice Parameter research largely on semantics; Trenkic on the interaction of syntax, saliency, and processing constraints; Goad and White on prosody). Austin, Pongpairoj, and Trenkic's (2015) model, presented in section 3.3.3, combining L1–L2 structural competition and a constraint-satisfaction approach comes across as promising in this regard, since the model does not presuppose one specific type of grammatical realization.

Nonetheless, as discussed from the perspective of language transfer in section 1.4, in many studies an interaction between universality and language-specific traits seems to be presupposed as an important factor. For instance, trochees come across as more salient in discourse than iambic structures, and Norwegian two-syllable definites are realized as a trochaic foot. Taking this into account, to fully distinguish between universal and language-specific effects seems to be a difficult task and perhaps not even one desirable to surmount.

The framework of analysis adopted in the present study encourages an approach holding that the core of learning is mapping form and meaning. In this process both L1 related effects, universal discourse features, and the effect of specific linguistic features associated with the target language may prove relevant.

Finally, if we revisit Axelsson's (1994) quote above, I believe that she was right in pointing out and raising awareness concerning comparison between Swedish and English as target languages. However, considering that the previous research has focused on semantic/pragmatic universals of meaning, it also seems well-warranted to draw lines across target languages as well as across first languages. The issue seems less controversial when examined from the opposite perspective, namely that of L1 comparability. For example, Ionin, Ko, and Wexler (2004) do not seem particularly unsettled by comparing two groups of learners with L1s as different as Korean and Russian (although they do indeed report on differences between the groups)¹¹⁶ implicitly entailing that [-ART] means the same thing across very different languages. Yet, there are also examples in the recent literature that may point toward an increased awareness of linguistic nuances; Crosthwaite (2014) draws attention to interesting nuances that can be observed between Korean and Chinese with respect to bridging reference.¹¹⁷ Moreover, Austin, Pongpairoj, and Trenkic (2015) call for a broader linguistic variation in compared L1s.

In conclusion, even though some reference level of equality or difference must be presupposed in order to compare across groups and individuals and extend the research agenda to new domains, the present study maintains an overt focus on formal differences between Norwegian and English, which should be regarded as an attempt to avoid premature conclusions concerning comparability of semantic/pragmatic

¹¹⁶ Even though the two L1 learner groups exhibit the same patterns of article use, the L1 Korean learners generally perform more accurately than do the L1 Russian learners (Ionin, Ko, & Wexler, 2004, p. 30).

¹¹⁷ "Bridging" refers to first mention definites allowed by initial mention of an associated referent. See Haviland and Clark for the notion of bridging (1974, Clark & Haviland, 1977), or J. Hawkins (1978) for a thorough explanation of the concept of associative anaphora.

universals and their grammatical counterparts in different languages. (These methodological issues will be explored further in 4.1 and 4.2.)

3.6. Research questions and predictions

The focus in this study is, as already outlined in chapter 1, the interaction between L1 related effects, universals and L2 specific structures in the encoding of grammatical definiteness and the development of the use of this category in L2 Norwegian among learners with a Russian or English L1 background. The learner groups have been chosen in order to enable a comparison that takes L1 and L2 differences at the semantic, pragmatic, and grammatical level into account. In the subsequent paragraphs, I once again draw on Ringbom (2007) as a framework for the research questions pertaining to the impact of cross-linguistic differences. However, in order to provide a more detailed account of the formal contrasts between Norwegian and English, I also look to the Competition Model (Bates and MacWhinney, 1989; MacWhinney, 2005; Tokowicz & MacWhinney, 2005).

In section 2.4, Ringbom's (2007) approach to cross-linguistic comparison illustrated the asymmetries between the three languages in terms of definiteness: Norwegian and Russian display a zero relation with elements of contrast, whereas Norwegian and English exhibit a similarity relation with elements of contrast. In a similar vein, Tokowicz and MacWhinney (2005), drawing on the Competition Model (see, for instance, Bates and MacWhinney, 1989), distinguish between three types of L1–L2 structural relations that are relevant to the processing of a new L2 language trait: L1–L2 similarities, L1–L2 contrast relations, and, finally, structures that are unique to the L2 (Tokowicz & MacWhinney, 2005, p. 176) (see table 3.1 below).¹¹⁸

¹¹⁸ Tokowicz and MacWhinney (2005) address the sensitivity to NP internal agreement in the L2 Spanish comprehension of L1 English learners. Here, I have chosen to refer to Tokowicz and MacWhinney (2005) because they articulate very clearly the foundation for predictions in L2 learning entailed by the Competition Model.

CROSS-LINGUISTIC SIMILARITY / L1–L2 RELATIONS	
Ringbom (2007)	Tokowicz & MacWhinney (2005)
Similarity	Similar
Contrast	Different (Contrast/Conflict)
Zero	Unique to L2

Table 3.1 Cross-linguistic comparison. Ringbom (2007) and Tokowicz and MacWhinney (2005).

Table 3.1 shows that the categories outlined by Ringbom and the categories of crosslinguistic relations emerging from the Competition Model are by and large identical. However, whereas the traditional view of L1–L2 effects originating in the Contrastive Analysis Hypothesis would predict that the zero/unique to L2 structure would pose the greatest challenge for learners (see section 1.3), the Competition Model (MacWhinney, 2005) emphasizes that L1–L2 contrasts entail cue competition and thereby may act as an inhibitor for the learners as they acquire the target structure. In Tokowicz and MacWhinney’s study (2005, p. 176), it is, for instance, predicted that in comprehension learners will be more sensitive to a structure that is unique to the L2; than they will be to a structure that contrasts in the L1 and the L2.

The Competition Model (Bates & MacWhinney, 1989) originally related to L1 processing in a cross-linguistic perspective, but has been extended to a unified account for language acquisition in general (MacWhinney, 2005). However, the idea that competition or conflict between differing constructions may inhibit the acquisition of target structures also implicitly emerges from other accounts of cross-linguistic influence. For instance, Jarvis’s (2010) fourth type of evidence of transfer, namely the criterion for *intralingual contrasts* (see section 1.3 in the present thesis), predicts the detection of transfer in the L2 when a particular language trait has partly identical and partly contrasting realizations in the L1 and the L2.

Both Ringbom (2007) and MacWhinney (2005) seem to hold similarities between languages as the basic foundation for transfer. In fact, in his article addressing the Competition Model as a unified account for language acquisition, MacWhinney writes “The basic claim is that whatever can transfer will” (2005, p. 55). Nonetheless, if we

contrast Ringbom's categories for cross-linguistic comparison with those of the Competition Model, we may assume that they will entail different predictions with respect to the learning task faced by the L1 Russian and L1 English learners of L2 Norwegian grammatical definiteness. Ringbom (2007, p. 7), on the one hand, underscores that zero relations, or perceived zero relations, will complicate the learning process since there is nothing to transfer. In essence, this would be the predicted case for the L1 Russian learners. The Competition Model (MacWhinney, 2005), on the other hand, identifies contrast relations as the most challenging to the L2 learner. The Competition Model would thus emphasize that the most critical issue is the situation facing the L1 English learners when these learners are compelled to revise their L1 article system to a new L2 model of article and suffix. Although the challenges accompanying contrast relations are also acknowledged by Ringbom (2007, p. 6), his approach seems to ascribe more weight to the functional and (incomplete) formal similarity between Norwegian and English in terms of definiteness, whereas the Competition Model first and foremost underscores the conflict-effect of contrasts.¹¹⁹ In fact, perhaps the similarity features and the contrast features are competing to exert the strongest influence on the L1 English learners. Finally, the Competition Model also permits a prediction dissociating from the established view that zero or absence is the main inhibiting factor: There is a chance that the L1 Russian learners will produce more target like definite NPs than the L1 English learners do, since definiteness in Norwegian is a structure unique to the L2 that does not compete with a contrasting L1 Russian category.¹²⁰

¹¹⁹ The concepts of similarity and contrast are slightly elusive. Ringbom (2007, p. 6) refers to function and form. From this perspective, Norwegian and English would have a functional similarity and a formal contrast. The formal contrast emerges from differences in morphological realization, and the requirement for gender, number, and definiteness agreement in Norwegian. Tokowicz and MacWhinney (2005) also emphasize the agreement requirement as a contrast relation between Spanish and English NPs. However, since agreement is not highlighted in the present study, the emphasized contrast is not defined in terms of inflectional categories, but rather in terms of conflicting inflectional/morphological realizations for the English–Norwegian language relation.

¹²⁰ This version requires, however, that the bare L1 form not be interpreted as a possible competitor to the definite target form. For instance, Trenkic and Pongpaioj (2013) hold that bare NP forms and the encoded L2 definite and indefinite forms are in structural competition. In general, I believe their approach is sound in relation

Above, we have established that two different accounts of cross-linguistic comparative relations between L1 and L2 definiteness may also predict different outcomes. Below, the initial two research questions try to capture the alternative patterns of acquisition that result from the two different frameworks for cross-linguistic comparison. The third research question aims to account for the integration of L1 effects, L2 specific features and universals in the learners L2 models of definiteness.

The research questions guiding the study are the following:

RQ 1: Are the L1 Russian learners inhibited or delayed in their use of definiteness encoding in Norwegian as a consequence of their L1, as supported by previous research on other L2s, or may the absence of an L1 grammatical category of definiteness be more advantageous to learning than a contrast relation is?

RQ 2: Are the L1 English learners facilitated in their use of definiteness encoding in Norwegian as a consequence of their L1, as generally supported by previous research on other L2s, or is their learning process conversely inhibited by L1–L2 contrast relations?

RQ 3: If there is an interaction between L1 effects, L2 effects, and universal principles of discourse in the learners' L2 models of definiteness, does each variable affect the learners equally, or does one override the others?

The predictions below further specify the approach to the overall goals and research questions of the study which will guide the analyses of the data material and the research report. Predictions 1 and 2 are formulated with a main prediction (a) and an alternative prediction (b), which both address the relationship between L1 effects and the L2 structure. Note that the alternative predictions of both P1 and P2 to some extent conflict with the main findings in the literature for [–ART] and [+ART] learners.

Finally, P1 includes a second alternative (c) which addresses the possible impact of an [+ART] L3. To my knowledge, there are very few studies of L2 English article

to the task of L2 definiteness acquisition. However, for the present purposes, the approach to competition presented by Tokowicz and MacWhinney (2005) is sustained because it captures the particular situation met by the L1 English learners of Norwegian very nicely.

acquisition that report on third language knowledge and investigate additional language knowledge as a possible source of transfer.¹²¹,¹²² Leung (2007) is an exception, who reports and tests L1 Chinese learners' use of articles in both French and English. In a Scandinavian context, several studies report on knowledge of additional [+ART] languages, yet none of them investigates directly the interaction between L1 transfer and transfer from other previously acquired languages. Nyqvist (2013) assumes, but does not explore any further, that the L1 Finnish students of Swedish in her study may be benefiting from their EFL instruction particularly in relation to detecting contexts for definite and indefinite forms (2013, p. 59; see section 3.5 for a survey of Nyqvist's study). In Axelsson (1994) information about additional languages is not provided, even though the learners' L1s are Finnish, Polish and Spanish (see also section 3.5). Jin, Åfarli and van Dommelen (2009) report that all the L1 Chinese learners had acquired English prior to Norwegian, and admit that the learners' NP production may be affected by English. However, even though influence from their L2 English cannot be fully rejected, the authors reason that since the L1 Chinese and L1 English learners exhibited distinct behaviors, the effect of previous [+ART] knowledge seems to be limited (2009, p. 195). From the opposite angle, Jarvis (2002) reports a study of article use in the L2 English of L1 Finnish and L1 Swedish learners in Finland. He observed a positive correlation between article use in the L1 Finnish learners' English and the amount of received Swedish instruction (Jarvis, 2002, pp. 406–408; see also section 3.5 in the present study),¹²³ but he did not compare

¹²¹ Here, the notion of “L3” is used only to indicate “additional language” without putting forth any claims concerning the chronological sequence of acquisition. When nothing else is indicated, the present target language is referred to as the “L2,” even though this may sometimes break with the learners' actual language biography.

¹²² It should be mentioned that the issues related to L2–L3 transfer is probably less pervasive when the target language is English, since the modern language learner typically tends to learn English before other L2s. That is, it is more likely that learners of Norwegian and Swedish have already received some L2 English instruction than it is for the typical L2 English learner to have acquired, for instance, French or German as L2s before starting to learn English.

¹²³ That is, there is a notable difference between L1 Finnish learners having received two or six years of Swedish instruction. See section 3.5 for a more detailed survey of this study.

the encoding of definiteness in the L1 Finnish learners' English to that of their Swedish. Below, in P1 alternative (c), I follow Jin, Åfarli and van Dommelen (2009).

P1 regards the L1 Russian learners, while P2 is directed at the L1 English learners.

P 1: [-ART] learners

(a) The L1 Russian learners will face more challenges in the marking of definiteness in Norwegian because their L1 does not grammaticalize definiteness.

- i. The L1 Russian learners will omit more marking than the L1 English group.
- ii. The L1 Russian learners will substitute more marking than the L1 English group.

(b) The L1 Russian learners will have an advantage in the lack of conflicting realizations of definiteness in Norwegian and Russian.

(c) The knowledge of a third [+ART] language (L3) will overrule the impact of the L1 and entail a model of definiteness encoding that is highly similar to that of the L1 English learners.

P 2: [+ART] learners

(a) The L1 English learners will benefit from their L1 because, despite formal differences, their L1 encodes the same semantic and pragmatic functions by grammatical definiteness as Norwegian does.

(b) The L1 English learners will be inhibited in their use of definiteness in Norwegian due to the formal contrasts between English and Norwegian in the realization of grammatical definiteness.

Prediction 3 attends to the interaction between the L1 and universals and concerns both L1 learner groups.

P 3: *Discourse universals*

Different environments for the use of grammatical definiteness and the gradability of givenness will affect L1 Russian and L1 English learners differently.

- i. In line with previous research, because Russian does not encode definiteness grammatically, the L1 Russian learners will resort to universals and their L2 Norwegian definiteness encoding will be more strongly guided by discourse universals than will the L2 of the L1 English learners.
- ii. L1 transfer based on the similarity relation between grammatical definiteness in Norwegian and English will override a dependence on discourse universals alone in the L2 Norwegian definiteness encoding of the L1 English learners.

The research questions and predictions are explored and attempted answered through the analytical frameworks of the Semantic Wheel (Bickerton, 1981; Huebner, 1983; see chapter 5) and the Taxonomy of Assumed Familiarity (Prince, 1981; see chapter 6), and finally the post-hoc analysis in chapter 7. Predictions 1 and 2 are mainly addressed in chapter 5, whereas prediction 3 will be the focus of chapter 6. Research question 1, 2, and 3, however, will be pursued throughout the analyses, and they will be discussed in detail in the final, summarizing chapter (ch. 8).

4. Methodological issues and data collection

In the previous chapters a theoretical framework for the present study, leading to a set of research questions and predictions, was established. The first part of the present chapter, that is, sections 4.1 and 4.2, will focus on overarching methodological issues.¹²⁴ Dimensions of theoretical and methodological orientation, and the elicited data type will thus be illuminated from different angles with the purpose of appraising the research validity of the study. In the second part of the chapter, I will describe the research design in more detail and outline the data collection procedure. Finally, a proficiency level assessment of the Pear Story retells, carried out independently of the data collection as such, will be reported.

4.1. Dimensions of form and function

In a review article published in the celebration of the 50th anniversary of *Language Learning*, Klein (1998) put forth a criticism of the field encapsulated by the notion of a *target deviation perspective*.¹²⁵ Central to this criticism is that when comparing the learner language exclusively to the target norm, true insight into how humans learn languages escapes the researcher's notice. In the subsequent paragraphs, I will take Klein's notion of the *target deviation perspective* as a point of departure for a more elaborate methodological discussion of the form-function dimension in SLA studies.

Klein (1998, p. 532) lists three factors that cause the dominance of the target deviation perspective: (1) the target norm is the teacher's perspective; (2) the target norm is the perspective of the classroom learner; and finally, (3) the target norm may serve as a *yardstick* for the researcher when compiling research projects and designs, that is, as a

¹²⁴ The topic of form and function, and possible approaches to the analysis of L2 data, may, however, be said to belong at the intersection of methods and theory. Here, I have chosen to discuss the topic under the heading of methodological issues, because I believe it serves well the function of preparing the subsequent chapters of data analyses.

¹²⁵ Klein's 1998 paper offers a general critique of the achievements of the field of SLA.

standard against which accuracy is measured. According to Klein, with regard to research, the target norm as a yardstick particularly runs the risk of limiting the scope of inquiry:

But this analysis, no matter how well it is done, does not inform us about what the human language faculty does; it tells us to which extent and perhaps why a person's usage differs sometimes from a certain norm. At the very best, it tells us where and why our species-specific capacity to learn and process languages does not work under particular circumstances, but does not tell us much about its structural and functional properties. Therefore, people who want to understand this faculty and its specific manifestations do not find these results relevant. (Klein, 1998, pp. 536–537)

The alternative approach proposed by Klein is the *learner variety perspective*:

The alternative to the target deviation perspective is to understand the learner's performance at a given time as an immediate manifestation of the capacity to speak and to understand. The form and function of these utterances are governed by principles, and these principles are those characteristic of the human language faculty. (Klein, 1998, p. 537)

The *learner variety perspective* presupposes an *independent grammar assumption* (see Cook 1993, pp. 13–17),¹²⁶ and such an approach is perhaps reflected in its most ideal form in the ESF-project (Klein & Perdue, 1992, 1997; see section 1.3). Even though Klein does not entirely reject a place for the target norm as a yardstick in research, his agenda seems to be to point out its shortcomings, chief among them a restricted access to the mechanisms underlying how languages are learned. (His critique is also reminiscent of that of Bley-Vroman, 1983). However, it seems clear that he holds *the learner variety perspective* to be an ideal for SLA research.

In light of present-day criticism of the longstanding dominance of cognitivism in SLA (see also 1.3 and 1.4 (note)), I realize that Klein's focus on the target deviation perspective may also appear misguided and outdated. Today the *learner variety*

¹²⁶ The *independent grammar assumption* stems from Chomsky's theory, and originally described how the child's developing language should be treated as an independent language system. This assumption has also been important to the study of the development of second language grammars.

perspective comes across as sustaining a very strong focus on the cognitive component of language learning, and one might say that this approach also misses the intended target.¹²⁷ Yet, in spite of exerting perhaps a weaker scientific and epistemological influence today, Klein's discussion of *the target deviation perspective* and *the learner variety perspective* still provides an entry to important and fundamental methodological considerations pertaining to, for instance, the selected starting point of a study.¹²⁸ The selected object of study will govern the subsequent analyses and the obtainable results. It is clear that in order to preserve aspects of *the learner variety perspective*, the target norm alone cannot serve the function of being the researcher's yardstick.

The most basic choices made by the researcher concern how the units of learner language are pursued. Several different approaches may be outlined. Huebner (1983) exemplifies an entry tracing the use of particular learner forms, while Klein and Perdue (1992) study the developing linguistic expressions of a set of language functions. As noted by Nistov (2001a), who discusses the same issues related to form-function analysis in her dissertation, the former undertakes a form-to-function perspective, while the latter reflects the opposite option, namely function-to-form, also called a *concept-oriented* approach (von Stutterheim, 1991). Because adult L2 learners have already established a conceptual system in their L1, von Stutterheim (1991, p. 388) sees the concept-oriented approach as the advantageous and natural starting point.

¹²⁷ In the special issue of *Language Learning* celebrating the 65th anniversary of the journal, Ortega (2013) revisits Klein's (1998) appraisal of the field published 15 years before. While Ortega accepts the main lines of Klein's critique, namely the limitations of the target deviation perspective, she also takes on a broader perspective and presents a far more positive view of the present state of the art. The proliferation of theory and epistemology, alongside an augmented methodological sophistication, is seen as promising with regard to the future of SLA. Ortega does not overtly criticize Klein's analysis, but she underscores the need for "positive framing" of the field, which is in her view, taking the last 15 years of development into account, a fully surmountable task. Her own proposal for positive framing ties into the call for a bilingual/multilingual turn: to redefine the human language faculty as bi-/multilingual by default.

¹²⁸ The methodological issues discussed in the present section originate from functionally oriented SLA research. The essence of functionalist linguistics and a functionalist approach to language acquisition is that language is first and foremost a tool for communication and language learning a process of form-function mapping (see Bardovi-Harlig, 2007, p. 57).

Additionally, she holds that taking a conceptual starting point is essential for creating a common *tertium comparationis*. Her argument is illustrated by data stemming from the ESF-project. Gujord (2013) also embarks on some of the same discussion in her dissertation on encoding of time in L2 Norwegian, and she refers to a third alternative identified by Sato (1990), namely the *form-only* approach. The morpheme-order studies, surveyed in section 1.3 in the present study, relied on a form-only perspective in the analysis of L2 data. Nistov's (2001a) study is a typical example of a concept-oriented approach, while Tenfjord's dissertation (1997) on temporal expressions among young Vietnamese learners of Norwegian is an additional Norwegian example pursuing a function-to-form analysis (Tenfjord, 1997, p. 58). Finally, Gujord (2013, p. 118) admits that her dissertation "shares features with both approaches."¹²⁹

In studies of article acquisition and definiteness acquisition,¹³⁰ influence and inspiration from both the form-to-function and the function-to-form approach can be detected. After Huebner's (1983) seminal study of Ge, which included an investigation of the use of *da* (the), certain methodological adjustments and a shift from form-to-function towards a more function-to-form approach is detectable.¹³¹ Shortcomings and limitations associated with the form-to-function approach were, for instance, more or less explicitly identified by Parrish (1987), who uncovered that her L1 Japanese learner, Mari, applied linguistic devices other than those of the articles, such as the numeral *one*, in contexts where the indefinite article would be expected. Master (1987) was also highly concerned with how the articles were used, but here the analysis was

¹²⁹ Gujord (2013) refers to Bardovi-Harlig's (2000) distinction between a form-oriented and a meaning-oriented approach, and Sato's (1990) form-to-function, function-to-form, and form-only distinction. When Gujord asserts that her study contains elements of "both," the intended categorization seems to be Bardovi-Harlig's, which largely corresponds to form-to-function and function-to-form.

¹³⁰ Here I refer primarily to the nongenerative strand of article acquisition studies, since researchers within the generative school generally value and apply methods (and research goals) different from those applied in studies with a nongenerative orientation (see Ortega, 2009, p. 111).

constrained by a *double* yardstick consisting of the Semantic Wheel on the one hand, and accuracy according to the target norm on the other. This “two-track” approach will be further explored in the next paragraphs.

I will not review the entire body of literature on L2 article acquisition in terms of methodological orientation, yet, as a whole most studies come across as fostering elements of both a form-to-function and a function-to-form approach; that is, the use of the articles including the zero article is defined in accordance with a conceptual context (see section 5.2.10 for a discussion of the analyses of the absence of an article vs. zero article). The conceptual starting point thus seems to be a semantic/pragmatic model of definiteness/article use, most often the Semantic Wheel of NP Reference (Bickerton, 1981; Huebner, 1983). However, the semantic/pragmatic foundation is also often applied to the description of the target norm, which inevitably entails the emergence of a double yardstick consisting of both the target norm and the underlying semantic/pragmatic content.¹³² Perhaps, then, the search for a complete distinction between a form-to-function and a function-to-form approach is misguided in relation to article/definiteness acquisition studies. In Parrish (1987), for instance, the methodological ideals were first and foremost formulated in opposition to the morpheme-order approach, which examined form in relation to the target norm only (i.e., the *form-only* approach mentioned above). Ultimately, on the whole, the tradition of article acquisition studies does not fully escape the target deviation perspective criticism, although alternative non-target licensed interpretations are available through the conceptual (semantic/pragmatic) yardstick.

As suggested above, the relevance of the present discussion can be questioned with reference to the current criticism of cognitivist SLA. However, if the methodological

¹³² I believe that a weakness pointed out by Trenkic (2002b) in the paper “Form-Meaning Connections in the Acquisition of English Articles” ties into the same issue of a double yardstick. Trenkic points out that the analysis conducted in the studies following Huebner (1983), which apply the analytical model of the Semantic Wheel (i.e., exemplified by Master, 1987; Parrish, 1987; Thomas, 1989), “fails to look for completely non-native assumptions of what articles mean and mark, since it is possible that EFL learners may make non-targetlike connections” (Trenkic, 2002b, pp. 118–119).

ideals following the independent grammar assumption actually turned out to be a digression, there would, in my opinion, still be good reasons to take Klein's caveats seriously, because, broken down to its core, his critique highlights the value of awareness of the consistency between theory, methodological choices and analysis. Mainly, the present discussion can be broken down to the requirement for *construct validity*: The research design must be developed in order to meet and answer the research questions, and the researcher is obliged to know whether he/she is investigating what was intended or not.

Finally, the present study must also be said to contain elements of both, if not all three, approaches: form-to-function, function-to-form, and form-only. In one sense, a concept-oriented approach is preserved since the starting point for analysis consists of analytical models pertaining to the semantic/pragmatic level. However, it would not be right to claim that the analyses are conducted as an unbiased and target-independent examination of how these functions are encoded. Rather, the study concentrates on how target forms are used and not used to encode the selected meaning categories, and it may be that alternative devices applied to encode a given function will be overlooked. On the other hand, it cannot be called a pure form-to-function approach in the sense of Huebner (1983), because the forms that are analyzed in the present study are unstable and change constantly between accurate and inaccurate encoding, not to mention between any sign of encoding at all. None of the perspectives alone can thus encapsulate the present analysis, but the form-independent meaning-concepts guide and serve as a yardstick for exploring the learners' use of definiteness.¹³³ This

¹³³ It is, however, a more complex issue to determine what yardstick is ultimately held by the learners, in particular by the [-ART] learners. I have put forth an argument that the yardstick is the universal meaning content associated with identifiability which plays a part in all languages, and that this meaning content also takes part in the analytical models applied in the present study. Yet, despite a vast literature on the topic, I believe it is most honest to say that studies still produce empirical results which in turn are objects to interpretation; that is, no waterproof evidence settling this question has been put forth thus far. The other side of the coin regards the role of the target language as a yardstick not only for the researcher but also for the learner. Despite Klein's well-warranted warnings presented in this chapter, I argue in line with Nistov (2001a) that in the case of instructed learners we must assume that also the target norm plays at least some part in the learners' L2 form-function mappings. This argument is precisely formulated by Nistov as "The learner has a target language" (2001a, p. 19), when she discusses the need for a reference target norm not only in the classroom but also in

approach is further amplified in the method for data elicitation, namely the Pear Film prompt, yet my study does not escape the characteristic of an imperfect function-to-form approach.

4.2. Dimensions of data collection: the narrative

In his comprehensive and detailed guide to research methods in applied linguistics, Dörnyei draws initial lines between quantitative, qualitative, and language data as separate types (Dörnyei, 2007, p. 19). The data in the present study qualify as the latter type by being elicited written fictional narratives. In the following section, I will discuss the advantages of such an approach, which in the present context tie into both the grammatical category of definiteness and the above discussion of methodological starting point, as well as the research tradition of cross-linguistic differences. Below, I will explain how fictional narratives as data have the potential to neatly unify the theoretical and methodological perspectives that have been developed through the previous chapters.

First, however, I will provide a brief survey of the types of data frequently elicited in studies investigating specific language traits in L2 acquisition and development. In order to do so, I embark on Ortega's (2009) presentation of the mainstream cognitive approach to second language development studies (see section 1.3 for an overview of the discipline history).¹³⁴ In Ortega (2009, pp. 110–111) an overarching division is made between *interlanguage studies* and *formal linguistic studies* of SLA, which roughly corresponds to research taking a general cognitive approach to the development of learner language and research conducted within the generative

research, even if it contradicts the ideal of *independent grammars* (see Cook, 1993), that is, of course, as long as the learners are enrolled in language classes, and thereby are consciously made aware of a norm.

¹³⁴ Ortega's (2009) *Understanding Second Language Acquisition* is written with the graduate student as its intended reader. Here, I have found the chapter "Development of Learner Language" (ch. 6) to be a useful entry to a discussion of data types in SLA-studies of linguistic categories since it combines theoretical and methodological dimensions, instead of discussing each independently of each other.

paradigm of Universal Grammar. As Ortega points out, “Even though ultimately both share the same goal of understanding learner language, each has its own constructs, tenets and preferred methodologies” (2009, p. 110). The differences in methodological preferences are the main issue in the present context: Methods are legitimated by research goals that vary by theoretical orientation. The two schools are also clearly distinguished by different areas of interest: Whereas Ortega pinpoints the investigation of *competence*, that is, “the nature of the mental representations comprising the internal grammar of the learners” (Ortega, 2009, p. 110), and *development*, “the processes and mechanisms by which those representations and the ability to use them change over time” (Ortega, 2009, p. 110), as the substantial objects of study within SLA, competence is clearly favored in generative SLA research, while the *interlanguage tradition*¹³⁵ maintains a strong focus on development. Consequently, grammaticality judgment tasks, in addition to various experimental data, have been favored by UG-oriented SLA researchers because they may reveal insights into the learner’s linguistic intuition, while free production data in combination with experimental designs are appreciated within the interlanguage approach.

The choice of data type mirrors both implicit and explicit assumptions regarding the human language ability, in addition to reflecting epistemological views on what counts as evidence. Grammaticality judgment tasks are designed to uncover the learners’ implicit knowledge of language, while free production is elicited since it “offers a window into ability for use in real time and across communicative contexts” (Ortega, 2009, p. 111). Experimental designs are used by both strands, and an obvious advantage associated with this data type is the ability to isolate certain features of

¹³⁵ Even though the term *interlanguage tradition* is widely used in surveys of the discipline history in order to identify trends in the research, I believe the use of this category label may perhaps come across as slightly disharmonic and also slightly imprecise. I see two reasons for this: First, as indicated in chapter 3, Error Analysis (Corder, 1967) and the Interlanguage Hypothesis (Selinker, 1972) are considered the starting point for both nongenerative and generative SLA, and second, a certain amount of disfavor has come to be attached to the interlanguage notion through present-day discipline discussions (see sections 1.2 and 1.4). The notion of a *general* cognitive approach, which is also applied by Ortega, in contrast to a *domain-specific generative* cognitive approach, would perhaps be equally informative.

language and to control for factors that may influence the outcome in undesirable ways.¹³⁶

Ortega's reflections about methods and data types are also relevant to article acquisition and definiteness acquisition studies. Based on the literature review in chapter 3, it seems evident that, by and large, L2 article/definiteness acquisition is studied within both frameworks captured by Ortega's categorization of approaches to learner language development, that is, through the general cognitive/interlanguage approach or the formal linguistic/generative approach (see discussion above). Moreover, the methodologies outlined above seem to cover most types of data elicited in L2 article studies. However, data types applied in L2 article acquisition studies do, to a certain extent, bridge theoretical camps; for instance, written free production is also elicited and analyzed in studies motivated by a generative research agenda (e.g., Ionin & Wexler, 2003; Ionin et al., 2004; White, 2003b). In the following section, the primary focus will thus not be to underscore and reinforce the differences between generative and non-generative traditions of data elicitation, but rather to get an overall impression of data types occurring in L2 article acquisition studies.

The subsequent presentation does not claim to be exhaustive. The purpose is to identify the major trends for data collection in the tradition of article acquisition studies. Studies of adult L2 article/definiteness acquisition roughly seem to elicit data of the following types: interactional interview data, individual free oral and written production (including narratives), problem-solving tasks/map-tasks, and fill-in-tasks. Some grammaticality judgment data are also elicited (e.g., Ionin et al., 2011), and some research projects include introspective data, that is, *stimulated recall* tasks (see Chardon, 2003, p. 782) (Butler, 2002; Ekiert, 2010a, b). Interactional interview data,

¹³⁶ Atkinson (2011b) is critical towards the use of experimental research designs for seemingly identical reasons as those who favor them. That is, to Atkinson, isolation of independent features of language is initially flawed because in his opinion cognition alone does not provide relevant data to the investigation of language learning. Atkinson's position ties in to a larger criticism towards a reductionist research paradigm, also put forth in, for instance, Larsen-Freeman and Cameron's (2008) article on methodological entailments following Complexity Theory in SLA and applied linguistics.

or data based on recorded conversations and interviews between participant and researcher, are elicited in, for instance, Huebner (1983), Master (1987), Sharma (2005a), Tarone and Parrish (1988), and White (2003b). Oral narratives or retells serve as data in Austin et al. (2015), Parrish (1987), and Tarone and Parrish (1988), while written production tasks, including written narratives and retells, constitute the data source in Chaudron and Parker (1990), Jarvis (2002), Ekiert (2010a), and Tarone and Parrish (1988).

Problem-solving map-task experiments are used in, for instance, Thomas (1989) who made the participants describe photographs to each other. In this task, inspired by the method applied in Warden's (1976) L1 article acquisition study, a naïve listener is told to pick out the right model for the description after having heard its presentation. A similar method is used by Robertson (2000), who asked pairs of learners to participate in a task where one participant would describe a figure for the other to draw. In Trenkic (2007) the data also emerge from map-task elicitation; a task is solved in pairs and one learner explains a picture to the other. Also in Chaudron and Parker (1990), free written production is combined with oral, more experimental data (oral responses to stimulus questions). Experimental designs other than those already listed are used, for instance, by Trenkic and Pongpairoj (2013), who recorded the learners' online reports on a visual stimulus (Tomlin's *FishFilm*).¹³⁷

Missing article fill-in-tasks, which most closely resemble grammaticality judgment tasks,¹³⁸ are rather frequent in the literature: Butler (2002), Ekiert (2010a, b), Ionin and Wexler (2003), Ionin, Ko, and Wexler (2004), Ionin, Zubizarreta, and Maldonado (2008), Liu and Gleason (2002), García-Mayo (2008), Tarone and Parrish (1988), and Trenkic (2008) all make use of various types of fill-in tasks. However, in all studies apart from Liu and Gleason (2002), García-Mayo (2008), and Ionin, Zubizarreta, and Maldonado (2008), these data are supplemented by other types such as free production

¹³⁷ Tomlin's *FishFilm* (1995) consists of "a set of 32 dynamic events" (Trenkic & Pongpairoj, 2013, p 156).

¹³⁸ In some studies, the elicited data include judgments of correct and incorrect sentences.

data (Ionin & Wexler, 2003; Ionin, Ko, & Wexler, 2004; Tarone & Parrish, 1988) or introspective interviews (Butler, 2002;¹³⁹ Ekiert, 2010a, b), and therefore they play a more limited role in a mixed-methods design.

Among other types of data, we find, for instance, translation data, which are used by Trenkic (2002b, 2004, 2007); it should also be emphasized that Trenkic's three latest co-authored publications compile carefully designed experiments for data elicitation (Trenkic & Pongpairoj, 2013; Trenkic, Mirkovic, & Altmann, 2014; Austin, Pongpairoj, & Trenkic, 2015). For instance, the method of *elicited imitation*¹⁴⁰ was applied in Austin, Pongpairoj, and Trenkic (2015). In general, these experimental methods can perhaps most appropriately be grouped among elicitation techniques presented as emergentist in Norris and Ortega's (2003) insightful contribution on SLA measurement in *The Handbook of Second Language Acquisition* (Doughty & Long, 2003). Typical emergentist-connectionist methods include "computer modeling experiments" and "interpretations based on reaction-time decision tasks involving carefully controlled input" (Norris & Ortega, 2003, p. 728).

The survey above provides an incomplete overview of types of data used in L2 article acquisition studies. To draw absolute lines between the types listed above is difficult for several reasons. For one, many data types crosscut language production mode; that is, they can be elicited as either written or oral data, again testifying to the fact that data types may be classified along several different dimensions. Text type, such as narrative, is also difficult to single out in the present categorization since it is subsumed under the broad category of free production. Finally, there seems to be a preference for examining productive language skills over receptive skills (with the exception of grammaticality judgment tasks). On the whole, the terminology used to

¹³⁹ In Butler (2002) the learners' metaknowledge and reflections about article use are the main subject of study. The fill-in task is thus a tool on the way to the target.

¹⁴⁰ This particular method stems from early L1 research, and it has been widely employed also in SLA (see Chaudron, 2003, pp. 793–794). Thus far, its use in L2 article acquisition studies seems to have been limited, although the technique was used in Chaudron and Parker (1990).

describe experimental tasks and fill-in tasks varies as do the procedures accompanying them.

However, from a broader perspective, the main body of evidence in L2 article acquisition seems to stem from the experimental side of what Chaudron (2003, p. 763) refers to as the *naturalistic/experimental dimension* of data types. In his comprehensive review of data collection methods in SLA,¹⁴¹ he provides an initial survey of various dimensions of data collection. Here, Chaudron follows Bennett-Kastor's (1988, p. 7, p. 26) division of *naturalistic* and *experimental* data. In Chaudron, this dimension is treated and systematized as a continuum ranging from naturalistic, through elicited production (for instance, story retelling), to experimental data (Chaudron, 2003, pp. 763–765). It seems fair to conclude that naturalistic data occur rather rarely in adult L2 article acquisition studies. Huebner (1983) may be in part an exception, although even here it could be argued that the conversations he undertook with Ge were indeed asymmetrical and unnatural in the sense that one of the interlocutors was also the researcher. Most data types can be classified as belonging somewhere in the range of elicited to highly fine-tuned experimental data. The exact position depends on the degree of manipulation and decontextualization. Some data types, however, can scarcely be categorized in terms of either Chaudron's continuum or Ortega's categories; introspective data, for instance, have more in common with traditional qualitative data than with language data.

Below, we will return to the type of data elicited and analyzed in the present study. From the brief review of data collection methods in article acquisition research, we can identify the studies that elicit data compatible with the data in the present study, that is, narratives based on visual stimuli. In this group we find Ekiert (2010a, b) and Jarvis (2002), who both elicited written narratives based on visual stimuli. Ekiert (2010b, p. 107) argues for the natural appropriateness of studying articles provided by the

¹⁴¹ The chapter is part of Doughty and Long's (2003) *The Handbook of Second Language Acquisition*.

narrative structure (this argument is elaborated below). If we count L2 Norwegian studies addressing adjacent topics, Nistov's (2001a) study of referential choice included elicited written *Pear Story* retells. Tarone and Parrish (1988) analyzed oral narratives elicited by a visual prompt. Unfortunately, however, the arguments for eliciting fictional narratives in contrast to other types of data are not always defined in any depth; they are, perhaps, taken for granted or taken to be sufficiently well-known through research on, for instance, cross-linguistic differences (e.g., Berman & Slobin, 1994; Chafe, 1980a).¹⁴² In the following section, I will provide more detail about the position and advantages of fictional narratives, and discuss how such data may also prove fitting for L2 studies of grammatical definiteness.

The narrative perspective

My chief reason for eliciting narratives instead of, for instance, using fill-in-tasks is that my primary focus is on how the learners use the grammatical category of definiteness in L2 discourse production. That is, I wanted to know how the grammatical category was used, and how the semantic/pragmatic category was encoded in free language production in order to analyze how the category functions as a feature of discourse in L2 Norwegian. Analyses of the learners' ability to insert correct and incorrect encoding in isolated instances would not provide the information I was seeking. Triangulation in the sense of investigating the same linguistic feature in different data types has also uncovered that task-specific properties may affect the outcome.¹⁴³ Below, I will review the tradition of using fictional narratives in SLA

¹⁴² As mentioned, Ekiert (2010b) is in part an exception to this crude generalization, and so is Nistov (2001a) who explicitly defines the intentions behind eliciting narratives in terms of providing contexts for the linguistic object of study and situating the study within a specific research tradition. The narrative as a text type and a discourse genre is also more salient in her study than in most article acquisition studies.

¹⁴³ Tarone and Parrish (1988) compare the results from several tasks: oral interview, grammaticality judgment task, and oral narrative. They find that the learners performed most accurately in the oral narration, followed by the oral interview, and least accurately on the grammaticality judgment task. Their study clearly indicates that article use may, to some extent, be task dependent. However, it should not be forgotten that the research has produced a collection of rather robust findings, such as overgeneralization of *the* and delayed acquisition of *a*, which are thus validated by triangulation.

studies before I present in more detail the potential of elicited narratives as a research method.

It is necessary to comment on the position of the narrative in research on language and cognition in general. This position is described by Johnstone as follows:

Narrative has been one of the major themes in humanistic and social scientific thought since the mid-twentieth century. The essence of humanness, long characterized as the tendency to make sense of the world through rationality, has come increasingly to be described as the tendency to tell stories, to make sense of the world through narrative. In linguistics, narrative was one of the first discourse genres to be analyzed, and it has continued to be among the most intensively studied of things people do with talk. (Johnstone, 2004, p. 635)

The tradition of using narratives in psychology and linguistic research can be traced back to the first half of the 20th century. In Pavlenko (2008, 2014) and Chafe (1980a), the work of the British psychologist Bartlett from 1932, who investigated students' retellings of a folktale, is emphasized. Johnstone (2004) traces the narrative in research back to the structuralist works on narrative structure in myths and folklore carried out by Propp (1968) and Lévy-Strauss (1955, 1964, 1966), and to the central work of Labov and Waletzky (1967) on *personal experience narratives* (the reader is referred to Johnstone (2004) for literature references to these works).¹⁴⁴

The idea that the narrative form, both fictional and personal/autobiographical, generally mirrors and plays a central role in human thinking and memory organization is essential to the importance of narratives in research.

In Pavlenko's (2008) chapter on narrative analysis as a research method in SLA, she makes an overall distinction between *fictional* and *personal* narratives. The narratives applied in the present study tie into the group of fictional narratives, described by Pavlenko as "...stories about fictional events, elicited with non-verbal prompts, such as

¹⁴⁴ The augmented attention to autobiographical narrative in both the social sciences and the humanities following these now classical works has been described as a "narrative turn" in research (see Pavlenko, 2007, p. 164).

pictures or videos” (Pavlenko, 2008, p. 311).¹⁴⁵ *The Pear Film*, made by Wallace Chafe and his research crew (Chafe, 1980a), is among the most frequently used visual prompts applied in SLA.¹⁴⁶

The Pear Story

In the introduction to *The Pear Stories: Cognitive, Cultural and Linguistic Aspects of Narrative Production* (Chafe, 1980a, b), Chafe describes the motivation for making the Pear Film in the following way:

To begin with, we were interested in how people talk about things they have experienced and later recall. (Chafe, 1980b, p. xi)

Since we were interested in the conversion of nonverbal into verbal material, it seemed important that what people first experienced not already be in verbal form. And we suspected that oral language provides valuable clues to verbalization processes that are missing in written language. We also wanted to collect data in a number of different languages in order to compare our findings cross-linguistically. (Chafe, 1980b, p. xii)

Narratives were thus collected in order to map and explore cross-linguistic differences reflected in the way people verbalize experience. Chafe highlights two aspects: the nonverbal form of the experience, and the value and superiority of oral language. The present approach breaks with Chafe in collecting written rather than oral samples; obvious drawbacks to written material are the relative lack of spontaneity and the

¹⁴⁵ I am aware that narratives based on the *Pear Story* and similar stimuli may perhaps not be defined as “fictional” in the most literal sense, since they do not necessarily require the narrator to invent a story. Rather the Pear Film instructs the narrators to recall and retell (i.e. verbalize) a story that has been presented to them visually. On the other hand, in order to make sense of the visual stimuli as a story, interpretation is required that naturally may involve elements of fantasy. However, Pavlenko (2008) does not accentuate this point of disharmony, and I will thus settle on an understanding that holds the “real world” criteria as more critical to the definition than a condition of “fantasy/invention.” Additionally, it is also well-warranted to ask whether retellings are indeed narratives or rather just reproductions of the narrative structures of others. Berman and Slobin (1994, p. 41) exclude from the general definition of narrative any retellings where the events have already been given a verbal expression by the initial narrator. However, as long as the Pear Film is not given a verbal narration, I believe its retells may classify as narratives.

¹⁴⁶ Besides the Pear Film, the picture book *The Frog Story* and an excerpt from the Charlie Chaplin film *Modern Times*, have frequently been applied in studies investigating cross-linguistic differences and language development in bilingual children and adolescents, and in adult SLA (Bamberg, 1987; Berman & Slobin, 1994 (*The Frog Story*); Jarvis, 2002 (*Modern Times*) among others).

possibility that participants monitor the outcome. This is particularly true in relation to studying the L2 acquisition of definiteness; for instance, the saliency effect found in Trenkic and Pongpairoj (2013) (see section 3.5.3 in the present study) cannot be directly confirmed in written material.

The original Pear Story project resulted in a collection of studies published in a volume edited by Chafe (1980a). The volume examines a variety of topics related to narrative production among first-language users with a variety of language backgrounds. The investigations carried out include topics such as referential choice in Japanese and English (Clancy, 1980), oral narrative strategies in Greek and English (Tannen, 1980), and article use and identifiability in discourse (Du Bois, 1980). The latter contribution from Du Bois in particular has inspired the present thesis. Du Bois' analysis "The Trace of Identity in Discourse" is impressive and insightful in that it includes all NP types occurring in the retellings; that is, the analysis is not limited to certain types of NPs. Rather, Du Bois provides detailed analyses of the functions of nonreferential NPs, the usage patterns of possessive NPs, and the impact of animacy, just to mention some of the features addressed. Du Bois' work is referred to sporadically throughout the dissertation.

Below is Chafe's synopsis of the Pear Film (Chafe, 1980b, p. xiv):

The film begins with a man picking pears on a ladder in a tree. He descends the ladder, kneels, and dumps the pears from the pocket of an apron he is wearing into one of three baskets below the tree. He removes a bandana from around his neck and wipes off one of the pears. Then he returns to the ladder and climbs back into the tree.

Towards the end of this sequence we hear the sound of a goat, and when the picker is back in the tree a man approaches with a goat on a leash. As they pass by the baskets of pears, the goat strains toward them, but is pulled past by the man and the two of them disappear in the distance.

We see another closeup of the picker at his work, and then we see a boy approaching on a bicycle. He coasts in toward the baskets, stops, gets off his bike, looks up at the picker, puts down his bike, walks toward the baskets, again looking at the picker, picks up a pear, puts it back down, looks once more at the picker, and lifts up a basket full of pears. He puts the basket down near his bike, lifts up the bike and straddles it, picks up the basket and places it on the rack in front of his handlebars, and rides off. We again see the man continuing to pick pears.

The boy is now riding down the road, and we see a pear fall from the basket on his bike. Then we see a girl on a bicycle approaching from the other direction. As they pass, the boy turns to look at the girl, his hat flies off, and the front wheel of his bike hits the rock. The bike falls over, the basket falls off, and the pears spill out onto the ground. The boy extricates himself from under the bike, and brushes his leg.

In the meantime we hear what turns out to be the sound of a paddleball, and then we see three boys standing there, looking at the bike boy on the ground. The three pick up the scattered pears and put them back in the basket. The bike boy sets his bike upright, and two of the other boys lift the basket of pears back onto it. The bike boy begins walking his bike in the direction he was going, while the three other boys begin walking off in the other direction.

As they walk by the bike boy's hat on the road, the boy with the paddleball sees it, picks it up, turns around, and we hear a loud whistle as he signals to the bike boy. The bike boy stops, takes three pears out of the basket, and holds them out as the other boy approaches with the hat. They exchange the pears and the hat, and the bike boy keeps going while the boy with the paddleball runs back to his two companions, to each of whom he hands a pear. They continue on, eating their pears.

The scene now changes back to the tree, where we see the picker again descending the ladder. He looks at the two baskets, where earlier there were three, points at them, backs up against the ladder, shakes his head, and tips up his hat. The three boys are now seen approaching, eating their pears. The picker watches them pass by, and they walk off into the distance.

In the present study, narratives are not collected in order to study narrative structure and the construction of narratives but rather with the intention of providing and establishing contexts that can elicit the specified linguistic structures. Below, I will explain how elicited Pear Stories may meet the intentions of the present study as a whole.

A stable reference context

Pavlenko (2008, p. 312) points out an advantage associated with using visual prompts to elicit data, namely that they “allow the semantic referent to be kept stable.” This property has been decisive for choosing narratives over other available types of data (see above). When studying a grammatical phenomenon that encodes a meaning distinction such as definiteness, it is critical to be able to connect the supplied linguistic expression, or the verbal material, to a stable, corresponding frame that in fact represents the referents. As mentioned in chapter 1, shared knowledge between speaker and hearer is critical to the choice between the definite and the indefinite form, but, as will become clearer in chapters 5 and 6, the concept of shared knowledge as a

foundation for identification is not static. Yet, it is necessary that the researcher be able to access the sources for identifiability licensed by the universe of discourse that emerges through the Pear Film.

Furthermore, as pointed out in Bardovi-Harlig's (2000, p. 199) discussion of the method of using films and other prompts to elicit retellings, an advantage of narratives is comparability between learners; all participants write their retellings based on the same stimuli. The shared context provided by the Pear Film allows a more detailed and in-depth comparison than does a collection of texts written about different topics. That is, it is easier to isolate and compare semantic/pragmatic contexts and their encoding when the stimuli are constant across individuals. Moreover, constant stimuli are also essential in order to detect whether cross-linguistic differences affect the narratives. I will return to this issue below.

Identifiability as a feature of the narrative

Bardovi-Harlig (2000, p. 199) also emphasizes the ability to manipulate the content by eliciting narratives based on fictional prompts. In relation to the present object of study, contexts for identifiability and definiteness may be largely inherent in the narrative structure as such. Chapters 1 and 2 established that identifiability can be assumed to be the core of definiteness, both in terms of being able to encompass most contexts, and in terms of encapsulating the meaning content of a universally expressed meaning category of definiteness (see section 2.4). The meaning concept of identifiability is immanently pragmatic and pertains to the discourse level. In a narrative the effect of identifiability in discourse is particularly salient, since a narrative necessarily involves introducing and tracing different referents through the story-line. Du Bois asserts that:

The most basic function of the English articles is to contrast identifiable from nonidentifiable referents. In the common pattern, a person or object is introduced into discourse with the indefinite article and subsequent mentions receive the definite article... (Du Bois, 1980, p. 206)

Furthermore, narratives require referents in discourse to be described, related, and distinguished from each other, which establishes contexts for various aspects that may

be described by reference to identifiability. However, as will be evident from the analyses to follow, it is also necessary to distinguish between the concepts of specificity and referentiality in order to perform an adequate analysis of the data.

Cross-linguistic differences

Pavlenko's argument of "keeping the semantic context stable" is also highly relevant if the purpose is to identify cross-linguistic differences. In order to compare how different languages encode various events, it is important that what is to be described has an objectively controllable basis. This approach is fostered in Berman and Slobin's large-scale study of cross-linguistic differences in the language of children and adolescents using the *Frog Story* as a stimulus (Berman & Slobin, 1994). To detect cross-linguistic differences in the sense of Chafe (1980a) and Berman and Slobin (1994), that is, to investigate how users of different languages encode the same events, is not the primary goal of the present study. Instead, the present study sets out to explore the encoding and development of encoding of one particular grammatical category. Nonetheless, the film prompt is applied in order to trigger a collection of contexts for definiteness; as stated in section 1.3, in relation to the encoding of definiteness, L1 background is assumed to be critical to the development of this category in the L2.

However, a study pursuing the tradition of Slobin's *Thinking for Speaking* (e.g., Slobin, 1991, 1996) by Stoll and Bickel (2008), which examined referential density in Pear Stories retold by L1 Russian and Belhare adult speakers,¹⁴⁷ revealed significant differences with respect to the use of elaborated NPs, pronouns, and zero anaphora. The Russian Pear Stories displayed considerably higher levels of referential density than did the Belhare stories; thus, stories retold by each L1 group could easily be detected and categorized with regard to this language trait (that is, in addition to the language they were retold in, of course). Yet, the study addressed first language use,

¹⁴⁷ Belhare is a Sino-Tibetan language spoken in Nepal.

and it is important to keep in mind that the issue of second language learning adds an additional dimension that complicates the study of cross-linguistic differences in event encoding. The L2 learner will try to meet the requirements of the target language while working with limited L2 linguistic resources, which makes it less straightforward to uncover the effects of cross-linguistic diversity in how events are depicted. However, the additional complexity of L2 learning is of course also in essence what makes cross-linguistic influence in the L2 learning process an interesting and ongoing endeavor for the researcher: L1 licensed structures and traits seem to emerge in the L2, even when the learner's focus is on the target language.

In relation to the present study, the effect of cross-linguistic diversity in the use and encoding of definiteness could be predicted to occur in areas where both the grammar and the usage patterns of grammar diverge for instance, most obviously in relation to the fact that Russian does not encode definiteness grammatically, but, perhaps also in less obvious domains, such as in the distribution of possessives. Even though this perspective is not the primary one of the present study, it is an advantage to the study as a whole that issues such as diversity between languages in the ways events are encoded can be controlled for.

Summary and closing remarks

The preceding sections have provided a context for the data on which the present study is based. The narrative as a research method is firmly rooted in the tradition of cross-linguistic research and the traditions of studying learner languages, perhaps most appreciated within the nongenerative approaches to SLA. Elicited narratives may be said to belong somewhere on the continuum between true naturalistic data and fully manipulated experimental designs (see Chaudron, 2003, p. 764). We have also seen that fictional narratives are associated with advantages such as comparability across individuals and a stable accessible frame of reference since the stimuli are constant (Bardovi-Harlig, 2000; Pavlenko, 2008). Bardovi-Harlig (2000) also notes that the content may, in principle, be manipulated when compiling the stimuli, but this option

is naturally not available when the stimulus is a preproduced film, such as the Pear Film (Chafe, 1980a).

The Pear Film is well-known within cross-linguistic research and SLA research in general. The present study follows a path tread by many, but Du Bois (1980), Nistov (2001a, b) and Stoll and Bickel (2008) have been more central than others to the development of the present research design. The semantics and pragmatics of definiteness are immanent in a fictional narrative, and this aspect is critical to the application of narratives in the present study. Nonetheless, the main reason for eliciting narratives instead of, for instance, using filled-in missing definiteness encoding is the value of accessing the linguistic structures through more or less natural, free language production, that is, as it emerges in normal discourse in the learner languages.

Finally, Chaudron (2003, p. 801) lists three necessary conditions for validating research results: theoretical consistency, replication, and triangulation. The present study aspires to meet Chaudron's validity requirement first and foremost by controlling for theoretical consistency, that is, by ensuring that theory, methods, and analyses are all well-warranted. In terms of the requirement for triangulation, even though the present section has discussed a variety of different methods applied in L2 article acquisition studies, with special attention to the potential of narratives, it is important not to forget that the research tradition has indeed produced a body of findings from which several rather robust patterns may be extracted (see chapter 3).

4.2.1. A note on the dimension of qualitative and quantitative data

In the social sciences, data have usually been categorized as either qualitative or quantitative. In the introduction to section 4.2, however, with respect to applied linguistics Dörnyei (2007, p. 19) was mentioned as having established a third category

for *language data* independent of the qualitative/quantitative dichotomy.¹⁴⁸ I agree that it is problematic to define language data in terms of the qualitative and quantitative distinction. Yet, it is beyond doubt that both qualitative and quantitative *methods* are substantial to the analysis of language data, that is to say, perhaps it is more pertinent to talk about qualitative and quantitative methods and approaches to language data than about qualitative and quantitative language data as such.

Nonetheless, language data types vary in their ease of quantification. Datasets consisting of fill-in task results from a large population will typically be more readily quantified than will personal narratives elicited longitudinally in small-scale case studies. However, there are also theoretical rationales behind emphasizing the potential of qualitative analyses over quantitative and vice versa. Nistov argues that qualitative methods may be advantageous to the study of L2 data since the variation associated with learner language production frequently involves forms that are difficult to unequivocally categorize:

Besides, experience from earlier work (cf. Nistov 1989) has taught me that interlanguage data – due to the many unclear and ambivalent structures that may appear – may be hard to quantify, and may rather require a more documentary hermeneutic approach. (Nistov, 2001a, p. 91)

Even though this does not mean that linguistic data from personal narratives, such as article use or other linguistic features, would be meaningless or impossible to quantify, Nistov reminds us of the danger of losing the inherent complexity and variation associated with L2 data when using quantitative methods. The other side of the coin is the inherent drive in all research to produce knowledge readily generalizable to larger populations (see Larsen-Freeman, 2006b).

¹⁴⁸ Dörnyei notes that language data are most often subsumed under qualitative data, but he argues that they are nonetheless data of a specific kind.

In the SLA and article acquisition literature, qualitative and quantitative methods occur side by side, both in studies strictly defined as longitudinal case studies (for instance, Huebner, 1983; Nistov, 2001a; Parrish, 1987) and in larger-scale cross-sectional studies (for instance, Butler, 2002; Jarvis, 2002; Thomas, 1989). Jarvis's (2002) study is explicit about carrying out both quantitative and qualitative analyses; stark quantitative analyses including the application of inferential statistics are performed on the material overall, whereas a sub-corpus of the data (fictional narratives) is extracted in order to be analyzed more qualitatively. By applying a mixed-methods design, the study capitalizes on the strengths of both, and reaches, in my opinion, a high level of research validity: The statistics extract the most robust patterns in the data as a whole, while the more detailed qualitative analysis uncovers variation and subtle tendencies in a larger set of linguistic structures.

Yet, on the whole, it seems that the quantitative/qualitative dichotomy is slightly less important than the choice of data type, as described above in studies analyzing language data: How data are elicited and what kind of data are elicited seem to be the most substantial methodological choices in studies of second language article/definiteness acquisition.

The data elicited in the present study would typically belong to the more qualitative end of the continuum of qualitative and quantitative data and methods. In the subsequent analyses, language traits will be quantified and presented as quantified entities; however, the method of elicitation and the analytical tools and models applied provide a context for the analyses that ensures the preservation of a certain qualitative aspect.

4.3. The research design of the study

The present study explores, as outlined in chapter 1, the encoding of definiteness and the use of the grammatical category of definiteness in the L2 Norwegian of a group of adult L1 Russian and L1 English learners. The data consist of written Pear Stories

collected through three data points within the period of approximately one year (see section 5.3.2 below for a more detailed overview). Three explicitly-formulated criteria governed the recruitment of participants to the study:

- L1 Russian or L1 English
- L2 language training in public courses
- L2 language level sufficient to produce a written text in Norwegian

The subsequent sections will survey the research design, the participants, and the data collection procedure, in addition to discussing problematic issues related to data collection and the final data. I will also provide some general information about the Russian and the English speaking populations in Norway and the organization of public Norwegian language training.

4.3.1. The participants

The present study includes data from seven L1 Russian learners and four L1 English learners of Norwegian. All participants were immigrants currently living in Norway, and they were attending Norwegian classes within the public language training program for adults offered in Norway (see below). It was an overt aim to recruit participants from the general immigrant population instead of for instance exchange students at the university. This decision was primarily motivated by the fact that the cause for immigration might affect not only the motivation and investment in the learning task but also the social and communicative pressure resting on the learning process.¹⁴⁹ Second, I wanted to examine the language of instructed learners who were participating in classes following the public curriculum. Third, I assumed that, on the whole, immigrants on a work permit and immigrants arriving for family reunification would, to a larger extent, be planning a long-term stay in Norway than would immigrants who were in Norway on a student exchange or to complete a university

¹⁴⁹ See Ortega (2005b) for a critical discussion of the L2 population bias in SLA.

degree.¹⁵⁰ That is to say, their general integration in the regular Norwegian society was considered a potentially relevant factor for their language learning process. However, immigrants on a work permit are not obliged to attend Norwegian classes, indicating that those who do may in fact have a strong motivation to learn Norwegian (see information below about the legislation in this area through *The Introduction Act*). A final reason for recruiting students who were in the national program for Norwegian language training is that the national curriculum of 2012 is standardized and developed in accordance with the CEFR. On a general basis, the standardization of language teaching in Europe can be questioned; however, in the present context the transparency that comes with standardization is seen as an advantage.

The Russian speaking and English speaking populations in Norway

According to Statistics Norway (*Statistisk sentralbyrå*), there are 17,058 Russian immigrants in Norway as of January 1, 2016. The population of Russian citizens ranks as the 12th largest immigrant population in Norway. However, these numbers do not include all Russian speaking immigrants, since there are relatively large Russian speaking communities in Ukraine, Belarus, and the Baltic countries.¹⁵¹ Statistics Norway does not provide calculations based on first language; however, in Ukraine in 2011, 17.3% of the population spoke Russian,¹⁵² and the total Ukrainian population in Norway as of January 1, 2016 is 4,572. Norway has a population of 9,963 people of Latvian origin, and a population of 5,078 Estonian inhabitants. The largest group from the Baltic area consists of immigrants of Lithuanian origin: 37,376 people as of January 1, 2016. Lithuanians are, as of January 1, 2016 the second largest immigrant

¹⁵⁰ This is, of course, not necessarily a sufficiently nuanced analysis: Immigration on the basis of education may also lead to permanent residency, and equally, immigrants with a specialist work permit might be arriving on short-term contracts and leave whenever their contract expires.

¹⁵¹ In her dissertation examining the language skills of L1 Russian 1st grade students in Norway, Randen (2014, p. 6) reasons that given the sizable immigration from the Baltic area after these countries gained membership in the European Union in 2004, and the relatively large Russian speaking communities in Estonia, Latvia, and Lithuania, the L1 Russian speaking immigrant group in Norway presumably exceeds the group of Russian citizens in number.

¹⁵² All percentages for population according to first language are taken from www.globalis.no, which is linked through the Norwegian website for the United Nations, www.fn.no.

group in Norway. All the Baltic countries have minority populations of speakers of Russian: 33.8% of people in Latvia (2011), 24.8% (2011) of people in Estonia, and 8% of people in Lithuania (2011). Immigrants from Belarus amount to a rather small group in Norway consisting of 1,020 people (as of January 1, 2016). In general, the Russian speaking population in Belarus was 8.3% in 2009, but it should be emphasized that Russian and Belarussian are closely related and, to a large extent, mutually intelligible.

A report published by Statistics Norway (Henriksen, 2007), on the largest immigrant populations in Norway in 2007 informs that one third of the Russian immigrants have a refugee background from Chechenia. There are more than twice as many Russian women as there are Russian men in Norway, and many of the women are married to inhabitants without an immigrant background (Henriksen, 2007, pp. 149–152). In the group of Russian immigrants the level of education exceeds that of the Norwegian majority population. This property also applies to the present group of participants; all the L1 Russian learners report that they have some higher education. In general, the Russian immigrant population falls into the category of immigrants with a short period of residency, and their migration is seen as a direct result of the political changes that took place in the early 1990s, that is, the fall of the Soviet Union (for the Chechen group, of course, this is different since they have immigrated mainly as refugees after the two Chechen wars that took place between 1994–1996 and 1999–2002) (Henriksen, 2007).

The population of L1 English speakers globally cannot be confined exclusively to a particular citizenship. From Great Britain there are 14,475 people in Norway as of January 1, 2016, and from Australia there are 1,530 people, whereas only 506 people originate from New Zealand. The U.S. population as of January 1, 2016 consists of 8,445 people. Finally, the South African population amounts to 961 people. To my knowledge there is very little available information about immigrants with these nationalities and language backgrounds, but it is worth noticing that, on the whole, immigrants from the EU/EEA (European Economic Area), USA, Canada, Australia,

and New Zealand have a higher level of employment (73%) than the majority population does (68.5%) as of 2014 (Statistics Norway).

Norwegian as a second language: National curriculum and classes

The Introduction Act of 2003 outlines and ensures immigrants' rights and obligations to participate in Norwegian language training and social studies courses.¹⁵³ Refugees and their reunited families, as well as family members reunited with Norwegian or Nordic citizens and others admitted permanent residency, are all granted the right and obligation to participate in free Norwegian language and social studies classes. The education consists of 600 hours of training (if necessary, a person is granted up to 3,000 hours of training), of which 50 hours are reserved for social studies exclusively. Since September 2013, the courses have been obligatorily concluded by a language test and a social studies test.¹⁵⁴

The Norwegian language training is guided by the *National Curriculum in Norwegian Language and Social Studies for Adult Immigrants* from 2012,¹⁵⁵ and the instruction is organized in three different "tracks" developed to meet variations in the participants' educational level: low pace, medium pace, and high pace.¹⁵⁶ The curriculum also includes a description of a basic literacy module directed at the language training of illiterate participants. As a whole, the curriculum aligns with the *Common European Framework of Reference* (Council of Europe, 2001); that is, progress and development are described in terms of the proficiency levels, basic language skills, and language modes outlined by the CEFR. The tests that complete the training are now explicitly defined in terms of the CEFR proficiency levels, that is, A1, A2, B1, B2.¹⁵⁷ The B1

¹⁵³ See www.imdi.no for more information (IMDi=Directorate for Integration and Diversity).

¹⁵⁴ Over the past few years, the legislation in this area has been and is currently subject to close scrutiny and current revisions. For instance, new legislation was adopted in December 2015 that introduced a language test and a social studies test as a prerequisite for being granted Norwegian citizenship. The language test is set to measure oral skills at level A2, but requires the social studies test to be completed in written Norwegian.

¹⁵⁵ VOX (www.vox.no) is responsible for the curriculum and its implementation, whereas each municipality is responsible for organizing and providing the instruction.

¹⁵⁶ The "tracks" not only concern pace but also the didactic and pedagogical approach.

¹⁵⁷ As of February 2014.

level is the estimated and anticipated goal for classes developed for participants with a fair or large amount of prior education (medium and high pace groups).

Personal information provided by the participants in the study

After each data collection session, the participants in the present study were invited to fill out a questionnaire eliciting non-sensitive personal information and information about Norwegian classes and language tests. The motivation for including a questionnaire was to get an overview of the participants' age, educational level, and so forth. The participants' age range was approximately 30 years, and the average age was 35.7 for the L1 Russian group and 40.7 for the L1 English group (see Table 4.1 below). The majority of the participants was women (9 out of 11). All participants reported that they had some higher education. The participants were asked about duration of residency in Norway, and they gave as detailed information as they could. Based on this

BIOGRAPHICAL DATA – DATA POINT I								
Participant	L1	Gender	Age	Time of residency	Education	Norwegian language tests	Knowledge of other languages	Uses Norwegian at/with:
Ru-1	Russian	Female	20–30	9 months	Higher	Norwegian test 2	[–ART] language: good English: good	Norwegian classes Partner
Ru-3	Russian	Female	30–40	4 years, 10 months	Higher	-	English: intermediate [+ART] language: intermediate	Norwegian classes Partner
Ru-4	Russian	Female	20–30	2 years, 6 months	Higher	Norwegian test 3	[–ART] language: good English: intermediate	Norwegian classes
Ru-5	Russian	Female	50–60	1 year, 3 months	Higher	Norwegian test 2	[–ART] language: basic [+ART] language: intermediate [+ART] language: intermediate	Norwegian classes
Ru-6	Russian	Female	30–40	9 months	Higher	-	English: intermediate	Norwegian classes Partner Family
Ru-7	Russian	Female	30–40	ca. 1 year	Higher	-	English: good	Norwegian classes Friends Partner Family
Ru-10	Russian	Female	40–50	ca. 5 years	Higher	Norwegian test 3	English: beginner	Norwegian classes Friends Partner Family
Eng-1	English	Female	50–60	1 year	Higher	-	[+ART] language: intermediate [+ART] language: basic [+ART] language: intermediate	Norwegian classes Friends
Eng-3	English	Female	30–40	ca. 2 years	Higher	Trial for Norwegian test 1 + 2	-	Norwegian classes
Eng-4	English	Male	40–50	3 years	Higher	-	[+ART] language: basic [–ART] language: basic	Norwegian classes Partner
Eng-5	English	Male	30–40	16 months	Higher	-	-	Norwegian classes Family

Table 4.1 Biographical data. Data point I.

information, displayed in Table 4.1, at the time of onset the duration of residency in Norway ranged from nine months to five years. There are two participants with significantly longer residencies: one with approximately four years and one with five years. Both belong to the L1 Russian group.

All self-reported information must be interpreted with caution. The self-reported information on knowledge of other languages is most relevant for the L1 Russian learners. All report that they possess some knowledge of an [+ART] language (see also section 1.2 and 1.4). Yet, the reports vary from basic level knowledge (“a little”) to “good” knowledge. This information has not been verified, yet it is not unlikely that learners with good knowledge of another language would be able to detect and draw on L2–L3 functional similarities. However, as outlined in 1.2 and 3.6, this can only be studied indirectly by accounting for possibly resembling models of definiteness entertained by the L1 English and the L1 Russian learners possessing good knowledge of English.

At the time of onset for the present study, only one out of four L1 English learners had completed a language test, whereas four out of seven L1 Russian learners had completed either *Norwegian Language Test 2*, measuring at A2 (two participants) or *Norwegian Language Test 3* (two participants). Two L1 Russian learners were also studying for the *Norwegian Higher Level Test*, measuring at level B2. This picture is altered by DP III, when three out of four L1 English learners and all the L1 Russian learners report on having passed an official language test (however, none of the participants had succeeded in passing the B2 level test by the time the data collection was complete).

4.3.2. The data collection procedure

The majority of data collection sessions were carried out on the property of the university, that is, in a school setting. On some occasions, the sessions had to be conducted at other locations due to the personal schedules of the participants. The participants came in small groups (two or three) or individually. The appointment

times were also adjusted in accordance with their personal schedules; consequently, most meetings took place in the afternoon.

All participants in the present study signed a consent given in Norwegian and in their L1 (see appendix 1 and 2). (Issues related to informed consent will be addressed further below.)

The participants watched *The Pear Film* on a big screen while I was present (see below for a brief comment on the problem of mutual knowledge). After having completed the film, instructions were given in Norwegian and in their L1. The instructions were formulated as follows: “Tell/retell the story from the film, and imagine that it all/everything happened last year/last summer.” The participants were then free to compose their narrations within the limits of 20 minutes.¹⁵⁸ The stories were written with a pen in order to control whenever something was rewritten or erased. If there were any words that they did not know or did not remember, they were given the opportunity to ask, but they were not offered information that would reveal any grammatical properties associated with the word such as gender. Before they left the room, I made an effort to assist individually with filling out the personal information form. The participants received a gift voucher of NOK 150 by the end of each session (see section 4.3.4 for a note on the ethical aspects of reimbursement). The collection of data for DP I took place in the autumn of 2013 (late September to early October), with the exception of one participant, Ru-10. The data collection was concluded in May–June 2014 for all but two participants (Ru-10 and Eng-5), who were delayed due to both late recruitment and personal schedules. After DP I, three L1 Russian and one L1 English participant dropped out. Finally, I chose to exclude the sixth L1 English participant because of late recruitment to the study. The Pear Stories written by these participants are not included in the subsequent analyses.

¹⁵⁸ The limitation was explicitly given for all but Eng-1-1 and Ru-1-1.

TIME SCHEDULE AND SAMPLING INTERVALS			
Participant	Data point I: 2013	Data point II: 2014	Data point III: 2014
Ru-1	September	January	May
Ru-3	October	January	June
Ru-4	October	January	May
Ru-5	October	January	May
Ru-6	October	January	May
Ru-7	October	January	May
Ru-10	December	May	November
Eng-1	September	January	May
Eng-3	October	January	June
Eng-4	October	January	June
Eng-5	October	June	November

Table 4.2 Time of data collection.

The role of the researcher during data collection sessions: Mutual knowledge

We will now turn to an issue that possibly poses a threat to the construct validity of the study. My presence during the time the participants were watching the Pear Film may have affected the composition of the narratives and also the use of definite and indefinite forms. This is because the mutual knowledge between the researcher and participant may affect the way referents are introduced. The risk is amplified by the fact that the participants probably pictured the researcher as the receiver. Nistov (2001a, p. 107) addresses the same issue, but argues that since the task of writing the Pear Story was conducted within the framework of a regular school task, the probability that mutual knowledge strongly affected the students is limited. The issue of mutual knowledge was also discussed in the original Pear Story projects. Clancy (1980, p. 145) observed that some of the participants ignored the instruction of an “uninformed” listener, and developed retellings presupposing mutual information. On the other hand, Du Bois (1980, p. 235) reported a large proportion of definite first mentions in his native English Pear Stories, which were told to an interviewer who had not been present during viewing.

In relation to the present study, it is clear that the possibility of mutual knowledge affecting the language production would arise at DP II and DP III regardless of how the first session was conducted. After all, Pear Stories were elicited at each and every

DP. However, since the issue of mutual knowledge was not accounted for at DP I, I have made an effort to pay attention to this through the analyses of the narratives.

4.3.3. The longitudinal design

The present study has a longitudinal design, that is, data were collected at several points from the same individuals within a specified time frame. Dörnyei describes longitudinal research in the following way: “Longitudinal research is a rather imprecise term that refers to a family of methods that share one thing in common: information is gathered about the target of research... during a series of points in time” (Dörnyei, 2007, p. 79). The target in the present design is the 11 individuals’ use of grammatical definiteness, which is studied longitudinally in three Pear Story retellings written within approximately one year. Furthermore, Dörnyei (2007, p. 79) draws on Menard’s (2002)¹⁵⁹ three criteria for a longitudinal design: (1) data are collected at several time periods (2) from the same population (3) with the purpose of comparing data between periods. Dörnyei adds to the purpose of conducting longitudinal research that the goal should be to “describe patterns of change, and to explain causal relationships” (2007, p. 79). The purpose of the longitudinal aspect of the present study is to enable a description of patterns of change, more than to detect causal relations.

In section 1.3, some newer trends in the field that take a usage-based approach to language learning were briefly introduced. Perhaps increasingly important to the study of SLA are approaches integrating cognitive and social aspects of language learning, and approaches holding the learner language to be a dynamic, adaptive, complex, and emerging system, such as Complexity Theory (Larsen-Freeman, 1997, 2011) and Dynamic Systems Theory (e.g., De Bot, Lowie, & Verspoor, 2007).¹⁶⁰ These theories emphasize the study of development, change, and variability, and further capitalize on

¹⁵⁹ See Dörnyei (2007) for the full literature reference to Menard (2002).

¹⁶⁰ Both theories originate from the natural sciences; Dynamic Systems Theory was originally developed within mathematics.

the potential of longitudinal designs. In order to study language development and change within this framework, Larsen-Freeman and Cameron advocate methods that take time into account and point out weaknesses associated with a more traditional cross-sectional approach:

Another methodology that might be useful when modified for complex system purposes, is a longitudinal, case-study, time-series approach, which enables connections to be made across levels and timescales. In contrast, often interlanguage studies tend to be cross-sectional, denying us the idiographic description of individual growth and variability. (Larsen-Freeman & Cameron, 2008, p. 208)

However, Dörnyei (2007) and Ortega and Iberri-Shea (2005) note that relatively little attention is paid to longitudinal research in applied linguistics and SLA. As pointed out in the quote above, most studies carry out cross-sectional investigations, that is, studies where data are collected at one single point from a defined population. Cross-sectional designs may provide pseudo-longitudinal data through, for instance, data collected from populations that differ in terms of years of language training, age, language proficiency, etc. In the body of L2 article/definiteness acquisition studies, the most prominent longitudinal studies are Huebner (1983) and Parrish (1987). More recently, we find Granfeldt (2000), White's study of SD (2003b), and Ekiert (2010a) (see ch. 3 for a more detailed presentation of these studies).

In Ortega and Iberri-Shea's (2005) review of longitudinal research in SLA, several possible approaches are identified. The present study seems to fit into the type described as "Descriptive-Quantitative Longitudinal Studies of L2 Development" (Ortega & Iberri-Shea, 2005, p. 29), characterized by the investigation of data from a limited number of participants and an absence of inferential statistics.¹⁶¹ Ortega and

¹⁶¹ The remaining three types that Ortega and Iberri-Shea (2005) mention are "Longitudinal Research on L2 Program Outcomes," "Longitudinal Investigations of L2 Instructional Effectiveness," and "Qualitative Longitudinal Research." The authors conclude their review by calling for more largescale studies and more sophisticated analytical methods, that is, innovative inferential statistics (Ortega & Iberri-Shea, 2005, p. 49). Unfortunately, the present study cannot meet this demand, but may perhaps be viewed as contributing to investigating the time component in L2 learning.

Iberri-Shea also note that this group of studies has a strong linguistic orientation: “Descriptive-quantitative longitudinal SLA research draws on linguistic theories, often of a functional bent, and seldom includes nonlinguistic variables” (Ortega & Iberri-Shea, 2005, p. 29). Huebner (1983) is emphasized as a typical example of studies under this rubric. Nistov (2001a) and Tenfjord (1997) are Norwegian doctoral dissertations bearing a similar design.

On the whole, longitudinal research may provide important insights about SLA; in fact, Ortega and Iberri-Shea put it the following way:

Indeed it can be argued that many, if not all, fundamental problems about L2 learning are in part problems about “time,” and that any claims about “learning” (or development, progress, improvement, change, gains, and so on) can be most meaningfully interpreted only within a full longitudinal perspective. (Ortega & Iberri-Shea, 2005, p. 26)

Nonetheless, to actually conduct and carry out longitudinal studies is associated with complexity and certain challenges which can be avoided in cross-sectional designs. First of all, the risk of subject drop out is clearly increased when participation involves more than one meeting. Second, both Dörnyei and Ortega and Iberri-Shea (2005) point out the danger of the “practice effect” (Dörnyei, 2007, p. 53), namely that the participants become trained at performing the task and therefore improve. This is thus a constant threat to validity. In a similar vein, Dörnyei mentions “panel conditioning,”¹⁶² warning that “there is a real danger that the regular meetings that the participation involves and the knowledge of being part of the study can alter the panel members’ behaviour and responses” (Dörnyei, 2007, p. 83). Ortega and Iberri-Shea (2005, p. 39) frankly suggest that the participants might in fact be bored by the repetitive aspects of longitudinal research.

Even though I am aware that the practice effect may have occurred and affected the performance to a limited degree during the period of my study, I believe that the signs

¹⁶² “Panel” refers to the participants in the study.

of panel conditioning are more salient. For instance, some participants did write shorter and less elaborate Pear Stories at DP II and DP III (Ru-1 is a typical case). Yet, I would be reluctant to admit that an improved use of definiteness encoding could be a result of the practice effect only and not a reflection of L2 development.

A third challenge, addressed by Ortega and Iberri-Shea (2005, p. 37), which is perhaps most central, relates to the duration of a longitudinal design and the time lapse between data points. The importance of being sensitive to time scales and finding the right “sampling intervals” is also pointed out by Larsen-Freeman and Cameron (2008, p. 208). However, the literature does not provide clear guidance on how to settle on the intervals and the end point of the data collection period. The time frames for the present study were set based on the academic year lasting from August to June, with three data points representing the beginning, middle, and end of the year. However, these time frames were not sufficiently flexible, leading to a delayed sample from two participants (Ru-10 and Eng-5).

4.3.4. Practical and ethical challenges and general limitations

Recruitment and participant dropout

Subject dropout (participant attrition/mortality) is mentioned as one of the major threats to research validity by Dörnyei (2007, p. 53). The present data collection was conducted and concluded as planned for the majority of participants. The largest challenge was therefore not subject dropout, but rather getting in touch with a large enough number of participants who fulfilled both the L1 criteria and the criteria of following language training organized within the official curriculum.¹⁶³ It was important that the L1 backgrounds guaranteed the asymmetry described in Ringbom’s (2007) categories of language similarity and contrast (see section 2.4). In the very beginning of the recruitment phase, the majority of the L1 Russian learners were attending a social studies class that was given in Russian by a Russian speaking

¹⁶³ My initial research plans and design included between 20 and 30 participants total.

teacher. Likewise, some L1 English participants were invited to participate in the present project in a social studies class given in English. However, far from all the learners attending classes in English have English as their L1, and there were neither enough L1 English nor L1 Russian students who agreed to participate in my study. Consequently, for both L1 groups I also had to recruit from regular heterogeneous language classes in two different schools (both located in large cities in Norway).

Comparability between participants

The group of learners participating in the present study is, in many aspects, heterogeneous. Also, since the participants could not be recruited from one single language class, I had to consider the extent to which they were indeed comparable as language learners.

Variation in proficiency level and in duration of stay in the host community also implies that the initial starting point of the learners differs. Yet, the proficiency level assessment, which will be discussed below, reveals that the learners are most equal at DP I, while variation increases through DP II to DP III. Against this backdrop it is intriguing to explore how both individual and group profiles develop throughout the time of data collection. Complexity Theory and Dynamic Systems Theory see variability as “inherent properties of a changing system” (De Bot, Lowie, & Verspoor, 2007, p. 14).¹⁶⁴ Consequently, accompanied by biographical data, I believe inter- and intra-individual variation may, in fact, be worthy of study in its own right, particularly if the goal is to shed light on developmental processes.

Furthermore, the present study has an overt linguistic orientation; the main aim is thus not to investigate the impact of instruction, but rather to get a picture of how patterns of definiteness encoding develop over time across two different groups of learners

¹⁶⁴ Dynamic Systems Theory and Complexity Theory encourage a rethinking of the traditional reductionist views of variation as an external variable that must be controlled for. Furthermore, scholars in this tradition emphasize the limitations of studying learner language as a linear causal process (e.g., Larsen-Freeman & Cameron, 2008).

categorized by their different L1 backgrounds. It is thus, without doubt, interesting to see whether individual development mirrors group development; for this reason I will provide group-level calculations accompanied by detailed individual information.

Informed consent

As mentioned above, all participants gave consent. However, this stage of the research process invokes certain issues of an ethical character. Under the rubric of research ethics, Dörnyei (2007, pp. 65, 69) addresses the issue of deception and the question of how much information should be shared with the research subjects. He writes:

How ‘informed’ should the consent be? Of course, when we ask this question what we really mean is ‘how little information is enough to share in order to remain ethical?’ The reluctance to reveal too much about the nature of our research is a pragmatic one because certain information can influence or bias the participants’ responses and may even make them withdraw from the study. So, we need to achieve a trade-off here and the recommendations concerning the minimal level of informedness found in the literature vary; in exceptional circumstances even deception can be acceptable. (Dörnyei, 2007, p. 69)

The participants in the present study were informed that the object of study was how their first language influenced their Norwegian, and moreover, that I was investigating linguistic aspects in which the two groups of learners could differ. Although these are vague formulations, I would not say that the participants in the present study were deceived. If they were, the motivation for doing so would exclusively relate to Dörnyei’s first reason, namely the risk of biasing or influencing the responses, and not the second reason of subject dropout. I was wary of “giving away the goal of the study,” as formulated by Mackey and Gass (2016, p. 35), and informing the participants right away that I was examining the definite and the indefinite forms, because I wanted to avoid a “study-for-the-test” effect and over-monitoring of the production. Since my aspiration was to get a glimpse into how identifiability was used as a discourse organizing phenomenon (see chapter 6 in the present study), which was also part of the reason for eliciting narratives, it would be problematic if the participants focused too much on all NPs as isolated instances. Nonetheless, the idea of deception was unsettling, and my solution was to inform the participants before the

first data collection session started that initially they would not be told exactly which language trait I was investigating. When the data collection was completed, such information was provided whenever the participants wanted to know.¹⁶⁵

Reimbursement

Dörnyei also addresses the issue of cost-benefit in research involving human subjects:

Not only must we prevent our investigation from causing any harm, but we need to try also to make sure that the participants *benefit* from our research in some way. We should never forget that by spending time and energy helping us they are doing us a favor and it is our responsibility to try to make the cost-benefit balance as equitable as possible. (Dörnyei, 2007, p. 67)

It is doubtful that the research conducted in the present study will either harm or benefit the participants in the near future, but in order to show gratitude for the subjects' costs of participating in my study, they were offered a gift voucher of 150 NOK (approximately \$ 20) for the university book store by the end of each data session. Additionally, the participants were offered the chance to have their Pear Stories annotated and corrected after the data collection period was completed.

However, even though Dörnyei argues convincingly for respecting the cost-benefit balance between participant and researcher, there are also downsides to reimbursement. In a lecture provided for a graduate class in Theory of Science and Science (VITHF900), Fossheim (2015) emphasized the researcher's responsibility to be aware of the power asymmetry between researcher and subject. He did not warn against reimbursement, but encouraged awareness regarding the possibility of "buying" participation.¹⁶⁶ In relation to the present study, I believe Dörnyei's perspective to be the most relevant. There are two reasons for that. First, in light of the present-day democratization of knowledge and education, I regard the barrier between researcher and participants as diminished (see, for instance, Sfard, 1998). Second, the

¹⁶⁵ This is also the overt recommendation in Dörnyei (2007) and Mackey and Gass (2016).

¹⁶⁶ Hallvard Fossheim (lecture at the University of Bergen, January, 2015).

objective of the present research does not affect the personal lives or the health of the participants, nor is the task the participants are asked to perform or their participation in the project associated with any gatekeeping functions in the host community.

4.3.5. Summary and closing remarks

The preceding sections have described the research design and the procedure for data collection. They have also discussed strengths and weaknesses associated with the methodological approach.

In addition, the above sections have addressed the ethics of informed consent and of reimbursement. I have concluded that the present study generally respects the standards of the field. Moreover, I have discussed challenges that emerge when studying human subjects, such as attrition, panel conditioning and the practice effect. The weight of these challenges is naturally particularly heavy in a longitudinal design.

The participants in the study were all recruited from language training courses organized within the public system of L2 Norwegian instruction for immigrants, but they were not recruited from one single class. Variation in duration of residency and variation in age among the participants have been noted, but in terms of educational level, a general consistency both across and within groups is maintained. Differences in the L2 Norwegian proficiency level are accounted for by a proficiency level assessment conducted independently of the data collection. This assessment will be reported below (section 4.4). A weakness associated with the study is the inability to control for the context of the participants' L2 development, that is, language practice within the classroom and outside the classroom, the pace and intensity of the language courses, their individual language aptitude and motivation, and so forth. However, such information can rarely be interpreted directly from self-reported information from questionnaires. Yet, in essence, what is viewed as a weakness or strength also depends on perspective. As was briefly outlined in section 4.3.3, the study of variability and variation also carries a great potential to bring new insights into the learning process.

Verspoor, Lowie, and van Dijk argue for the value of variability in a dynamic approach to language learning:

Essential to this approach is that variability is elevated, both within and between individuals, into a central element of developing systems. Thus intra- and inter-individual variability are important features that should be treated as data and be analyzed. (Verspoor, Lowie, & van Dijk, 2008, p. 217)¹⁶⁷

Even though the present study is not developed within a Dynamic Systems Theory approach, it is worth noting that this perspective appreciates variation as something more than noise.

By and large, I believe a strength of the study is that the selected group of learners belongs to the population of regular immigrants; the learners do not hold the privileges associated with being exchange students in higher education. The potential impact of context for language training has received little attention in studies of L2 article acquisition. Most often the participants in studies are recruited from university ESL or EFL courses. The canon of L2 article acquisition studies may thus be said to have a slight university bias in terms of context for instruction. This bias does not necessarily pose a threat to the results, but in line with Ortega (2005b), I would nonetheless welcome an increased awareness of variation in participants' immigrant status within the L2 article acquisition literature.¹⁶⁸

Finally, while a longitudinal design permits a close examination of individual development, it also entails an increased level of variability and variation that one would attempt to regulate, at least if the goal is generalizability. However, by looking closely into what is hidden behind the group profiles, the researcher gets the opportunity to balance comparability and individual developmental patterns. In order

¹⁶⁷ The authors refer to Thelen and Smith (1994, pp. 341–342) for this argument.

¹⁶⁸ The body of research on L2 Norwegian attests to a different focus: Most studies investigate subjects enrolled in the public system of schooling. However, many previous dissertations have addressed the L2 learning of school children (Randen, 2014; Tenfjord, 1997) or adolescents (Kulbrandstad, 1998; Nistov, 2001a), although some recent Ph.D. dissertations also include adult immigrant learners (Gujord, 2013).

to conclude this section, I quote De Bot, Lowie, and Verspoor, who integrate variation as an important variable in a larger picture of second language research:

In a sense, DST [Dynamic Systems Theory] can bridge the gap between holistic and reductionist views on SLA: it recognizes the fact that all aspects of human behavior are connected and that the brain is not isolated and cognition is both embodied and situated as holisticists would argue, but at the same time it does aim at the full quantification that is the ultimate goal of the reductionists. If this view of language is appropriate, it would entail that we should widen our scope in our quest to understand the SLA process. We should look to see whether individuals really have similar systems. (De Bot, Lowie, & Verspoor, 2008, p. 19)

4.4. Appendix: Proficiency level assessment

In the subsequent sections, I report on a proficiency level scoring of the present data material, carried out independently of the main study. The proficiency level scoring takes the reference levels of the Common European Framework of Reference (CoE, 2001) as its starting point. Background and procedure will be presented before I report the results. Finally, I evaluate the results in light of a broader discussion of the status and impact of L2 proficiency, on the one hand, and L2 development on the other. The overall purpose for conducting a proficiency level scoring of the data material is to get an overview of variation in proficiency level within the material. Each text has been evaluated independently by three professional raters.

In its present form, the data material is well-suited for investigating and detecting L2 development within each individual. Longitudinal comparison at the group level is more challenging since it ideally requires controlling for a larger set of variables including variation in L2 mastery.

Context: SLA and proficiency level

Discrepancy in L2-proficiency between individuals in a group is a well-known concern in SLA studies investigating learner language development and, for example, cross-linguistic influence. In the introductory paper to a volume containing works resulting from two meetings within the SLATE network of language testers and SLA

researchers,¹⁶⁹ Hulstijn, Alderson, and Schoonen (2010) address the complex relationship between the CEFR, language testing and language development. The authors point out how comparison across individuals and proficiency level seems to remain a constant challenge to SLA studies:

SLA, for example, has frequently simply taken groups of learners at supposedly different levels of ability, conducted cross-sectional research and claimed that the results show development. Yet the levels have been woefully undefined, often crudely labelled “intermediate” or “advanced”, or “first and second year university students” – which means little if anything in developmental terms – and which cannot therefore be interpreted in any meaningful way. (Hulstijn, Alderson, & Schoonen, 2010, p. 16)

In cases where proficiency level is not included as an independent variable, the researcher may thus run the risk of making unwarranted claims about group-level features.¹⁷⁰ As seen in section 4.3, the participants in the present study were recruited from different language classes. However, also when students belong to the same class of learners and prepare for the same language test, there is no guarantee that they will perform equally well in all aspects of language. Moreover, exposure to quantitatively and qualitatively equal input does not necessarily entail equal language development. In the preceding sections, I introduced a view that holds variation and variability to be important entries to understanding L2 development. Nonetheless, I still believe that accounting for several variables associated with the data enhance the study of variability and variation. In general, research designs benefit from including a method for proficiency level assessment in order to account for fundamental variation between

¹⁶⁹ SLATE is an abbreviation for Second Language Acquisition & Testing in Europe. The volume referred to is titled *Communicative proficiency and linguistic development: Intersections between SLA and Language Testing Research*, edited by Bartning, Martin, and Vedder (2010).

¹⁷⁰ There is a great deal of variation in how and how well this challenge is handled in SLA. It is not within the limits of the present study to go into detail on this topic, but the reader is referred to two research syntheses on SLA and proficiency level authored by Thomas (1994, 2006). These works summarize how L2 proficiency is dealt with in papers published in *Applied Linguistics*, *Language Learning*, *Second Language Research* and *Studies in Second Language Acquisition* through two periods of time, namely 1988–1992 (Thomas, 1994) and 2000–2004 (Thomas, 2006).

individuals that are compared to each other. However, that does not mean that L2 proficiency assessment is not in itself hampered by a number of both theoretical and methodological challenges. Although, Hulstijn, Alderson, and Schoonen may have a point in: “It is our belief that, whatever its shortcomings, the CEFR has introduced a notion of levels of development that is far better – if only because it can be challenged – than the vague terms (not measures) used to date” (2010, p. 16).

The Common European Framework of Reference

The Common European Framework of Reference: Language, Teaching, Assessment

(CoE, 2001) is a comprehensive framework widely used across Europe due to its applicability across languages. Based on its widespread use and relative transparency, the CEFR serves as the reference point in the present *text-centered*¹⁷¹ L2-proficiency level assessment. The CEFR is now translated into 39 languages.¹⁷² Hulstijn, Alderson, and Schoonen (2010, p. 12) summarized the present-day position of the CEFR as follows: “Throughout Europe (and beyond), the CEFR has become a major point of reference for language in education, with both the ambition and the potential of bringing common standards and transparency across Europe.” The main purpose of using the CEFR in the present context is to measure the language skills reflected in the narratives through a transparent system that may be interpreted and understood independently of the main analyses conducted in chapters 5, 6 and 7, as well as independently of the self-reported information discussed in section 4.3. It is thus an assessment of language proficiency as language proficiency is operationalized in the CEFR, but, importantly, it is not believed to reflect a neutral, value-free truth about language mastery.

The CEFR results from a longstanding work conducted by the Council of Europe initiated already in the 1970s. Its roots are found in the implementation of

¹⁷¹ In Carlsen (2012a) a distinction is made between learner-centered and text-centered measurements. Text-centered assessment makes no claims concerning proficiency level that extend the isolated text.

¹⁷² According to CoE, April 2016.

communicative competence as a goal in European language education and in the political strive for a free, globalized labor force in Europe. In an article expressing a deep skepticism towards the standardization of language testing and the use of language tests in policy making, McNamara summarizes the origins of the CEFR as follows:

The Council was looking for a way of thinking about achievement in language study which was independent of the structural properties of particular languages, in the interests of labour mobility and readily transportable and interpretable credentials. The policies of the Council at that time were critical in the development of the notional/functional syllabus, and the definition of levels of syllabus in such functionalist terms; the Council was the principle influence on the European version of communicative language teaching. It can therefore be argued that the functionalist orientation of communicative language teaching and the curriculum and assessment frameworks that go with it are a reflection of the values of the Council – broadly, European integration. (McNamara, 2011, p. 502).

The standardization process driven by the CEFR may also be criticized for perpetuating the monolingual norm in education and society by maintaining the native speaker as the yardstick (e.g., McNamara, 2011; Shohamy, 2011). However, criticism has also been put forth with the intention of improving the CEFR, for instance has the call for language specific descriptions in order to validate the reference levels by now generated a large body of works linking the CEFR descriptors to specific languages. Reference-level description projects have been carried out in a number of languages, among them Norwegian (Carlsen, 2012b).¹⁷³

The CEFR framework describes language proficiency along a vertical and a horizontal dimension. The vertical dimension relates to the reference levels describing increasing language mastery from A1–C2, while the horizontal dimension includes communicative contexts, activities and skills associated with language and communication. Overall, the CEFR exhibits a system of 56 scales describing the

¹⁷³ See CoE for a complete overview.

properties of a range of skills related to language and communication along reference levels from beginner to highly advanced academic language use.

4.4.1. The present approach

The present assessment procedure is inspired by the methods applied in Carlsen (2012a). Carlsen's large-scale work conducted within the frames of the project ASKeladden (University of Bergen) set out to link the L2 texts of the Norwegian Second Language Learner Corpus (ASK) to the reference levels of the CEFR (see Tenfjord, Meurer, & Hofland, 2006; Tenfjord, Hagen, & Johansen, 2007, for a description of ASK). The method of assessment partly depended on human raters and partly on statistical methods. A total of 1222 texts were assessed. Carlsen (2012a, p. 174) refers to the method as an *incomplete linked design*: Of the total of 1222 texts, all ten raters first assessed the same 200 texts, whereas the rest of the texts was divided among two groups of five raters. Statistical methods in addition to rater training ensured inter-rater reliability.

The present study cannot comply with the complexity and methodological rigidity of Carlsen (2012a). However, the design aims at an enhanced and just rating by employing three professional raters, who all scored all texts independently of each other. The results were summarized and concluded by me. In cases where two or all the three raters agreed, the level was readily settled. In a few cases the raters arrived at three different conclusions, and the scores were then summarized in order to calculate the average. Ru-1-3 is an example where the raters assigned level B2/B1 – B2 – B1. In this case level B2/B1 was ultimately concluded. Likewise, for Ru-6-2, the raters assigned level B1/A2 – B1 – A2/B1, which summarized equaled B1/A2.¹⁷⁴ The raters used in-between levels in order to augment the level of precision, and it is reassuring that the inter-rater discrepancy only occasionally extended half a level.

¹⁷⁴ See appendix 5.

The raters' evaluations were based on the following CEFR -scales:

- Global scale p. 24
- Overall written production p. 61
- Creative writing p. 62
- General linguistic range p. 110
- Vocabulary range p. 112
- Vocabulary control p. 112
- Grammatical accuracy p. 114
- Orthographic control p. 118
- Coherence and cohesion p. 125
- Thematic development p. 125
- Propositional precision p. 129

The scales judged as relevant are largely identical to the ones applied in Carlsen (2012a, p. 173), where also written texts were scored.¹⁷⁵

It is in order to comment on the scales measuring vocabulary. The present data material consists of fictional narratives based on visual stimuli. This means that the world of the Pear Film to a large extent governs and confines the vocabulary relevant to the task. The scales measuring vocabulary range and control may thus pose a possible problem to the rating. The raters were therefore instructed to keep in mind that the events and features of the film to a large extent controlled the vocabulary. Moreover, vocabulary mastery in the present case may also involve an element of chance and coincidence, that is, some learners may by coincidence be more trained and familiar with the relevant Pear Story vocabulary. However, since the Pear Film repeatedly served as prompt (and the learners knew), the participants were indeed given the opportunity to practice the specialized vocabulary needed to complete the narrative.

¹⁷⁵ Some scales are changed because the text type occurring in the present material differs from the main text types present in Carlsen's material (2012a). *Thematic development* is for instance more relevant to the present material and is therefore included as a reference scale here.

4.4.2. Results

The primary purpose of the proficiency level assessment is to uncover large inconsistencies in terms of proficiency among the participants. The development of each individual and the two L1 groups in comparison to each other are only secondary. Secondary is also the concurrence, or lack thereof, of more target-like use of the category of definiteness in Norwegian and increased proficiency level (although this will be addressed further in chapter 5).

Table 4.2 and Figure 4.1 below confirm that there are differences in proficiency level both within and across DPs. The proficiency levels assigned at DP I range from level A2–B1, and the variation is thus limited to one whole level. At DP II the levels assigned to the texts spread from A2 to B1/B2, and for DP III, the range is A2/A1–B2/B1. Interestingly, the widest range occurs at DP III, whereas the range at DP I and II is almost equal. However, the sample of texts has climbed the scale by one level at DP II.¹⁷⁶

PARTICIPANT	DATA POINT I	DATA POINT II	DATA POINT III
Ru-1	B1	B1/B2	B2/B1
Ru-3	B1	B1/A2	B1
Ru-4	A2/B1	B1	B1
Ru-5	A2/B1	B1/A2	A2/B1
Ru-6	A2/B1	B1/A2	B1
Ru-7	A2	A2/B1	B1/A2
Ru-10	B1	B1	B1/B2
Eng-1	A2	A2	A2/A1
Eng-3	A2	A2	A2
Eng-4	A2	A2/B1	A2
Eng-5	A2/B1	B1/A2	A2/B1

Table 4.3 Proficiency level assigned to each text.

The highest level of consistency in proficiency level is identified at DP I (see figure 4.1). The initial relatively high consistency is important to the succeeding analyses. The explanation for the result may be that the learners shared a larger set of

¹⁷⁶ It should be noted that the CEFR emphasizes that time and effort for climbing from one level to the next are relative, and not necessarily comparable between A1 and A2 and B1 and B2.

characteristics at the time they were recruited for the present study than after a year had passed by. By DP III, a divide between learners writing increasingly better/more complex Pear Stories and learners performing at the same or even exacerbated level of proficiency is observable (see Table 4.3). Figure 4.1 displays an augmented variation in proficiency level at DP III.

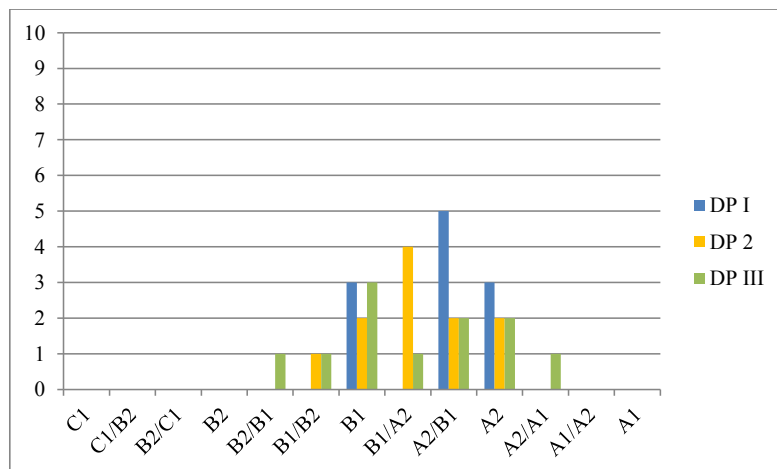


Figure 4.1. Proficiency level. All participants, all DPs.

In general, the proficiency level in the L1 Russian group seems to increase between DP I and III, while the proficiency level within the L1 English group surprisingly seems to fall between DP I and III (see Figure 4.2 and 4.3 below).

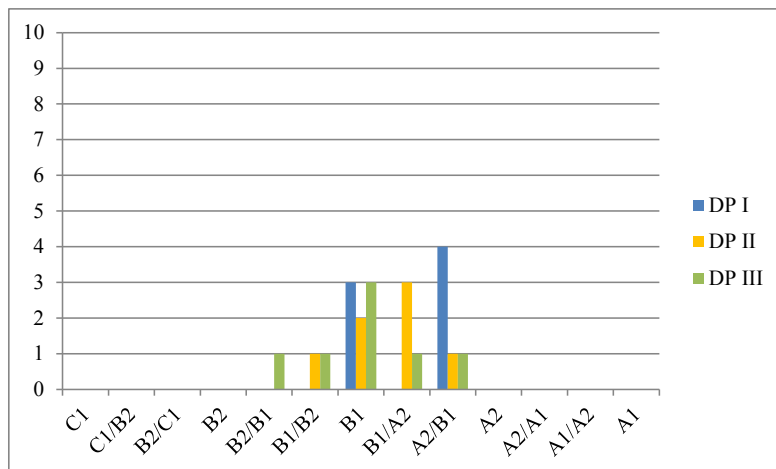


Figure 4.2. L1 Russian group. Absolute numbers.

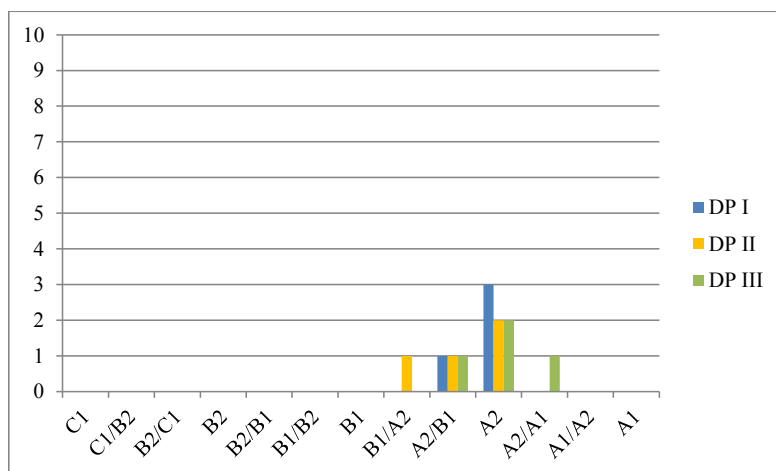


Figure 4.3. L1 English group. Absolute numbers.

Summary and closing remarks

The results presented above reveal several interesting features associated with the data material in the present study:

- The range in proficiency level increases between DP I and DP II, and again between DP II and DP III.
- The variation in proficiency level increases between DP I and DP II and again between DP II and DP III.

- The L1 Russian learners on the whole perform slightly higher on the scale than do the L1 English learners.
- The L1 Russian group to a larger extent than the L1 English group improves in proficiency between data point I and II.

Summarized, proficiency-level (in)consistency seems least problematic as a hindrance for comparison at DP I. That is, there are differences, but the participants are also to a large extent navigating in the same landscape of language. Beyond that, it is interesting to observe that the main body of texts is assigned a level between A2 and B1 through all DPs, implying only a limited general increase in proficiency within this time scope. Yet, what is really critical to the present study is not necessarily the rise or fall in proficiency, but how this knowledge influences comparison between groups and individuals. By now, we know that total consistency may not be attested either within the L1 groups or within each DP. A consequence is that calculations at the group level always ought to be handled with caution. Yet, the present proficiency level scoring seems rather well-suited for an investigation of development and variability occurring from data point I to data point III.

5. Analysis I: Encoding of specific reference and hearer knowledge

The following chapter reports the results from the Semantic Wheel analysis which is the most wide-reaching analysis conducted in the present study. The analyses carried out in the present chapter also prepare for the following more fine-grained analyses reported in chapter 6 and 7: Even though later analyses elucidate the data from other perspectives, they should be read as continuations of the present, rather than as isolated, independent investigations. The data are analyzed from the perspective of accuracy in the present chapter. However, several topics that will be explored in most depth in the present chapter also relates to the investigation as a whole. These topics include the overall coding procedures (section 5.2), the calculations of text length and the analysis of interaction between text length and definiteness encoding (section 5.3), and, finally, the investigation of correlation between development of definiteness encoding and proficiency level is reported in the present chapter (section 5.4). The present chapter also provides the most detailed survey of the different uses of grammatical definiteness. This description embarks on the Semantic Wheel, as it is known from Bickerton (1981) and Huebner (1983), but it also draws on a number of other works. On the whole, this second part of the study that reports the results from three analyses conducted within different theoretical frameworks in three separate chapters should be viewed as a gradual narrowing down and a stepwise dissection of the learners' encoding of definiteness in L2 Norwegian.

The research questions are here pursued through predictions 1 and 2. However, the present chapter also analyzes the interaction between development and proficiency level in the encoding of definiteness in the present data. This topic is addressed in a separate section (section 5.4.4). Predictions 1 and 2, repeated below, are formulated with a main prediction (a) and an alternative prediction (b) (and a second alternative, (c), in the case of prediction 1) that relate to each other in a hierarchic way:

P1:

- (a) The L1 Russian learners will face more challenges in the marking of definiteness in Norwegian because their L1 does not grammaticalize definiteness.
 - i. The L1 Russian group will omit more marking than the L1 English group.
 - ii. The L1 Russian group will substitute more marking than the L1 English group.
- (b) The L1 Russian learners will have an advantage in the lack of conflicting realizations of definiteness in Norwegian and Russian.
- (c) The knowledge of an additional [+ART] language will overrule the impact of the L1 and lead to the development of a model of definiteness encoding highly similar to those of the L1 English learners.

P2:

- (a) The L1 English learners will benefit from their L1, because, despite formal differences, their L1 encodes the same semantic and pragmatic functions by grammatical definiteness as Norwegian does.
- (b) The L1 English learners will be inhibited in their use of definiteness in Norwegian due to the structural contrasts between definiteness in English and Norwegian.

The chapter is organized as follows: The first section focuses on the background and origins of the Semantic Wheel. The Semantic Wheel provides the coding categories for the subsequent analysis, which will be specified for Norwegian and given detailed descriptions in sections 5.1.1–5.1.4. Section 5.2 further clarifies the coding procedures and addresses coding issues emerging from the data type, that is, from being learner language data. The final and major part of the chapter reports results (section 5.3).

5.1 The Semantic Wheel of Noun Phrase Reference

This section will provide a more detailed description of the analytic framework applied in the present analysis. As pointed out in chapter 3, Bickerton's (1981) Semantic Wheel of Noun Phrase Reference has, particularly in his student's (Huebner) adaptation (1983), frequently served as a framework for analysis in studies of article/definiteness acquisition in SLA (Butler, 2002; Huebner, 1983, 1985; Master, 1987; Parrish, 1987; Sharma, 2005; Tarone & Parrish, 1989; Thomas, 1989; Trenkic, 2002; Young, 1996). Moreover, Bickerton's (1981) analytic model is also closely

associated with early studies of first language acquisition of articles (Czico, 1986; Bickerton, 1981, 1984; Maratsos, 1974; Warden, 1976, see also section 3.1.1 in the present study).

[+SR, +HK]	[-SR, +HK]
[+SR, -HK]	[-SR, -HK]

Figure 5.1. The Semantic Wheel of Noun Phrase Reference.

If we start out recapitulating from section 3.1.1 addressing the Semantic Wheel of NP Reference in SLA, Bickerton's (1981) descriptive system for article application is based on two binary universal features of language, referred to as the semantic prime *specific-nonspecific* and the more pragmatic prime of *presupposedness*.¹⁷⁷ These categories were adopted in Huebner (1983) as [\pm specific referent] and [\pm assumed hearer knowledge], and the analytical model became known as The Semantic Wheel of NP Reference (see figure 5.1 above).¹⁷⁸ The framework allowed a mapping of articles onto four categories/types (Huebner, 1983, p. 133):

¹⁷⁷ In Bickerton (1981, p. 246) the notion of semantic primes refers to "... a very limited set of binary oppositions; any concept can then be defined in terms of plus and minus (and perhaps null values for these oppositions..."

¹⁷⁸ The binary categories of Ionin's Article Choice Parameter (Ionin, 2003) resemble the categories of the Semantic Wheel. However, the parameter values in the Article Choice Parameter [\pm specificity] and [\pm definiteness] are not identical to those of Bickerton (1981) and Huebner (1983) (see section 3.3.4 for a more detailed presentation of the Article Choice Parameter). The most important difference between the two models is the operationalization of specificity, which is conceived of as a scope distinction in the Semantic Wheel, but a distinction of referentiality and noteworthiness in Ionin's approach (Ionin, Ko & Wexler, 2004). However, another alternative has also recently been put forth: Schaeffer and Matthewson (2005) proposed an article parameter for first-language acquisition, but this one is also based on the binary categories of specificity and definiteness. The notion of "specificity" in the Parameter of Article Semantics differs from Ionin's concept of specificity but is similar to the one underlying the Semantic Wheel.

1. [-Specific Referent, + Assumed Hearer Knowledge]
2. [+Specific Referent, +Assumed Hearer Knowledge]
3. [+Specific Referent, –Assumed Hearer Knowledge]
4. [-Specific Referent, –Assumed Hearer Knowledge]

For English, category 1 [-SR, +HK] captures generics that can take all forms except the definite plural, category 2 [+SR, +HK] will be linguistically expressed by the definite article, whereas category 3 [+SR, –HK] is restricted to the indefinite article (and bare mass nouns), and finally, NPs in category 4 [-SR, –HK] can be encoded by both the indefinite article and bare nouns. However, the Semantic Wheel of NP Reference claims universal relevance and it also allows a mapping of Norwegian definiteness encoding as displayed in table 5.1:

2. [+SR, +HK] -en (M.), -a (F.), -et (N.) definite sg. -ene (M., F. N.), -a (N.) definite pl.	1. [-SR, +HK] en (M.), ei (F.), et (N.) indefinite sg. -en (M.), -a (F.), -et (N.) definite sg. -er (M., F., N.), Ø (N.) indefinite pl. -ene (M., F., N.), -a (N.) definite pl.
3. [+SR, –HK] en (M.), ei (F.), et (N.) indefinite sg. Bare N	4. [-SR, –HK] en (M.), ei (F.), et (N.) indefinite sg. Bare N

Table 5.1 The Semantic Wheel of Noun Phrase Reference: Norwegian description.

There has been some debate in the literature concerning the notion of specificity in relation to article use and definiteness. Primarily, this controversy regards the meaning content of specificity. For instance, Ionin (2003) advocates an approach to specificity, differing from that entertained by Bickerton (1981), based on Fodor and Sag's distinction between referential and quantificational NPs (Fodor & Sag, 1982; see also footnote 178). In the Semantic Wheel, the category of [±specific referent] is generally understood as related to scope.¹⁷⁹ The effect of

¹⁷⁹ Wide scope referents have scope over their operator and carry the property of being [+SR], while narrow scope referents are nonspecific because they are within the scope of the operator. When the NP is within the scope of a modal verb or a negation (the operator), it has narrow scope.

scope on specificity is illustrated in the following specific and nonspecific sentences taken from Bickerton (1981, p. 150):

- (1) [+SR] I saw **a dog**.
- (2) [-SR] I didn't see **a dog**.

The *dog*-NP in (2) is within the scope of the negator and is thus automatically nonspecific. The meaning difference between (1) and (2) relates to the existence of a dog: in (1) there was *a dog*, whereas in (2) there is no existing referent corresponding to *a dog*.

The second prime, [\pm presupposed], was, as seen above, relabeled [\pm assumed hearer knowledge] in Huebner (1983). Bickerton's definition of *presupposed* as "information presumed shared by speaker and listener" (Bickerton, 1981, p. 248), immediately associates with *identifiability* and *familiarity*, and comes across as yielding more pragmatic aspects of article use. [+presupposed] covers generics and definites when combined with the feature of [+specific referent]. Examples below from Bickerton (1981, p. 147):

- (3) [+SR, +HK] **The man** you met yesterday.
- (4) [+SR, +HK] **The sun** is setting.
- (5) [-SR, +HK] **The dog** is the best friend of man.

In order to dig deeper into the origins of the Semantic Wheel, we must explore both the context for and some details in Bickerton's well-known work on Creole language and language evolution: *Roots of Language* (1981). In addition to the purely descriptive aspects of Bickerton's work, there is also a strong theoretical motivation underlying the Semantic Wheel emerging from the unique position of Creoles in relation to language development and evolution. In fact, in the introduction to the volume, Bickerton states that the aim of the work is to outline a unified theory that may "propose at least a partial answer" to how Creoles originate, to how child L1 acquisition happens, and to how human language originates (Bickerton, 1981, p. xi).

In Bickerton's theory, specific/nonspecific is assumed to be among the oldest semantic primes, and the work also displays how definite and indefinite articles in Creole languages are restricted to mark the feature of [+specific] (Bickerton, 1981, pp. 56–58, 246–249). The distribution of articles in Creoles thus did not correspond directly to that of the English articles, since in English, the definite article is also extended to generic uses and the indefinite article extends to certain nonspecific uses. Creoles, on the contrary, seemed to develop a tripartite system using articles to encode specific indefinite and specific definite, but bare nouns for generics and nonspecific/nonreferentials. Similar patterns reported on in child L1 acquisition studies reinforced the possibility of a fundamental innate semantic category of specific/nonspecific (see in particular Maratsos, 1974, referred to in Bickerton, 1981, p. 146–154). The specificity universal also gained a central position in Bickerton's Language Bioprogram Hypothesis (1984).

A crucial claim in Bickerton (1981, 1984) is that Creole development reflects language universals. Furthermore, it is asserted that an innate specification for language is causal to the similarities between different Creole languages: A human being is innately equipped with a pre-specified capability for language acquisition including for instance the ability to distinguish between specific and nonspecific. Bickerton overtly acknowledged the similarities to Chomsky's Universal Grammar, yet he also put forth an alternative account:

However, an alternative view [to that of UG] is possible, and perhaps preferable, at least on grounds of parsimony, since it entails a less complex innate schemata: that the single core grammar that is actualized to varying extents in the course of creolization constitutes the totality of preexperiential linguistic knowledge, and that this grammar is of a nature that will permit its possessor to construct or compute all those rules, structures, and features of natural languages that are not explicitly specified in the single core grammar, given minimal exposure to such rules, structures and features. (Bickerton, 1984, p. 178)

The innate language device postulated in the Language Bioprogram Hypothesis comprises a shared set of universals constituting all human grammars and language use, namely “a core grammar.”

The innatist view underlying the original The Semantic Wheel is not necessarily adopted or even explicitly discussed when the model is used in non-generative SLA-studies. Rather on the contrary, the Semantic Wheel seems to have lost much of its theoretical basis, allowing it to be employed largely theory-neutrally as a purely descriptive framework. The theory-neutrality and the fact that the starting point of the Semantic Wheel refers to the semantic and pragmatic level also enhances its applicability across languages.

Road map

As the first pioneer to incorporate the Semantic Wheel into SLA, Hubener (1983) also provided more detailed descriptions for each of the four categories. In the following, I will embark on mapping the categories of the Semantic Wheel onto Norwegian. The subcategories to be outlined below for [-SR, +HK], [+SR, +HK], [+SR, -HK] and [-SR, -HK] are in line with those presented by Huebner (1983). However, even though Huebner’s work is comprehensive, I also draw on insights from other works, such as Hawkins’s (1978) classification of nongeneric uses of *the*, in order to outline the category of [+SR, +HK]. Hawkins (1978) has been frequently applied to SLA article acquisition studies (Ekiert, 2010a, b; García Mayo, 2008; Liu & Gleason, 2002, Snape, 2008), and singles out more contexts than Huebner’s description does.

On the whole, the succeeding description is strengthened with examples from works addressing Norwegian language structure, but also with examples specifying the categories of the Semantic Wheel in L2 English article acquisition studies. I have also found it necessary to draw on work by other scholars in order to arrive at a satisfactory understanding of nonspecific and nonreferential NPs, which is perhaps the most complex category in terms of form-function mappings. On the whole, when nothing else is indicated, the examples are my own. Throughout the following chapters, examples stemming from the L2 Pear Story data maintain original spelling.

5.1.1. [-SR, +HK] Generics

Generics refer to classes of referents, types or typical members of a class, and do thus not refer to individual, specific referents (Faarlund, Lie, & Vannebo, 1997, p. 52).

Generics are commonly acknowledged in English to be expressed by the singular definite (1), the plural indefinite (2)¹⁸⁰ and the singular indefinite form (3). However, in Norwegian both definite and indefinite singular and plural may express a generic meaning (see Faarlund, Lie, & Vannebo, 1997, p. 52; Kulbrandstad, 2005, p. 145).

- (1) **Isbjørn-en** lever på Svalbard.
 polar bear-DEF.SG.M lives on Spitzbergen.
 [The polar bear lives on Spitzbergen.]
- (2) **Isbjørn-er** er store dyr.
 polar bear-PL are big animals.
 [Polar bears are big animals.]
- (3) **En isbjørn** er et stort og farlig dyr.
 a.M polar bear is a.N big and dangerous animal.
 [A polar bear is a big and dangerous animal.]

Also positions other than that of the subject can be filled by generic NPs. The following example is taken from Faarlund, Lie, and Vannebo (1997, p. 293):

- (4) Ofte får hun ikke sove **om** **nett-ene**.
 often can she not sleep at night-DEF.PL
 [Often, she cannot sleep at night.]

The narratives analyzed in the present study exhibit only rare occurrences of generic NPs, but when generics occur it is mostly in contexts similar to that of example (4) above and (5) below written by one of the L1 Russian participants:

¹⁸⁰ Even though the plural indefinite form does not have an explicit marker of indefiniteness in Norwegian (just as in English), it is commonly referred to as “ubestemt form pluralis,” “indefinite form plural.”

- (5) Handling-en foregår om sommer-en på land-et. (Ru-1-1)
 event-DEF.SG.M happen in summer-DEF.SG.M in country-DEF.SG.N

[The events happen in the summer **in the country**.]

TARGET: *Handlingen foregår om sommeren på landet.*

5.1.2. [+SR, +HK] Identifiable specific NPs

Section 2.4 addressed the relation between the grammatical category of definiteness and the semantic/pragmatic category of definiteness. In line with Lyons (1999), the present study holds identifiability to be the core content of grammatical definiteness. In the Semantic Wheel framework, identifiability as a pragmatic feature of discourse is first and foremost associated with [+SR, +HK].¹⁸¹ NPs belonging to this category are *uniquely* identifiable in a shared set of knowledge established between speaker and hearer.

The category of [+SR, +HK] is comprehensive and encompasses a set of definite uses which may be further broken down into a variety of subcategories. In section 2.4 several accounts of definiteness were mentioned, among them Hawkins's (1978) Location Theory. As mentioned above, the present description will also make references to this work.¹⁸²

In the specification of the category of [+SR, +HK] in the Semantic Wheel, Huebner (1983) identifies four subcategories: *Unique referent*, *Referent physically present*, *Referent previously mentioned* and *Specific referent assumed known to the hearer*.¹⁸³ Below, the categories outlined in Huebner (1983) are exemplified for Norwegian.

¹⁸¹ As mentioned in section 5.1, generics are also identifiable, but not uniquely identifiable.

¹⁸² Hawkins's classification consists of eight categories for nongeneric uses of *the* that also largely captures the meanings of definite nouns in Norwegian. See Appendix 3. for an overview of Hawkins's categories.

¹⁸³ *Unique referent* would correspond to Hawkins's *larger situation uses*, *referent physically present to immediate situation uses*, *referent previously mentioned to anaphoric uses*, and finally would also *specific referent assumed known to the hearer* be subsumed under *larger situation uses* in Hawkins (1978).

a. Unique referent or conventionally assumed unique referent:

- (6) **Regjering-en** oppfører seg helt galimatias.
 government-DEF.SG.M behaves itself totally lunatic.
 [**The government** is behaving totally lunatic.]

b. Referent physically present:

- (7) Kan du gi meg **penn-en**?
 can you give me pen-DEF.SG.M?
 [Would you hand me **the pen**?]

c. Referent previously mentioned in the discourse:

- (8) En mann plukker pærer i et tre. **Tre-et** er stort.
 a.M man picks pears in a.N tree. tree-DEF.SG.N is big.
 [A man is picking pears in a tree. **The tree** is big.]

d. Specific referent assumed known to the hearer:

- (9) Kan du gå på **butikk-en** på vei hjem?
 can you og to store-DEF.SG.M on way home?
 [Can you stop by **the store** on your way home?]

Huebner's description of [+SR, +HK] incorporates all the uses of *the* outlined by Hawkins except for two, namely *associative anaphora* and the categories of *unfamiliar uses* (referred to as *structural uses* by Liu and Gleason, 2002)). Hawkins's (1978) notion of *associative anaphora*, referring to frame evoked first-mention definites, variously labelled as *inferrables* (Prince, 1981), *bridging* (Haviland & Clark, 1974), and *frame evoked* or *situation/context evoked* used by Chafe (1976) and Du Bois (1980), captures an important category of definite NPs used as first mentions (see example (7) in chapter 1). That is, associative anaphoric uses may serve the function of introducing referents into discourse. Associative anaphora is singled out in a separate category in Prince's Taxonomy (1981) under the label *inferrables* (see chapter 6 in the present study).

- (10) Han slått en stein med **hul-e** av sykkel. (Eng-4-3)
 he hit a.M stone with **wheel-** of bike.
 [He hit a stone with **the wheel** of the bike.]
 TARGET: *Han traff en stein med **hjul-et** på sykkel-en.*

The second type which may be added to Huebner's (1983) description is, as mentioned above, referred to as *structural uses* in Liu and Gleason (2002), which correspond to Hawkins's categories of *Unfamiliar uses*. This type includes all uses of the definite article where the referent cannot be located in a shared set from previous discourse or in the interlocutors' general knowledge, but rather when the definite form is motivated by location of the referent in the subsequent discourse. This use of the definite article is also referred to as cataphoric.

Liu and Gleason (2002) chose to apply Hawkins's Location theory as the analytic framework in their analysis of nongeneric uses of the English article based on the comprehensiveness of this approach. However, the present chapter has as its objective the use of the definiteness category as a whole, and not only what may be subsumed under the category of [+SR, +HK]. Against that backdrop, an analytical model accounting for definite, indefinite, and bare NPs, such as the Semantic Wheel, was considered advantageous.

5.1.3. [+SR, –HK] Nonidentifiable, specific NPs

Huebner (1983) mentions two primary contexts for NPs with specific reference, not assumed identifiable for the hearer:

- a. First mention in a discourse of [+SR, –HK] NP which is assumed not known to the hearer.
- (11) Det er **en gutt** i hag-en.
 It is a.M boy in garden-DEF.SG.M
 [There is a boy in the garden.]

First mention of [+SR, –HK] following existential 'have' and assumed not known to the hearer:

- (12) Gård-en har en hage.
 farm-DEF.SG.M has a.M garden.
 [The farm has **a garden**.]

Existential (presentational) sentences in general fall into this category.¹⁸⁴

The indefinite article represents the chief means for encoding singular [+SR, –HK] NP. However, the bare form occurs with noncount and mass nouns. Note that plural indefinites premodified by a quantifier or a determiner will be categorized as referential and [+SR, –HK]. Unmodified plural indefinites will otherwise as a general rule be classified as nonspecific/nonreferential or generic. See note on bare NPs below for the motivation for this.

5.1.4. [–SR, –HK] Nonspecific and nonreferential NPs

The forth area of the Semantic Wheel pertains to NPs which are neither specific nor assumed known to the hearer. They are thus nonspecific or nonreferential. However, it is complicated to completely distinguish between nonspecific and nonreferential NPs. Moreover, nonspecific/nonreferential are not unequivocally distinguished from specific NPs by form, since certain NPs preceded by the indefinite article are ambiguous in terms of specific reference.

Below, we will approach these NP types first and foremost through their description in Huebner (1983) and Tarone and Parrish (1988). As an initial guideline we may say that all nonreferentials must also be nonspecific. Specificity, as operationalized by Bickerton (1981), is, as mentioned above, also related to scope. Scope differences cause the ambiguity in sentences such as example (13) below:

- (13) John wants to marry **a blue-eyed girl**.

The ambiguity pertains to whether a blue-eyed girl exists which may thus be categorized as specific, or if the sentence simply expresses a desirable characteristic if John would ever consider marriage, which would indicate nonspecific reference.

¹⁸⁴ Norwegian also allows indirect presentationals: *Det sitter en katt på trappa* [*There **sits a cat** on the porch].

If a nondefinite NP is within the scope of a negator (see section 5.1 above) it is automatically non-specific and non-referential:

(14) I don't have **children**.¹⁸⁵

However, it should be emphasized that non-specific NPs may in fact be referential, as shown in the example (15) below:

(15) I gave him **some flowers**.

The indefinite NP is referential due to the quantifier, but it is not specific.

Nonreferential and nonspecific NPs are often summarized as emerging in a set of fixed sentence types. The sentence types are referentially parallel in Norwegian and English, but there is variation in terms of form (see note on predicate-conflation below). Below I will refer the sentence types listed in Huebner (1983),¹⁸⁶ but the examples (16)–(19) translated into Norwegian are taken from Tarone and Parrish's study of L2 English article acquisition (Tarone and Parrish, 1988, p. 27):

a. Equative NPs:

(16) Han er **en hyggelig mann**.
 he is a.M nice man.
 [He's a **nice man**.]

b. NPs in scope of negation:

(17) Jeg ser **ingen blyant**.
 I see no pencil.
 [I see no **pencil**/I don't see any **pencil**.]

c. NPs in scope of interrogatives:

(18) Kan du se **en blyant**?
 can you see a.M pencil?
 [Do you see a **pencil**?]

¹⁸⁵ In section 2.4 negated NPs were identified as normally exhibiting the genitive case in Russian.

¹⁸⁶ Except NPs within the scope of interrogatives, which are listed in Tarone and Parrish (1988) but not in Huebner (1983).

d. NPs in irrealis scope:

- (19) Hvis jeg hadde en million dollar,
 if I had a.M million dollar,
 ville jeg ha kjøpt **en stor yacht.**
 would I have bought a.M big yacht.
 [If I had a million dollars, I would have bought **a big yacht.**]

Predicate conflation

The above examples do to a large extent isolate and identify nonreferential NPs. However, it could be useful to add an additional type of construction which also contains nonreferential uses. Predicate conflation is described in Du Bois's (1980) investigation of L1 English Pear Stories, introduced in section 4.2, and the concept involves expressions where predicate and object appear as one meaning entity rather than as two separate. The NP is nonreferential. In Du Bois's words "The noun phrases ... were used in conjunction with a verb to express a unitary concept rather than to refer to an actual object" (Du Bois, 1980, p. 214).

Norwegian and English differ in how predicate conflated NPs are realized. In Norwegian, the NP in predicate-conflated phrases can normally be recognized by a bare noun, whereas English often requires the indefinite article in equivalent contexts:^{187 188}

- (20) I am going to buy **a car.**
 jeg skal kjøpe bil.

¹⁸⁷ Use of bare nouns of this kind is described for Norwegian in Hagen (2000, p. 227), and he also convincingly describes the semantic difference related to specificity and individual reference between use of a bare noun and a singular indefinite noun in such contexts.

¹⁸⁸ However, there is also alternation between a bare noun and the indefinite article in English. For instance, in sentences such as: "We are going to have cake," the noun is bare in both Norwegian and English. In fact, this area is very complicated in both Norwegian and English, predicate conflation also interacts with countability issues, and the conventionality of a phenomenon will often determine the possibility of an object to appear in a unified concept or as a pure description of another referent. That is, it is perfectly normal to say "En mann med hund" [A man with dog], whereas "En mann med geit" [A man with goat] would sound awkward.

Du Bois' approach to (non-)referentiality diverges from the one referred above which is based on sentence types. Conversely, Du Bois focuses on more overarching discourse characteristics associated with non-referential NPs. He provides the following definition for referentiality: "A noun phrase is referential when it is used to speak about an object as an object, with continuous identity over time" (Du Bois, 1980, p. 208). Moreover, in his Pear Story contribution several principles for detecting non-referential NPs are established:

- A form of a nonreferential mention is not responsive to the presence or absence of a prior mention (Du Bois, 1980, p. 210).
- The form of a nonreferential mention is not responsive to the semantic distinction between singular and plural (Du Bois, 1980, p. 210).
- Nonreferential mentions of certain types are typically realized as zero-form noun phrases (Du Bois, 1980, p. 212).

His approach may be a useful supplement to Huebner's more structure-based approach when the referentiality status of an NP is to be settled.

A note on bare NPs in Norwegian

The meaning and use of the bare NP may be said to be a puzzle. The area of application for bare nouns and the meanings and functions signaled by bare nouns seem rather underexplored in Norwegian (see Halmøy, 2008, referred in section 2.1 in the present study), and it is difficult to outline a complete framework for uses of bare nouns.¹⁸⁹ However, Borthen's (2003) doctoral thesis addressing bare nouns in Norwegian is an exception to this broad generalization.

¹⁸⁹ The situation is a little different for English. For instance do Chesterman's (1991) analysis of definiteness and indefiniteness include a thorough analysis of the zero article, where zero is in fact divided into zero and "null" article referring to indefinite and definite bare NP uses, respectively. Typical examples of null article use in English are proper names and uses such as: "What are we having for lunch today?" where the NP is taken to be semantically definite, but realized as an uninflected form.

Importantly, in line with Borthen (2003, p. 55), non-modified indefinite plurals as in (21) below are considered nonreferential:¹⁹⁰

- (21) En liten jente plukket **blomst-er** i hage-en.
 a.M little girl.(F) picked flower-PL in garden-DEF.SG.M
 [A little girl was picking flowers in the garden.]

It is intuitively clear that bare plurals (indefinite plurals) cannot receive a specific reading if no determiner which may specify the referent any further is added. That is, “I bought apples” refers to a non-specific amount, whereas “I bought three apples” points out a specified number and may thus receive a specific reading. However, these issues are complex. Borthen (2003) draws on Fodor and Sag’s (1982) notion of referentiality (see also Ionin’s Article Choice Parameter, Ionin & Wexler, 2003; and the introduction to the present chapter), holding that an object is referential depending on the speaker’s intent to point out that particular object for individual reference. Borthen writes: “On this account, a noun phrase is referential if and only if the speaker is acquainted with the referent and by using the noun phrase has an “internal pointer” to the referent, intending to make a statement about this particular individual” (Borthen, 2003, p. 25). Consequently, in this view, bare plural indefinites cannot be referential unless they are accompanied by a determiner or quantifier. A distinction between type versus token emphasis also belongs to Borthen’s argument. Neither bare singulars nor bare plurals are token-emphasizing; rather, they emphasize type and does thus not signal an intention to refer to particular individual objects (Borthen, 2003, p. 55).

¹⁹⁰ An exception is when the NP is generic. Kulbrandstad (2005, p. 146) provides the following example for generic reference “Samler du på frimerker?” [Do you collect stamps?]. I would argue that what makes the NP in (21) nonreferential and Kulbrandstad’s example generic is the presence of habituation in Kulbrandstad’s example and the absence of the same phenomenon in (21).

5.2. Clarification of coding categories

In the subsequent paragraphs some more general aspects of the process of coding the data will be addressed. Section 5.2.1 clarifies the structural types and lexical types not included or annotated as separate categories in either the present or the subsequent analysis (chapters 6 and 7). Section 5.2.2 surveys a set of general coding principles for error annotation for chapter 5 and 7. Since “errors” are not a variable in chapter 6, the coding principles for this analysis, which diverges from the ones used in chapter 5, will be specified in section 6.3.

First, however, it is important to recall that the research objective in the present chapter is the encoding and use of the four different NP types in the Semantic Wheel of NP Reference. The point of departure is thus in this sense a function-to-form perspective. Since the categories of the Semantic Wheel are principally form-independent, accuracy is based on the yardstick of the target norm. In short, the present analysis holds a *double* yardstick (see section 4.1 in the present analysis). This initial positioning entails some important principles for the items to be extracted and encoded which will be outlined below.

As mentioned in the introduction to this chapter, Analysis I has the broadest scope of the three analyses carried out on the material. All NPs that may be categorized by the Semantic Wheel are analyzed. The intention is to get an overall picture and to avoid ignoring NP types that may be considered difficult to classify. As will become clear below, a disadvantage of this broad perspective is that the categories are quite heterogeneous in terms of formal types. Recall, however, that the three chapters of analysis are organized in a way that allows a stepwise dissection of the learners' L2 Norwegian definiteness encoding.

5.2.1. Selection of units of analysis

All examples below are original from the present data. As stated above, they are presented here in original spelling and syntax.¹⁹¹

NPs in idiomatic phrases

NPs in idiomatic phrases are not part of the material. Multiword prepositions such as *i nærhet-en av* [nearby], and *ved sid-en av* [in addition to, next to] do not either fall within the frames of the research objective.

Singular vs. plural NPs

The present categorization does not distinguish between singular and plural NPs.

Number is not a category within the Semantic Wheel, and consequently, reference type is the primary criterion for classification.¹⁹² Example (11) displays an anaphoric definite use of a plural NP subsumed under the category of [+SR, +HK].

- (22) En mann plukket pærer. **Pær-ene** var stor-e og modig-e.¹⁹³ (Ru-10-1)
 a.M man picked pears. pear-DEF.PL were big-PL and brave-PL

[A man was picking pears. **The pears** were big and ripe.]

TARGET: *En mann plukket pærer. Pærene var store og modne.*

Simple vs. complex NPs

Neither does the present analysis distinguish between simple and complex NPs.

However, several types of complex NPs are singled out and analyzed in chapter 7.

¹⁹¹ It should be clear that Norwegian and English syntax differ. For instance, Norwegian is a V2-language, and word order is recognized as a persistent challenge to learners of Norwegian. Even though the glossing maintains original syntax, it has not been possible to error tag all deviant syntax in a way transparent to the English speaking reader.

¹⁹² I am aware that it has been pointed out in the research that plural definites may pose an additional challenge to the learners (e.g., Austin, Pongpaioj, & Trenkic, 2015; Nyqvist, 2013, 2015; see chapter 3).

¹⁹³ The intended meaning is probably not *modige* [brave], but *modne* [ripe].

- | | | | | | | |
|------|-----------------|------------------|--|----------------|--------------|----------|
| (23) | Venn-ene | til | | gutt-en | finner | |
| | friend-DEF.PL | to | | boy-DEF.SG.M | find | |
| | den | ligg-ende | | lu-en | hans. | (Ru-1-1) |
| | the | lie-PRES.PART | | hat-DEF.SG.M | his | |

[The boy's friends find his lying hat.]

TARGET: **Vennene til gutten finner den liggende luen hans.** ¹⁹⁴

Example (23) contains two complex NPs: one possessive phrase where the possessive relation is expressed by a postposed prepositional attribute, and another adjectivally premodified NP. Both NPs are subsumed under the category of [+SR, +HK] in the present analysis, but they receive more attention in later analyses (premodification and possessives), where various subcategories of givenness and specific NP constructions are addressed (chapters 6 and 7).

Gender

Neither does the present analysis single out nouns on the basis of gender. Even though gender and gender agreement in the NP affect the forms of definiteness, gender is not the primary objective in the present analysis. However, I cannot exclude the possibility that uncertain gender assignment may have prevented the learner from supplying (in)definite encoding.

Bare vs. indefinite nouns

- | | | | | | | | |
|------|-----------|------|-----------|-------------|------|---------------|----------|
| (24) | Plutselig | kom | en | gutt | med | sykle. | (Ru-5-1) |
| | suddenly | came | a.M | boy | with | bike | |

[Suddenly **a boy** with **a bike** came along.]

TARGET: Plutselig kom **en gutt** med **(en) sykkel**.

The second NP in (24) *sykle* [bike] has the bare form, which prohibits a referential interpretation. In English the bare noun does not represent either a grammatical or a

¹⁹⁴ Recall that when a Norwegian definite NP is premodified, as in the second NP of (23), a definite determiner is also used. Inflection is normally preserved on the noun (unlike in Danish) (see chapters 2 and 7).

pragmatic option in such constructions, whereas in Norwegian the use of a bare noun in this environment forces an interpretation of the NP as part of an attributive prepositional phrase describing the boy. Suppliance of the indefinite article, on the contrary, would render the NP referential, a reading that also implies viewing the prepositional phrase as an independent constituent. I have counted NPs such as *sykle* in the example above as omission errors only in contexts where the referent functions as an antecedent for a subsequent pronominal anaphor (it is too weak of an antecedent for a pronominal phrase). Otherwise it is classified as [-SR, -HK].

5.2.2. Principles of errors coding

Inadequate gender assignment

Inadequate gender assignment is not regarded as an error. This means that neuter nouns with a masculine indefinite article or a masculine definite suffix are still categorized on the basis of reference type and not gender error.

Double contradictory encoding

Double contradictory encoding, that is, when a noun is encoded as both definite and indefinite, is considered an error. This inaccuracy may be considered ambiguous substitution. The NP is grouped based on reference type.

(25) **Et** **jent-a**¹⁹⁵ sykler til han. (Eng-1-1)
 a.N girl-DEF.SG.F rides to him

[A **girl** rides toward him.]

TARGET: **En jente** sykler mot han.

In (25) the referent is correctly introduced with an indefinite article. However, the noun is additionally inflected with a definite suffix, which provides the NP with a

¹⁹⁵ In some Norwegian spoken dialects the singular indefinite form for *jente* will actually end in an *-a*, which means that what at first glance looks like a simultaneous, but contradictory, encoding of indefinite and definite, might in fact be an input-dependent encoding on indefinites.

double contradictory encoding. Even though, the indefinite article has the neuter form, inadequate gender encoding is not, as stated above, considered an [+SR, -HK] inaccuracy; only the double definite/indefinite encoding is.

Double definiteness

Chapter 2 described the double definiteness construction in Norwegian (and Swedish). Even though the noun is modified by a definite determiner, the noun requires the definite suffix. Exceptions are genitive NPs and preposed possessive constructions. Also, when the noun is premodified by an adjective, a definite determiner is required. In the present material, omission of either the determiner or the suffix is considered an error. That is, single definiteness when a double encoding of definiteness is required is regarded as an inadequate encoding. However, agreement errors with the adjective are not taken into account. (See Lyons's argument (1999, p. 85; mentioned in section 2.1, footnote 54) in favor of interpreting definite encoding in the adjective as agreement and not definiteness in Scandinavian.)

Substitution

Substitution represents one of the two main error types, the other being omission (see section 3.4 in the literature review). The main analysis does not distinguish between substitution and omission errors. However, due to the critical position of substitution in the literature (see chapter 3), substitution errors are singled out and discussed as an independent feature in section 5.3.3.

(26)	En	mann	bodde	utenfor	by-en.	
	a.M	man	lived	outside	town-DEF.SG.M	
	han	hadde	hus-et	og	stor	hag-en. (Ru-5-1)
	he	had	house-DEF.SG.N	and	big	garden-DEF.SG.M

[A man lived outside of the town. He had **a house** and **a big garden**.]

TARGET: *En mann bodde utenfor byen. Han hadde **et hus** og **en stor hage**.*

In the above example, two [+SR, -HK] NPs are encoded with the definite forms, and thus illustrate the dominant pattern of substitution, namely overuse of the definite form.

Zero article vs. bare nouns and article omission

There is some controversy in the literature surrounding the interpretation of zero articles (*zero article* is often applied when referring to bare singular nouns in English). I believe this controversy arises from the ambiguity of zero articles and bare nouns in learner language. On the one hand these units are part of the conventional target grammar, while on the other hand, L2 bare nouns or zero forms frequently occur in contexts where an indefinite or a definite NP is expected.

Example (27) below is typical: Should the bare NP *mann* [man] be interpreted as an inadequate overgeneralized use of a bare NP, as an L1 licenced form, or as a definite NP with an omitted suffix?

(27)	Gikk	plutselig	det	en	mann	forbi.	han	hadde	ikke
	went	suddenly	it	a.M	man	by.	he	had	not
	noe	kontakt	med	mann	som	plukket	pærer.		(Ru-10-1)
	any	contact	with	man	who	picked	pears		

[Suddenly a man went by. He did not have any contact with **the man** who was picking pears.]

TARGET: *Plutselig gikk det en mann forbi. Han hadde ikke noe kontakt med **mannen** som plukket pærer.*

Master (1987), discussed in chapter 3, presents what is perhaps the most consistent and radical example of an interpretation of the zero article as a target form that is acquired along the same lines as the definite and the indefinite article. In chapter 3, I suggested that this very strict form-to-function approach complicates the interpretation of his results; that is, Master's results can be read and measured only against his own yardstick. For instance, he concluded that the zero article was the first category to develop, but that the correctness level of zero article use decreased dramatically as proficiency increased. The reason for this decrease was the overgeneralization of other forms; in short, the initial accuracy of the zero article depended on the overuse of bare

nouns. On the other hand, Thomas (1989), also presented in chapter 3, interpreted erroneous zero article use as article omission, that is, as a failure to assign any article at all, rather than overuse.

The interpretation of zero article and bare nouns is, as mentioned above, also instrumental to the view on transfer: What is actually transferred and transferable from a [-ART] language to a [+ART] language? (See section 1.4 in the present thesis for a full discussion of transfer and definiteness.) Can the omission of articles, or bare nouns, be interpreted as direct L1 transfer? Ekiert (2007) argued in a paper on L2 article acquisition that an interpretation of the zero article as overuse may conceal important insights regarding transfer:

Early studies focusing on crosslinguistic differences in the acquisition of articles revealed that learners whose first languages contained an article system differed markedly in English article acquisition from those whose first languages did not contain such a system, showing that English article use, especially at the beginning levels, is clearly influenced by the first language. Therefore, *zero* in early interlanguage can hardly be considered a *use*. (Ekiert, 2007, p. 15)

Ekiert's (2007) position thus seems to be that the zero article in the interlanguage of [-ART] learners is transfer *by default*, and not overuse. To a certain extent, this view seems to tie into the mainstream position explicitly or implicitly shared by many (e.g., Jarvis, 2002; Trenkic & Pongpaiboj, 2013; see also section 1.4 in the present study) that article omission is related to the L1 at some level or another. Yet, it should not be ignored that [+ART] learners also omit articles (e.g., García Mayo, 2008). In fact, Nistov (2001a) even documented instances of inadequate use of bare nouns also in Pear Stories written by native speakers: *mann kommer* [Ø man comes] (2001a, p. 133).

The final, and perhaps most subtle issue concerns the classification of bare nouns as omission of the definite or the indefinite form. Even though the context requires only one or the other to be omitted, to what extent is it possible to decide which form was

intended to be used by the learner?¹⁹⁶ I believe that a stable semantic context, such as the Pear Film, to a large extent may help offset these issues, since the story line may function as an independent yardstick (see section 4.2 for an evaluation of the advantages of fictional narratives elicited by a film prompt as data type). For instance, the film stimulus will tell us that the omitted encoding in the example below refers to a [+SR, +HK] context.

In conclusion, I believe that there are advantages and disadvantages to all the approaches mentioned above. A strict conception of bare nouns as overgeneralized zero article uses may, for instance, fall short in some aspects such as transfer as pointed out by Ekiert (2007). Yet, it should be clear that coding including such labels as “omission,” which are employed in the present study, carries an element of interpretation: Even though the Pear Story prompt provides a semantic frame, it is impossible to access the learners’ intentions.

5.3. Results from the Semantic Wheel of NP Reference Analysis

In this part of chapter 5, I begin by reporting in detail the results from DP I before moving on to connect the findings from DP I to the findings from DP II and DP III. Subsequently, I address the role of substitution through the three data points, and compare the overall development in accuracy to the variables of text length proficiency level as operationalized in the CEFR (see section 4.4 for the report on a proficiency level evaluation of the present material).

The Semantic Wheel of NP Reference permits an overall categorization of all NPs in terms of four combinations of two semantic/pragmatic categories.¹⁹⁷ This means that

¹⁹⁶ The ongoing issues of the learners’ intention are addressed in Nistov (2001a, p. 126).

¹⁹⁷ However, in particular the category of [+SR, +HK] can be divided into several semantic/pragmatic subcategories, and it is also quite complex and variable syntactically with inherently definite possessive NPs and genitive expressions. A more in-depth analysis that also takes the discourse level into account is required. Such

the following analysis presents the most general picture of the use of the definite and indefinite forms among the learners. The approach is descriptive-explorative.

Predictions 1 and 2 are addressed throughout the analyses in the subsequent pages (see 3.6 and the introduction to the present chapter).

5.3.1. Data Point I: Baseline results

Two major patterns are identified at DP I (see Figure 5.2, Table 5.4 below):

- The L1 English learners in general seem to attain a higher level of accuracy in the encoding of the category of [+SR, -HK] than do the L1 Russian learners.
- The L1 Russian learners in general seem to attain a higher rate of accuracy in the category of [+SR, +HK], than do the L1 English learners.

These patterns emerge from the analysis based on L1 groups, and thus they do not provide any information about individual variation, which is critical to the overall interpretation of the results. The size of the data sample as a whole does not permit any application of methods involving inferential statistics. Instead attention will be directed to variability and development, and the details of what is hidden within the L1 learner group results will be uncovered step by step throughout this chapter. (A simple *rank-sum test* is carried out in order to get a more solid impression of the robustness of the results.)

First, however, before we move on to the main results, I briefly present some background information concerning text length in the material and distribution of NP types.

A note on text length at DP I

Table 5.2 below measures the text length of each narrative by simple word count (tokens). The mean text length in the L1 Russian group is 190.5 words, and 205.7 words in the L1 English group. The intragroup range is 124 (124–248) words in the L1 Russian group and 128 (141–269) words in the L1 English group. While the L1 Russian learners write texts that are impossible to fix at particular lengths, the L1 English learners seem to divide into two subgroups: Two learners write relatively long Pear Stories and two learners write relatively short Pear Stories. (See Appendix 4 for a text length at all DPs).

TEXT LENGTH			
Participant	DP 1	Participant	DP 1
Ru-1	221	Eng-1	264
Ru-3	197	Eng-3	149
Ru-4	161	Eng-4	269
Ru-5	248	Eng-5	141
Ru-6	124		
Ru-7	136 ¹⁹⁸		
Ru-10	247		
MEAN	190.5	MEAN	205.7

Table 5.2 Text length. Data point I.

A note on distribution of NP types at DP I

Table 5.3 below presents the distribution of NP types in the Pear Stories. The table reveals that the category [+SR, +HK] is by far the most frequent, comprising more than 55% of all NPs in the narratives. [+SR, +HK] is followed by the category of [+SR, –HK], which encompasses between 25% and 31% of the NPs. On the whole, the results show that the distribution of NP type in the narratives is not dependent on L1 background: The L1 Russian learners as a group and L1 English learners as a group have an almost identical distribution pattern. The L1 English learners do, however, reserve more contexts for [+SR, –HK] NPs than do the L1 Russian learners.

¹⁹⁸ This text was originally richer in words, but genre violations due to text irrelevant to the task, a text comprising 136 words has been analyzed.

DP I	L1 RU		L1 ENG		ALL TEXTS	
	TOKENS	%	TOKENS	%	TOKENS	%
[-SR, +HK]	8	2.7	1	0.5	9	1.9
[+SR, +HK]	167	58.3	101	57.0	268	57.8
[+SR, -HK]	74	25.8	55	31.0	129	27.8
[-SR, -HK]	37	12.9	20	11.2	57	12.3
SUM	286	100	177	100	463	100

Table 5.3 Distribution of NP types in the texts. Data point I: Absolute and relative numbers.

Table 5.4 and Figure 5.2 below provide the result from DP I for all participants calculated in each L1 learner group. The results from all the L1 Russian and L1 English learners are presented as absolute and relative numbers in Table 5.4; group level results are also calculated and presented. I present both the summarized relative frequencies of inaccuracy obtained for each L1 group. When nothing else is indicated, I refer to the summarized group relative frequency in the presentation of the results.

Road map

Figure 5.2 below represents the main results based on L1 background, and the patterns of difference outlined above are clearly reflected. The subsequent pages are organized as follows: First, I present the group-level results for the L1 Russian learners and the L1 English learners. Second, I dissect the group-level results in order to reveal individual patterns hidden within each L1 group. Finally, I provide a comprehensive summary.

THE SEMANTIC WHEEL OF NOUN PHRASE REFERENCE DATA POINT I												
	[-SR, +HK]			[+SR, +HK]			[+SR, -HK]			[-SR, -HK]		
	Inacc.	Total	%	Inacc.	Total	%	Inacc.	Total	%	Inacc.	Total	%
Ru-1-1	0	2	0	2	39	5.1	3	9	33.3	0	2	0
Ru-3-1	0	2	0	3	24	12.5	3	11	27.2	2	6	33.3
Ru-4-1	0	1	0	2	21	9.5	5	9	55.5	0	4	0
Ru-5-1	1	1	100	7	19	36.8	9	16	56.2	1	8	12.5
Ru-6-1	0	0	-	9	19	47.3	1	7	14.2	0	6	0
Ru-7-1	0	2	0	8	15	53.3	6	9	66.6	0	3	0
Ru-10-1	0	0	-	7	30	23.3	1	13	7.6	0	8	0
SUM	1	8	12.5	38	167	22.7	28	74	37.8	3	37	8.1
Eng-1-1	0	0	-	13	26	50.0	4	21	19.0	0	2	0
Eng-3-1	0	0	-	5	26	19.2	2	10	20.0	0	4	0
Eng-4-1	0	1	0	13	33	39.2	0	14	0	0	10	0
Eng-5-1	0	0	-	7	16	43.7	2	10	20.0	0	4	0
SUM	0	1	0	38	101	37.6	8	55	14.5	0	20	0

Table 5.4 Overview: Inaccuracy rates for data point I.

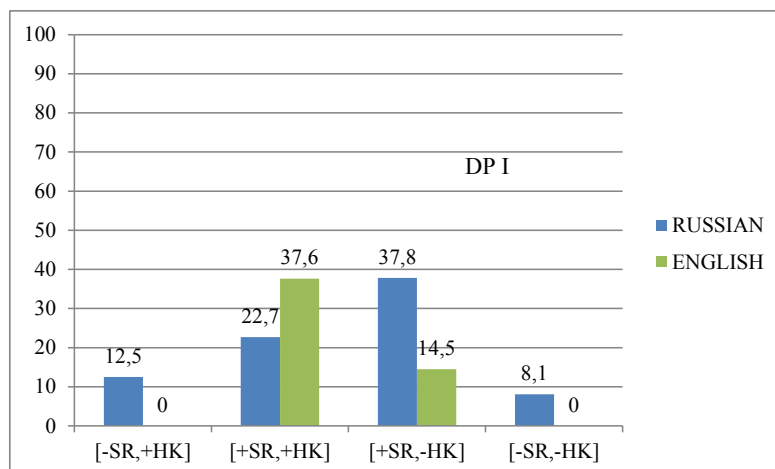


Figure 5.2. Rates of inaccuracy, group level, relative numbers. Data point I.

5.3.1.1. The L1 Russian learners

The L1 Russian learners are considered the [-ART] learners in the present study. Based on the survey of previous research in chapter 3 and the theory of cross-linguistic influence presented in 1.4, the L1 Russian learners were first and foremost predicted to be challenged by the grammatical category of definiteness. If we consider the details of what may be detected by the present analysis, predictions that stem from previous research relate to overuse of the definite form, late acquisition of the indefinite article, and a propensity for [-ART] learners to encode specificity prior to hearer knowledge. However, as accounted for in the alternative predictions (b), it is also a possible outcome that a new category may be established relatively easily due to lack of competition, at least compared to learners experiencing competition between the structural realizations of the L1 and L2. Finally, the alternative prediction (c) accounts for the possible outcome if the learners' knowledge of another [+ART] language has a stronger effect than the L1.

At the surface level of the present analysis, we find that the L1 Russian group faces more challenges with the [+SR, -HK] category than with any of the other NP reference types. The error rate is 37.8%. In the largest category, [+SR, +HK], the error

rate is lower, but errors still represent 22.7% of the total number of definite NPs. These two categories are much larger in number than [-SR, +HK] and [-SR,-HK], and they will therefore be the main focus throughout the presentation. However, the category [-SR, +HK], which consists of only eight tokens, and one single error, has an error rate of 12.5%. For the category [-SR, -HK], which has a total of 37 tokens, three NPs are marked inaccurately for definiteness. Overall the percentage of accurately-marked NPs is 75.6% for the L1 Russian learner group.

The lower rate of accuracy in category [+SR,-HK] may testify to a delayed acquisition of indefinite NPs compared to definite NPs, or perhaps more precisely, the results suggest a failure to detect contexts for encoding indefinite NPs in parallel with the encoding of definite NPs. Certainly, this result identifies [+SR, -HK] as a major challenge for the L1 Russian learner of Norwegian. Nevertheless, the rate of inaccuracy within [+SR, +HK] is also quite high, and a closer look into the data is critical in order to achieve a deeper understanding of which aspects associated with [+SR, +HK] affect the results the most (this will be explored further in chapter 6).

Within type [+SR, -HK], 10 out of 28 errors are substitution errors; that is, the definite form is used instead of the indefinite. Example (28) displays an encoding pattern of [+SR, -HK] where suppliance of the indefinite article alternates with the definite form.¹⁹⁹

(28)	Det var en vanlig dag. Sol-a Ru-5-1 skinner og det var veldig fint vær-et . En mann bodde utenfor by-en, han hadde hus-et og stor hag-en .	It was a normal day. Sun-DEF.F shone and it was very nice-N weather-DEF.N A man lived outside of town-DEF.N, He had house-DEF.N and big garden-DEF.M
------	--	--

¹⁹⁹ Note, however, that *vær* [weather] is noncount, and thus never takes an indefinite article.

The remaining 18 errors in category [+SR, –HK] are omissions of any article or inflectional form, namely the zero/bare form used in contexts where it is not conventionally used, or instances where the NP is doubly encoded as both definite and indefinite. Ru-7-1 has the lowest accuracy rate in the category of [+SR, –HK], and (29) below illustrates a typical omission of the indefinite article:²⁰⁰

(29)	I hag-en en mann har fikk epler	In garden-DEF.M a man has had apples
Ru-7-1	fra epletre og gikk epler til andre mann som gikk denne frukt til liten gutt	from Ø apple tree .N and given apples to Ø other man .M who gave this fruit to Ø little boy .M

Overgeneralization of the definite form is, as stated in chapter 3, widely attested in the literature. Substitution errors have also frequently been interpreted as an indicator of the more fundamental position of specificity in the learners' grammars (see section 3.1), represented by the definite form.²⁰¹ Overgeneralization of the definite form not only to specific, but also to nonreferential/nonspecific NPs, implies that this material does not provide unambiguous support for the definite form as a marker of specificity primarily.

5.3.1.2. The L1 English learners

The L1 English learners are [+ART] learners, and they are therefore generally predicted to be facilitated by the presence of a functionally equivalent grammatical category in the L1 (see section 3.6, prediction 2). However, when taking the literature

²⁰⁰ Note that the indefinite article also occurs in the excerpt (*en mann*). *Epler* represents a more complex issue. On the one hand, the indefinite plural is considered a bare form, indicating that when it occurs in definite contexts, it represents omission in terms of definiteness encoding. On the other hand, it could also classify as substitution since it is the indefinite counterpart to the definite plural. In the present study, substitution is, however, confined to forms explicitly expressing definiteness, that is, the indefinite and definite singular, and the definite plural. After all, the bare plural in Norwegian is only explicitly encoded for number, not definiteness.

²⁰¹ This is perhaps not very surprising when accounting for the number of bare plurals compared to bare singular NPs that fall into this group; most occurrences are bare plurals, where adding an indefinite article is not an option licensed by the target language grammar.

review in chapter 3 into account, we may assume that factors related to the formal differences between Norwegian and English definiteness encoding may pull in the opposite direction; that is, there is a possibility that structural features might prevent the L1 English learners from benefiting from the functional similarities. The possible impact of these competing variables is accounted for in Prediction 2, a, b.

As Figure 5.2 shows, the L1 English learners do indeed deviate from the target grammatical encoding of NP reference. The rate of inaccurately-marked [+SR, +HK] NPs in the L1 English material is considerably higher than in the L1 Russian material. The error rate is 37.6% in this category. The opposite pattern is attested in the category of [+SR, -HK], where only 14.5% of the NPs represent errors, and the absolute number of errors is limited to eight tokens. Among the errors in category [+SR, -HK] three out of eight occurrences are substitution errors. (In percentage this is not very different from the L1 Russian group, but considering the much higher rate of inaccuracy for this type in the L1 Russian material, it still seems to be a difference.) The remaining five errors involve three occurrences of *et/en jente* [a girl.DEF.],²⁰² that is, employment of both an indefinite article and definite inflection. Example (30) illustrates one such occurrence of conflicting encoding of *jente* [girl]:

(30)	Mens gutten sykkelt på vei, sett han ei jent-a også på sykkel si. Samtidig han mistet hatten sin og falt fra hans sykkel.	While boy-DEF.M biked on road-Ø, saw he a.F girl -DEF.F also on bicycle-Ø hers. At the same time he dropped hat-DEF.M his and fall from his bike.
------	--	--

Omission of the indefinite article is attested only once, *geite* [goat], and finally there is one occurrence of substitution of the plural *treer* [trees, incorrect spelling] for *tre* [tree].

²⁰² See footnote 195.

Examples (31) and (32) may be said to reflect the major pattern attested in the L1 English learner group at DP I: consistent encoding of [+SR, –HK], but highly variable encoding of [+SR,+HK]. Accurately encoded [+SR, –HK] NPs and NPs in category [+SR, +HK] that are not encoded are glossed in bold type in order to emphasize the contrast. Note, however, that both excerpts also contain definite NPs encoded in accordance with the target norm.

- | | | |
|------|--|---|
| (31) | <p>Plutselig komt en mann og en geit
 verby. Han ser på pære, var lyst å har,
 men bare gikk verby. Et oeyeblikk senere
 komt en gutt opp bakk-en
 på en sykkel. Det var hardt arbeid
 i sol-en. Under traer
 så han to kurv fult med
 delig groene pære. Han hoppet av
 sykkel så rundt men det var ingen.
 Han sat en kurv
 med pære på sykkel og gikk bidere.</p> | <p>All of a sudden come a man and a goat
 by. He looks at pear-Ø, wanted one,
 but just went by. A moment later
 come a boy up hill.DEF.M
 on aM bike. It was hard-N work.N
 in sun-DEF.M. Under trees-Ø
 saw he two basket filled with
 lovely ripe pear. He jumped off
 bike-Ø looked around but there was no one.
 He put a basket
 with pear on bike-Ø and went on.</p> |
| (32) | <p>Gutt-en syklet på veie
 og så en jent-a som kommer
 fra det andre retning.²⁰³
 Han ble dystyrret og så ikke
 en stor-e stein som la
 på vei-en.
 Han slår stein-en med sykle
 og pærer som han stjålet
 gå på vei-en.</p> | <p>Boy-DEF.M biked on road²⁰⁴
 and saw aM girl-DEF.F who come
 from the.N other direction-Ø.M.
 He was disturbed and saw not
 a big-PL. stone which lay
 on road-DEF.M
 He hit stone-DEF.M with bike-Ø
 and pears-Ø which he steal
 go on road-DEF.M</p> |

However, due to the high level of omitted definite inflection in the [+SR, +HK] category detected at the group level, the L1 English learners do not seem to be,

²⁰³ Recall that the reported error here is not the violation of agreement, but the single encoding of definiteness.

²⁰⁴ Consistently, I translate the Norwegian verb *å sykle* as “to bike” in order not to lose the close association between the Norwegian noun and verb in the English version.

unambiguously facilitated by their L1, contrary to the main prediction. Rather, they seem to be severely challenged by definite NPs. This may be due to a failure to detect the relevant contexts, or perhaps to a low sensitivity to the inflectional encoding. This latter point is captured by the alternative prediction of P2, accentuating the possibility that competing L1–L2 structures may complicate the establishment of novel realizations.

5.3.1.2. Section summary

Two different patterns emerge from the analysis of the L1 Russian and the L1 English learner groups at data point I: Overuse of the definite form and omission of the indefinite article can be isolated to, and are characteristic features of, the narratives written by L1 Russian learners of Norwegian, whereas the errors of this type documented within the L1 English group seem to be connected to a lack of confidence with the inflectional patterns in Norwegian in general; definite and indefinite forms occur in the same NP (see, for instance, example (39)). Definite forms do not occur in category [–SR, –HK] in the narratives written by L1 English learners, which implies that overgeneralization of the definite form is a more pervasive characteristic within the L1 Russian group.

However, the finding that the L1 English learners omit more definite marking than the L1 Russian learners do should be investigated more qualitatively. In summary, what needs to be addressed further is why the L1 Russian learners at the group level face more challenges with the indefinite article than with definite inflection, and why the L1 English learners at the group level face equal or more challenges with definites compared to the L1 Russian group. In the following section, individual variation will be discussed and its relation to the group level results will be evaluated.

5.3.1.3. Individual profiles

Although differences may be detected through the comparison of groups, the number of texts investigated is not large enough to exclude the possibility that group level differences might conceal diverging performance of individual learners. In this section, I will primarily concentrate on the two frequent NP types of referential definites [+SR,

+HK] and referential indefinites [+SR, -HK]. Table 5.5 below provides the range and mean for DP I, which gives an initial overall impression of individual variation.

CATEGORY	L1 RUSSIAN		L1 ENGLISH		
	Range	Mean	Range	Mean	
[+SR, +HK]	48.2 (5.1–53.3 %)	22.7%	30.8 (19.2–50.0 %)	37.6 %	
[+SR, -HK]	59 (7.6–66.6 %)	37.8 %	20 (0–20.0 %)	14.5 %	

Table 5.5 Rates of inaccuracy: range and mean.

Individual variation: L1 Russian learners

First, the individual profiles connected to [+SR, +HK] reveal that the variation among the texts is considerable (see table 5.4). The rate of inaccurately-marked NPs ranges from 5.1% to 53.3%. In fact, the L1 Russian group seems to split into three groups at this point, as three individuals exhibit a rate of inaccuracy between 5% and 15%, and two individuals have an error rate between 20% and 40%, while the remaining two have an error rate at approximately 50%. However, when comparing the absolute numbers of occurrences and percentages of inaccuracy, there is no consistent correlation between the total number of definite NPs and accuracy, although there is a tendency for texts with many definite NPs to have a high level of accuracy. This tendency is not reflected in the L1 English material, where the trend seems to be the direct opposite.

Examples (33) and (34) below may serve to illustrate the variation in the encoding of [+SR, +HK] in the material written by L1 Russian learners at DP I. Both examples describe the last scene of the film, when the Threesome passes the Pear Man, who subsequently realizes that some of his pears are missing. The scene requires the Pear Man to be reintroduced after a relatively substantial absence in time.²⁰⁵ Ru-4-1 has the second highest rate of accurately-encoded [+SR, +HK] NPs among the the texts

²⁰⁵ See chapter 4, section 4.2, for Chafe's summary of the Pear Story.

written by the L1 Russian learners at DP I, whereas Ru-6-1 on the whole displays a pattern of close to 50% inaccurately-encoded definite NPs.

- | | | |
|------|---|---|
| (33) | Men venn-ene hans gikk andre
Ru-4-1 vei-en forbi den mann-en
som plukket frukt
spisende pær-ene .
Da forsto mann-en hvem har
stjalt pær-ene hans . | But friend-DEF.PL. his went Ø other
way-DEF.M by that man-DEF.M
who picked fruit
eating pear-DEF.PL .
Then understood man-DEF.M who has
stolen pear-DEF.PL his . |
| (34) | Når man gikk ned fra træ ,
Ru-6-1 var han veldig overrasket.
Det manglet ett kurv
med pærer. | When man-Ø went down from tre-Ø ,
was he very surprised.
It lacked one basket
with pears. |

Second, there is also a high degree of variation in the encoding of [+SR, –HK]: The range of inaccuracy is 59%, extending from 7.6% to 66.6%. In fact, there is no clear clustering of inaccuracy rates at all in the marking of indefinites, but there seems to be a gap between 33.3% and 55.5%; that is, the inaccuracy rates are either below 33.3% or above 55.5%. The interindividual variation comes across as considerable, yet, whereas all individuals had an error rate of 53.3% or lower for type [+SR, +HK], three out of seven learners failed to mark indefinites accurately in more than 55.5% of the indefinite contexts. Within type [+SR, –HK] the numbers of contexts are more evenly spread than they are in category [+SR, +HK], ranging from 7 to 16 contexts for indefinites, where most cluster right below 10.

Examples (35) and (36) both describe the scene where the Goat Man and the Goat pass the pear tree. We see that, whereas Ru-10 uses the indefinite article to signal the introduction of both the Goat Man and the Goat in the narrative at DP I, Ru-5 introduces the Goat Man by the definite inflection (but no determiner) and the Goat in the bare form at DP I. At this data point, Ru-10 and Ru-5 perform at opposite ends in terms of accurately-encoded [+SR, –HK].

- | | | |
|---------|--|---|
| (35) | gikk plutselig det forbi
en mann
med en geit . Han hadde ikke
noe kontakt med mann
som pluket pærer. | went suddenly it by
a.M man
with a.M goat . He had not
any contact with man
who picked pears. |
| Ru-10-1 | | |
| (36) | Han begynte å ta pærer og samtidig
så han andre mann-en
med geit . | He started to take pears and at the same time
saw he other man-DEF.M
with goat . |
| Ru5-1 | | |

Figure 5.3 below illustrates the variation among the learners when inaccurate encoding of [+SR, +HK] is compared to inaccurate encoding of [+SR, -HK] and [-SR, -HK].

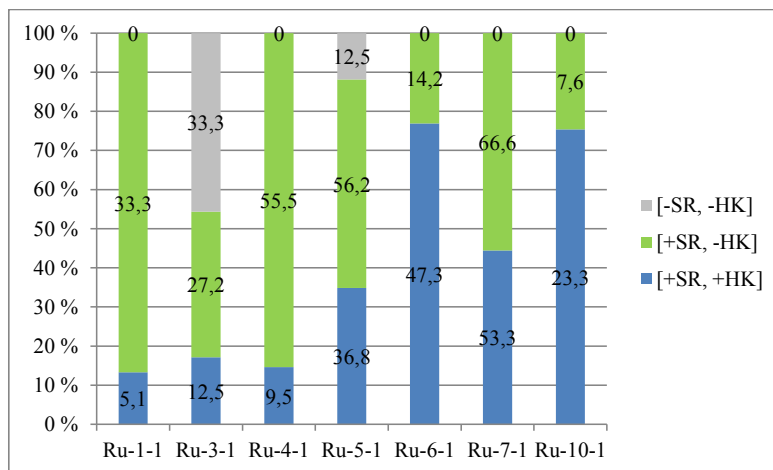


Figure 5.3. Inaccurately-encoded NPs. Relative frequencies. DP I. L1 Russian learners.

The figure above reveals that even though the encoding of [+SR, -HK] seems to be the major challenge to the L1 Russian learners at the group level, two out of seven learners do indeed exhibit a pattern indicating that [+SR, +HK] NPs are more difficult to encode accurately.

Text length and level of accuracy

Finally, text length may principally affect or correspond to level of accuracy. If we examine text length and accuracy in the categories of [+SR, +HK] and [+SR, -HK], it

is clear that there is no absolute correlation between the two. Ru-6-1 represents the shortest text in the data (124 words), and it is one of the two texts with the highest rate of inaccuracy for [+SR, +HK] (error rate: 47.3%). However, its rate of inaccuracy for [+SR, -HK] belongs at the lower end of the scale (14.2%). At the other end of the scale, the three texts containing more than 200 words can hardly be said to depart radically from the remaining three texts that are closer to the average of 195 words. Nevertheless, it should be noted that one of these texts, Ru-5-1, has a rather high inaccuracy rate for both [+SR, +HK] (36.8%) and [+SR, -HK] (56.2%), while the other two, Ru-1-1 and Ru-10-1, each represent high accuracy rates in separate categories: Ru-1-1 within [+SR, +HK] and Ru-10-1 within [+SR, -HK]. In fact, within each category, each one of them outperforms all the others. An unambiguous correlation between text length and accuracy is not detected for the L1 Russian learners, but, apart from Ru-5-1, there might be a slight tendency in the material for long-text writers to be more accurate (two out of three).

Individual variation: L1 English learners

The L1 English learners consist of four individuals only, and all, except for one in category [+SR, -HK], fail to mark at least one context in the two largest categories of [+SR, +HK] and [+SR, -HK] accurately.

The most interesting NP type in the results from the L1 English learners is referential definites [+SR, +HK]. The percentage of errors is higher in the L1 English group than in the L1 Russian group: 37.6% in the L1 English group and 22.7% in the L1 Russian group. This result is slightly unexpected, since the L1 English learners were predicted to be facilitated by the functional similarities between the L2 and their [+ART] L1, but this has turned out not to represent the whole story. All participants have a rate of inaccuracy between 19.2% and 56.2%, and three individuals are above 39%. There is no clear correlation between the number of contexts and the rate of inaccuracy, but at DP I, Eng-4 failed to mark 13 out of 33 contexts, Eng-1 13 out of 26 contexts, and Eng-3 failed to mark 5 out of 26 contexts. Nevertheless, the intragroup variation is higher for [+SR, +HK] within the L1 English group than within the L1 Russian group.

However, although the L1 English learners to a large extent fail to encode [+SR, +HK] in accordance with the target norm, within-group variation is attested. A comparison of example (37) and example (38) mirrors how omission of the definite inflection is a more salient feature of some of the texts. Both excerpts describe the appearance of the Goat Man, the Goat, and the Bike Boy.

(37)	En andre mann kom med geite.	An.M other man came with goat.
Eng-1-1	Han holder det på hode .	He holds it on head-Ø .
	Han si på pere , etterpå han gikk.	He look at pear-Ø , afterwards he went.
	En gutt sykler til pere .	A boy bikes to pear-Ø .
	Han stopper og den	He stops and then
	han tar en basket. Han sitter det	he takes a.M basket. He sits it
	på sykle og sykler med den foran ham. ²⁰⁶	on bike-Ø and bikes with it in front of him.
(38)	Mens mann-en var i tra-et en andre	While man-DEF.M was in tree-DEF.N an other
Eng-3-1	mann gikk foran av traer-et	man went in front of tree-DEF.N
	med et geit.	with a.N goat.
	Etterpå vi sett en liten gutt på	Afterwards we saw a.M little boy on
	sykkel-en sin nærheten til	bike-DEF.M his nearby to
	mann-en i traet .	man-DEF.M in tree-DEF.N

In the category [+SR, -HK], referential indefinites, the overall inaccuracy rate is much lower than in the L1 Russian group: 14.5%, which represents eight contexts wrongly or inaccurately marked. Out of these eight occurrences, four can be traced back to a

²⁰⁶ The present analysis uses a measure of accuracy, but as suggested earlier, this measure cannot capture all aspects of the “learner variety,” in Klein’s (1998) words. This issue is salient in example (37) where Eng-1 at DP I consistently employs an NP-form ending in an *-e*: *geite*, *hode*, *pere*, *pere*, *sykle*. When consulting the Pear Film prompt, it appears that the film stimulus triggers both singular and plural referents, which are pragmatically either identifiable or unidentifiable. For instance, the goat is expected to be introduced by an indefinite form, but the referent for *pere* is difficult to interpret as singular and not plural. *Hode* and *sykle* are [+SR, +HK] and would thus be encoded as definite both in Norwegian and English. Yet, it must be mentioned that in spoken Norwegian, the definite ending *-t* for neuter are rarely pronounced, which means that in an orthophonic model, *hode* would be definite. However, in short, even though the present analyses do not go deeper into the individual learner varieties beyond ascertaining target like or nontargetlike encoding of semantic/pragmatic categories, it might be that some of the learners do indeed entertain models of definiteness encoding not possible to detect either from a Semantic Wheel analysis or from a discourse universal approach. Eng-1-1, on her part, seem to entrust a system largely based on a universal ending *-e*, alternating with occasional definite and indefinite forms (the text also contains definite forms).

text written by one individual (Eng-1-1). Eng-1-1 had twice as many contexts for indefinites as the group median (tokens=10). In conclusion, the L1 English learners do not represent a homogeneous group.

Finally, if we compare the relative proportions of inaccurately encoded NPs within the categories of [+SR, +HK] and [+SR, -HK] (see Figure 5.4 below), we see that there are differences both among the L1 English learners and also between the L1 English and the L1 Russian learners. Only one of the L1 English learners, Eng-3, displays equal rates of inaccurately-encoded definite and indefinite NPs at DP I. The remaining three learners exhibit patterns clearly identifying definites as the main challenge.

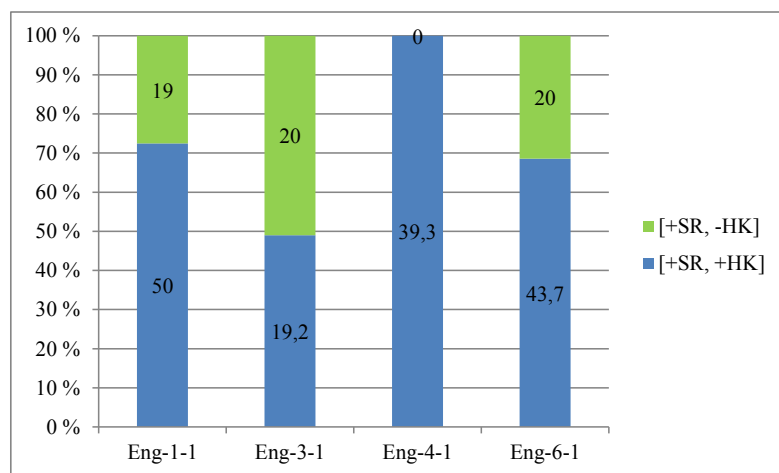


Figure 5.4. Inaccurately-encoded NPs, [+SR, +HK], [+SR, -HK]. DP I, L1 English learners.

Text length and level of accuracy

No close correlation was found between text length and accuracy for the L1 Russian learners, even though there was a tendency for long-text writers to outperform the others in one isolated type. However, the general tendency in the L1 English group is the opposite. The two texts containing more than 200 words represent high inaccuracy rates within [+SR, +HK] (Eng-1-1: 50%, Eng-4-1: 39.3%). On the other hand, Eng-5-1 includes 141 words and exhibits an inaccuracy rate of 43.7% in [+SR, +HK]. In the case of the L1 English group, it seems fair to say that text length does not necessarily correlate with accuracy; in fact, overall, it seems that text length can affect the

language production both positively and negatively. In other words, text length is not an absolute predictor of accuracy of definiteness marking.

5.3.1.4. *Summary and closing remarks*

The present analysis reporting on DP I has provided an overarching picture of accuracy in the encoding of specific reference and hearer knowledge according to the target norm, that is, the encoding of the grammatical category of definiteness. The analysis has revealed how the different grammatical forms are mapped onto the semantic/pragmatic categories of Bickerton/Huebner in the L2 Norwegian of L1 Russian and L1 English learners. Two major tendencies seem to emerge: The L1 Russian group to a much larger extent than the L1 English group fails to supply the indefinite article to mark the category of [+SR, -HK], and the L1 English group unexpectedly fails to encode NPs for [+SR, +HK] (both groups exhibit relatively high rates of inaccuracy in this category). Furthermore, two different patterns of inaccuracy are evident in the category of [+SR, -HK]. The L1 Russian group is characterized by overgeneralization of the definite form to indefinite contexts, and omission of indefinite articles, while the errors in the L1 English group are related to either overgeneralization or suppliance of both forms (e.g., *ei jenta* [a girl.DEF.]), omission of the indefinite article occurs only once. In summary, L1 Russian learners omit indefinite articles the most, whereas both L1 English and L1 Russian learners overgeneralize the definite form. Substitution goes practically only one way: There is no overgeneralization of the indefinite article to definite contexts; errors within [+SR, -HK] consist of omission.

However, even though the individual profiles largely corroborate the group level tendencies detected, there is variation. The opposite error pattern of the one detected at the group level is demonstrated for two of the L1 Russian learners; that is, two learners appear to encode indefinites more accurately than definites. The L1 English learners do exhibit rather homogeneous patterns in relation to [+SR, +HK]. Furthermore, for [+SR, -HK] one individual was largely responsible for the inaccuracy rate.

Text length does not seem relevant for explaining the results; high levels of inaccuracy cross-cut text length. This conclusion is reinforced by the scatterplot presented in Figure 5.5 below, where text length and the level of accuracy are calculated and summarized from the complete set of categories of the Semantic Wheel at DP I for each individual. The figure reveals no clear correspondence between long-text writers and accuracy in encoding of definiteness. However, there is a stronger tendency for learners with relatively inaccurate definiteness marking to write long texts, than there is for learners with high accuracy to write short texts. Moreover, only one individual with a general accuracy rate above 80% wrote less than 150 words, while three individuals with an accuracy rate below 80% wrote more than 250 words. In conclusion, it is very difficult to estimate accuracy based on text length; that is, level of accuracy and possibly proficiency do not determine the length of the Pear Stories written by the learners.

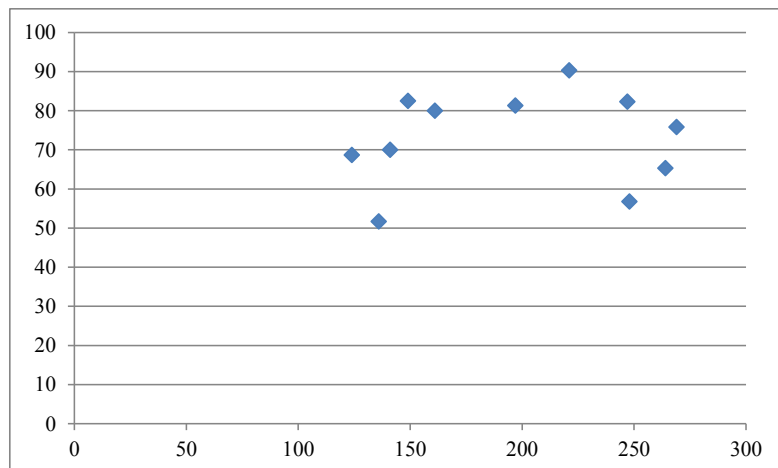


Figure 5.5. Text length and rates of accuracy (relative numbers). All participants. DP I.

Y-axis: Percentages. X-axis: Word count.

A rank-sum²⁰⁷ measure has been calculated for the categories of [+SR, +HK] and [+SR, -HK] in a final attempt to rule out high individual variation as causal to the results. This calculation reinforces the interpretation of [+SR, -HK] as a challenge to L1 Russian learners in particular (the L1 Russian group receives a final value of 7.14, while the L1 English group arrives at 4.0).²⁰⁸

Neither the quantitative group level results nor the individual level results for category [+SR, +HK] revealed large intergroup or interindividual differences, and the failure to encode definites thus seem to be a feature characteristic for most learners. This is also supported by a rank-sum calculation which does not support interpreting the difference between the groups as a difference (the L1 Russian group obtained a value of 5.28 and the L1 English group of 7.25).

Finally, in order to summarize the results from DP I, the following findings should be the object of closer scrutiny:

- The L1 Russian learners as a group fails to encode [+SR, -HK] by the indefinite article.
- The L1 Russian learners as a group omit definite suffixes in the category of [+SR, +HK] to a lesser extent than do the L1 English learners.
- Learners in both groups, but in the L1 Russian group in particular, overgeneralize the definite form to indefinite contexts.
- Overgeneralization of the definite suffix is not restricted to specific reference.
- Substitution is a one-way process; the indefinite article is not overgeneralized to definite contexts.

²⁰⁷ The rank sum measure is a pre-calculation for the Mann-Whitney test, where each independent value is ranked and given a ranking value. Finally, the sum on these ranking values is calculated within each group and divided on number of individuals.

²⁰⁸ Due to small numbers and zero values, the test has only been conducted on categories [+SR, +HK] and [+SR, -HK].

Road map

Whether the above findings are indicators of certain levels of development or whether they persist through the three data points will be explored in the next sections. First, an overall picture of development through the data points will be presented at both the group level and the individual level. The development or persistence of the major patterns detected at DP I will be the main focus. Second, the specific topic of omission and substitution will be addressed. Finally the development in the encoding of grammatical definiteness and the assigned level of proficiency will be examined in relation to each other.

5.3.2. Data points II and III: Development

The following sections examine the main findings from DP I, namely the difference in the encoding of [+SR, -HK] and the similarity in the encoding of [+SR, +HK].

However, general development of the encoding of the categories will also be in focus.

Predictions 1 and 2, referred to in the introduction to the present chapter, are principally independent of the data points and will remain central to the subsequent discussion.

However, the following sections also address the impact of time and exposure on development and enhanced proficiency. Focus will thus be directed at documented development and changes in the accuracy level of definiteness encoding that occur within the time frame of the three data points. Attention will then shift to the relationship between proficiency and development.

5.3.2.1. Development at the group level

Tables 5.6 and 5.7 provide an overview of accuracy at DP II and DP III, broken down into the four categories from the Semantic Wheel. A summarized group-level relative

frequency is also calculated²⁰⁹ and represented graphically to demonstrate the development in each L1 group, presented separately in Figures 5.6 and 5.7.

THE SEMANTIC WHEEL OF NOUN PHRASE REFERENCE DATA POINT II												
	[-SR, +HK]			[+SR, +HK]			[+SR, -HK]			[-SR, -HK]		
	Inacc.	Total	%	Inacc.	Total	%	Inacc.	Total	%	Inacc.	Total	%
Ru-1-2	0	0	-	0	18	0	1	7	14.2	1	2	50.0
Ru-3-2	0	0	-	5	15	33.3	4	12	33.3	1	5	20.0
Ru-4-2	0	0	-	4	21	19.0	2	8	25.0	0	6	0
Ru-5-2	0	0	-	6	30	20.0	2	9	22.2	0	8	0
Ru-6-2	0	0	-	5	24	20.8	4	13	30.7	0	1	0
Ru-7-2	0	0	-	6	12	50.0	4	5	80.0	0	1	0
Ru-10-2	0	0	-	5	25	20.0	1	9	11.1	1	5	20.0
SUM	0	0	-	31	133	23.3	16	63	25.3	3	28	10.7
Eng-1-2	0	0	-	14	25	56.0	4	11	36.3	0	7	0
Eng-3-2	0	0	-	8	31	25.8	0	11	0	0	1	0
Eng-4-2	2	2	100	5	35	14.7	2	12	16.6	0	9	0
Eng-5-2	0	0	-	3	30	10.0	1	12	8.3	0	4	0
SUM	2	2	100	30	120	25.0	7	46	15.2	0	21	0

Table 5.6 Rates of inaccuracy. Data point II. Absolute and relative numbers.

²⁰⁹ That is, the relative frequency of inaccuracy calculated by summarizing the individual results within the group.

THE SEMANTIC WHEEL OF NOUN PHRASE REFERENCE DATA POINT III												
	[-SR, +HK]			[+SR, +HK]			[+SR, -HK]			[-SR, -HK]		
	Inacc.	Total	%	Inacc.	Total	%	Inacc.	Total	%	Inacc.	Total	%
Ru-1-3	0	0	-	1	16	6.2	1	6	16.5	0	4	0
Ru-3-3	0	0	-	7	31	22.5	3	15	20.0	0	6	0
Ru-4-3	0	1	0	0	19	0	2	8	25.0	0	3	0
Ru-5-3	0	0	-	7	29	24.1	7	13	53.8	0	5	0
Ru-6-3	0	0	-	9	28	50.0	1	11	9.0	1	7	0
Ru-7-3	0	0	-	5	10	50.0	2	5	40.0	1	3	33.3
Ru-10-3	0	0	-	1	28	3.5	0	13	0	2	14	14.3
SUM	0	1	0	30	161	18.6	16	71	22.5	3	42	7.1
Eng-1-3	0	0	-	4	10	40.0	3	11	27.2	0	1	0
Eng-3-3	0	0	-	2	29	6.9	0	13	0	1	3	33.3
Eng-4-3	0	0	-	3	21	14.2	0	14	0	0	6	0
Eng-5-3	0	0	-	4	27	14.8	0	11	0	0	2	0
SUM	0	0	-	13	87	14.9	3	49	6.1	1	12	8.3

Table 5.7 Rates of inaccuracy. DP III. Absolute and relative numbers.

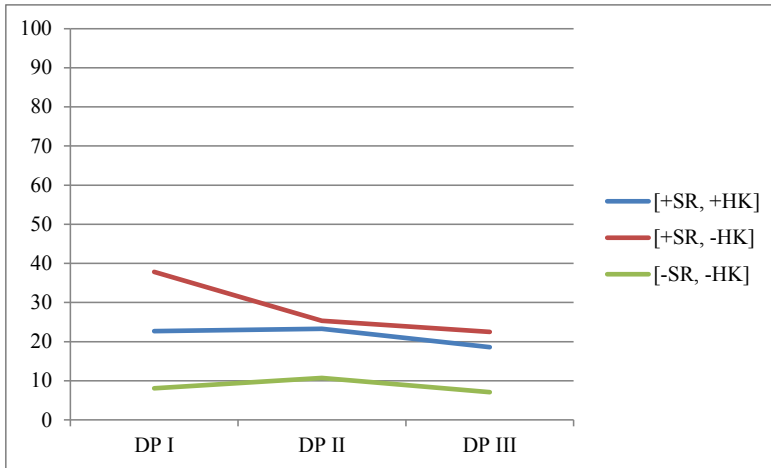


Figure 5.6. Rates of inaccuracy (relative frequencies): L1 Russian group. DP I–III.

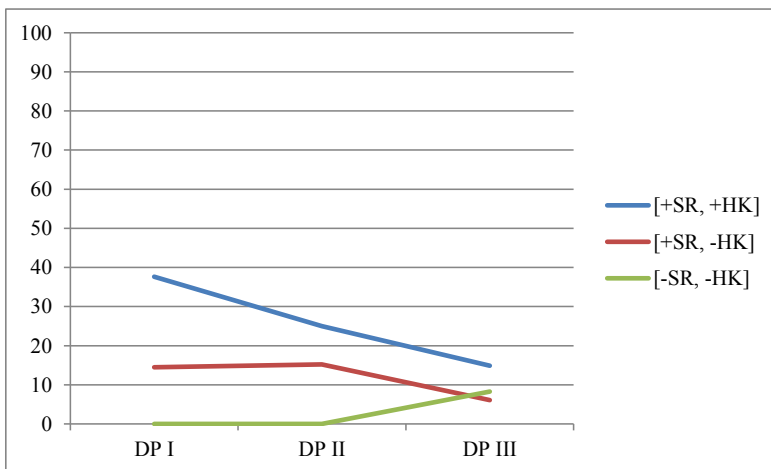


Figure 5.7. Rates of inaccuracy (relative frequencies): L1 English group. DP I–III.

If we look at Figures 5.6 and 5.7 above, the main impression is that from DP I–III an improved accuracy in the use of grammatical definiteness in Norwegian may be seen at the group level. Diverging patterns are still attested, but interestingly, these patterns do not necessarily tie directly into the patterns reported for DP I. The functional categories of primary interest are [+SR, +HK], represented by a red line, and [+SR, –HK], represented by a green line. The categories of [–SR, +HK] and [–SR, –HK] have a very low number of occurrences. This is particularly true for the category of [–SR, +

HK], which is not included in the figures and will not be commented on apart from confirming that generics are almost nonexistent in the Pear Story retellings.

L1 Russian learners

If we start out with the L1 Russian learners, Figure 5.6 displays an overall positive development toward the target norm occurring between DP I and DP III. All lines point downward, indicating a falling rate of inaccuracy. This shift toward the target norm is most striking in the category of indefinites [+SR, –HK], where the rate of inaccuracy falls from 37.8% to 22.5%, reflecting a reduction of errors by almost half. The drop in inaccuracy is most extreme between DP I and DP II (37.8% to 25.3%), which may imply that the critical point for change in this category is located somewhere between DP I and DP II.

Ru-4 symbolizes the general development documented at the group level; from DP I to DP II the rate of errors in category [+SR, –HK] drops from 55.5% to 25%.

- | | | |
|----------------|---|--|
| (39)
Ru-4-1 | <p>Det var en gang en gammel mann plukket pærer i hag-en sin.
Han plukket de av høy tre og måtte bruke trappe til å plukke pær-ene.
Når plukket han frukt oppe, kunne han ikke se hva skjedde nede.
Men det var veldig lite folk på bygd-a, så kunne ikke mann tenke om at noen kan ta pær-ene hans.
Først gikk det en mann med geit forbi så han de fin-e pær-ene, men tok ingenting.</p> | <p>It was a time (once upon a time) an old man picked pears in garden-DEF.M his.
he picked them off Ø tall tree and had to use stair to pick pear-DEF.PL
When picked he fruit up there, could he not see hva happened down there.
But it was very little people on countryside-DEF.F so could not man-Ø
think that someone could take pear-DEF.PL.M his.
First went a man with Ø goat by saw he the nice-DEF/PL pear-DEF.PL.M, but took nothing.</p> |
| (40)
Ru-4-2 | <p>Det var en gang, en mann plukket pærer i hagen sin. Han plukket pær-ene veldig rolig i forsiktig. Han ville selge pær-ene etterpå.
Da var mann-en oppe på pærtre, gikk det en annen mann</p> | <p>It was a time (once upon a time) a man picked pears in his garden. He picked pear-DEF.PL.M very quietly and carefully. He wanted to sell pear-DEF.PL.M afterwards-
When was man-DEF.M up on pear tree-Ø, went it an other man</p> |

med en geit forbi tre-et.

with a goat by tree-DEF.N

In (39) two out of three [+SR, –HK] NPs are left unmarked, whereas in (40) both [+SR, –HK] NPs are encoded by the indefinite article. In (40), however, an instance of omitted definite inflection occurs: *pærtre* (pear tree).

However, the line representing the category of [+SR, +HK] does not tie into the same trajectory of development. Rather, the rate of inaccuracy remains almost stable between DP I and DP II, but falls moderately from 23.3% to 18.6% between DP II and DP III. If the diverging patterns of development with respect to [+SR, +HK] and [+SR, –HK] are supported in individual performances, the longitudinal aspect of this investigation may have uncovered that there is a difference within this group of learners in terms of acquisition of the indefinite and the definite form that is only partly predictable from previous research. At DP I the results corroborate previous findings suggesting that the indefinite article is acquired later than the definite, but interestingly, the results from DP II and DP III show that from then on, the development ceases to take a linear trajectory; instead, the use of the indefinite form seems to increase rapidly at the group level, while the definite form sustains a stable rate of inaccuracy of approximately 20%. In other words, even though the relative frequencies at DP III are similar (22.5% and 18.6%), and even though it is impossible to know whether development in [+SR, –HK] will continue at an equal pace or stagnate, these results may perhaps imply that challenges with the definite form are more persistent than the challenges with the indefinite article detected at DP I. Settling this question is a task for future research.

Finally, however, some learners do not fit into the pattern outlined above. Ru-5 does, in fact, regress in the encoding of [+SR, –HK] between DP II and DP III, and maintains a high level of bare NPs in contexts for specific but unidentifiable NPs.

(41) Ru-5-3	Det var solskinnsdag . En mann gikk ut i hag-en å samle epler og pærer. Plutselig gal kock , nabo-en ledet geit . Hun ville ikke gå hjem. Det var vanlig dag-en. Den mann klatret tre-et og begynte å plukke pærer og legge dem i basket .	It was Ø sunny-day . A man went out in garden-DEF.M to pick apples and pears. All of a sudden crowed Ø cock , neighbor-DEF.M led Ø goat . She would not go home. It was normal day-DEF.M. That man climbed tree-DEF.N and started to pick pears and put them in Ø basket .
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L1 English learners

For the L1 English group, the line illustrating [+SR, +HK] indicates that the initial, slightly unexpected high rate of inaccuracy may represent a temporary stage in learning. From DP I to DP III the error rate at the group level drops from 37.6% to 14.9%, with approximately even changes between the data points. The development within the category of [+SR, -HK] moves toward the target norm, but change within this category is not equally dramatic. Interestingly, the error rate is highest at DP II, before a decrease again occurs at DP III. The rapid increase in the use of the definite form implies that the initial unanticipated challenges faced by the L1 English learners with the definite form represent problems that may be overcome within a fairly limited period of time. However, it is important to explore whether these results are corroborated by the individual development.

5.3.2.1. Individual profiles: L1 Russian and L1 English learners

The picture presented above is more nuanced when taking into account the individual variation. If we start out with the category of [+SR, +HK] at the group level, where the L1 Russian group seems to face persistent problems, the individual profiles for DP III in particular reveal some within-group inconsistencies. Table 5.8 below documents the range for each category at each DP. The range in category [+SR, +HK] for DP I and DP II is 44.4 (5.5–50.0%) and 50 (0–50.0%), respectively. At DP III the range remains 50 (0–50.0%). However, this measure conceals that while only one learner at DP II performs at 100% accuracy, three out of seven participants at DP III perform with an inaccuracy rate between 0 and 6.2%, and the remaining four individuals exhibit

between 22.2% and 50.0% inaccuracy. In this case, the individual variation at DP III warrants a slight adjustment from the group level results: Persistent problems with the definite form are a more valid conclusion for some learners than for others.

For the L1 English learners, the development toward the target norm in the category of [+SR, +HK] is more consistent among the participants. However, Eng-1 performs notably more inaccurately than the others at both DP II and III, obtaining a rate of inaccuracy of 56.0% at DP II and 40% at DP III. Despite the apparent uniformity, the range at DP I is 30.8 (19.2–50.0%),²¹⁰ and, if we exclude Eng-1, 15.8 (10.0–25.8%) at DP II, and again, if Eng-1 is excluded, 7.9 (6.9–14.8%) at DP III.

Eng-5 has a typical development toward more target-like encoding of [+SR, +HK]. The error rate of 43.7% from DP I decreases to 14.8% at DP III. The examples below display the narration of the same scene at DP I and DP III. In the excerpt in (42), omission of definite inflection occurs in several different contexts. In (43), however, omission is limited to one independent word: *sykkel* [bicycle].

(42)	Gutt-en syklet på veie og så en jenta som kommer fra det andre retning . Han ble dystyrret og så ikke en stor-e stein som la på vei-en. Han slår stein-en med sykle og pærer som han stjålet gå på veien.	Boy-DEF.M biked on road-Ø and saw a.M girl-DEF.F who comes from the.N other direction-Ø.M He was disturbed and saw not a.M big-PL stone which lay on road-DEF.M He hit stone-DEF.M with bike-Ø and pears-Ø which he stole go on road-DEF.M
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²¹⁰ At DP I, three out of four individuals perform with an error rate of 39% or higher.

(43)	Han krasjet sykl-en hans og de pær-ene gikk helt over vei-en.	He crashed bike-DEF.M his and those pear-DEF.PL went all over road-DEF.M
Eng-5-3	Tre gutter var stod på sid-en av vei-en hvor han krasjet sykle . Gutt-ene hjelpet han å finne alle pær-ene og tar de opp på sykle igjen.	Three boys was stood on side-DEF.M of road-DEF.M where he crashed bike-Ø . Boy-DEF.PL helped him to find all pear-DEF.PL and take them up on bike-Ø again.

The language of both groups of learners becomes more target like in the encoding of [+SR, –HK] through the three data points. At the group level, the L1 English learners develop from 14.5% to 6.1% inaccuracy, and at DP III errors are documented only in the narrative written by Eng-1 (27.2%). Overall, the marginal general development for Eng-1 seems to demonstrate an idiosyncratic pattern (see also footnote 206). For the L1 Russian group, Ru-7 seems to be in a similar position.

The development of the encoding of [+SR, –HK] is most interesting within the L1 Russian group, whose rate of inaccuracy is 37.8% at DP I and 22.5% at DP III. At DP II, it seems like Ru-7 skews the results, with an inaccuracy rate of 80.0%. If Ru-7 is excluded at DP II, the inaccuracy percentage within the group is 18.9% rather than 25.3%. At DP III, Ru-7 still shows a high rate of inaccuracy (40.0%), but so does Ru-5 (53.8%). Ru-10 is the only one to attain 100% accuracy at DP III, indicating that there is still individual variation at play. In absolute numbers, on the other hand, we find that six out of seven individuals have between zero and three errors, reinforcing the impression of development toward the target norm in category [+SR, –HK] for the L1 Russian group.

RANGE	DP I		DP II		DP III	
	L1 Russian %	L1 English %	L1 Russian %	L1 English %	L1 Russian %	L1 English %
[+SR, +HK]	(5.1–53.3) 48.2	(19.2–50.0) 30,8	(0–50.0) 50	(10.0–56.0) 46	(0–50.0) 50	(6.9–40.0) 33,1
[+SR, –HK]	(7.6–66.6) 59	(0–20.0) 20	(11.1–80.0) 68.9	(0–36.3) 36.3	(0–53.8) 53.8	(0–27.2) 27.2

Table 5.8 Range category [+SR, +HK] and [+SR, –HK] through three data points.

5.3.2.2. Section summary and closing remarks

In section 5.3 above, a rank-sum measure was applied in order to permit a more solid interpretation of differences at the group level that also accounts for individual variation. The results indicate a difference at DP I in encoding of [+SR, –HK], but not [+SR, +HK]. Four histograms, which are meant to highlight differences between the L1 groups but also show individual variation, are presented below in order to summarize the present section. Figures 5.8 to 5.11 rank the individual inaccuracy rates for [+SR, +HK] and [+SR, –HK] at DP I and DP III. The purpose is to get a clearer overview of the individual variation among the learners, and to ensure that clustering is indeed a within-group and not a between-group characteristic. And last, but not least, the histograms display the general development toward the target norm. The L1 Russian learners are represented by the red color, while the L1 English learners are blue. DP I has a background color of green, while DP III is dark yellow.

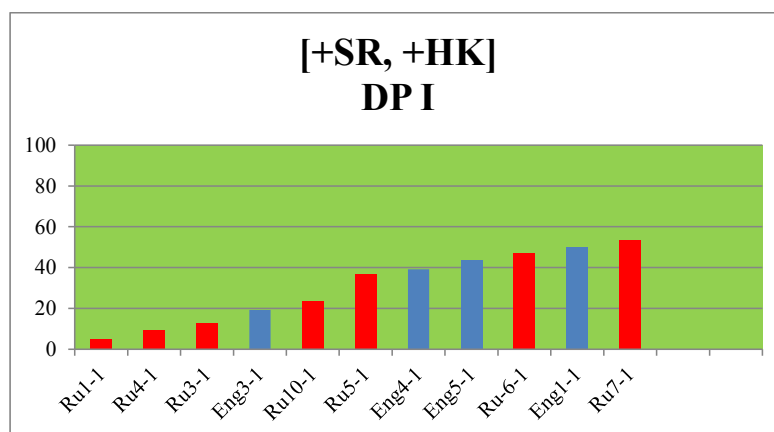


Figure 5.8. Rates of inaccuracy

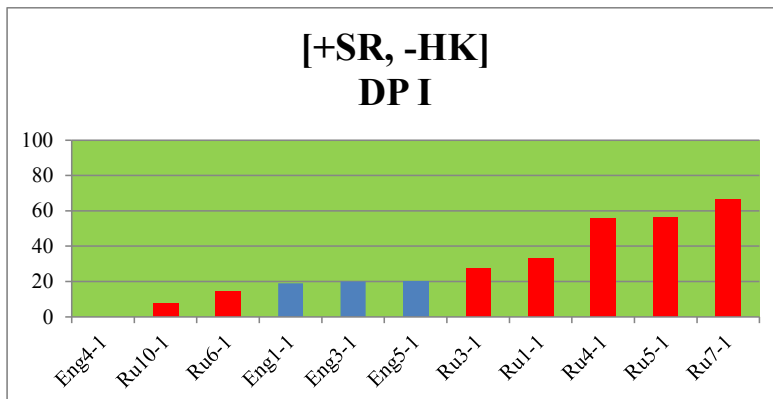


Figure 5.9. Rates of inaccuracy.

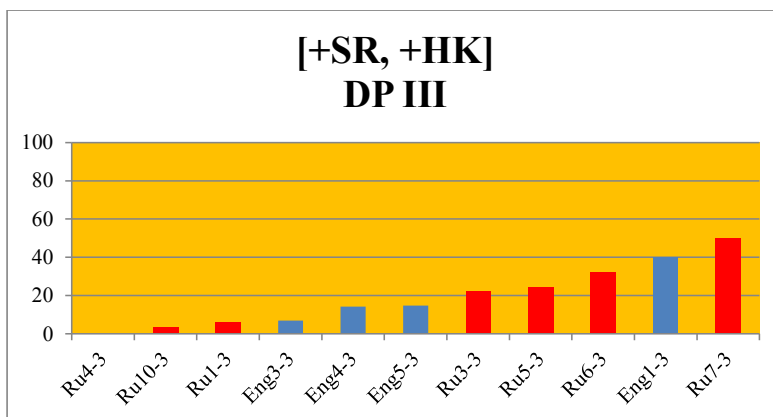


Figure 5.10. Rates of inaccuracy.

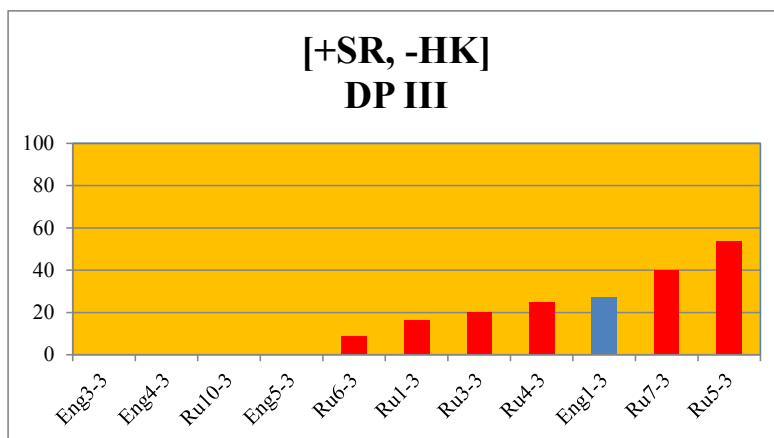


Figure 5.11. Rates of inaccuracy.

First of all, we see that there is a clear tendency between DP I and DP III in the direction of a targetlike encoding of definite and indefinite NPs. Namely, the bars at DP III are generally lower. However, at DP I a difference was detected in favor of the L1 English group for [+SR, -HK], while an unanticipated similarity with the L1 Russian group was documented for definites [+SR, +HK]. In short, with reference to the histograms above, these patterns are not maintained at DP III. By DP III the L1 English learners largely seem to outperform the L1 Russian learners. Even though there has been considerable improvement in the L1 Russian learners both at the group and at the individual level in [+SR, -HK], we see that compared to the L1 English learners, the L1 Russian learners cluster at the high end of the histograms, displaying persistently higher rates of inaccuracy.

Road map

Thus far, the focus in the above sections, which take the three data points into account has been the development of accuracy within the two major categories [+SR, +HK] and [+SR, -HK]. In terms of what constitutes inaccurate performance, the present analysis has, up to this point, only scratched the surface. In the following section (5.3.3), the discussion turns to the relationship between omission and substitution,

which is substantial from a theoretical perspective. (Note, however, that specific grammatical constructions, including modification, will be addressed in chapter 7.) In section 5.3.4, the relationship between proficiency level and general development among the individuals will be discussed in detail.

5.3.3. Omission and substitution errors

As stated in the literature review in chapter 3, it is clear that the significance attached to omission versus substitution varies by the research goals and theoretical approach. As discussed (and challenged) by Trenkic (2009), omission of articles is often explained in one way or another with reference to the Gricean Principle of Quantity (1975; see section 3.1.2 in the present study) or in terms of processing limitations (Trenkic, 2009; Trenkic & Pongpairoj, 2013). Omission may also be approached from a perspective of syntactic (Trenkic, 2007, 2008) or morphological deficit (Lardiere, 1996; Prévost & White, 2000; see section 3.1 in the present study) or even prosodic transfer (Goad, White, & Steele, 2003; Goad & White, 2006; see sections 3.5 and 3.3.2 in the present study). Substitution errors are discussed in the literature most often in relation to the learner's failure to specify the right function assigned to the articles, and are thus considered a result of erroneous crosscutting of categories. The most broadly-explored explanation for substitution errors seems to be that learners encode specificity instead of hearer knowledge (the tradition of Bickerton, 1981; Huebner, 1983; see sections 3.1.1 and 5.1 in the present study) or definiteness (Ionin and associates; see section 3.3.4).²¹¹ Furthermore, overgeneralization of the definite article seems to be most widely attested, even though work on the Fluctuation Hypothesis predicts and detects bi-directional substitution (Ionin, Ko, & Wexler, 2004). Leung (2008) also reports that the indefinite article may be substituted.²¹²

²¹¹ See section 5.1 for more details regarding differences between Bickerton (1981) and Huebner (1983) on the one hand, and Ionin and colleagues on the other.

²¹² From a different angle, the significance of substitution errors is also attested in a study measuring attitudes toward inaccurate use of articles (and inflection) in L2 Swedish in Finland (Nyqvist, 2014). The study

In the present study only the definite form is overgeneralized to contexts other than [+SR, +HK] at DP I (due to minimal documentation, the category of [–SR, +HK] will not be commented on).²¹³ However, the L1 Russian learners are not the only ones to overgeneralize; the L1 English learners also overgeneralize the definite form to contexts that are not [+hearer knowledge]. Furthermore, overgeneralization is not restricted to specific NPs, [+SR, –HK]; rather, “flooding” of the definite form to nonspecific and nonreferential NPs is also observed. At DP I, 12 out of 28 errors within the category of [+SR, –HK] are overgeneralizations of the definite form in the L1 Russian learners’ narratives. Also, overgeneralizations to nonspecific and nonreferential NPs occur within the L1 Russian group at DP I: two out of three errors are due to inaccurate use of the definite form, both occurring in the narrative written by Ru-3, who also overgeneralized the definite form to two [+SR, –HK] contexts. The total number of occurrences is 37 NPs.

Examples (44) and (45) below display a typical pattern in the material written by L1 Russian learners: The Goat Man is introduced with in the definite form, but the Goat is introduced in the bare form.

(44)	Han begynte å ta pærer og samtidig så han andre mann-en med geit.	He started to take pears and at the same time saw he Ø other man-DEF.M with Ø goat.
Ru-5-1		

documented that overgeneralizations of the definite form were considered the most disturbing error within the area of grammatical definiteness. Interestingly, Nyqvist speculates that the disturbance experienced by the L1 Swedish speakers might stem from the fact that the definite form signals for the hearer to start searching for the intended referent.

²¹³ There is one exception to this tendency: When describing the scene where one of the boys in the threesome hands the hat back to the bicycle boy, at DP I, Eng1 writes: “*Litt etterpå de ser seg hatt på vei-en og en gutt tokk det til ham.*” [A little after they see his hat on road-DEF and a boy took it to him.] The example is a little tricky because the context is regarded as [+SR, +HK], but the expected target construction is *en av guttene* [one of the boys]. Consequently, this is not a true substitution error; rather, it seems to arise from uncertainty about the Norwegian construction type.

(45)	Det går mann-en	It goes man-DEF.M
Ru1-1	med esel forbi, han skjuler på pær-ene men ikke ta dem.	with Ø donkey by, he looks at pear-DEF.PL. but not take them.

Both uses of the definite form are clearly inadequate, but (45) is perhaps more severe since the definite form here occurs in a sentence type where it may under no circumstances be accepted as grammatical, namely in a presentational sentence.²¹⁴ The definite form in (44), on the other hand, could potentially be explained by the closeness to the film prompt, and by the possibility that the writer did not picture an uninformed receiver. However, even if that were the case, it would still break with textual conventions and disturb the coherence of the narrative.

The landscape is slightly less comprehensible within the L1 English group at DP I: Three out of eight errors in category [+SR, -HK] are substitution errors and they occur in three different texts (Eng-1-1, Eng-3-1 and Eng-5-1), and three additional errors involve the application of both the indefinite article and the definite form to one specific noun *jente* [girl], resulting in the form *en/ei/et jenta* [a girl.DEF.]. However, even though this objectively represents a use of the definite form in indefinite contexts not licensed by the target norm, I do not believe such errors should be classified as substitution. After all, the indefinite article is present, and the suppliance of the feminine suffix *-a* may be caused by a general association between “girl” and the feminine form, ultimately leading to the misconception that the indefinite form also ends in *-a* and not *-e*.²¹⁵ Even more interesting is the observed pattern attesting that omission of the indefinite article almost never occurs in the L1 English group; that is,

²¹⁴ Examples such as (45) are rare in the material. Nonetheless, it is interesting that it contradicts the so-called definiteness-effect holding that [-ART] learners are also inherently sensitive to inhibition of definite NPs in existential NPs (e.g., White et al., 2010)

²¹⁵ Ingvild Nistov made me aware that in certain spoken dialects in the Western parts of Norway, *ei jent-a* would actually represent the appropriate variant. It is not possible to exclude the fact that the participants in the present study may have found support for this realization in the input. See also footnote 195.

if errors occur, they involve substitution or contradictory double encoding (there is one example of omission of the indefinite article in the text written by Eng-1-1, occurring with the NP *geite* [goat]).

At DP II, the pattern from DP I is largely sustained, but on a smaller scale: Overgeneralization of the definite article occurs, and it is attested within the L1 Russian group that the definite suffix is not restricted to specificity. Overall, the number of errors decreases for both groups, as does the proportion of substitution errors in the L1 Russian group. At DP II, 4 out of 16 errors in category [+SR, –HK] are represented by the definite form, whereas three out of three errors in [–SR, –HK] display inadequate suppliance of the definite form. The substitution errors occur in the texts written by Ru-1, Ru-3, Ru-5 and Ru-10. Only one out of seven errors are due to substitution in the L1 English group, but two errors involve omission of an article (see example (46) below). The following Pear Story introduction illustrates one of the few omitted indefinite articles:

(46)	En mann stodd på topp-en av trapp og plukt pærer.	A man stood on top-DEF.M of Ø stairway and picked pears.
------	---	--

No overgeneralization of the indefinite article was attested at DP I. Unexpectedly, this pattern is violated at DP II within the L1 Russian group, where 2 out of 31 errors in the category of [+SR, +HK] include suppliance of the indefinite article. Even though the number of occurrences is low (N=2), this development is interesting since it might imply that at certain stages, perhaps when the indefinite article is about to become an integrated part of the learners' grammars, the indefinite article may also be overgeneralized. Yet, it is worth noting that these two errors occur in texts which do not exhibit any overgeneralization of the definite article, namely Ru-4-2 and Ru-7-2 (see example (47) below from the final scene reintroducing the Pear Man). No occurrences of the indefinite article in definite contexts are observed within the L1

English group, which heightens the impression that the definite form and its application in discourse are the chief challenges for these learners.

(47)	Da gikk gutt-ene videre,	Then went boy-DEF.PL on,
Ru-4-2	kom en.M mann , som plukket	came a man , who picked
	frukt,	fruit,
	ned av tre-et.	down from tree-DEF.N

At DP III, overgeneralization of the definite form remains a sustained pattern in the L1 Russian group, where 4 out of 16 errors in the category of [+SR, -HK] are due to substitution. Interestingly, it is still Ru-1, Ru-3, Ru-5 who sustain this pattern. The narrative written by Ru-10 at DP III displays two examples of an overgeneralized definite form to the category of [-SR, -HK]. Ru-4, who did not substitute the definite form at DP I or DP II, but who substituted the indefinite article for the definite in one occasion at DP II, overgeneralizes the definite form in to one [+SR, -HK] context at DP III. In the L1 English group there are no instances of substitution at DP III. With respect to overgeneralization of the indefinite article to definite contexts, no occurrences are evident at DP III. Suppliance of both forms still occurs at DP III, particularly with the noun *jente* [girl]. Overall, at the group level, it seems like the results reported above tie into the pattern showing that both groups exhibit deviant use of the definite article, but that challenges with the indefinite article are largely associated with the L1 Russian learners. Furthermore, both groups are closer to the target by DP III, but the way there was less linear for the L1 Russian learners than for the L1 English learners.

Finally, it is important to keep in mind that not all the learners exhibit patterns of substitution at all DPs, or even at all, indicating that the robustness of the above result is limited, and it should be interpreted with caution. In general the number of individuals overgeneralizing the definite form to [+SR, -HK] falls radically from DP I to DP III. At DP I, all the L1 Russian learners and three out of four L1 English learners exhibit a pattern of overgeneralization of the definite form. At DP II, 3 out of 7 L1

Russian participants display a pattern of substitution errors in the category of [+SR, –HK], compared to one individual in the L1 English group. At DP III, the same three individuals, plus Ru-4, in the L1 Russian group overgeneralize the definite form. There is, though, no clear correlation between the relative amount of inaccurate encoding of [+SR, +HK] and [+SR, –HK] and substitution of the definite form. However, there is a tendency for learners performing more accurate in the category of [+SR, +HK] than in the category of [+SR, –HK] at DP I, to overgeneralize and to keep overgeneralizing the definite article. Ru-10 is an exception. Overgeneralization seems to be a persistent pattern for some of the L1 Russian learners (Ru-1, Ru-3, Ru-5 and Ru-10) although substitution as a general group characteristic weakens considerably from DP I to DP III.

5.3.4. Development and proficiency

Proficiency and development of article use in previous studies

Most studies of article or definiteness acquisition include a measure of the learners' proficiency level in order to control for the comparability of the participants. As described in section 4.4, all the narratives analyzed in the present study underwent a proficiency-level scoring. The arguments in favor of the present approach were described in section 4.4. Even though the correlation between proficiency and article use often seems to be only secondary to other purposes (such as using a measure of proficiency to neutralize a possible source of error, or as a tool for grouping participants), most studies containing groups of learners at different proficiency levels also document distinct patterns and attributes associated with each level with respect to the encoding of definiteness. Below, in order to get an understanding of the role attributed to proficiency in the development of a L2 article system and in studies of L2 article acquisition, I will review a non-exhaustive number of studies where development or proficiency level has been included as a variable.

Master (1987), presented in section 3.1.1, documents learners' development of article use pseudo-longitudinally through four developmental stages. He concludes that the line of development depends on whether the learners' first language background is [+ART] or [-ART] (Master, 1987, p. 81), and that acquisition is attained at earlier stages of development for [+ART] learners than for [-ART] learners (Master, 1987, p. 29). Thomas (1989), also introduced in section 3.1.1, compared learners organized into three different levels of proficiency based on an in-house placement test measuring at a high, mid, and low-level. The attention directed to the development of article use and proficiency level is limited, however, since her main interest was to compare L1 and L2 learning. Yet, there seems to be a positive correlation for the [-ART] learners' use of articles and proficiency level score, particularly between the low and high level (Thomas, 1989, pp. 348–349). Liu and Gleason's (2002) study distinguished between low, intermediate, and advanced level learners' use of the definite article in nongeneric contexts. Unfortunately, they did not distinguish between [+ART] or [-ART] background. The study documented a clear positive correlation between suppliance of *the* in obligatory contexts and proficiency level (Liu & Gleason, 2002, pp. 11–12). Overgeneralization of the definite article, on the other hand, did not follow a parallel developmental trajectory, since overuse of *the* seemed to go through a stage of incline before accuracy once again increased (Liu & Gleason, 2002, pp. 16–17). García Mayo (2008) replicated Liu and Gleason (2002) in the EFL-English of Spanish learners at four different proficiency levels. She reported that the most radical change took place between the elementary and low-intermediate level (but note that these learners were all [+ART]) (García Mayo, 2008, p. 557). See section 3.3.1 for more detailed reviews of these two studies.

In Butler's (2002) investigation of learners' post-hoc reports on hypotheses of article use, presented in chapter 3 primarily as a study taking countability into consideration, the Japanese-speaking participants were divided into four different levels of proficiency, with the most advanced learners scoring above 550 on a TOEFL test (Butler, 2002, p. 457). The results corroborated a positive interplay between

proficiency and article use, but Butler emphasizes that the level attained was far from target like even for the advanced learners, and particularly regarding the identification of hearer knowledge (Butler, 2002, p. 473). Trenkic (2002) reports on a study grouping the [-ART] participants into four groups of developmental/proficiency level based on number of years of EFL study (they were all currently enrolled in either secondary school or university studies of English in an EFL setting). The advanced-level groups had a more targetlike performance across-the-board. Trenkic and Pongpairoj (2013) distinguish between intermediate and advanced L1 French and L1 Thai learners of English in their study based on scores achieved on the Oxford Placement Test. They found that all L1 Thai learners generally omitted more articles in salient contexts, but the intermediate learners did so more often than the advanced learners (Trenkic & Pongpairoj, 2013, pp. 159–160). (There was also a proficiency level difference in the encoding of less salient referents.)²¹⁶

Even though some of the results reported above are interpreted as development, these are insights that have emerged indirectly: Pseudo-longitudinal studies compare individual learners with different proficiency levels to each other in order to describe how proficiency level interacts with definiteness encoding, but they do not follow the development in each individual. Ekiert (2010a), Huebner (1983), and Parrish (1987) are examples of actual longitudinal research designs investigating development (see sections 3.1.1 and 3.3.1 for more detailed surveys). Both Huebner (1983) and Parrish (1987) approached development of article use (Huebner studied only the article *da*) through longitudinal case studies of one learner. Huebner's study demonstrates how the learner passes through different stages and employs structures that may be L1 dependent or possibly related to language universals. The use of *da* is constantly negotiated on the way to a near target like pattern. A main insight from Parrish (1987)

²¹⁶ See section 3.3.4 for a more detailed review of Trenkic and Pongpairoj (2013). For Trenkic (2000), see section 3.1.2.

is that the use of articles is constantly changing, yet it still displays a systematic pattern at each stage.

This brief excursion into a handful of findings that relate levels of proficiency and development to article use and acquisition motivates a general prediction of a positive correlation between development in the encoding of definiteness and proficiency level. Yet, the literature suggests that there is a clear relationship between first language and development of a targetlike use of articles in English as a second language: Roughly, development toward targetlike article use is more rapid for [+ART] learners, while [-ART] learners experience a variety of persistent problems.

Finally, detecting a correlation between proficiency level and certain recognizable traits associated with article/definiteness use at the group level does not automatically legitimize proficiency level as a predictor of development of definiteness encoding. Sharma (2005b) presents the details of the implicational scales she applies in order to investigate the relationship between proficiency level, development, and stabilization in a variety of nonnative English in the U.S. used by Indian speakers.²¹⁷ She argues that the article system applied in the English of these speakers has stabilized in a way that deviates from the target norm. Her suggestion is that the displayed article system is not affected by proficiency or second language acquisition, but by the L1 system in combination with universal principles of information. In her study, article use is thus, unlike other linguistic features, predominantly independent of general language proficiency (Sharma, 2005b, pp. 203–205). Unfortunately, there has been no opportunity to compare the development of definiteness encoding and the development of other language traits in the present study.

²¹⁷ This article provides more detailed information on the implicational scales for language proficiency reported on in Sharma (2005a).

Overall development at the individual level

From the general report on performance both at the group level and at the individual level, and in relation to the three data points, we already know that the encoding of definiteness, in most aspects, became more targetlike from DP I to DP III. At the group level, the L1 English learners seem to have improved most radically, while the largest group-level change within the L1 Russian group was the increased accuracy in the application of the indefinite article. In the following section, accuracy rates calculated based on the four semantic/pragmatic types together will first be examined at the individual level. This will be followed by a comparison to the level of proficiency assigned to each text.

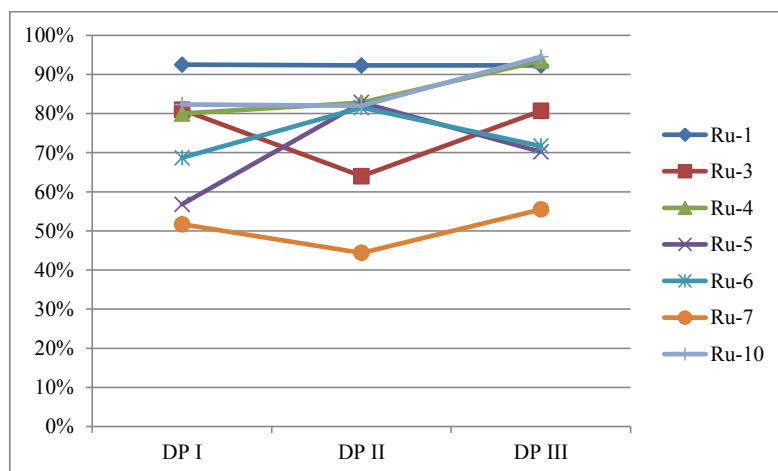


Figure 5.12. Overall level of accuracy across DPs (relative frequencies). L1 Russian learners.

	RU-1		RU-3		RU-4		RU-5		RU-6		RU-7		RU-10	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
DP I	47/52	92.5	35/43	81.3	28/35	80.0	25/44	56.8	22/32	68.7	15/29	51.7	42/51	82.3
DP II	25/27	92.3	20/32	62.5	29/35	82.8	39/47	82.9	31/38	81.5	8/18	44.4	32/39	82.0
DP III	24/26	92.3	42/52	80.7	29/31	93.5	33/47	70.2	36/46	71.7	10/18	55.5	52/55	94.5

Table 5.9 Overall level of accuracy across DPs (absolute and relative numbers). L1 Russian group.

Within the L1 Russian group, five out of seven participants improve in accuracy between DP I and III. Only Ru-3 becomes less accurate from DP I to III. In contrast to Ru-1 who sustains a high level of accuracy through all DPs, Ru-3's level of accuracy considerably worsens at DP II, but gets more accurate again by DP III. This development is illustrated by a V-shaped curve, displayed in Figure 5.12 above, and is a characteristic shared with Ru-7. Ru-5 and Ru-6 have the opposite development, illustrated by an improvement from DP I to DP II, but a fall from DP II to DP III, that is, a development visualized as an invert V. However, both Ru-6 and particularly Ru-5 perform more accurately at DP III than at DP I. In summary, even though six out of seven participants are more or equally target-like in their encoding of definiteness by DP III, only three individuals had linear progress.

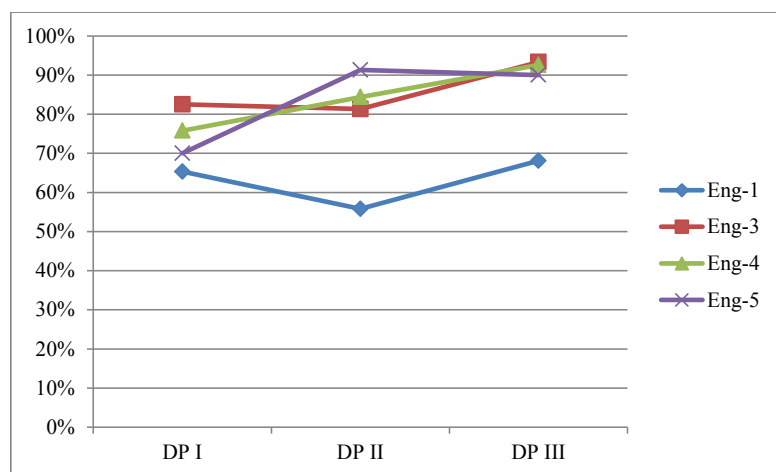


Figure 5.13. Overall level of accuracy across DPs (relative frequencies). L1 English group.

	ENG-1		ENG-3		ENG-4		ENG-5	
	N	%	N	%	N	%	N	%
DP I	32/49	65.3	33/40	82.5	44/55	75.8	21/30	70.0
DP II	25/43	55.8	35/43	81.3	49/58	84.4	42/46	91.3
DP III	15/22	68.1	42/45	93.3	38/41	92.6	36/40	90.0

Table 5.10 Overall level of accuracy across DPs (absolute and relative numbers). L1 English group.

Eng-4 and Eng-5 increase stepwise in accuracy, while Eng-1 and Eng-3 exhibit a slight fall in accuracy at DP II before attaining their highest accuracy level at DP III. In general, the group-level analyses are supported by the individual-level results: three out of four L1 English learners ultimately attain a rate of accuracy above 90%, whereas only three out of seven L1 Russian learners achieve an equal level of accuracy. Nonetheless, nearly all learners improve at an individual level. The next section will examine to what extent this tendency is reflected in proficiency level.

The interplay between development in encoding of definiteness and proficiency level

The following section examines to what extent the present material reveals a correspondence between proficiency level and development in encoding of definiteness, and to what extent development in the use of definiteness marking occurs independently of increased proficiency level.

In this context, Nordanger (2012) is of some interest, because this study correlates accuracy rate and CEFR level in 200 expository texts written by L1 Russian and L1 English learners of Norwegian. The study was based on data from the Norwegian Second Language Corpus (ASK), and was part of a larger profiling project (Carlsen, 2012a; see section 4.4 for more details). The study was limited to measuring target-like use of the definite inflection alone. The texts were extracted from the upper-intermediate and advanced level section of the corpus, implying that all texts had a score from B1 to C1; this restricts the study's comparability to the present study, since the texts are generally ranked as more advanced than the present Pear Story narratives. However, the study documented in terms of mean frequencies that the L1 Russian learners performed with lower rates of accuracy in the use of the definite encoding than did the L1 English learners until the point of reaching the C1 level. That is, by the C1 level L1 background did not seem to predict the use of definite inflection anymore. However, some uncertainty surrounds the results since relatively few texts were assigned the level of C1. Perhaps these results may predict the road ahead for the learners in the present study when they reach the more advanced levels of L2 Norwegian proficiency.

In section 4.4, the comparability at each DP was discussed with regard to proficiency.

Below, three scatterplots correlate CEFR score and rate of accuracy for each individual at each DP. Interestingly, the three figures elucidate an increased variation in terms of CEFR level from DP I to DP III: At DP I, all texts cluster at three discrete levels of proficiency, while they range from A2 to B1/B2 at DP II and A2/A1 to B2/B1 at DP III.

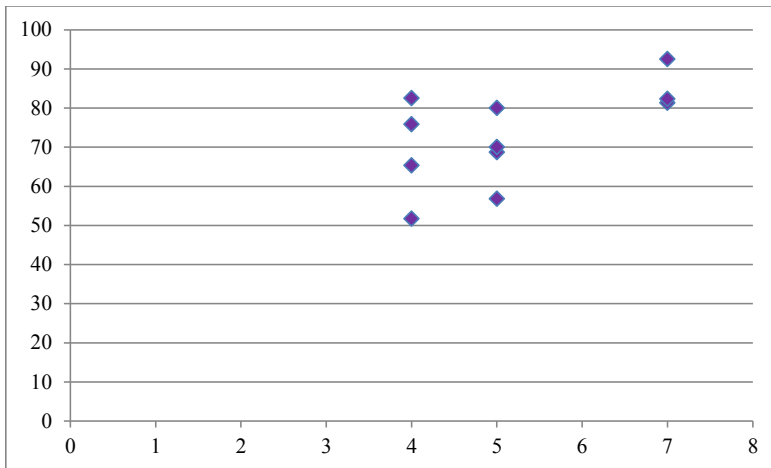


Figure 5.14. Rates of accuracy and CEFR score. DP I. All participants.

Y-axis: Percentage. X-axis: CEFR level.²¹⁸

²¹⁸ Figures 7.11, 7.12, and 7.13: The CEFR levels are given increasing numbers, starting from A1=1, A1/A2=2, A2/A1=3, A2=4, A2/B1=5, B1/A2=6, B1=7, B1/B2=8, B2/B1=9, B2=10.

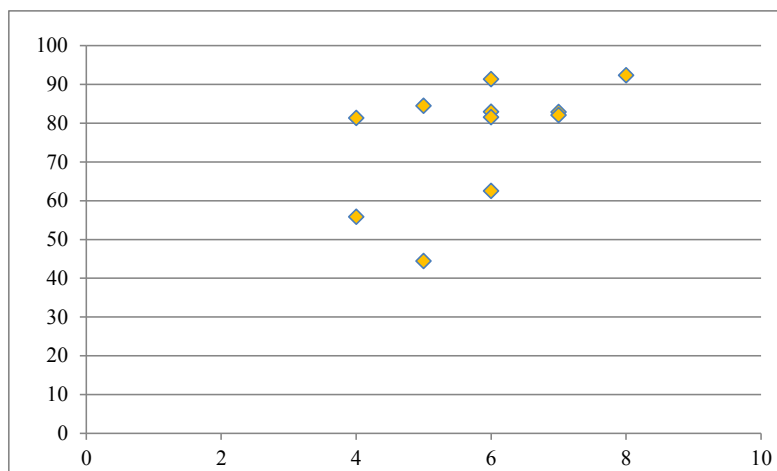


Figure 5.15. Rates of accuracy and CEFR score. All individuals. Data point II.

Y-axis: Percentage. X-axis: CEFR level.

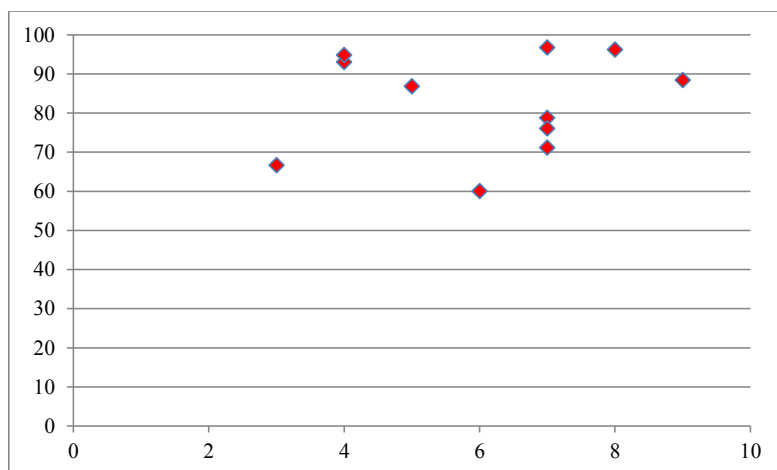


Figure 5.16. Rates of accuracy and CEFR score. All participants. DP III.

Y-axis: Percentage. X-axis: CEFR level.

The variation in level of proficiency among the learners thus increases with time.

However, if we concentrate on the y-axes, a general augmented level of proficiency is traceable from DP I to DP III; at DP III six texts obtain a rate of accuracy above 80%, and only two below 70%, whereas only one text attains an accuracy rate above 90% at

DP I. At DP I five texts display an accuracy rate of 70% or below. In conclusion, variation in proficiency increases, while level of accuracy in encoding of definiteness also increases, but there is no absolute interdependence between a high level of accuracy and a high CEFR score.

Upon close examination, Table 5.11 below sustains the impression that the interdependence between level of proficiency and accuracy in encoding of definiteness is ambiguous, at best. Seven out of 11 advance in general proficiency from DP I to DP III, while one participant writes texts assessed at exactly the same level at all DPs (Eng-3). Eng-4 and Eng-5 improve at DP II, but regress to the level of DP I by DP III. Eng-1 regresses by DP III.

PROFICIENCY LEVEL AND OVERALL ACCURACY						
PARTICIPANT	DATA POINT I		DATA POINT II		DATA POINT III	
	CEFR-LEVEL	%	CEFR-LEVEL	%	CEFR-LEVEL	%
Ru-1	B1	92.5	B1/B2	92.3	B2/B1	92.3
Ru-3	B1	81.3	B1/A2	62.2	B1	80.7
Ru-4	A2/B1	80.0	B1	82.8	B1	93.5
Ru-5	A2/B1	56.8	B1/A2	82.9	B1	70.2
Ru-6	A2/B1	68.7	B1/A2	81.5	B1	71.7
Ru-7	A2	51.7	A2/B1	44.4	B1/A2	55.5
Ru-10	B1	82.3	B1	82.0	B1/B2	94.5
Eng-1	A2	55.3	A2	65.3	A2/A1	68.1
Eng-3	A2	82.5	A2	81.3	A2	93.3
Eng-4	A2	75.8	A2/B1	84.4	A2	92.6
Eng-5	A2/B1	70.0	B1/A2	91.3	A2/B1	90.0

Table 5.11 Level of accuracy (relative numbers) and CEFR score.

Overall, the tendency seems to be that, for the L1 English group, improvement in the suppliance of definiteness marking is not reflected in the assigned proficiency level; that is, even though improvement in a category occurs, it clearly does not affect the general impression of proficiency level. This might indicate that definiteness is rather un-important when evaluating level of proficiency. Or formulated more carefully: The interaction between definiteness marking and other grammatical elements affects proficiency assessment, but in much more subtle ways. The lack of interaction between the development of definiteness encoding and proficiency level among the L1 English learners might imply that the use of definiteness marking develops before other, perhaps more salient elements of grammar improve. For the L1 Russian participants, on the other hand, the improvement of definiteness encoding may happen alongside the development of other salient traits. That is perhaps an explanation of why the L1 English learners improve more in encoding of definiteness, but less in proficiency, while the L1 Russian learners' improvement is almost without exception reflected in proficiency.

5.4. Chapter summary

In this chapter the main analysis building on Bickerton's Semantic Wheel of NP Reference has been reported. The learners' encoding of grammatical definiteness has been analyzed on the basis of a double yardstick consisting of the binary categories of the Semantic Wheel, [\pm specific reference] and [\pm assumed hearer knowledge], and the target norm. The result has been presented with regard to both group profiles, individual profiles, and variation for all three data points, although the results from DP I have provided guidance for the subsequent data points. The phenomena of substitution and omission have been addressed in a separate section. In the final chapter section, the learners' proficiency level was compared to their overall development of correctness in the encoding of grammatical definiteness.

The main findings comprise high initial rates of inaccuracy in the category of [+SR, –HK] for the L1 Russian learners, and high initial rates of inaccuracy in the category of [+SR, +HK] for the L1 English learners. The definite article is overgeneralized in both groups, but more frequently and more persistently among the L1 Russian learners. Through the three data points, the L1 English learners see rapid development toward the target norm, whereas the rate of inaccuracy decreases considerably for the L1 Russian learners in the category of [+SR, –HK] but not in the category of [+SR, +HK]. Interestingly, when overall development in accuracy is compared to proficiency level during the three points of data collection: For the L1 Russian learners, there seems to be a correlation between improvement in the encoding of grammatical definiteness and increased level of proficiency, while no such alignment can be demonstrated for the L1 English learners, where more target like use of definiteness is not directly reflected in level of proficiency.

6. Analysis II: Encoding of discourse familiarity

6.1. Introductory comments

The literature review in chapter 3 emphasized that studies of definiteness/article use and acquisition in SLA generally should account for two empirically validated observations; omission of grammatical marking and substitution of marking. Regarding omission, two main triggers have been identified, namely pre-modification and redundancy due to contextual factors (Trenkic, 2009). Substitution is primarily understood to be a result of the learner's failed navigation between different semantic/pragmatic features of article use, such as specificity versus definiteness or hearer identifiability (see, for example, Ionin, Ko, & Wexler, 2004; Huebner, 1983; Parrish, 1987; Thomas, 1989).

The analyses carried out thus far have provided an overall impression of both omission and substitution errors in addition to accuracy based on the four major categories for NP reference (see chapter 5). Domains yielding differences and similarities between the learners have also been identified. However, there are still questions left unanswered. In order to approach the remaining questions, a more in-depth analysis is required that can account for a variety of NP constructions, such as modification, and degrees of givenness. The Semantic Wheel analysis must also be supplemented by other models of analysis if the issues of cross-linguistic influence and universal principles of discourse are to be explored in more detail.

The collection of comprehensive and acknowledged analytical models that may elaborate on the findings from the initial analysis is not limitless. The application of an additional analytical framework would ideally provide more detail than what has already been captured through the Semantic Wheel. An apparent candidate to fill such a gap is perhaps Hawkins's Location Theory (1978, see Appendix 3). The Location Theory outlines a comprehensive set of referential uses of the definite article in English. The model is well-known within SLA (see the literature survey in chapter 3),

and its categories are tied together by reference to location in sets of knowledge shared between speaker and hearer. The model thus has a theoretical foundation that reaches beyond that of form.

However, in the present analysis, Prince's Taxonomy of Assumed Familiarity (1981) has been chosen instead of Hawkins's theory. The reasons for this choice are as follows: Prince's Taxonomy captures uses that are encoded for both definiteness and indefiniteness, and the model's central concept of *givenness* succeeds in accounting for both pragmatic and structural features associated with discourse familiarity. But most importantly, where the Location Theory starts bottom-up by explaining the different observed uses of *the*, the point of departure for Prince's Taxonomy is the universal cognitive categories of "given" and "new," and from there the analysis descends to the more concrete surface level of (English) language structure. The point is that since Prince starts out at a level independent of form, namely the discourse level, her model applies more easily to analyses including languages without any fixed or conventionalized linguistic category for definiteness. This aspect of Prince's approach furthermore ensures that a function-to-form perspective can be preserved (see section 4.1 for a discussion of the dimensions of form-to-function and function-to-form in SLA). The fact that the model relates to discourse also enables an isolation of contexts that may be considered to expose a relatively high degree of pragmatic redundancy. As noted in chapter 3, the effect of pragmatic redundancy on definiteness marking is one of the most resilient and persistent observations in the literature, although exactly *how* the effect of pragmatic redundancy on L2 production is established is not necessarily equally well-investigated. To my knowledge, even though Prince's taxonomy is acclaimed, its only application to studies involving second language has been Sharma's (2005a) investigation of the L2 English used among Indian immigrants to California, U.S.A. (see section 3.3 in the present study). In the subsequent chapter, insights from Hawkins (1978) will supplement the description of Prince's Taxonomy. Sharma's study (2005a) was introduced among "more recent" studies adopting the framework of Bickerton (1981) in the literature review in chapter 3. However, Sharma

extended her Bickerton analysis of NPs by applying Prince's Taxonomy of Assumed Familiarity (1981). For this step, the analysis was broken down into a scalar system of categories from *most new* through *inferrables* to *evoked* NPs. Sharma emphasized the relativity that Prince's model captures: "If we consider the newness of a NP as scalar rather than discrete, then the relative position of a NP along this scale might affect the use of articles" (Sharma, 2005a, p. 540). This scalarity, which will be presented in more detail below, is mirrored in how a brand-new entity introduced without any anchoring represents one degree of newness on the scale, different from the newness of a new entity anchored in already familiar information. And, further, that the speaker will choose a linguistic expression neatly adjusted to the assumed level of shared knowledge between him/her and the hearer.

Sharma's study documented a concurrence between degree of familiarity and encoding; that is, the more familiar, the less marking was provided. Yet, she also reported an effect of attributes and modification on the observed article omission; quantifiers seemed to favor the null article (Sharma uses *null article* theory-neutrally to account for the suppliance of bare nouns), and there was also a tendency to omit articles when the NP was modified (Sharma 2005a, p. 558; see also section 3.3.3 in the present study). Finally, L1 influence was reported in the case of encoding of specific indefinite contexts (Sharma, 2005a, p. 551). In other words, Sharma's study documented a tangled picture that comprised interaction between noun phrase complexity, L1 effects and degree of familiarity. Whereas Prince's original proposal pertained to native English language structure primarily, the present adaptation of the model onto nonnative language builds on Sharma (2005a).

Before we go into the details of Prince's Taxonomy, the concept of pragmatic redundancy and its position in SLA research on definiteness and articles will be discussed. The present discussion is largely informed by Trenkic (2009) and Trenkic and Pongpaioj (2013).

6.1.1. The redundancy/saliency effect in SLA

The Semantic Wheel-inspired analysis, reported in the previous chapter, revealed diverging group level patterns embedded in the semantic and pragmatic properties of specificity and hearer knowledge. The Taxonomy of Assumed Familiarity (hereafter “The Taxonomy”), developed by Prince, allows for a more detailed analysis that digs deeper into the fine-grained system of shared knowledge and familiarity that is hidden below Bickerton and Huebner’s relatively broad categories. First and foremost, the Taxonomy provides a perspective only superficially presented in the survey of previous research on definiteness in SLA, but whose presence in L2 article acquisition studies is unquestionable, namely the relationship between surface marking and universals of discourse (see chapter 3 in the present study).

This relationship appears to have been addressed primarily by the functionalist school of linguistics, as well as by pragmatists, such as Grice (1975). According to a discourse-universal approach (for instance, Givón, 1983, 1984), discourse familiarity and topic continuity are expected to universally affect the encoding of discourse referents in the sense that the more familiar an entity is, the less marking is needed, and vice versa (see also sections 3.1.2 and 3.3.4 in the present study). Referential salience,²¹⁹ as expressed by Trenkic and Pongpairaj (2013, p. 153), thus stands in an *inverse relationship* to explicit marking and affects the choice of referential expression, that is, the choice of a full NP, a pronoun or zero-anaphor(a). In the tradition of L2 article acquisition studies, the effect of discourse universals is first and foremost studied in relation to the degree of definiteness marking.

Trenkic describes the idea of the redundancy effect as something that “resonates through a lot of the L2 article literature” (Trenkic, 2009, p. 128), and the underlying

²¹⁹ “Salient” is preferred over “redundant” in Trenkic and Pongpairaj (2013). Redundancy is considered problematic because it is difficult to isolate and constrain. “Saliency” refers to “the accessibility of referential representations in memory/discourse model” (Trenkic & Pongpairaj, 2013, p. 153). Furthermore, saliency is defined as a gradable phenomenon, and the authors refer to works by Lambrecht (1994) on activation, Chafe (1976) on givenness, Givón (1989) on accessibility, and Prince (1981) on familiarity.

rationale is thus that the language user will, consciously or unconsciously, try to avoid any excessive redundancy in language production. Moreover, pragmatic redundancy as a consequence of high levels of familiarity or saliency, as pointed out in Trenkic (2009) and Trenkic and Pongpaioj (2013), relies on the Gricean Maxim of Quantity predicting that the language user will economize and restrict the most explicit linguistic encoding to entities where the context does not allow a straightforward interpretation (see, Grice, 1975).²²⁰

On the whole, the Gricean principle of quantity and the inverse interplay between saliency and encoding are ubiquitously accepted as variables exerting influence on language use, yet this influence may be manifested in and result in different structures in an L1 and an L2.²²¹ Below, we revisit the SLA literature in order to survey in more depth the notion of pragmatic redundancy and its effect on L2 definiteness encoding.²²²

L2 definiteness acquisition and redundancy

Sharma (2005a) phrased the underlying predictions of her study in the following way: “Within the domain of universals, a particular interest of this study lies in the reliance by L2 speakers on universally available knowledge about the discourse status of entities in the absence of a clear native target model” (Sharma, 2005a, p. 536). Her study also documented a tendency for article omission to increase linearly with familiarity. That is, the participants were more likely to preserve marking when the familiarity level was low, and more likely to omit marking when the familiarity level was high. Sharma’s results also tie into the hypothesized redundancy effect of definiteness marking made explicit by Rutherford (1987) in a pedagogically oriented work on second language grammar. Rutherford predicted that whenever the

²²⁰ See footnote 87.

²²¹ It should also be noted that discourse familiarity is encoded differently in different languages. Whereas Norwegian and English are very similar in this respect, Russian does not encode explicitly the level encoded by Norwegian and English definite and indefinite NPs. Moreover, Russian also allows pronouns to be dropped more readily than do Norwegian.

²²² See also sections 3.1.2 and 3.3.4 in the present study.

identifiability status of an NP is deducible from the informational structure in the proposition, marking will be superfluous. Young (1996), introduced in section 3.1.2, based one of his hypotheses on Rutherford in his article on Czech and Slovak learners of English, and phrased this position the following way:

His [Rutherford's] reasoning is that if [+HK] is indicated by pragmatic word order, then marking with articles is redundant and will be avoided. Articles will only be used when thematic NPs are found in clause-final position or when rhematic NPs are used in clause-initial position. (Young, 1996, p. 156)

The above quote highlights the interaction between word order and the status of an NP as thematic or rhematic, and thus the hypothesis has particular relevance for learners with a first language characterized by a less fixed word order (see also section 2.4 in the present study). Omission of redundant marking is thus also seen in relation to first language influence, since pragmatic context may be seen as an important cue to givenness for native speakers of [-ART] languages (e.g., Jarvis, 2002; Nyqvist, 2013, for Finnish; Young, 1996, for Czech and Slovak).

The line of thinking outlined above indicating that definiteness encoding may be rendered redundant as a general consequence of pragmatically available information exists as a more or less explicit assumption in the works by Chaudron and Parker (1990), Huebner (1983), Jarvis (2002), Robertson (2000), Sharma (2005a), Trenkic (2002b), and Young (1996), reviewed in chapter 3, but to my knowledge, it is only directly tested in Trenkic and Pongpaioj (2013). However, studying the influence of discourse universals (and the redundancy effect) is accompanied by several methodological and theoretical problems, such as the definition of *topic*, pointed out in Jarvis's (2002) review of Young (1996) (see section 3.1.2), and the dependence or independence of clause position, and finally, the question of which theoretical constructs may account for the status of communicative redundancy in second language acquisition. Trenkic (2009, pp. 129–130) points out that an account of development is absent in relation to redundancy and article omission; that is, the general rate of inaccuracy diminishes as proficiency increases, but omission of

encoding with salient referents seems to persist. The present longitudinal data may help elucidate or even shed new light on this issue.

The backdrop of Trenkic and Pongpairroj (2013) (also presented in section 3.3.4) is the observation that few attempts seem to have been made to *explain* why such a redundancy effect influences the learner so strongly, beyond that of being a consequence of universal principles of communication. They argue that a Gricean explanation is insufficient as long as the effect is not also observed among [+ART] learners (Trenkic and Pongpairroj, 2013, p. 161). Additionally, one could add that a Gricean explanation may be criticized for largely presupposing a more conscious, rational learning mind that saves effort wherever possible, than what may indeed be the case. Following the rationale of communicative economy, the learners' behavior could readily be understood as "avoidance of redundancy."

Furthermore, Trenkic and Pongpairroj (2013, p. 163) suggest that omissions co-occur with salient referents because the processing load on the working memory inhibits repression of L1 structures; that is, the learner fails to handle a heavy processing unit, not that the learner rationally economize language efforts. Salient referents are considered to be more capacity-demanding in cognition because they are already activated in the working memory. In terms of arriving at a satisfactory explanation, I believe Trenkic and Pongpairroj (2013) may have a good case. However, for the present purposes, a first and primary step is to explore whether the same effect is observable and more conspicuous among [-ART] learners than among [+ART] learners also in L2 Norwegian. These diverging models of explanation will be revisited in chapter 8, but only as a topic of discussion inasmuch as the present data type, offline written data, does not allow any conclusions beyond surmise.

As addressed by Ringbom (2011) in a book chapter discussing "perceived redundancy and crosslinguistic influence," it is difficult to isolate a universal redundancy effect from crosslinguistic influence. Furthermore, the adjectival participle "perceived" is important in this context because learners' perception of communicative redundancy

and linguistic judgment about redundancy are not necessarily identical.²²³ Trenkic (2009) and Trenkic and Pongpairaj (2013) also hold that it can be principally problematic to assess some contexts for article use as redundant and others not, when most of the world's languages, in fact, do fine without any articles or definiteness encoding at all. This argument is based on J. Hawkins's (2004, pp. 82–93) claim that the primary function of articles is not to signal identifiability, but to signal the appearance of an NP in discourse (as opposed to, for instance, a verb).

In short, what is henceforth informally referred to as the “redundancy hypothesis” and the “redundancy effect” relates to the communicative redundancy of definiteness encoding that emerges from the concurrence of clause position, thematic status of an NP, and its salience and familiarity status in discourse, which consequently entails omission of definiteness encoding.

The present analysis is, as stated above, not developed to *test* the redundancy hypothesis; rather, the purpose of using Prince's Taxonomy as an analytic tool is first and foremost rooted in its suitability to reflect and single out more environments relevant to the use of definite and indefinite forms in addition to providing an account of the relation between different grammatical constructions where NP familiarity status is a relevant factor. Yet, since much earlier research has identified a concurrence between omission of marking and high discourse salience/familiarity, the research report will focus on and explore traits indicating co-occurrence of omission and of pragmatic redundancy. In order to do so, the succeeding analysis is based on a measure of unmarked/marked for definiteness rather than maintaining the perspective of accuracy from chapter 5. However, the analysis will be accompanied by reflections from a target language perspective.

²²³ See section 1.3 for a more thorough introduction to Ringbom's work on cross-linguistic influence.

6.1.2. The concept of *givenness* or *familiarity* in Prince's Taxonomy

Prince's Taxonomy is an attempt to clarify and break down the notions of *given* and *new* into a more nuanced system that also establishes links between these notions and linguistic structures. Several researchers at the time were working on approaches to discourse in order to uncover universally valid discourse principles, which in turn could be connected to language structure. Prince (1981) surveys ideas put forth in Chafe (1976), Halliday and Hasan (1976), Kuno (1972, 1978, 1979), Haviland and Clark (1977), and Clark and Haviland (1974).²²⁴ In particular, their diverging views on what constitutes givenness are subject to discussion. In short, Prince holds Clark and Haviland (1974) and Haviland and Clark's (1977) understanding of *givenness* as *shared knowledge* to be the best-suited theoretical underpinning for her model. However, Clark and Haviland (1974) and Haviland and Clark's (1977) approach to givenness differs from Chafe's (1976) approach. Chafe (1976) treats *given* as confined to what the speaker assumes to be present in the *consciousness* of the listener at the time of an utterance. This measure implies a discreteness of *givenness* and *newness*, which does not incorporate a perspective of gradability as adopted by Prince.

Considering the general impact of Chafe's much-cited work on givenness (1976), particularly on Lambrecht (1994), referred to in section 2.4 in the present study, I will describe in more detail the rationale behind Prince's motivation for not finding Chafe's givenness concept the most informative for her model. As mentioned above, Chafe (1976) treats givenness as a measure connected to consciousness, not to knowledge in general. The following example illustrates Chafe's position:

(1) I saw **your father** yesterday (Chafe, 1976, mentioned in Prince, 1981, p. 229)

According to Chafe, as a first-mention NP in discourse (1) would contain new information even though the referent of *your father* is an entity known to both speaker

²²⁴For the present purposes, I focus only on the approaches taken by Clark and Haviland (1974), Haviland and Clark (1977) and Chafe (1976). Consult Prince (1981) for literature references for Kuno and Halliday and Hasan.

and hearer and thereby contains *shared knowledge*. However, in the sense of Haviland and Clark, whose perspective will be discussed below, the NP classifies as given information. Prince does not seem ready to accept the strict divide between given and new preferred by Chafe: “He takes it to be a binary distinction; thus known items that are introduced into the discourse for the first time are as new as unknown ones ...” (Prince, 1981, p. 229). Prince maintains that there is something in-between totally given and totally new, which may be captured by a concept of givenness as shared knowledge.²²⁵

The difference between a concept of givenness as relating to presence in consciousness (or “saliency,” in Prince’s terms) and givenness as shared knowledge may also be detected in the following examples adapted from Haviland and Clark (1974, pp. 514–515)²²⁶ and mentioned by Prince (1981, p. 229):

(2) We got some beer out of the trunk. **The beer** was warm.

(3) We got some picnic supplies out of the trunk. **The beer** was warm.

The beer in sentence (2) would be given in the sense of both Haviland and Clark (1974) and Chafe (1976), while *the beer* in (3) would be classified as given only if we apply the shared knowledge notion.²²⁷ In Haviland and Clark’s terms *the beer* in (3) is given by the process of constructing an *inferential bridge* (Haviland and Clark, 1974, p. 514), a phenomenon referred to as *inferrable* in Prince (1981). In Prince’s taxonomy, givenness thus includes contextual/general knowledge that, for instance, can stem from inferential relationships between discourse referents. By drawing on

²²⁵ In later works, however, Chafe (1987, 1994) advocated a three-way distinction of givenness that also include an item’s cognitive status, consisting of active – semi-active – inactive, and given – accessible – new. The first axis refers to the cognitive status of a given piece of information, and the second to its givenness status. Finally, the two dimensions relate to each other and describe the information status of an expression from two perspectives: an active information entity is identified as given, while an inactive entity consists of new information. By this extension, the model increased its flexibility (even though it was still restricted to presence in consciousness), independent of access to consciousness, or the working memory.

²²⁶ In fact, the example is phrased slightly differently in Haviland and Clark (1974, p. 515): “We checked the picnic supplies. The beer was warm.”

²²⁷ I believe that according to Chafe (1994), (3) would be categorized as *accessible*, though not directly given.

shared knowledge, Prince's taxonomy encompasses a broader range of expressions than do other notions of "given," such as Chafe's.

6.1.3. The concept of discourse referent

While the Semantic Wheel relates to NPs in general, the scope is slightly narrower in the present approach. The Taxonomy must be understood largely to presuppose referentiality, since the model is directed at discourse referents. Prince links the model to Karttunen's notion of discourse referent: "A discourse-model object, akin to Karttunen's (1971) DISCOURSE REFERENT; it may represent an individual (existent in the real world or not), a class of individuals, an exemplar, a substance, a concept, etc." (Prince, 1981, p. 235, [emphasis original]).²²⁸ Further, Prince draws on Webber (1978): "...entities may be thought of as hooks on which to hang attributes. All discourse entities in a discourse-model are represented by NPs in a text, though not all NPs in a text represent discourse entities" (Prince, 1981, p. 235). The citations indicate that both generic and individually-referring NPs in general may function as discourse referents.

Karttunen also included a structural criterion for discourse referents: "Let us say that the appearance of an indefinite noun phrase establishes a 'discourse referent' just in case it justifies the occurrence of a coreferential pronoun or a definite noun phrase later in the text" (Karttunen, 1976, p. 366). This definition provides the basic guideline for coding NPs as discourse referents in the present analysis. However, coreferentiality is not an entirely unproblematic concept. Karttunen (1976) discusses the problematic position of nonspecific NPs as antecedents, yet he also points out how nonspecific singular indefinites in certain contexts may be rendered available as direct antecedents, and therefore indeed qualify as discourse referents. Only nonspecific singular NPs

²²⁸ Presumably Prince mixed up the publishing year of Karttunen's article on Discourse Referents. The quotation stems from the 1976-anthology *Syntax and Semantics: Notes from the Linguistic Underground*. However, Karttunen's paper has been published several times. I refer to the 1976 print in the present study.

were mentioned by Karttunen. This is unfortunate because the problem of coreference also extends to plural indefinites in Norwegian. With reference to Norwegian, Borthen (2003, p. 55, ch. 2, see section 5.1.4 in the present study) noted that bare NPs generally exhibit a weaker position as antecedents compared to referential NPs. Furthermore, bare nongeneric plurals are nonspecific, and may also be regarded as nonreferential (in the framework of Fodor and Sag (1982) (see section 5.1.4 in the present study)). Thus, the question remains as to what extent one can actually claim a subsequent mention such as *pær-ene* [pear-DEF.PL] to be *coreferential* with a non-specific initial mention of *pær-er* [pear-PL], when the reference is clearly not specified through the first mention.

The example below from the present Pear Story material illustrates this challenge:

- (4) Han satt et kurv med **pærer**_i på sykkel-en
 he sat a.N. basket with **pears**_i on bike-DEF.SG.M
 Så han stjal et **pærer**_{ii}
 so he stolen **pears**_{ii} (Ru-3-1)

[He put a basket with **pears** on his bike. So he had stolen **(the) pears**.]

TARGET: *Han satte en kurv med pærer på sykkelen. Så hadde han stjålet pærer/pærene.*

- (5) Mann-en som plukket **pærer**_i tilsatt **pærer**_{ii} i en boks
 man.DEF.SG.M who picked **pears**_i put **pears**_{ii} in a.M box
 og gikk opp igjen å plukke mer. (Eng-5-1)
 and went up **again** to pick more.

[The man who was picking **pears** put **the pears** in a box and went back up to pick more.]

TARGET: *Mannen som plukket pærer, la pærene i en boks og gikk opp igjen for å plukke mer.*

A strict criterion of coreferentiality could hardly allow a first-mention *pær-er* [pear-PL] to qualify as discourse referent. Nonetheless, the bare plural indefinite NP *pær-er* [pear-PL] is the normal first mention of a later important entity in the Pear Story, and in most texts *pær-er* [pear-PL] is later referred to as *pær-ene* [pear-DEF.PL],

presupposing the bare plural indefinite NP as antecedent. In fact, the second use of the indefinite plural may under no circumstances be assessed to be grammatical as illustrated in the above examples from Eng-5-1 (5). For Ru-3-1 (example (4)), it is possible to give the second *pears* a nonreferential interpretation, but it seems rather unlikely.

In the present analysis discourse referents thus include NPs that are *treated* as discourse referents by the speaker, which means that a first mention such as *pær-er* is encoded as a discourse referent as long as it is the only means by which a subsequent *pær-ene* [pear-DEF.PL] has been introduced into the text. Nonreferential NPs that do not function as first mentions of a later retrievable discourse entity are excluded from the analysis.

The above discussion and adjustment can be justified and must be understood in the context of the particularity of learner language with respect to referential adequacy. First of all, in both examples the subsequent mention of *pær-er* [pear-PL.] has the indefinite plural form, which does not correspond to the target language norm requiring the definite form in anaphoric contexts. Second, the inadequate use of the indefinite plural in these examples invokes another challenge, namely that of interpreting the learner's intention. Both examples allow for substitution between a full NP and a pro-form, but only if a referential reading is intended. A referential reading seems to be the only relevant option in the case of Eng-5-1, while the example from Rus-3-1 is more ambiguous in this matter. That is, in the case of Rus-3-1, it is possible that a nonreferential reading of the second *pær-er* [pear-PL] was intended, if the sentence *Så han stjålet pær-er* [so he stole pear-PL] has an intended meaning of giving a general description of the situation from the writer's perspective. This challenge of interpretation underscores an important point when working with learner language; interpretation of referential meaning cannot be based on form alone. Example (6) below highlights a similar problem:

(6)	Det	går	mann-en	med	esel _i	forbi,				
	it	goes	man.DEF.SG.M	with	donkey _i	by,				
	han _{ii}	skjuler	på	pærene,	men	ikke	ta	dem.		(Ru-1-1)
	he _{ii}	looks	at	pear.DEF.PL	but	not	take	them.		

[A man with **a donkey** passes by, **he** looks at the pears, but does not take them.]

TARGET: *Det går en mann med (et) esel forbi, han skuler på pærene, men tar dem ikke.*

In the example written by Ru-1, *esel* [donkey] is introduced in the bare singular form, and is referred back to in the following proposition with a pronoun. Generally, bare NPs are weak antecedents. In this case, a referential reading of *esel* is, in fact, highly inadequate, since the bare singular *esel* is part of a prepositional phrase conventionally interpreted as describing *mann-en* [mann-DEF], and is thereby unavailable to act as an independent discourse referent.²²⁹ Nonetheless, the subsequent pronominal mention indicates that *esel* is indeed a discourse referent according to the learner language, even though its introduction is not supported by the target language norm. The researcher is thus dependent on the textual context and the possibility of controlling the elicitation stimuli in order to interpret the learner's intention as adequately as possible. In this latter context, the elicitation material confirms that a referential first mention of *esel* is intended, since the Goat actually glances at the baskets of pears in the film. Moreover, the bare singular form of *esel* necessarily represents article omission. However, this example ties into a discussion in the literature addressing the interpretation of the zero article as omission or as overgeneralization of the bare form (see section 5.2.10 in the present study).

6.2. The Taxonomy

In the following section, the discourse components represented in Prince's Taxonomy of Assumed Familiarity will be reviewed in more detail.

²²⁹ My interpretation is here based on the Pear Film prompt. However, I cannot be completely sure that the participant did not intend to refer back to "the man."

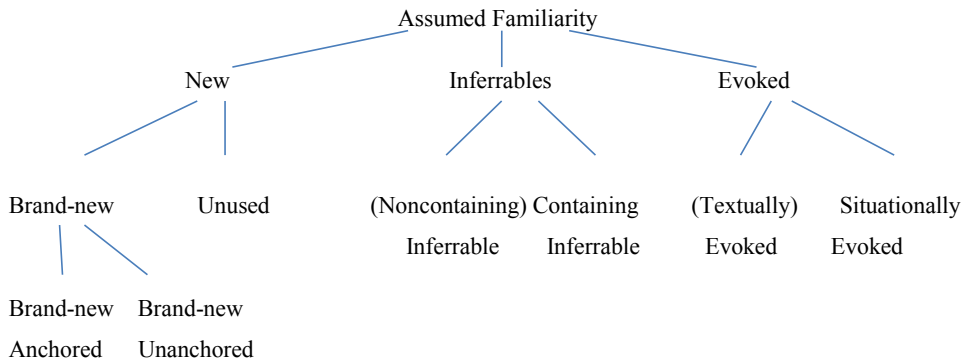


Figure 6.1. Prince's Taxonomy of Assumed Familiarity.

Prince (1981, pp. 236–237) explains the Taxonomy by the following examples:

1. New:

A. Brand-new (BN): I bought **a beautiful dress**.

B. Brand-new anchored (BN_A): **A rich guy I know** bought a Cadillac.

C. Unused (U): **Rotten Rizzo** can't have a third term.²³⁰

2. Inferrable:

A. Inferrable (I): I went to the post office and **the stupid clerk** couldn't find a stamp.

B. Containing inferrable (I_C): Have you heard **the incredible claim that the devil speaks English backwards?**

3. Evoked:

A. Evoked (E): Susie went to visit her grandmother and **the sweet lady** was making Peking Duck.

B. Situationally evoked (E_S): **Lucky me** just stepped in something.

From the above examples, we find that the degrees of familiarity have clear linguistic counterparts, reflected in, for instance, the linguistically expressed difference between brand-new and brand-new anchored. In 1B the core referent is new, but anchored in familiar information by a descriptive postmodifying clause. Likewise, “the incredible claim” in 2B is treated as inferrable from the point of view of the hearer, but the condition for inference arises from the postmodifying clause. Within the category of unused, we find proper names, but also referents commonly treated as definite by their position as familiar or unique within the cultural situation. Unused entities are new in discourse, but still identifiable from shared knowledge.

Inferrables are evoked by context to a greater or lesser degree. What all inferrable entities have in common is that they are not directly coreferential with an antecedent, but they are still treated as given information, since the speaker assesses the information as accessible either through the frames evoked by other discourse referents, or by descriptive modifiers (containing inferrables). Evoked phrases are anaphoric or deictic; they are either explicitly given in discourse (textually evoked), or they are evoked by the deictic/situational context (situationally evoked). All but brand-new discourse referents require the use of the definite form and presuppose definite reference, and the model illustrates quite well that even though the definite form indicates hearer identifiability, given entities can hardly be considered one unified concept.

Prince's Familiarity Scale

The same line of thinking as identified in Grice's Conversational Maxims (1975) seems to prevail as a fundamental premise in Prince's Taxonomy, although it is not explicitly referred to this work. Based on an analysis of an oral personal-narrative,

Prince (1981, p. 245) suggested that the uses of the outlined discourse functions were related to each other in a hierarchical, scalar way:²³¹

$E > U > I > I_C > BN_A > BN$

This hierarchy indicates that a speaker will choose an expression belonging to a category as low on the scale as the context allows:

The Familiarity Scale may fall under a more general Conservation Principle that says that hearers do not like to make new entities when old will do and that speakers, if they are cooperative, form their utterances so as to enable the hearer to make maximal use of old entities. (Prince, 1981, pp. 245–246)

In the oral narrative analyzed in Prince (1981), the scale largely reflected the frequency of the categories (with the exception of unused), but this pattern was not confirmed in a written academic text, where the number of inferrable and unused entities increased dramatically at the cost of evoked NPs. (Pronouns, in addition to definite nouns, also fill the discourse function of evoked.) The analyses in the present study are based on fictional retellings, and we may thus expect the scale to have some relevance in terms of frequency. However, the present analysis does not tie directly into the Familiarity Scale; rather, I have chosen to build my analysis on the divide between the broad categories of new, inferrable, and evoked rather than on the scale. These categories relate to different degrees of familiarity, and form three different categories in the Taxonomy, but they do not directly depict principles for information conveyance.

6.2.1. Encoding and outlining of the categories in the Taxonomy

In the Pear Story sample analyzed in the present study, all of Prince's types occur. Brand-new, inferrable, containing inferrable, and evoked are the most frequent types. In comparison to the former analysis building on Bickerton (1981) and Huebner

²³¹ The category E includes both textually evoked and situationally evoked.

(1983), the Taxonomy of Assumed Familiarity represents a breakdown of particularly [+SR, +HK], that is [+ specific reference] and [+ hearer knowledge], into subcategories. [+SR, -HK] corresponds to two (brand-new and brand-new anchored) out of three categories containing new information (brand-new, brand-new anchored, and unused).

Identifiability, which was pointed out as the core of definiteness in section 2.4, is not an explicit variable in Prince's model, but its relevance is implicitly expressed through the compiling of categories. Identifiability is what distinguishes brand-new from unused. In the following section, I will point out correspondences to Bickerton (1981) and Huebner's (1983) model as they occur in order to clarify the link between the two approaches. Yet, the theoretical frameworks associated with the two approaches diverge: Bickerton (1981) and Huebner's (1983) Semantic Wheel draws on a semantic/pragmatic model of definiteness, whereas Prince's (1981) model is more dynamic and relates to pragmatic features at the discourse level, including identifiability.

Brand-new

The category of brand-new (BN) contains all new introductions with the properties of [+SR, -HK] which are not anchored in already introduced or familiar information.

- (7) **En** **gutt** sykler til pere.
 a.M **boy** rides to pear (Eng-1-1)
 [A **boy** rides to the pears.]

Brand-new anchored

Brand-new anchored (BNA) consists of new introductions that are [+SR, -HK] and anchored in given information or in a descriptive relative clause, such as in the example below.

- (8) Han ble dystyrret og så ikke
 he became disturbed and saw not
en stor-e stein som la på **vei-en.**
 a.M **big-PL stone** which lay on **road-DEF.SG.M** (Eng-5-1)

[He was disturbed and did not see **a big stone lying on the road.**]

TARGET: *Han ble forstyrret og så ikke en stor stein som lå på veien.*

Unused

Unused (UN) NPs represent a rather minor category in the present Pear Story data. Sharma's (2005a, p. 549) operationalization of the category of unused included definite NPs uniquely identifiable in the sense that there is only one plausible referent within the cultural or natural frames relevant for the communication. There are not many examples in the present material, but when they occur, they are categorized as unused. Proper names would also fall within this category, as well as *absolutely unique referents*, like *the sun* below. All unused entities presuppose the semantic properties of [+SR, +HK].

- (9) **Sol-en** skinne og det var bare tre eller
sun-DEF.SG.M shine and it was only three or
 fire skyer i **himmel.**
 four clouds in **sky** (Eng-4-1)

[**The sun** was shining, and there were only three or four clouds in **the sky.**]

TARGET: *Solen skinte, og det var bare tre eller fire skyer på himmelen.*

- (10) Jeg har sett en interessant film på **nett-et.** (Ru-7-1)
 I have seen an.M interesting film on **web-DEF.SG.N**

[I have seen an interesting film on **the web/internet.**]

TARGET: *Jeg har sett en interessant film på nettet.*

Inferrables

Many first-mention definite NPs fall within the category of inferrables (IN).

Inferrables are new to discourse, that is, first mentions, but are definite because of their association with other elements in discourse. In fact, several scholars have pointed out that inferrables are quite frequent in discourse (e.g., Fraurud, 1992; Hawkins, 1978).

Inferrables are thus not directly evoked; rather, they are deducible through association with another introduced referent. Prince (1981, p. 236) says the following:

The third and most complex type of discourse entity are the INFERRABLES. A discourse entity is Inferrable if the speaker assumes the hearer can infer it, via logical – or, more commonly, plausible – reasoning, from discourse entities already Evoked or from other Inferrables.

Inferrables display the semantic properties of [+SR, +HK].

- (11) I fjor var det en mann som jobbet på
 in last year was it a.M man who worked on
en **gård.** på sommer plukket han **pærer** fra
 a.M **farm.** in summer picked he **pears** from
de **pæretre-rne.**
those **pear tree.DEF.PL** (Eng-6-1)

[Last year, there was a man who worked at **a farm**. In the summer he **picked pears** from **the pear trees** (IN).]

TARGET: *I fjor var det en mann som jobbet på **en gård**. På sommeren **plukket han pærer** fra **pæretreerne*** (IN).

- (12) **Film-en** handler om en gutt
film-DEF.SG.M is about a.M boy
 som stjalte pærer fra bond-en.
 who stole pears from farmer-DEF.SG.M
Handling-en foregår om sommer-en på land-et.
event-DEF.SG.M happens in **summer-DEF.SG.M** in country-DEF.SG.N (Ru-1-1)

[**The film** is about a boy who stole pears from a/the farmer. **The events** (IN) take place in the summer in the country.]

TARGET: ***Filmen** handler om en gutt som stjal pærer fra (en) bonde(n). **Handlingen** (IN) foregår på landet om sommeren.*

The status of “associative anaphora” (Hawkins, 1978) (inferrables) in contrast to anaphoric NPs in a general theory of definiteness has been the object of some debate

in the literature, both in terms of frequency of use and processing load with comparison to anaphoric uses in general.²³²

Inferrables fall between given and new. See section 6.5.2.

Containing inferrables

Containing inferrables (INC) occur in the Pear Story sample. Prince (1981, p. 236) explains that containing inferrables are inferrable due to a “set-member inference” based on already familiar information, such as in (13) below.

- (13) **En** **av** **gutt-ene** ga hat-en til ham. (Ru-6-1)
 one.M **of** **boy-DEF.PL** gave hat-DEF.SG.M to him.

[**One of the boys** gave the hat to him.]

TARGET: *En av guttene ga hatten til ham.*

Another structure subsumed under containing inferrables by Prince resembles Hawkins’s (1978) “*Unfamiliar*” uses with explanatory modifiers.²³³

- (14) Bill is amazed by **the fact that there is so much life on earth** (Hawkins, 1978, p. 140).

- (15) Have you heard **the incredible claim that the devil speaks English backwards?**

(Prince, 1981, p. 237)

²³² The high frequency of first-mention definites that are identifiable through their association with other referents in English is also stated by Hawkins (1978, p. 123). In a dissertation on NP processing in Swedish, Fraurud (1992) questioned the motivation for the *a priori* prototypicality assigned to anaphoric definite NPs in descriptions of definiteness, and she insisted on the inclusion and centrality of inferrables (associative uses) in an adequate theory of definiteness. Psycholinguistic evidence pertaining to the processing load imposed on the interlocutors by associative anaphora/inferrables is also central to this debate. An experimental study conducted by Haviland and Clark (1974) included an examination of the processing load placed upon native speakers of English by first-mention NPs that were definite by “bridging inference” compared to anaphoric NPs. The study also introduced the concept of “the given-new contract.” The experiment reported a slightly delayed response time when ‘bridging inference’ was necessary to establish identifiability. However, later experiments referred to in Fraurud (1992), found no such delay in processing time connected to “bridging inference.” Despite the equivocal results from these studies, the debate is worthy of attention from a second language acquisition perspective since the degrees of familiarity and the nature of inferences that need to be drawn to establish a referent as identifiable may be reflected in the learner’s language performance. For instance, García Mayo (2008) suggested that the mix of associative anaphoric NPs and textual anaphoric NPs in Liu and Gleason’s test items, may have skewed the results (see section 3.3.1).

²³³ In Chesterman (1991) a discussion of Hawkins’s concept of familiarity and shared set, C. Lyons (1980) is mentioned, as he pointed out that set membership that entails familiarity may also be established by that very mention of the referent. That is, the referent in question may achieve membership in a set in the hearer’s mind by hearing it in the definite form. See Chesterman (1991) for the complete reference to C. Lyons (1980).

The reason Hawkins refers to sentence types like the type above as “unfamiliar” is that they are only familiarized or locatable by the descriptive complements. The reference is thus cataphoric. Prince does not directly list construction types apart from the partitive construction and the type above. However, I believe that such constructions that Hawkins calls *associative clauses* (they are, in fact, phrases) should also be analyzed as containing inferrables:

(16) I remember **the beginning of the war** very well, ... (Hawkins, 1978, p. 139)

Post-modification has also been shown to affect learners’ accuracy. Liu and Gleason (2002), presented in 3.3.1, found that learners were second-most accurate in supplying the definite article with “structural uses,” which equals Hawkins’s two categories of unfamiliar uses. Robertson (2000), on the other hand, identified associative clauses as a context for article omission (see section 3.1.2). However, Hawkins’s unfamiliar uses and Prince’s containing inferrables may easily be confused with evoked NPs that are postmodified with the purpose of erasing ambiguity. Postmodification in itself is hence not a category identifier.

First-mention heads of possessive NPs and genitive constructions are also coded as containing inferrables because they are identifiable and definite due to the anchoring or set-membership provided by their owner’s presence in discourse:

(17) Hun flirter med gutt-en og tar **lu-en** **hans**. (Ru-1-1)
 she flirts with **boy-DEF.SG.M** and takes **hat-DEF.SG.M** **his.POSS**

[She flirts with the boy and takes **his hat**.]

TARGET: *Hun flørter med gutten og tar hatten hans*.

Here, however, I break with Prince, where first-mention possessive constructions are tagged as “regular” inferrables (Prince, 1981, pp. 240–241). This classification procedure emerges from the example text, but an argumentation is not provided in the main text. In general, Prince describes the properties of containing inferrables as follows: “A special subclass of Inferrables are the CONTAINING INFERRABLES, where what is inferred off is properly contained within the NP itself....” (Prince, 1981, p.

236 [emphasis original]). The rationale behind my classification of first-mentioned possessives as containing inferrables is that the link to the previous discourse is overtly given by being part of the NP, and this distinguishes possessives from other inferrables. This step is also supported in Sharma's (2005a, p. 556) classification of possessives as containing inferrables emerging from her examples (even though possessive NPs are not included in her main analysis).

Finally, I consider containing inferrables as discourse entities with the properties of [+SR, +HK], even though they represent the introduction of new discourse referents in discourse. In fact, Prince (1981) argues that inferrables can be considered as either new or given information in a bipartite system, since they represent new entities in discourse, but are still clearly grounded in given information or shared knowledge (see section 6.5 for a discussion).

Evoked

Textually evoked (EV) NPs are frequent in the present material, and the type involves discourse entities (in this case NPs) that refer to the same referent as another discourse entity already present. They are anaphoric, and may unambiguously be characterized as [+SR, +HK].

(18)	Han	klattet	opp	på	stig-et	og	plukket	
	he	climbed	up	on	ladder-DEF.SG.N	and	picked	
	hver	pære	i	forkle	med	stor-e	lomm-ene.	
	each	pear	in	apron	with	big-PL	pocket-DEF.PL	
	Når	lomm-ene	var	fulle	med	pær-ene	...	
	when	pocket-DEF.PL	were	full	with	pear-DEF.PL		(Ru-3-1)

[He climbed up on a ladder and picked each pear in an apron with **big pockets**. When **the pockets** were filled with pears...]

TARGET: *Han klatret opp på en stige og plukket hver pære i et forkle med **store lommer**. Når **lommene** var fulle av pærer...*

- (19) Han begynte syklet videre, men han glemte **sin hat**.
 he started biked on, but he forgot **his hat**
 En av gutt-ene ga **hat-en** til ham. (Ru-6-1)
 one of boy-DEF.PL gave **hat-DEF.SG.M** to him

[He started to bike on, but he forgot **his hat**. One of the boys gave **the hat** to him.]

TARGET: *Han begynte å sykle videre, men han glemte **sin hatt**. En av guttene ga **hatten** til ham.*

I find it reasonable to single out a subcategory of textually evoked NPs containing evoked referents with descriptive relative clauses and postmodifying prepositional phrases. This construction would relate to their supertype, evoked, much in the same way as brand new anchored and containing inferrables. Furthermore, postmodification in this context has the important function of neutralizing ambiguity.²³⁴

In the present Pear Story data we find examples like:

- (20) Etterpå vi sett en liten gutt på sykkelen sin naerheten av til **mannen i traet** (EVD).

(Eng-3-1)

[Afterwards we saw a little boy on bike his near to **the man in the tree** (EVD).]

In the analysis these NPs are coded as descriptive evoked (EVD), and they represent a subcategory of textually evoked.

Situationally evoked

In the fictional retellings used in the present study, situationally evoked NPs occur only rarely. One of the few contexts allowing for situationally evoked NPs emerges when the writer chooses to give a personal comment or assessment, or when he/she refers to the contextual situation of the data collection session.

²³⁴ It is, however, somewhat problematic to relate this NP type to the others on the scale. From a phrase structure perspective this kind of NP might seem to hold an even higher level of familiarity than evoked entities. From a textual discourse level perspective, on the other hand, the mechanism triggering these clause modifiers is often, in fact, ambiguity and reintroduction of familiar discourse referents, which reinforces the listener's need for information.

I have also decided to encode first mention definites that may only be allowed through a very tight connection to the immediate situation, namely the watching of the film, as situationally evoked. These uses are deictic. Interestingly, this use of the definite article/demonstrative that is not licensed by the discourse comes across as literary language: The writer establishes a new universe of discourse, which can only stepwise be uncovered and accessed by the recipient. In the following example, a demonstrative is also applied:

- (21) **Denne** **historie-n** skjedde med en mann. (Ru-5-2)
This.M. **story-DEF.SG.M** happened to a.M man

[**This story** happened to a man.]

TARGET: *Denne historien skjedde med en mann.*

6.2.2. Section summary

To sum up, the Taxonomy is based on a system of three main categories: new, inferrables and evoked (given). Identifiability cross-cuts the categories in the following way: inferrables and evoked are always identifiable, brand-new entities are nonidentifiable, and unused entities are identifiable. The definite and the indefinite encoding in both Norwegian and English map onto identifiable/nonidentifiable, with the exception of preposed possessives and genitives, which do not require the definite form in Norwegian (see chapter 7). Prince outlined two subcategories for each of the main categories, and for brand-new entities two additional subcategories are established, that is, brand-new and brand-new anchored. In the present study, the original categories of Prince's Taxonomy are applied, but one subcategory of (textually) evoked NPs is added, namely, descriptive evoked. This subcategory comprises evoked NPs with a descriptive complementing phrase or clause, which has as its main function to guide the hearer in picking out the right referent without ambiguity. The descriptive evoked NPs may also reactivate a referent in discourse (as will be addressed in section 7.1).

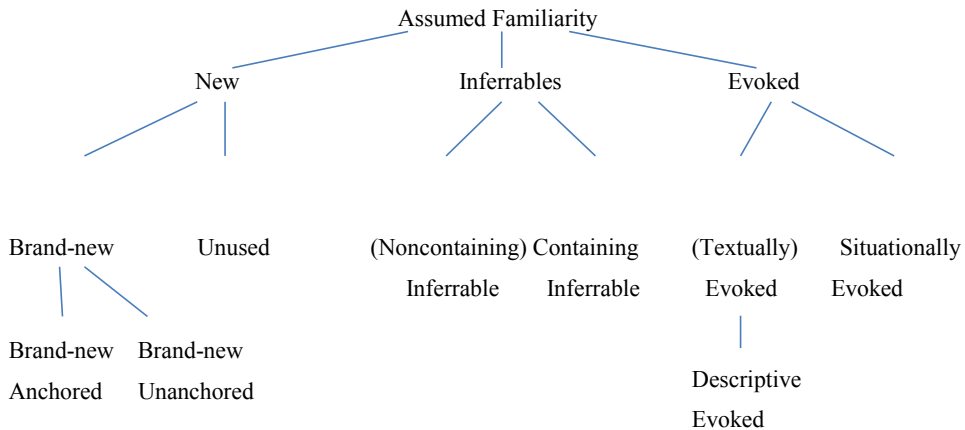


Figure 6.2 The Taxonomy. Modified version.

Comment on the category of Brand-new Anchored

The category of brand new-anchored turned out to be marginal in the data in the present analysis (perhaps also in the Pear Story). Because very few occurrences clearly belonged to the group of brand-new anchored, I chose not to keep the category separate from brand-new unanchored entities.

Moreover, prepositional phrases or relative clauses modifying new entities tend to contain new discourse referents themselves (that is, NPs encoded as indefinite, but not bare NPs); anchoring in familiar information seems to be more frequent in cases where the referent of the head noun is also familiar.

6.2.3. Preliminaries: Investigating Prediction 3

The remaining parts of the chapter are organized sequentially by the following principles: The most detailed presentation of the results from both L1 learner groups and individuals will be provided for DP I. This presentation will be followed by a brief discussion before the major tendencies identified at DP I will be pursued in the material collected at DP II and DP III. First, however, we revisit prediction 3 (P3) from section 3.6 before some L2 language data are displayed from other studies that have been assumed to demonstrate a redundancy effect (see section 6.1.1).

On the basis of the literature review, the following prediction was formulated in section 3.6.

P 3: *Discourse universals*

Different environments for the use of grammatical definiteness and the gradability of givenness will affect L1 Russian and L1 English learners differently.

- i. In line with previous research, because Russian does not encode definiteness grammatically, the L1 Russian learners will resort to universals of discourse and information structuring, and their L2 Norwegian definiteness encoding will more strongly be guided by discourse universals than will the L2 of the L1 English learners.
- ii. L1 transfer based on the similarity relation between grammatical definiteness in Norwegian and English will override a dependence on discourse universals alone in the L2 Norwegian definiteness encoding of the L1 English learners.

Coding principles

The following analysis will explore how the two learner groups, compiled on the basis of L1, generally encode the different degrees of givenness/familiarity as presented by Prince (1981). It will pay particular attention to structures that are expected to be influenced by the redundancy effect. It is important that this analysis does not measure accuracy; rather, it uses a measure of *marked for definiteness* vs. *unmarked for definiteness* (bare nouns).²³⁵ This has three major implications in which the present analysis differs from the analysis in chapter 5: *Simple definiteness* either by article or inflection is coded as “marked,” as in *den snille mann-Ø* [the/that nice man-Ø]. *Contradictory encoding* is coded as “marked,” such as in the frequently occurring *ei jent-a* [a girl-DEF], and so are nouns encoded as definite in new contexts (that is substituted definite nouns). The rationale behind these coding principles is that the

²³⁵ An exception is NPs with preposed possessives and genitives, since the target norm requires the noun to be bare in these constructions regardless of its status as definite. It would thus be misguided to count these as bare in the sense of being “unmarked.” Indefinite plurals are not either regarded as bare (unmarked) nouns.

learners' use of bare nouns (unmarked) will provide insight into their underlying discourse models.²³⁶ ²³⁷

Anticipated encoding patterns

The findings reported in Sharma (2005a) pertaining to an interaction between discourse familiarity and article use may thus be summarized as follows: The participants in her study seemed to model their system of articles based on the principle of “the more familiar information, the less marking material” (see the introduction to the current chapter and chapter 1 in the present study). The most explicit and linguistically salient forms²³⁸ were thus preserved by the speakers to encode the least familiar contexts.

It is necessary to clarify the nature of the L2 structures expected if the learners indeed do model their system for definiteness encoding on discourse universals of familiarity. In (22) below, I provide a selection of examples from Sharma's (2005a, p. 557) oral interview data.²³⁹

- (22) I don't like *the climate*. \emptyset *climate* too much cold. [KD]
 So in tenth, *the medium* was English. After that I took science. \emptyset *medium* was English.
 [RT]
 They refer for *the credit history*. Where they don't have \emptyset *credit history*, there I'm not getting *the credit card*. So now I have to go for \emptyset *secured credit card*. [GV]

As is predictable from the redundancy hypothesis, the sentences in (22) reflect a tendency for linguistic encoding to be avoided or omitted with second-mention NPs. A

²³⁶ “Unmarked” and “bare” are used interchangeably. I also sometimes use “omitted.” However, I am aware that the meaning content of “omission” implies that something has been taken away, which in turn indicates that there is an element of interpretation to this notion.

²³⁷ There are certain differences between the present coding principles and those outlined by Sharma. First, Sharma excluded NPs with a substituted definite article; second, she did not analyze bare plurals, possessive, genitive and partitive NPs (Sharma, 2005a, p. 545).

²³⁸ See Trenkic and Pongpairoj (2013) for an account of perceptual and linguistic saliency (see also section 3.3.4).

²³⁹ I am aware that oral and written data are in many ways principally different. For example, spoken language production is normally more spontaneous and less planned than is written, and the interlocutors have a larger context to rely on. Written production, on the other hand, allows more careful monitoring, but does also require higher levels of sensitivity to the receiver's contextual knowledge and discourse model. Even though one could argue that the redundancy effect is more readily predictable in oral communication, the effect is nonetheless observed in both spoken and written data (Jarvis, 2002; Trenkic, 2002).

similar, but even more pervasive pattern is displayed in the example below taken from Avery and Radišić (2007, p. 7, also mentioned in Trenkic, 2009, p. 127):

- (23) ...but in the middle of the wallet there is *a lottery ticket*...
 ...he took *the lottery ticket*...
 ...He took the money and *the lottery ticket*...
 ...He checked *the lottery ticket*...
 ...to give back *lottery ticket*
 ...the original owner of *lottery ticket*
 ...he took money and *lottery ticket*...

The example stems from a picture description task performed by an L1 Serbian learner of English. Regarding the pattern in (23), Avery and Radišić explain that “Participant 2 generally follows the NS [native speaker] pattern, but drops articles in predictable environments” (Avery & Radišić, 2007, p. 6). However, in contrast to the L2 speakers interviewed in Sharma (2005a), “Participant 2” does not omit the definite article immediately by second mention; rather, the article omission accelerates as the referent is traced through discourse. Trenkic emphasizes this feature in her comment on Avery and Radišić’s (2007) observation:

It is not only that L2 article production differs between first and subsequent mentions....rather a referent becomes more established with every mention, and the more established a referent is in a discourse model, the more likely the article is to be omitted. (Trenkic, 2009, p. 127)

Finally, Jarvis (2002) also detected a pattern in his sample of written narratives where explicit marking was reserved for new and known topics, but where all current topics were left unmarked (not all new and known topics are marked though).²⁴⁰

- (24) There was *the* girl whose stole a bread.
 She run, and hit to \emptyset Chaplin.
 Then \emptyset policeman chatch her.
 But \emptyset Chaplin was realy \emptyset gentleman, and he told, that he was stole *the* bread.
 \emptyset Policeman belive him, and take \emptyset Chaplin.
 But one people sed to \emptyset policeman: It wasent’ \emptyset man, it was *the* girl!

²⁴⁰ This example illustrates one of several distinct patterns documented in the qualitative part of Jarvis’s study (2002). See section 3.1.2 and 3.5 for more details. The categories new, current, and known stems from Chaudron and Parker (1990) presented in section 3.1.2.

Then \emptyset policeman go cool to \emptyset police station whit \emptyset Chaplin.
 \emptyset Chaplin tryed smoking.
 Then \emptyset policeman take \emptyset Chaplin in *the* police car.
 Then \emptyset girl come in.
 \emptyset Gentleman Chaplin give his place to \emptyset girl.
 Then \emptyset police car hit to another car.
 \emptyset Girl and Chaplin run a way together, and they was wery happy.
 Then they sat under *the* big tree.
 Near *the* little house.
 Then \emptyset Chaplin asked to \emptyset girl: "Where do you live?"
 \emptyset Girl answer: "No place, anywhere."
 \emptyset Chaplin sed: "Do you want to live \emptyset little house?"
 Then they dreaming something like this:
 They are living in \emptyset little house...
 But then \emptyset policeman sed them under \emptyset little tree.
 Then they walkin away gen.
 Finish.

In short, if the learners of Norwegian in the present study model their definiteness encoding on principles licensed by universals of discourse, patterns comparable to the ones above will be detectable in their L2 Norwegian. Furthermore, on the basis of the literature, the pattern of article use displayed above is expected to be a more salient characteristic in the L2 of [-ART] learners.

6.3. Data point I: Baseline results

In the subsequent section, I will present the overall results from DP I for both the L1 Russian and the L1 English learners. Figure 6.3 below builds on the data from Table 6.1.

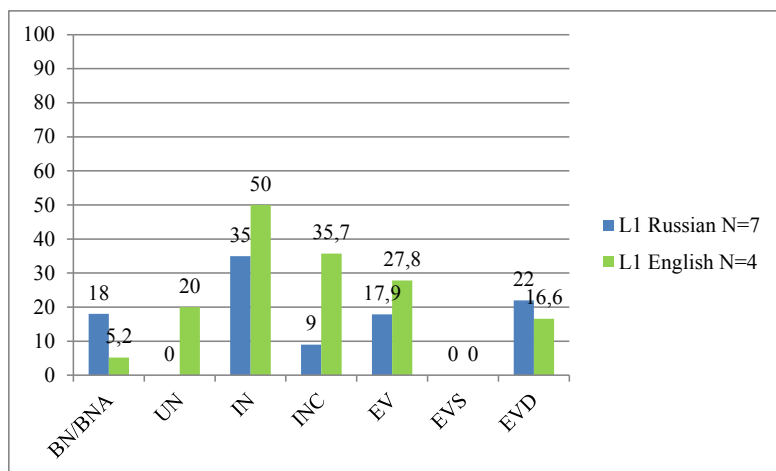


Figure 6.3. Unmarked NPs. Relative numbers. DP I.

From Figure 6.3 it is clear that a breakdown of the categories of the Semantic Wheel may highlight new aspects associated with the data. We see that the category of inferrable NPs and containing inferrables, for the L1 English learners particularly, are recognized by high levels of unmarked NPs. However, even though both learner groups omit most encoding in the category of inferrables, they depart in other domains: The L1 Russian learner group seems to omit most marking with inferrable entities (IN), followed by descriptive evoked entities (ED), while new entities (BN/BNA) and evoked entities (ED) are left unmarked to approximately the same degree. The L1 English learners supply least explicit marking with both types of inferrable entities (IN/INC) and evoked entities. The pattern of encoding of new entities and evoked entities largely confirm the results reported in chapter 5 when the L1 groups are compared to each other: The L1 Russian learners failed to encode the category of [+SR, -HK] consistently, and the L1 English learners were shown to struggle with encoding of [+SR, +HK]. However, the present approach manifests that both groups reach a peak in suppliance of bare nouns with inferrable entities. Moreover, it is interesting to note that when the measure is marked/unmarked

compared to accurately/inaccurately marked, the L1 Russian learners encode new and evoked NPs at an equal rate.²⁴¹

The subsequent analysis will, however, add nuances to this initial impression.

²⁴¹ As mentioned initially, in this analysis substitutions are not singled out as errors; new entities marked by an indefinite article or a definite suffix are equally counted as marked. However, recall from chapter 5 that substitution errors were far more relevant to the category of [+SR, -HK] than to the category of [+SR, +HK]. Indirectly, this pattern may also provide insight into the tendency to preserve the most explicit encoding for the least familiar contexts; that is, seen from this perspective, perhaps it is not incidental that substitution for the most part goes in the direction of new entities.

THE TAXONOMY OF ASSUMED FAMILIARITY DATA POINT I																					
	BN/BNA			UN			IN			INC			EV			EVS			EVD		
	Unnm.	Total	%	Unnm.	Total	%	Unnm.	Total	%	Unnm.	Total	%	Unnm.	Total	%	Unnm.	Total	%	Unnm.	Total	%
Ru-1-1	1	11	9.0	-	-	-	1	6	16.6	0	6	0	0	22	0	0	1	0	0	2	0
Ru-3-1	1	12	8.3	-	-	0	1	0	0	3	33.3	1	19	5.2	-	-	-	-	0	1	0
Ru-4-1	3	9	33.3	0	1	0	0	2	0	3	0	1	15	6.6	-	-	-	-	0	1	0
Ru-5-1	2	16	12.5	0	2	0	4	5	80.0	0	4	0	3	8	37.5	-	-	-	-	-	-
Ru-6-1	2	9	22.2	-	-	-	2	2	100	0	2	0	6	13	46.1	0	1	0	1	1	100
Ru-7-1	5	11	45.4	0	2	0	0	1	0	0	1	0	6	10	60.0	-	-	-	-	-	-
Ru-10-1	1	14	7.1	-	-	-	0	3	0	1	3	33.3	2	20	10.0	-	-	-	1	4	25.0
SUM	15	83	18.0	0	5	0	7	20	35.5	2	22	9.0	19	106	17.9	0	2	0	2	9	22.0
Eng-1-1	3	24	12.5	-	-	-	2	3	66.6	0	3	0	9	18	50.0	0	1	0	-	-	-
Eng-3-1	0	11	0	-	-	-	2	3	66.6	1	3	33.3	0	18	0	-	-	-	0	2	0
Eng-4-1	0	13	0	1	5	20.0	1	4	25.0	4	6	66.6	5	14	35.7	0	2	0	0	2	0
Eng-5-1	0	10	0	-	-	-	1	2	50.0	0	2	0	3	11	27.2	-	-	-	1	2	50.0
SUM	3	57	5.2	1	5	20.0	6	12	50.0	5	14	35.7	17	61	27.8	0	3	0	1	6	16.6

Table 6.1 Overall rates of unmarked/bare NPs. L1 Russian and L1 English group. DP I.

Before I report the results in more detail, some background information will be outlined. The distribution of discourse familiarity contexts in the analyzed texts will be presented before calculations of means and range in the narratives from DP I are provided.

The general distribution of discourse functions in the texts is displayed in Table 6.2 below.

DATA POINT I Category	L1 Russian		L1 English		Both groups	
	N	%	N	%	N	%
BN	82	33.1	55	34.8	137	33.7
BNA	1	0.4	2	1.2	3	0.7
Unused	5	2.0	5	3.1	10	2.4
Inferrable	20	8.0	12	7.5	32	7.9
InferrableC	22	8.9	14	8.8	36	8.8
Evoked	106	42.9	61	38.6	167	41.2
EvokedS	2	0.8	3	1.8	5	1.2
EvokedD	9	3.6	6	3.7	15	3.7
SUM	247	100	158	100	405	100

Table 6.2 Discourse function type. General distribution/frequency in the present material. DP I.

The most frequently occurring discourse function in the narratives is evoked NPs. In fact, evoked entities represent approximately 41% of all the NPs used, while inferrables and containing inferrables together comprise only 16.7%. Brand-new entities are the second most frequent discourse function, reaching a percentage of approximately 33%, whereas unused, brand-new anchored and descriptive evoked entities are not very frequently employed in the narratives. The discourse functions are more or less evenly distributed across L1 groups; however, as also noted in chapter 5, there is a tendency for the L1 Russian learners to provide more contexts for identifiable/given entities (see the numbers for evoked above), and for the L1 English learners' texts to establish more contexts for new entities (see the numbers for

BN/BNA above). Recall that the L1 English learners on average produce narratives that are slightly longer at this point (see section 5.3.1).

Table 6.3 below provides the calculations of range and mean of the percentages for unmarked NPs in each category and L1 learner group at DP I. This calculation gives a preliminary impression of the individual variation yielded in the present material.

DP I	L1 RUSSIAN		L1 ENGLISH	
	Range %	Mean %	Range %	Mean %
BN / BN_A	38.3 (7.1–45.4)	18.0	12.5 (0–12.5)	5.2
Unused	-	-	-	-
Inferrable	100 (0–100)	35.5	41.6 (25–66.6)	50.0
InferrableC	33.3 (0–33.3)	9.0	66.6 (0–66.6)	35.7
Evoked	60 (0–60.0)	17.9	50 (0–50.0)	27.8
EvokedS	-	-	-	-
EvokedD	-	-	-	-

Table 6.3 Range and mean. Taxonomy of Assumed Familiarity Analysis. Unmarked NPs.

*Mean and range are calculated for categories of which all participants contain occurrences only.

The range in each category documents that the individual variation is, on the whole, fairly considerable. In several categories there are individuals who mark all relevant contexts and there are individuals who leave all relevant contexts unmarked. A general trend, however, seems to be that infrequent categories entail larger variation. Moreover, it is worth noting that in each category, at least one of the L1 Russian learners performs at ceiling. Yet the within-group variation in terms of range also seems to be slightly higher among the L1 Russian learners. Section 6.3.4 in the analysis below will focus on the results at the individual level.

The subsequent sections examine the two L1 learner groups independently of each other.

6.3.2. The L1 Russian learners

Learners with Russian L1 background, here seven participants, were predicted to be influenced by the degrees of familiarity, in a way similar to the examples from Sharma (2005), Avery and Radišić (2007), and Jarvis (2002), due to the lack of grammaticalized definiteness in the L1 (see also chapter 3). In short, as a consequence, the learners were expected to rely on contextually embedded interpretations of the givenness status of an NP. However, this prediction does not find immediate support in the data, inasmuch as the L1 Russian learners primarily seem to use bare nouns to an almost equal degree with both new and evoked entities, and mostly with inferrable entities. In the Semantic Wheel analysis, accurate encoding of [+SR, -HK] was identified as a major challenge to the L1 Russian learners at DP I. However, even though the L1 Russian learners employ more bare nouns with new entities than do the L1 English learners, the rate is much lower when suppliance of marking is the measure rather than accuracy. Also, all NPs within the category of unused entities are marked. Unused entities also introduce new information in discourse but are generally encoded by the definite form: Contrary to brand-new and brand-new anchored entities, unused entities are definite both grammatically (proper names excluded) and semantically (they are uniquely identifiable). If unused entities indeed are more consistently (and accurately) marked this would indicate that the challenges cannot be directly related to discourse function. However, unused entities only rarely occur at DP I (5 occurrences), which indicates low generalizability.²⁴²

Bare nouns are most frequently used with inferrable NPs. This characteristic is shared with the L1 English learners. Yet, there is variation between the learners. Example (25) below reflects how both containing inferrables that occur in a possessive

²⁴² Very few occurrences of proper names are observed in the present Pear Story material. When they occur, they occur as a result of the narrator choosing to name, for instance, the protagonist (in the present material proper names occur in Eng-4-2 and Eng-4-3).

construction have received explicit marking, and also a simple inferrable NP *jord-et*.²⁴³

In (26), however, a bare noun is used with an inferrable entity.²⁴⁴

(25)	Når sykkleet gutt-en gjennom en jente, Ru-3-1 som sykkleet ved siden av ham, misstet han hatt-en sin (INC). Også pær-ene falt fra sykkel-en på jord-et (IN).	When biked boy-DEF. through a girl, who biked beside him, lost he hat-DEF.M his .REFL. Also pear-DEF.PL fell from bike-DEF. on earth-DEF.N
(26)	Så sykler han videre. Ru-1-1 På vei (IN) treffer han en jente som sykler óg.	So bikes he on. On road-Ø meets he a girl who bikes too.

Inferrables are first mentions in discourse, and, alternatively, it may be that marking is primarily reserved for second mentions, even though this would contradict the anticipated behavior.²⁴⁵

Evoked entities are employed when the level of presupposed familiarity is high. The rate of unmarked evoked entities is 17.9%, which is a lower number than the inaccuracy rate for [+SR, +HK] at DP I (22.7%). The high percentage of bare nouns filling the function of inferrables might explain the discrepancy between the results for evoked NPs and [+SR, +HK].

If we compare inferrables and containing inferrables, the differences in marking are quite large: Unmarked inferrable entities represent 35.0% of all occurrences, while unmarked containing inferrables represent only 9.0% of the uses of INC on the whole.

²⁴³ The gender assigned to the noun is, however, not in accordance with the target norm, which requires either masculine or feminine gender for *jord*.

²⁴⁴ *Å være på vei* (to be on one's way) is also a frequent idiomatic expression in Norwegian; however, in the present context I think it is more likely that the intended reference is a concrete road: No destination is suggested, and a concrete referent-road is prompted in the Pear Film stimuli as an object that needs to be established for later reference at some point. Nonetheless, I cannot with complete certainty claim that this interpretation is correct.

²⁴⁵ This system is argued to be the predominant pattern in Ekiert (2010b).

In addition to unused and situationally evoked entities, containing inferrables represent the category in which the L1 Russian learners have the most target like marking pattern. The high rates of marked NPs in these categories may perhaps alternatively be explained by grammatical and lexical properties associated with NPs frequently occurring in these categories. For instance, the category of containing inferrables includes first-mention possessive and genitive NPs, while unused entities seem to consist of a set of near idiomatic, highly frequent definite NPs, such as *sol-en/sol-a* [sun-DEF] and *bygd-a* [countryside-DEF]. Lexical and grammatical cues might also explain the discrepancy between inferrables and containing inferrables: By using specific types of NP constructions subsumed under containing inferrables, the learner can rely on recognizable grammatical components as cues. On the whole, the givenness of all inferrables is triggered by preceding discourse referents, yet the recognizable grammatical packaging associated with specific types of containing inferrables additionally entails a rather large collection of cues available for the learner. If this were anywhere near a plausible explanation, it would imply that several factors compete in guiding the learners: reliance on discourse universals may conflict with syntactic constructions in the target language.

At DP I, Ru-1 performed at ceiling in the category of containing inferrables. Example (27) displays four possessive constructions where the possessive is postposed and the preposed noun is inflected in the definite form. (See chapters 2 and 7 for possessive constructions in Norwegian.) Note, however, that the excerpt includes a simple inferrable where the encoding is omitted (*På vei*).

(27)	På vei (IN) treffer han en jente som sykler óg. Hun flirter med gutt-en og tar på lu-en hans (INC) så fort at den flyr av hod-et hans (INC). Gutten snur hodet for å se etter lu-en sin (EV) og samtidig faller han ned fra sykkel-en sin (INC).	On road-Ø meets he a girl who bikes too. She flirts with boy-DEF.M and touches on hat-DEF.M his so fast that it flies off head-DEF.N his . Boy-DEF. turns head-DEF. to look for hat-DEF.M his .DEF. at the same time falls he down from bike-DEF.M his .REFL.
Ru-1-1		

In (28), the possessive construction consisting of a postposed prepositional attribute that also falls within the category of INC is encoded in line with the target norm.

(28)	Da kom venn-en til tyver-en (INC),	Then came friend-DEF.M to thief-DEF.M ,
Ru-4-1	og hjalp ham å plukke pærene	and helped him to pick pear-DEF.PL.
	og finne lu-a hans (INC).	and find hat-DEF.(M) his .

A higher rate of bare nouns is observed in the category of descriptive evoked: 25.0% of the descriptive evoked NPs, compared to 17.9% of the evoked NPs, have not been provided any explicit marking. This frequency may not automatically be interpreted as corroborating evidence for the tendency outlined above: If grammatical cues compete with discourse function for providing guidelines for the learners, the use of bare nouns should not be higher with anchored definite NPs in descriptive evoked NPs, where the familiarity seems even more explicitly stated than with evoked entities (the descriptive evoked NPs also have an explicitly disambiguating function). Consequently, a high rate of omission in this category would be predicted by the redundancy hypothesis. Even though the number of occurrences is low (nine), it still seems premature to fully reject any impact of the redundancy hypothesis, even though an unequivocal system cannot be confirmed.

Example (29) demonstrates the use of a bare noun in a descriptive evoked entity. I believe the construction in this example below represents a typical environment that may entail a perception of redundancy since the relative clause unambiguously, and very explicitly, identifies the intended referent.

(29)	gikk plutselig det forbi en mann	went suddenly it by a man
Ru-10-1	med en geit. Han hadde ikke noe	with a goat. He had not any
	kontakt med mann	contact with man-Ø
	som pluket pærer (EVD).	who picked pears .

To sum up, inferrables appear to be left unmarked most often by the L1 Russian learners. Bare nouns occur in contexts for brand-new entities and evoked entities to almost the same level. A twofold relation to the prediction presented in section 3.7 is

thus revealed: On the one hand, the L1 Russian learners as a group do not seem to model their definiteness system entirely on degree of familiarity. On the other hand, the present analysis displays that definiteness encoding may be affected and described by nuances of familiarity (particularly through the mapping of different environments and uses of inferrables), perhaps just not in the predicted way.

6.3.4. The L1 English learners

Learners with L1 English background were generally predicted to be facilitated by the L1, compared to the L1 Russian speakers. If this prediction is supported, the use of the definite and indefinite form in the Pear Stories written by the L1 English learners should not be governed by universal principles of discourse alone, but also by their L1 knowledge. At least, since the L1 English learners are used to encoding definiteness in their L1, omission of marking should not be driven by contextual redundancy (see sections 3.1.2 and 3.3.4). Still, we find that the L1 English learners indeed omit more definite suffixes than do the L1 Russian learners. The category of unused entities, which balances between new and given, consists of five occurrences only, and the omission rate of 20.0% therefore represents only very small numbers. However, in the category of containing inferrables, the L1 English group supplies bare nouns to a much higher degree than do the L1 Russian learners. The high omission rates in the categories of inferrables and containing inferrables primarily seem to indicate that the L1 English group does not supply marking consistently with inferrable uses. The rate of omission in the category of inferrables reaches 50%. For the containing inferrables, the rate of omitted encoding is 35.7%. The latter result may possibly be caused by uncertainty with possessive, genitive, and partitive constructions rather than by a discourse model based on degree of familiarity: Four out of six unmarked containing inferrables in the L1 English group occur in possessive/genitive constructions, versus none of the unmarked containing inferrable entities in the L1 Russian group (see chapter 7). These omissions are reflected in constructions like *sykkel-Ø sin* [bike-Ø his], which require the definite suffix in addition to the possessive (target: *sykkel-en sin*) by the target norm.

Example (30) illustrates an alternation between marking and omitted marking with inferrables. Moreover, the excerpt also includes a postposed possessive construction where the definite inflection is omitted, thereby filling the discourse function of evoked since it is the second mention. In a similar vein, example (31) contains both an unmarked inferrable and an unmarked containing inferrable, the latter also occurring in a postposed possessive construction.

(30)	Plutselig stått han en stein	All of a sudden hit he a stone
Eng-4-1	og falt på bakk-en (IN).	and fell on ground-DEF.M
	Det var vondt på bein (IN).	It was hurting on leg-Ø .
	Han holdt bein hans (E).	He held leg-Ø his .

(31)	Mens gutten sykkelte	While boy-DEF. biked
Eng-3-1	på vei (IN),	on road-Ø , ²⁴⁶
	sett han ei jenta	saw he a girl
	også på sykel si (INC).	also on bike-Ø hers.REFL .

Surprisingly, the definite suffix is also frequently omitted in evoked contexts (27.8%). According to the redundancy hypothesis, marking should be omitted in environments where the meaning is easily recoverable from the context, and unexpectedly, the L1 English learners, seen as a group, exhibit a slight tendency to fit into such a pattern. Example (32) below readily ties into the patterns observed for L2 English displayed in the introduction to the current chapter. (Notice, however, that the unused entity: *sol-en* is explicitly marked.)

(32)	Et oøyeblikk senere komt en gutt	A moment later came a boy
Eng-4-1	opp bakken på en sykkel (BN).	up hill-DEF. on a bike .
	Det var hardt arbeid i sol-en (UN).	It was hard work in sun-DEF.M

²⁴⁶ Recall that I translate the verb *å sykle* into English as *to bike* in order to make the association between the verb and the noun in Norwegian more salient. See footnote 204.

Under traer så han to kurv fult med delig groene pære.	Under trees saw he two basket full of lovely ripe pear.
Han hoppet av sykkel (EV) så rundt men det var ingen.	He jumped off bike-Ø looked around but there was no one.
Han sat en kurv med pære på sykkel (EV) og gikk videre.	He sat a basket with pear on bike-Ø and went on.

Brief summary of group level results

As also concluded at DP I in chapter 5, it is unexpected that the L1 English learners omit definite encoding to a larger extent than the L1 Russian learners, and that a pattern of marking in line with discourse familiarity may be more clearly depicted for the L1 English learners than for the L1 Russian learners, who seem to apply bare nouns across-the-board. Yet, it should be investigated more closely why both groups use bare nouns most often with inferrable NPs. In short, thus far, between-group differences are documented in the following three discourse functions: brand-new, containing inferrables, and evoked entities.

6.3.5 Individual variation

The patterns connected to each individual may provide valuable information which may easily be disguised by a group level profile.

Individual variation: L1 Russian learners

All the Russian learners employ bare nouns to varying degrees in the category of brand-new/brand-new anchored, even though a discourse model based on universals of discourse would predict brand-new entities to receive most marking. At DP I, the two extremes are represented by Ru-7 with a 45.4% unmarked entities (five out of 11), and Ru-10 who omits marking in only one out of 14 contexts (7.1%). Between these two individuals, the learners seem to spread quite evenly; that is, they do not cluster at any specific point between 7.1% and 45.4%. For the unused entities, the data might be biased by the fact that only three of seven texts provide relevant contexts. Among these three texts, all entities are marked but the number of occurrences is low (five). Bare nouns occur with seven out of 20 inferrables, and within this category bare nouns

can be linked to three texts, Ru-1-1, Ru-5-1 and Ru-6-1, but all texts contain inferrable entities. The remaining four individuals mark all inferrables. All texts contain tokens for containing inferrables, but only two individuals perform inaccurately. The rate of unmarked NPs, which reaches 9.0% only, involves only two isolated NPs. The group is split in the use of evoked entities: Four individuals exhibit high levels of marking, one of them at ceiling, whereas Ru-7 mostly applies bare nouns in this function (60.0%) at DP I. The remaining two individuals, Ru-5 and Ru-6, omit marking in 37.5% and 46.1% of the occurrences, respectively, at this data point. For the descriptive evoked entities, five out of seven texts contain contexts. Among them, three display 100% marking. However, as noted in 6.3.2, the numbers are low in this category (nine).

When we look at the distribution of bare nouns in each individual, as displayed in Figure 6.4 below, a clearer picture emerges: The predominant pattern for the majority of the L1 Russian learners is to use most bare nouns with inferrables and evoked entities.

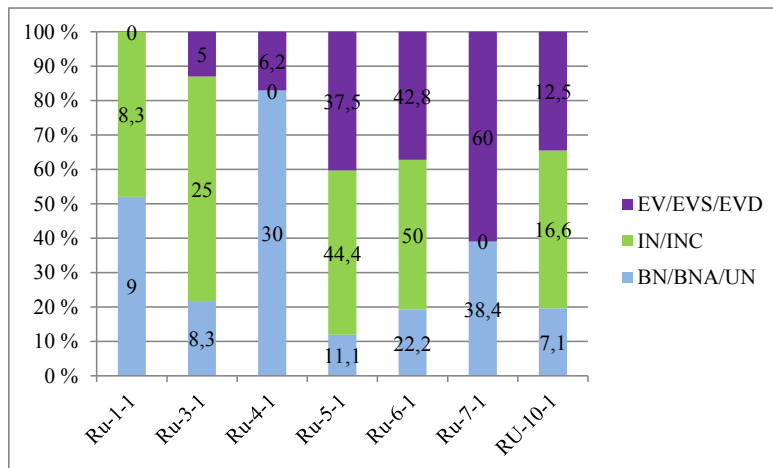


Figure 6.4 DP I: Individual profiles. Percentages of unmarked NPs.

Figure 6.4 illustrates individual percentages of bare nouns according to three degrees of familiarity: BN/BNA/UN, IN/INC and EV/EVS/EVD. The reduction of categories from eight to three was conducted in order to avoid zero-context categories (that is,

contexts not present in all the texts), and to avoid categories consisting of very few occurrences. Each bar corresponds to an individual text in the L1 Russian material. In fact, this visualization shows quite clearly that the group is split; one group of three individuals (Ru-1, Ru-3, and Ru-4) reserves bare nouns for BN/BNA/UN and inferrable NPs, while the other group of four individuals exhibits the opposite profile of encoding; that is, they largely reserve bare nouns for contexts with either evoked or inferrable NPs. This result strengthens the impression that the learners in the L1 Russian group may be guided by several competing principles, but that some learners indeed tend to perform as predicted by the redundancy hypothesis.

All three Pear Story excerpts below display typical patterns understood in terms of the redundancy effect. *Stein* in (33), *mann* in (34) and *sycle* in (35) are (or become) well-established discourse entities that are traced through several scenes in the Pear Film. Furthermore, it is clear that these discourse referents do not conflict with any others that could jeopardize a correct identification. Note that all three examples also contain marked definite NPs, and that the proficiency levels of the learners displaying this pattern do not distinguish them from the other three learners either positively or negatively.²⁴⁷ Yet, if any tendency is detectable, a model based on discourse universals appears to be more attractive for learners closer to the A2 than to the B1 level.

(33)	Da så han på jent-en,	Then looked he at girl-DEF.M,
Ru-6-	så han ikke en stein på vei-Ø. Og han	saw he not a stone on road. And he
1	påkjørte på stein (EV) og falt.	hit on stone-Ø and fell.
	Kurv-et med	Basket-DEF.N with
	pærer også falt. Det sto 3 gutter og	pears also fell. It stood 3 boys and
	spilte tennis. De hjalp til ham	played tennis. They helped him
	å plukke pærer og kastet stein (EV)	to pick pears and threw stone-Ø
	bort fra vei-en.	away from road-DEF.M

²⁴⁷ Ru-10-1 obtains the B1 level, whereas the texts written by Ru-5-1 are Ru-6-1 are assigned A2/B1. Ru-7-1 is assigned the proficiency level A2 (see section 4.4.2 in the present study).

- (34) Jeg så gjen **den mann som**
 Ru-10-1 **pluket pærer** (EVD). Og de gutt-ene
 gikk forbi han. Alle fikk
 pærer og spiste dem.
Mann (EV) så at en kurv
 var borte.
- I saw again **that man-Ø who**
picked pears. And those boy-DEF.PL
 went by him. All had
 pears and ate them.
Man-Ø saw that a/one basket
 was gone.
- (35) Vår gutt begynte å se på
 Ru-7-1 jent-a. Og han mistet **sykle** (IN).
 Etter øyeblikket var han
 på veien uten
sykle (EV). Men, plutselig, tre ung
 gutter, ubetjenter for ham, hjalp
 ham. Det er fint! De hjalp ham
 å finne epler og hans lue. Og de
 også hjalp ham med **sykle** (EV).
- Our boy began to look at
 girl-DEF.F. And he lost **bike-Ø**.
 After moment-DEF.N was he
 on road-DEF.M without
bike-Ø. But, suddenly, three young
 boys, unknown to him, helped
 him. That is nice! They helped him
 to find apples-Ø and his hat. And they
 also helped him with **bike-Ø**.

Before we leave this section, we will take a closer look at Ru-3, who marks most NPs in the narrative at data point I. Nonetheless, Ru-3 is interesting because through the three data points, she develops a pattern increasingly exhibiting similarities to a model based on discourse universals. Note, however, that even though most NPs occurring in the text below are marked, a tendency to over-rely on definite forms seems detectable. These uses are underlined, while bare nouns are highlighted in bold.²⁴⁸ Ru-3 will be revisited in section 6.4.2. Four discourse referents are chosen for closer examination between DP I and DP III: the Pear Man, the Goat (only relevant for DP III), the Bikeboy and the bike. (The same referents, except for the Pear Man, will be examined in the Pear Stories written by Eng-4.)

²⁴⁸ For Ru-3-1, Ru-3-3, Eng-4-1, and Eng-4-3, which are referred in entirety, the category annotation is, contrary to shorter examples, kept for the text as a whole.

- (36) Ru-3-1 Det skjedde i fjor på land-et (UN) som ligger i sør Amerika, kanskje. Det var sommer eller **begynnelse (INC)** av høst-en (UN). Det var på tide å pluke opp frukter. En mann (BN) plukket opp pærer (BN) fra et stor pæretræe (BN). Han klatret opp på stig-et (BN) og plukket hver pære (BN) i **forkle** (BN) med store lomm-ene (BN). Når lomm-ene (EV) var fulle med pærene i 3 kurv-ene (BNA) som har stodde under pæretræe-et (EV) En gutt (BN) sykklede ved siden av det pæretræe-et (EV). Han sette satt et kurv (BN) med pærer på sykkel-en sin (IC) og dra bortt. Så han stjalte **pærer** (EV). Når sykklede gutt-en (EV) gjennom en jente (BN), som sykklede ved siden av ham, misstet han hatt-en sin (INC). Også pær-ene (EV) falt fra sykkel-en (EV) på jord-et (IN). Da kom andre 3 andre gutter (BN) og hjulpet til ham med å pluke opp pær-ene (EV) igjen i kurv-et (EV), også fo de har fant hatt-en hans (EV). Gutt-en (EV) var veldig glad i dette og ga til de 3 gutt-ene (EV) 3 pære (BN). Etter ett stund troff gutt-ene (EV) denne mann-en (EVD) som plukket pær-ene (EV) Mann-en (EV) ble overrasket da han så sine stjalende pær-ene (EV), men gutt-ene (EV) visste ingenting om de har spist stjalende pærer, så gikk bare de borte. Og mann-en (EV) kunne ikke si noe for gutt-ene (EV).
- It happened last year in the country-DEF which lies in south America, maybe. It was summer or **beginning-Ø** of fall-DEF. It was time to pick up fruits. A man picked up pears from a big pear tree. He climbed up on ladder-DEF and picked each pear in **Ø apron** with big pocket-DEF.PL. When pocket-DEF.PL were full with pear-DEF.PL in three basket-DEF.PL which have stood under pear tree-DEF. A boy biked by the/that pear tree-DEF He put a basket with pears on bike-DEF his and went away. So he stolen **pear-Ø**. When biked boy-DEF through a girl, who biked by him, lost he hat-DEF his. Also pear-DEF fell from bike-DEF on earth-DEF. Then came other 3 boys and helped him with to pick up pear-DEF.PL again in basket and they have found hat- DEF his. Boy-DEF was very happy for this and gave to 3 boy-DEF.PL 3 pear-PL. After a while met boy-DEF.PL this man-DEF who picked pear-DEF.PL. Man-DEF was surprised when he saw his stolen pear-DEF.PL, but boy-DEF.PL knew nothing about they had eaten stolen pears, so went they just away. And man-DEF could not say anything to boy-DEF.PL.

Individual variation: L1 English learners

The four individual profiles hidden within the group results in the L1 English learner group also testify to some variation. Within the category of BN/BNA/UN, two individuals encode all occurrences, while the remaining two learners leave some entities unmarked at DP I: Eng-1 in 12.5% of the relevant NPs and Eng-4 with one unused entity. None of the other texts provide contexts for unused entities. The category of inferrables is intriguing: At DP I, all learners use bare nouns in between 25% and 66.6% of the NPs in this category. This result does not seem to be skewed by any single text, although the absolute number of 12 occurrences is rather small. Three texts are responsible for the rate of unmarked NPs, 35.7%, in the category of containing inferrables, but here also the absolute number is low. The rate of bare nouns with evoked NPs is 27.8%, which is considerably higher than in the L1 Russian group. In Eng-3-1 all evoked entities are marked. Beyond that, the percentages of omission are 50.0%, 35.7% and 27.2%. All but Eng-1-1 have contexts for descriptive evoked NPs, but the use of bare nouns in this category consists of only one NP (16.6%). A comparison between the categories of evoked and inferrables motivates a conclusion that familiarity positively affects the marking. However, if we compare the evoked phrases to the brand-new entities, it seems fairly well-motivated to reach the opposite conclusion: Familiarity indeed favors less marking.

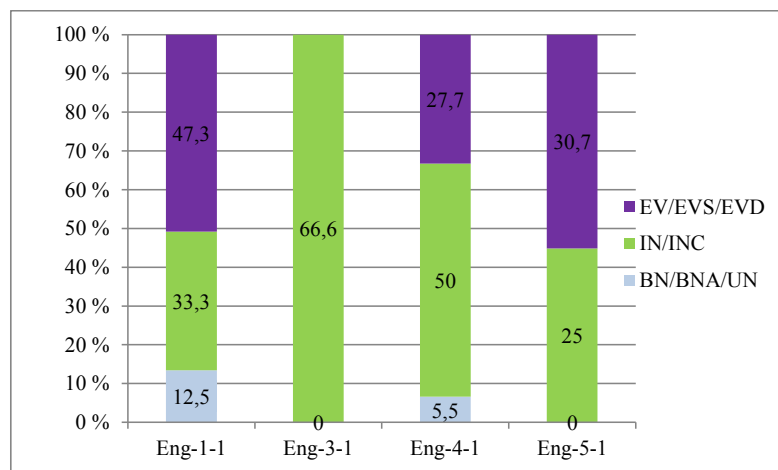


Figure 6.5. DP I: L1 English individual profiles: Percentages of unmarked NPs.

Figure 6.5 reinforces the impression that the L1 English learners omit most marking in the mid-category of inferrables (both containing and simple), which balances between given and new. However, if we temporarily exclude inferrables, we see that all four learners have a profile favoring bare nouns more strongly when the degree of familiarity is high than low. Interestingly, once again, the L1 English learners represent those learners, who most unambiguously tend to perform in accordance with the principle of article omission with highly familiar discourse entities. If this were the only possible interpretation of the data, the transfer hypothesis (see P1, section 3.6) would have to be reconsidered, since such a result actually implies that discourse universals overrule first language influence (see P3, section 3.6).

A closer look into the marking pattern occurring in the category of containing inferrables can help shed more light on the pattern of definiteness encoding documented for the L1 English learners. Twelve out of 14 occurrences are first-mention definite NPs in possessive/genitive or partitive constructions, and, as mentioned above, four out of five uses of bare nouns occur in these construction types. In comparison, 20 out of 22 containing inferrables used by the L1 Russian learners are possessive/genitive or partitive constructions, yet only one is unmarked. This discrepancy between the groups might be related to the realization of specific syntactic constructions in Norwegian. Contrary to the L1 Russian learners, the L1 English learners tend not to preserve the grammatical marking of the NP when a possessive relation is expressed (see chapter 7).

In order to arrive at a deeper understanding of the use of bare nouns in a narrative written by an L1 English learner, we will dig deeper into the Pear Stories written by Eng-4. The text written by Eng-4-1 largely exhibits a system of encoding based on indefinite articles for brand-new entities, definite inflection for unused entities, but definite inflection in alternation with bare nouns for inferrables and evoked NPs. Even though marked NPs dominate, it is interesting to note that definite suffixes are used with two-syllable nouns only, displayed in examples like *sol-en* [sun-DEF], *bakk-en* [hill-DEF], *gutt-en* [boy-DEF]. All these definite nouns form trochees, whereas the

definite form *sykkel-en* [bike-DEF], which does not occur in the text, breaks with this prosodic pattern (see section 3.5 and chapter 8). Note that several NPs in possessive constructions with a postposed possessive are left unmarked. Eng-4 will be revisited in 6.4.3, when we compare more systematically the marking of the discourse referents the Goat, the Bikeboy, and the bike in the narratives written at DP I and DP III.

In the narrative below, bare nouns are highlighted in bold.

(37) Eng-4-1	<p>...Han plukket en hele kurv (BN) fult med delig groen pære.²⁴⁹ Opp og ned han gikk nesten hele dagen sån var den andre kurv (IN) fult. Og opp igjen. Plutselig komt en mann (BN) og en geit (BN) verby. Han ser på pære (EV), var lyst å har, men bare gikk verby. Et oeyeblikk senere komt en gutt (BN) opp bakk-en (IN) på en sykkel (BN). Det var hardt arbeid i sol-en (UN). Under traer (IN) så han to kurv (BN) fult med delig groene pære. Han hoppet av sykkel (EV) så rundt men det var ingen. Han sat en kurv (BN) med pære på sykkel (EV) og gikk bidere. Ned bakk-en (EV). Oppe bakk-en (EV) komt en jente (BN) på sykkel. Hun bare gikk verby, ingen hei. Gutt-en (EV) snudt hod-et hans (INC) å så på jente (EV). Plutselig stått han en stein (BN) og falt på bakk-en (IN). Det var vondt på bein (IN) Han holdt bein hans (EV). Hun så opp og så tre</p>	<p>He picked a whole basket full of lovely ripe pear. Up and down he went almost all day. There was the other basket-Ø filled. And up again. All of a sudden came a man and a goat by. He looks at pear-Ø, wanted to have, but just went by. A moment later came a boy up hill-DEF on a bike. It was hard work in sun-DEF. Under treas saw he two basket with lovely ripe pear. He jumped of bike-Ø looked around but it was no one. He put a basket with pear on bike-Ø and went on. down hill-DEF. Up hill-DEF came a girl on bike. She just went by, no hi. Boy-DEF. turned head-DEF his and looked at girl-Ø. All of a sudden crashed he a stone and fell on ground-DEF. It was pain on leg-Ø He hold leg-Ø his. She looked up and saw three</p>
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²⁴⁹ The noun *pære* [pear] appears several times in the bare form in uses which are here coded as nonspecific/nonreferential. However, there is a chance that the participant with this use actually creates a noncount noun and signals a noncount reading. Perhaps it would sound slightly peculiar in Norwegian, but it is possible.

gutter (BN) for han.	boys in front of him. ...
En av de spilt me bakk. Det andre	One of them played with ball. The other
to hjelpt gutt-en (EV) å stå opp,	two helped boy-DEF to stand up,
og begynt å rydde og	and started to clean and
hjelpt å rydder alle pær-ene (EV).	helped to clean all pear-DEF.PL
De sat alle pær-ene (EV) i kurv-en (EV)	They put all pear-DEF.PL in basket-DEF
og gikk videre. Gutt-en (EVD) med bakk fant	and went on. Boy-DEF with ball found
hat til gutt-en (EVD)	hat-Ø to boy-DEF
på sykkel. Han ropte den andre og girt	on bike. He called the other and gave
hat-en hans (EV)	hat-DEF his
tilbake. Som en gave.	back. Like a gift.

Brief summary and closing remarks

At first glance the pattern of discourse-familiarity impact previously observed in studies of L2 article acquisition does not seem to be completely confirmed in the present data. Nor are the predictions put forth in Prediction 3, section 3.6, that the L1 Russian learners would generally exhibit a marking pattern reflecting universal discourse knowledge, where contextual redundancy due to familiarity would favor less marking. In fact, the group level results from the L1 Russian learners' Pear Stories appear to differ substantially from those reported by Sharma (2005a), since the L1 Russian learners indeed use bare nouns less with evoked NPs, which contains the majority of second and subsequent mentions, than with inferrables. Thus, the use of explicit marking, that is, use of the indefinite and the definite form, increases with familiarity. However, the individual patterns signalize that, when comparing evoked to new entities, this conclusion is appropriate only for three out of seven individuals. Four learners did indeed show a pattern more in line with those documented in, for instance, Sharma (2005a).²⁵⁰

The L1 English learners, on the other hand, were not predicted to be strongly affected by discourse familiarity since the L1 model for encoding of discourse familiarity is largely transferrable into Norwegian (see chapters 2 and 3). The differences in

²⁵⁰ See section 3.1.2 for additional documentation in the literature.

encoding patterns between the two L1 learner groups in terms of the categories provided by the Familiarity Taxonomy illustrated in Figure 6.3 seem relatively solid. On the whole, unambiguous linear increase of bare nouns in parallel with an increase in the level of familiarity is not documented for either L1 group. Rather, the encoding varies considerably and non-evenly.

6.4. Data point II and III: Development

Chapter 5 gave an overall impression of development in the encoding of definiteness based on the analytical model of the Semantic Wheel of NP Reference. The effect of development through time on the one hand and proficiency level on the other have also been approached from a more general perspective (see section 5.3.4).

The purpose of this section is not primarily to provide a general picture of the results from the analyses relying on Prince's Taxonomy of Assumed Familiarity. Rather, the purpose is to extract patterns not detectable by the categories of the Semantic Wheel alone, and to investigate the competition between the impact of discourse universals and other variables. In addition, the subsequent sections will explore if the overall impression from DP I undergoes changes through DP II and DP III.

The major findings from DP I can be summarized by the following points:

- No complete, unifying pattern has been revealed by either group or individual profiles. No complete concurrence is documented between [-ART] learners and omissions of the definite encoding in more communicatively redundant contexts.
- The L1 Russian and the L1 English learner seen as groups diverge in the encoding of containing inferrables: The L1 English group uses bare nouns more frequently than the L1 Russian group.
- The L1 English group leaves more evoked entities unmarked than does the L1 Russian group, but when individual patterns are taken into account, four out of seven L1 Russian learners fit into the pattern detected in the L1 English group.

Finally:

- On the whole, the L1 English learner group to a larger extent omits encoding in contextually redundant NPs than do the L1 Russian learners, but some of the L1 Russian learners display patterns readily attributable to a redundancy effect.

The section below is organized in line with the above points. First, an overall picture is presented. Second, the results are displayed for each L1 groups. Third, a discussion section addresses newness in discourse, the observed differences between evoked and inferrables, and the category of containing inferrables. Finally, a summary is provided.

6.4.1. Overall results

The tenets underlying the Taxonomy of Assumed Familiarity first and foremost pertain to how and to what extent universal principles of discourse organization are reflected in language structure and use. In relation to nonnative language use, Sharma's (2005a) study detected a tendency in line with these universal discourse principles for omission of articles to occur more frequently in familiar contexts. Her finding ties into the well-known redundancy effect. As was stated in the literature review in chapter 3, this is not an isolated observation; omission of marking in the most familiar contexts and in contexts that do not conflict with universal principles of information organization are attested in Chaudron and Parker (1990), Huebner (1983), Jarvis (2002), Robertson (2000), Trenkic (2002b), Trenkic and Pongpairroj (2013), and Young (1996).²⁵¹ The tendency to use less linguistically salient marking in the most predictable contexts is also reflected in principles of language use in general (see Givón, 1983, 1984; Prince, 1981; and others). In relation to second language acquisition, Trenkic (2009) regards this phenomenon as one of the most robust

²⁵¹ See also sections 3.1.2 and 3.3.4 in the present study for a survey of the research literature in this domain.

findings in the literature; nevertheless, she points out, as also noted in the introductory sections to this chapter, that an account of the redundancy and development is absent in the literature: The tendency is that whereas accuracy increases, omission of redundant encoding persists only in a smaller scale.

It still seems fair to ask whether this picture is maintained in the present study, or if the tendency may be linked to certain stages of development or certain levels of proficiency. The present Pear Story material collected at DP I did not provide overwhelming evidence corroborating findings from previous research holding that [-ART] learners would navigate in accordance with universal discourse principles: More than half of the L1 Russian learners omitted more marking with evoked than with brand-new NPs.²⁵² The [+ART] learners, on the other hand, had a slightly less expected behavior since the use of bare nouns in most learners increased from brand-new to evoked.

²⁵² Recall that a difference between the present analysis and the one in chapter 5 is that overgeneralized definite NPs to contexts for indefinite articles count as marking.

THE TAXONOMY OF ASSUMED FAMILIARITY DATA POINT II																					
	BN/BNA			UN			IN			INC			EV			EVS			EVD		
	Unm.	Total	%	Unm.	Total	%	Unm.	Total	%	Unm.	Total	%	Unm.	Total	%	Unm.	Total	%	Unm.	Total	%
Ru-1-2	0	8	0	-	-	-	-	-	-	0	4	0	0	11	0	-	-	-	-	-	-
Ru-3-2	2	12	16.6	-	3	33.3	-	-	-	-	-	-	2	10	20.0	-	-	-	1	2	50.0
Ru-4-2	0	9	0	-	3	33.3	0	5	0	1	14	7.14	-	-	-	-	-	-	0	1	0
Ru-5-2	0	11	0	-	2	0	0	5	0	2	19	10.5	0	2	0	2	0	-	-	-	-
Ru-6-2	3	15	20.0	-	2	50.0	0	3	0	4	20	20.0	-	-	-	-	-	-	0	1	0
Ru-7-2	3	5	60.0	-	2	50.0	-	-	-	4	9	44.4	-	-	-	-	-	-	-	-	-
Ru-10-2	0	10	0	-	3	33.3	0	6	0	3	14	21.4	0	1	0	0	0	0	0	1	0
SUM	8	70	11.4	-	5	33.3	0	23	0	16	97	16.4	0	3	0	1	5	20.0	1	5	20.0
Eng-1-2	3	13	23.0	-	0	3	0	4	25.0	7	14	50.0	-	-	-	-	-	-	1	2	50.0
Eng-3-2	0	12	0	-	1	100	1	5	20.0	2	22	9.0	0	2	0	0	0	0	0	1	0
Eng-4-2	1	14	7.1	0	2	33.3	1	2	50.0	3	24	12.5	-	-	-	-	-	-	0	1	0
Eng-5-2	1	13	7.6	0	1	0	0	4	0	1	24	4.1	-	-	-	-	-	-	-	-	-
SUM	5	52	9.6	0	2	0	3	11	27.2	3	15	20.0	3	84	15.4	0	2	0	1	4	25.0

Table 6.4. Overall rates of unmarked/bare NPs. L1 Russian and L1 English group. DP II.

THE TAXONOMY OF ASSUMED FAMILIARITY DATA POINT III																					
	BN/BNA			UN			IN			INC			EV			EVS			EVD		
	Unnm.	Total	%	Unnm.	Total	%	Unnm.	Total	%	Unnm.	Total	%	Unnm.	Total	%	Unnm.	Total	%	Unnm.	Total	%
Ru-1-3	0	9	0	-	-	-	0	1	0	0	1	0	1	10	10.0	0	1	0	-	-	-
Ru-3-3	2	16	12.5	-	-	-	0	4	0	0	1	0	5	26	19.2	0	1	0	-	-	-
Ru-4-3	1	9	11.1	-	-	-	0	3	0	0	3	0	0	11	0	0	1	0	0	1	0
Ru-5-3	4	14	28.5	-	-	-	0	4	0	0	4	0	3	18	16.6	-	-	-	-	-	-
Ru-6-3	1	12	8.3	-	-	-	2	2	100	1	3	33.3	5	21	23.8	-	-	-	0	1	0
Ru-7-3	2	5	40.0	-	-	-	1	1	100	0	4	0	2	3	66.6	1	1	100	-	-	-
Ru-10-3	0	13	0	-	-	-	0	2	0	0	4	0	0	22	0	0	1	0	0	1	0
SUM	10	78	12.8	-	-	-	3	17	17.6	1	20	5.0	16	111	14.4	1	5	20.0	0	3	0
Eng-1-3	0	12	0	-	-	-	1	2	50.0	0	1	0	3	5	60.0	0	2	0	-	-	-
Eng-3-3	0	14	0	-	-	-	1	2	50.0	0	5	0	1	20	5.0	0	1	0	-	-	-
Eng-4-3	0	12	0	0	1	0	1	6	16.6	0	2	0	2	9	22.2	0	1	0	0	1	0
Eng-5-3	0	12	0	-	-	-	0	2	0	0	4	0	2	19	10.5	-	-	-	0	2	0
SUM	0	52	0	1	0	0	3	12	25.0	0	12	0	8	53	15.0	0	4	0	0	3	0

Table 6.5. Overall rates of unmarked/bare NPs. L1 Russian and L1 English group. DP III.

6.4.2. The L1 Russian learners

As expected, Figures 6.6 and 6.7 below reflect that the results from all three data points chiefly yield an approximation towards the target norm (see also Tables 6.4 and 6.5 above for details). Within the L1 Russian group, the rates of omitted marking fall considerably in the main categories of brand-new (18.0% to 12.8%) and inferrables (35.0% to 17.6%), yet, the decrease in bare nouns for evoked NPs is more limited (17.9% to 14.4%). The rate of bare nouns within the category of containing inferrables remains stable through DP I and II, but unexpectedly increases from 0% to 5.0% from DP II to DP III.

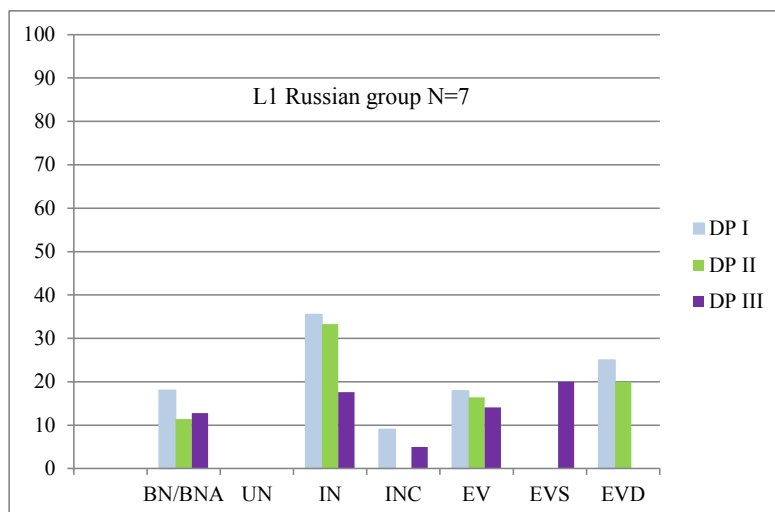


Figure 6.6 L1 Russian learner group. Development from DP I to DP III. Rates of unmarked NPs.

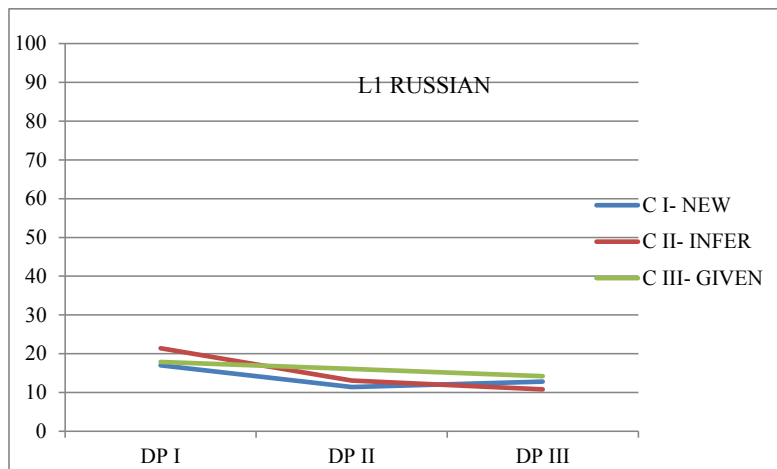


Figure 6.7. DP I to DP III. Collapsed categories. Bare nouns. L1 Russian learners.

In Figure 6.7 the results are presented in accordance with the overarching categories of new (BN/BNA/UN), inferrable (IN/INC), and evoked (EV/ EVS/EVD). This figure reveals approximation and development toward target norm use of definite and indefinite marking in new and inferrable contexts. Interestingly, this trend in development is not shared by NPs representing given information, which may indeed be indicative of a more persistent tendency to omit encoding in given (evoked) contexts compared to other categories. While the number of bare nouns decreases for new and inferrable entities, omission of definite marking in given contexts remains stable. Perhaps there is, after all, a tendency within the L1 Russian group for encoding to be more readily omitted with largely salient referents. It may also be that encoding of the most familiar entities tends to be more resistant to change.

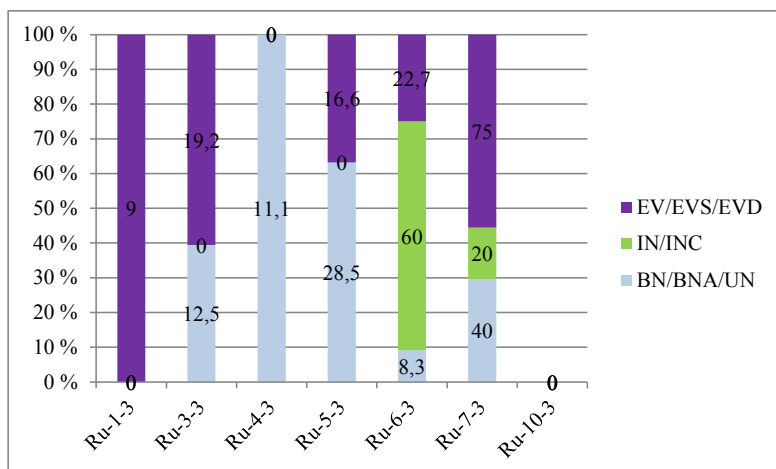


Figure 6.8. Relative rates of unmarked NPs. DP III. L1 Russian learners.

At DP I, Ru-5, Ru-6, Ru-7, and Ru-10 exhibited an encoding pattern indicative of a redundancy effect. If we finally examine the individual profiles displaying patterns of bare nouns in figure 6.8 above displaying the results from DP III, we see that Ru-1 and Ru-7 are the only ones who maintain a model of encoding where the most familiar entities receive the least encoding. Ru-6 seems to have taken an in-between position, performing with the highest rate of unmarked NPs in the category of inferrables and the second highest in evoked contexts. However, Ru-3 has, unlike at DP I, developed a pattern by DP III where a redundancy effect appears to be traceable, encoding evoked NPs less consistently than new entities. A pattern showing sensitivity to redundancy is thus not readily attached to specific levels of either development or proficiency. (Although there seems to be a smaller chance for discourse universals to heavily affect the models of definiteness when the learners have reached the upper stages of the B1 level.) Nonetheless, it is important to underline that for the L1 Russian learners the weight of and sensitivity to discourse universals appear to be highly individual.

Before we examine the individual profiles of the L1 English learners, the Pear Story written by Ru-3 at DP III will be subject to closer examination. From DP I to DP III, as mentioned above, Ru-3 has developed a model for definiteness encoding

increasingly relying on discourse universals (example (38) below). In the following Pear Story, all bare nouns and the NPs referring to the Pear Man, the Goat, the Bikeboy and the bike are higlighed in bold (one brand-new entity marked by a definite form is underlined).

- (38) Ru3-3
- | | |
|--|--|
| <p>...En bondemann (BN) har hadde plukket pærer (BN) fra pæretre (BN). Han hadde forkle (BN) med stor lomme på seg. Der plukket ham pær-ene (EV). Så kommet ham ned for å sette pær-ene (EV) i 3 kurver (BN) som sto på jord-en (IN). Det gikk en mann (BN) med en geit (BN) forbi kurv-ene (EV). Geit (EV) ville gjen spise noen pærer (BN) men mann (EV) ikke la geit-en (EV) å spise, så gikk de bare. Da kjørt en gutt (BN) med sykkel. Han hadde en en stor hat (BN). Gutt-en (EV) ville tenkte å ta noen av pær-ene (INC), men tok han <u>helle kurv-et</u> (BN) endelig. Han satt kurv-et (EV) fram på sykkel-en (EV) og syklet vekk fra sted-et (IN). Bondemann (EV) har ikke merket noe. Han bare fortsatt å plukke pærer. Gutt-en (EV) syklet på vei-en (IN), så traff han en jente (BN) som syklet forbi. Gutt-en (EV) var uoppmerksom i dette stund (EVS) og så traff sykkel-en (EV) en stein (BN). Gutt-en(EV) falt med sykkell-en sin (EV) og mistet sin hatt (INC) Kurven (EV) med pær-ene (EV) falt p jord-en (IN).</p> | <p>... a farmer has had picked pears from Ø peartree. He had Ø apron with big pocket on. There picked he pear-DEF.PL Then came he down to put pear-DEF.PL in 3 baskets. which were on ground-DEF It went a man with a goat by basket-DEF.PL Goat-Ø wanted eat some pears but man-Ø did not let goat-DEF to eat, so went they just. Then rode a boy with bike. He had a big hat. Boy-DEF wanted planned to take some of pear-DEF.PL, but took he <u>whole basket-DEF</u> finally. He put basket-DEF in from on bike-DEF and biked away from place-DEF. Farmer-Ø has not noticed anything. He just continued to pick pears. Boy-DEF. biked on road-DEF, so met he a girl who biked by. Boy-DEF. did not pay attention in this moment and hit bike-DEF a stone. Boy fell with bike-DEF. his and dropped his hat. Basket-DEF with pear-DEF.PL. fell (to) ground-DEF.</p> |
|--|--|

Det var tre gutter (BN) som har sett denne ulykk-en (EV). De komt og hjalp til gutt-en (EV).	It was three boys that had seen this accident-DEF. They came and helped boy-DEF .
De plukket alle pær-ene (EV) tilbake til kurv-en (EV)	They picked all pear-DEF.PL back in basket-DEF.
og de ga ham hans hatt (EV)	and they gave him his hat
og de kastet vekk fra vei-en (EV)	and they threw away from road-DEF.
den stein-en. (EV)	the/that stone-DEF.
Det var hyggelig. Så gutt (EV)	It was nice. So boy-Ø
ga 3 pærer (BN) til hver gutt (BN)	gave 3 pears to each boy
som hjalp ham.	who helped him.

At DP III, Ru-3 chooses to introduce the Pear Man as a farmer, *en bondemann*.²⁵³ He is referred to as *bondemann* twice, but elsewhere by a pronoun. Whereas the first-mention NP is marked by an indefinite article, the second-mention *bondemann* is a bare noun. In Ru-3's first Pear Story, on the other hand, the Pear Man was referred to by a more varied set of construction types; he was introduced with an indefinite article, traced by a pronoun and reintroduced into the story by a disambiguating descriptive evoked NP premodified by a proximal demonstrative. The subsequent mention was an NP marked as definite. The Goat did not appear in Ru-3's first Pear Story narrative, however, it is interesting that it occurs three times in Ru-3-3. In the introduction to section 6.3, we saw that Trenkic (2009) noted that in the data from Avery and Radišić (2007) the likelihood of omission of definite articles increased as the referent became increasingly established in discourse. In the present narrative, the alternation is more abrupt, since the second mention is bare but the third-mention NP is marked. From the perspective of the target language, the Bikeboy was introduced and traced in Ru-3-1 following the target system of marking. At DP III, however, the effect pointed out by Trenkic might have come into play: The last mention of the Bikeboy is a bare noun. In Ru-3-1, the bike is introduced as a first-mention definite in

²⁵³ However, the commonly used word for "farmer" in Norwegian is *bonde*, not *bondemann* (although *bondemann* is fully understandable).

a containing inferrable forming a possessive NP with a postposed possessive. The same construction occurs in Ru-3-3, and, in comparison to Eng-4-1, there is no indication for the definite form to be reserved for two-syllable nouns. Finally, it is interesting to note that the overreliance on definite marking also in brand-new contexts seems to have diminished by DP III. Brand-new entities are encoded by indefinite articles, whereas evoked NPs are either marked by the definite suffix or left unmarked.

6.4.3. The L1 English learners

Marking generally increases within the L1 English group from DP I to DP III in all categories (except for an equal amount of omission in the category descriptive evoked for DP I and III). Figures 6.9 and 6.10 below show that initial tendencies to omit marking with inferrable and textually evoked NPs may represent a stage in development that is possible to overcome within a rather short time span. At DP III the L1 English learners perform at ceiling in the category of BN (no occurrences of unmarked entities), while the use of bare nouns with evoked NPs is nearly reduced by half by DP III (from 27.8% to 15.0%). Finally, the marking in the mid-categories of inferrables increases considerably (consult Table 6.5 above for details). This category will be addressed further below.

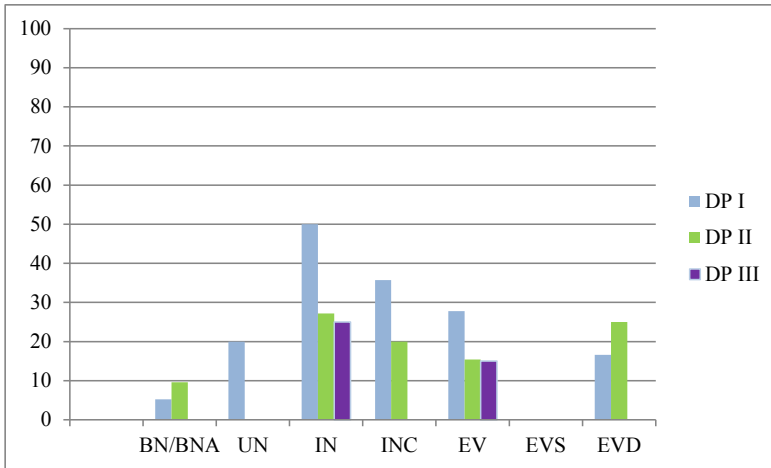


Figure 6.9. L1 English learner group. Development from DP I to DP III. Bare nouns.

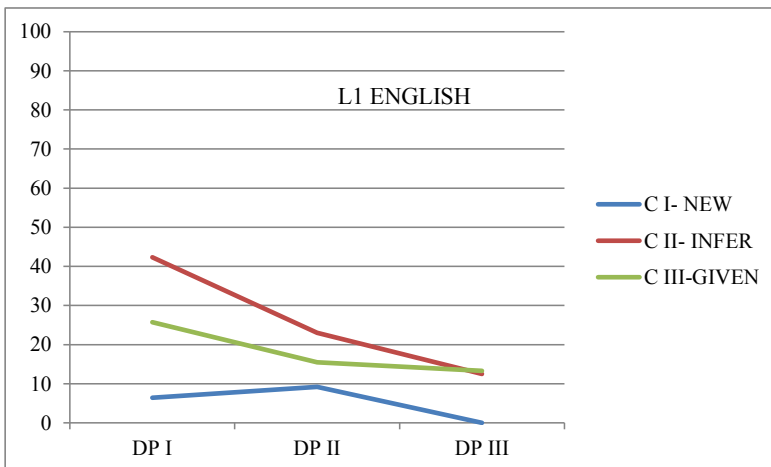


Figure 6.10. DP I to DP III. Collapsed categories. Bare nouns. L1 English learners.

If we look at the developmental lines in Figure 6.10 above, the idea that, out of the two groups, the L1 English group is the one that persistently behaves in line with the redundancy hypothesis is not further supported. In fact, the L1 English learners largely appear to be on their way to supplying target-like definite suffixes with both inferrable and given NPs. The tendency to map encoding on the basis of general principles of discourse universals instead of on the basis of the L2 or L1 norm might therefore be an effect mainly relevant to independent stages of development.

However, bare nouns still occur more frequently with NPs expected to be definite than with those expected to be indefinite in the target language. To conclude, the L1 English group, consisting of four individuals, displays a rather rapid development gradually replacing unmarked evoked and inferrable NPs with marked.

This development is perhaps also a result of raised awareness of similarities between Norwegian and English. It may also be expected that processing capacity increases through general exposure to the target language. Familiarization with the task most likely enhances the cognitive capacity; that is, when the learners write the Pear Story for the second and third time, recalling the story alone becomes less resource demanding and gradually requires less processing effort. Reduction of processing cost step by step is generally an important key to language learning in general (see section 3.3.4 in the present study). Yet, there is no reason not to expect this to affect all the learners irrespective of L1 equally.

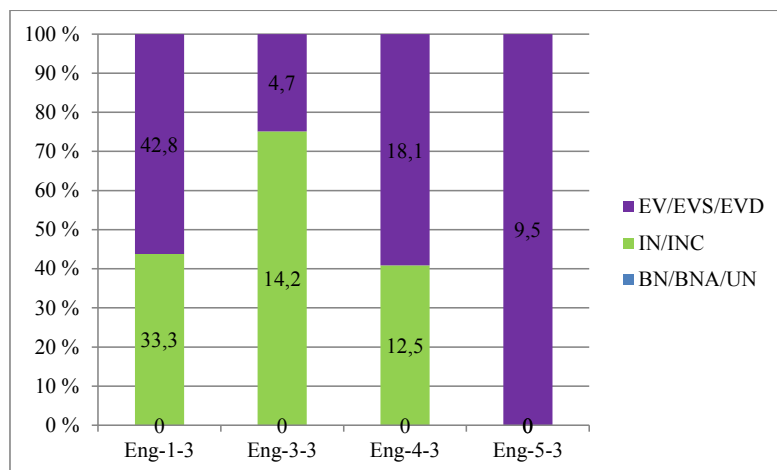


Figure 6.11. DP III. L1 English learners. Bare nouns.

Yet, when examining figure 6.11 above, which represents DP III, two intriguing patterns emerge. First, among the few unmarked NPs left in the learners' retells (Eng-1-3 is an exception), the predominance of bare nouns in more familiar contexts is increasingly pervasive at DP III: All perform at ceiling in the category of new entities. Second, Eng-1 sustains a pattern at DP III depicting a perfect model of

encoding building on universal principles of discourse: the rate of omissions increases as the level of familiarity strengthens. On the whole, even though the uses of bare nouns have generally diminished by DP III, the deviations from the target norm still pertain to more familiar discourse entities.

Below, we once again take a closer look at Eng-4. It is of particular interest to compare the references made to the Goat, The Bikeboy and the noun “bike.” All are highlighted in bold.

- (39) ...
- | | | |
|---------|--|---|
| Eng-4-3 | <p>Klokken tre komett en mann (BN)
 med en geit (BN) opp over bakk-en (IN).
 Han var på vei til mark-en (IN).
 Han var lyst å selger geit-en (EV).
 Han gikk verby de to kurv-ene (EV)
 og så på ingen.
 Men geit (EV) var lyst til å spiser litt.
 Men ikke i dag. Et par minute
 senere kom en ... liten gutt (BN)
 på en stor sykkel (BN). Nå han gikk
 verby hoppet han av sykkel-en (EV). Han prøved
 å stjeler bare et pære (BN) men han så
 at Olaf var veldig opptatt hoyt
 opp i tre-en (EV). Så han stalt et et hele kurv (BN)
 fullt med pære.
 Han gikk videre. Og i dal-en (IN) kom
 en gente (BN) på en sykkle (BN)
 mot han. Na hun gikk verby har vind-en (UN)
 blåst gutt-ens hat (INC) av
 og ned på bakk-en (IN).
 Han slått en stein (BN) med hule (IN) av
 sykkel (EV) og falt ned på bakk-en (IN).
 Det ligger pære overalt.
 Plutselig komt tre unge gutter (BN)
 mot han og de har
 bygnt å helper han å plukker all pær-ene (EV)
 opp og sett de tilbake i inn kurv-en (EV). “</p> | <p>Three o'clock came a mann
 with a goat up the hill-DEF.
 He was on his way to market-DEF.
 He wanted to sell goat-DEF.
 He went by the two basket-DEF.PL
 and looked at none.
 But goat-Ø wanted to eat a little.
 But not today. A couple of minutes
 later came a little boy
 on a big bike. Now he went
 by jumped he of bike-DEF. He tried

 to steal only a/one pear but he saw
 that Olaf was very busy high
 up in tree-DEF. So he stole a whole basket
 full of pear.
 He went on. Up in valley-DEF came
 a girl on a bike
 towards him. When she went by has wind-DEF
 blown boy-DEF.GEN hat off
 and down on ground-DEF.
 He hit a stone with wheel-Ø of
 bike-Ø and fell down on ground-DEF.
 It is pear alllover.
 All of a sudden comes three young boys
 towards him and they have
 began to help him to collect all pear-DEF.PL</p> |
|---------|--|---|

Og de gikk videre.

Men **gutt-en**(EVD) på sykkel

har glemt hatt-en hans (EV).

up and put them back into basket-DEF.

And they went on.

But **boy-DEF.** on **bike**

has forgot hat-DEF his.

Eng-4 writes rich stories. At DP I, the Goat is only mentioned hastily, but at DP III the occurrence of the Goat displays a typical redundancy pattern: the first-mention NP takes the indefinite form, the second mention takes the definite, but for the third mention the marking is omitted. Through the lenses of the target language norm, the tracing of the Bikeboy through the story is as expected encoded as definite both at DP I and DP III. References made to the bike are, however, intriguing (including one reference to the girl's bike): At DP I, the bike did not occur with a suffix, but does so once in an evoked context at DP III. Yet, with the next evoked NP the bare form is used. Even though both Ru-3 and Eng-4 show a tendency at DP III to increasingly restrict bare nouns to redundant contexts, their development also diverges: For Ru-3 the indefinite form has become strengthened in brand-new contexts repressing both NPs marked as definite and bare nouns, the definite form is now restricted to inferrable and evoked contexts where they compete with bare nouns. For Eng-4, brand-new entities never represented a context for bare nouns; rather, at DP III we see an already established system that has been reinforced.

6.5. Discussion

New entities in discourse

The definite and the indefinite form have encoding of identifiability and non-identifiability as their primary function. Identifiability is not, as discussed earlier in this chapter, an entirely parallel concept to givenness. The indefinite form is thus not the exclusive marker of newness in discourse, even though it is the only marker of non-identifiable referential NPs. This asymmetry is a constant challenge to categorization. In Prince's model, unused entities are subsumed under new, yet they are definite; at the same time, inferrables are not subsumed under new, but they are new referents to discourse. Crosthwaite's (2014) study of L2 encoding of new

information in discourse, contrary to Prince, maintains a strict measure of first mention as the unit of analysis, and thus categorizes entities that are definite by bridging as new. From a perspective of discourse universals, new entities in discourse would demand the most explicit marking, particularly if sentence position departs from the universal pattern of new information preceding given. It is, however, implicitly assumed in the SLA literature that the L1 will overrule reliance on any such discourse universal features (see section 1.4 on cross-linguistic influence). Furthermore, universal information principles tend to be more salient features of language use in languages without a grammatical marking of identifiability. In that sense [-ART] learners also implicitly draw on their L1 resources. In the present data, the phenomenon appears less straightforward, and the fact that the L1 groups partly behave differently than what is expected raises doubts, at least concerning the link between presence or absence of a target category in the L1 and reliance on discourse universals. Perhaps there are other variables besides discourse universals that may lead to similar patterns, such as competition between L1 and L2 forms, as is suggested by Trenkic and Pongpairaj (2013).

The findings in the present study imply a more complex interaction between L1 effects and discourse universals: Unexpectedly, the L1 English group starts out with a pattern indicative of being licensed by discourse universals. However, this pattern maintains, but concerns a smaller share of NPs, at DP II and III. The L1 Russian group, however, is initially characterized by equally high rates of omission of marking in the categories of brand-new and evoked. The marking increases considerably, and when taking all DPs into account, the category of new entities appears to be more prone to change than do evoked entities.

There are some indications that the initial use of bare nouns with new entities may be due to the development of the indefinite form as a marker of non-identifiability rather than as a marker of newness to discourse. Unfortunately, unused entities occur only at DP I, and the number is rather small with only five occurrences in total. Nevertheless, none of these NPs lacks the definite suffix, which might give an indication that the

challenge is the indefinite form, rather than newness. On the other hand, if inferrables are counted as new, which is a possible approach, the high rate of omission at DP I may point in the opposite direction. But this does not change the fact that the L1 Russian learners as a group do not initially fit straight into a pattern testifying to a redundancy effect, although four of the learners at DP I display a pattern which may be indicative of an influence exerted by discourse universals. On the whole, the present analysis suggests that the L1 Russian group experiences more difficulty in supplying the indefinite form at particular stages, and the data thus corroborate earlier findings that use of the indefinite article is established later than the definite suffix in evoked NPs. However, as also discussed in chapter 5, it is interesting that this finding weakens from DP I to DP III: Seen from the perspective of the target norm, while marking with evoked NPs is omitted at a stable and persistent rate through all DPs, marking increases rapidly with brand-new entities. Moreover, as shown in Ru-3's Pear Stories, at DP III the indefinite form seems to repress both definite forms and bare nouns as markers of brand-new discourse referents.

Inferrables contrasted to evoked

Crosthwaite (2014) treated first mention definites that were identifiable by bridging as new entities in discourse. In Liu and Gleason (2002) the approach is the opposite: They collapse Hawkins's (1978) categories of *anaphoric uses* and *associative anaphoric uses* into one category of *textual uses* (see also section 3.3.1). Neither of these approaches may capture the full complexity of inferrables in discourse, and both may be misleading. Therefore, it is an advantage in Prince (1981) that inferrables are treated as a separate category, with similarities to both new and given entities.

Considering the discussions in the literature and the various analyses of inferrables, it is interesting to explore whether isolating inferrables from evoked NPs may prove informative and reveal differences either between groups or between categories.

First of all, at DP I both L1 groups have a relative frequency of unmarked inferrables that is approximately twice as high as the rate of unmarked evoked NPs. Second,

from the perspective of the target language norm, the improvement in accuracy for inferrables is rapid. The most interesting finding here, I believe, is that the similarity between the two groups in the marking of inferrables between DP I and DP III coincides with a lack of similarity in the development for evoked: The L1 Russian group, strictly speaking, only improves in the domain of inferrables, not evoked, while the L1 English group improves in both categories. It must be emphasized, however, that the numbers of inferrables are low, between 10 and 20 per group at each DP. Hence, conclusions should be drawn with caution. Nonetheless, I believe that the results may imply that at least at initial stages, encoding evoked NPs accurately is less difficult than encoding inferrables in line with the target norm.²⁵⁴ And finally, even when inferrables are isolated, the unexpected persistence of omissions in evoked contexts by the L1 Russian learners is sustained.

Containing Inferrables

If we take the perspective of accuracy, the L1 Russian learners outperform the L1 English in the category of containing inferrables at DP I and DP II: The L1 Russian learner group has a rate of unmarked NPs of 9% and 0.0% at DP I and II, while the L1 English group employs bare nouns in 35.7% at DP I and 20.0% at DP II. The picture is mildly reversed by DP III, where the L1 English group performs at ceiling and the L1 Russian group has a rate of unmarked NPs at 5.0%.

NPs occurring within the category of containing inferrable, as noted earlier, differ from the NPs in other categories in that they are closely associated with recognizable grammatical constructions, such as the possessive construction, the genitive construction, and the partitive construction. Furthermore, Hawkins's (1978) category of associative clauses falls within containing inferrables (see section 6.2.1). In

²⁵⁴ A factor that has not been discussed explicitly in any detail is the type of referents introduced as inferrables compared to new. Typically, inferrable first mentions in the material refer to more peripheral objects in the story line, such as properties *associated* with main characters and objects. The point is that their salience in the narrative may also generally be lower than that of referents introduced as brand-new. See section 7.2 for a similar perspective on first-mention possessives provided by Du Bois (1980).

Norwegian, possessive constructions always designate definite reference, but the suppliance of the definite form depends on the position of the possessive:

(40) **hus-et** hans
 house-DEF.SG.N his
 [his house]

(41) hans **hus**
 his **house**
 [his house]

In (40) the possessive is postnominal and forces an obligatory suppliance of the definite suffix. In (41) the possessive is prenominal and thus no suppliance of definiteness encoding is required; in fact, suppliance of encoding would be ungrammatical. In terms of genitive constructions, Norwegian resembles English:

(42) gutt-en-s **sykkel**
 boy-DEF.GEN.M **bike**
 [the boy's **bike**]

(43) **sykkel-en** til gutt-en
 bike-DEF.SG.M to boy-DEF.SG.M
 [**the bike** of the boy]

The point, which will be explored further in chapter 7, is that accuracy rate in the category of containing inferrables may be dependent on knowledge of the regularity of these constructions, but also on the comprehensible rules associated with them. At DP I, one of the two errors occurring in the L1 Russian learner group is related to associative clauses, and the second one may be recognized as a partitive construction. In the L1 English learner group, four out of six errors occur in possessive and genitive constructions because the postnominal type is used without inflecting the noun. This difference is not present at DP II, where the errors may not be associated so clearly with particular types. Interestingly, at DP III the L1 Russian group increases in inaccuracy, and the larger share of the errors occurs in partitive constructions, in which no single error is observed in the L1 English group. From a redundancy perspective, on the other hand, one could also claim that double

definiteness occurring in these constructions is redundant, and hence perceived by the learners as less important to communication.

Brief summary and closing remarks

The present analyses by and large support the main conclusions from Analysis I in chapter 5, but they have provided more details and highlighted more nuances. The two L1 groups are not necessarily challenged by the same components of the Taxonomy, or of noun phrase morphology in general. However, it must be underlined that the numbers are indeed small. The differences between the learners from different L1 backgrounds in the present study concern both different patterns of use and different paths of development.

It is clear that neither of the learner groups models its use of definiteness encoding in accordance with discourse universals consistently from DP I to DP III. Still, in both L1 groups, structures that may be indicative of a redundancy effect are exhibited, but in different degree at different developmental stages. If we see the analysis in chapter 5 and the present as connected, the initial more accurate use of definites compared to indefinites in the case of the L1 Russian learners, however, breaks with the idea of redundancy and discourse familiarity as driving forces in the learning process. Yet, it is interesting that when marking in general was counted, the considerable difference between brand-new ([+SR, -HK]) and evoked ([+SR, +HK]) detected at DP I in chapter 5 was largely neutralized. However, there may also be other relevant variables that promote the patterns we have detected, for instance, prosodic features, modification, and fixed grammatical constructions. These variables will be addressed in chapters 7 and 8.

At this point in the current program of analyses, it is clear that the learners do not neatly fit into one single predicted pattern of definiteness acquisition. The initial difficulty with the indefinite article faced by the L1 Russian learners was anticipated, while the initial difficulty with the definite suffix faced by the L1 English learners was not readily predictable based on the literature; neither was the marginal development of definiteness encoding within the L1 Russian learner group, compared

to the rapid development of definiteness encoding among the L1 English learners. The next chapter, chapter 7, partly builds on issues raised in the literature review regarding the impact of pre-modification, and partly builds on discoveries of the current analysis in the category of containing inferrables.

6.6. Chapter summary

The preceding chapter has reported the results from the analysis based on Prince's Taxonomy of Assumed Familiarity. In Prince's Taxonomy, discourse referents are classified on the basis of degree of familiarity from new, to inferrable, to given (evoked). The model also to a certain extent incorporates syntactic form. In the present study, the approach to Prince's Taxonomy has been motivated by Sharma (2005a) who applied Prince's model on a sample of nonnative English data in order to investigate whether the speakers modelled their use of the English articles on universal principles of discourse or on the target norm grammar. Additionally, the present analysis also explored the well-documented tendency for L2 learners of English articles to omit marking in contexts where definiteness marking seems superfluous. In contrast to the analysis presented in chapter 5, the measure in this analysis has been marked vs. unmarked for definiteness rather than accuracy.

The results provided some but not complete support for a hypothesis holding that the learners would model their encoding of definiteness on discourse universals rather than on the target norm. If any, the L1 English learners tended to omit more marking with inferrable and evoked entities than with new entities, and they did thus show some resemblance to a pattern of marking modelled on the principles of discourse. At DP II and DP III, however, the rates of bare nouns were low, even though when bare nouns occur, they mostly occurred in contexts for evoked entities. The L1 Russian learner group seemed to be split in two. At the group level, bare nouns were used at an equal rate with both new and given entities. The individual profiles revealed that four learners were more prone to use bare nouns with inferrable and evoked entities

and three learners omitted encoding most frequently with new and inferrable entities. However, as the L1 Russian learners passed through the three data points, bare nouns were gradually repressed from contexts for new and inferrable NPs, but maintained at a stable rate in the category of evoked NPs. Finally, the present analysis also revealed that inferrables triggered the use of bare nouns, particularly for the L1 English learners. It was speculated that this may have been caused by the high number of specific NP constructions occurring as first-mention NPs in this category.

7. Analysis III: Specific nominal phrase constructions

This final chapter of analysis aspires to fill some gaps from the two previous chapters. The analyses in the preceding chapters uncovered several differences between the groups, as well as unanticipated challenges for the learners.

These insights emerged through semantic and pragmatic approaches to the category of grammatical definiteness; that is, classification has been conducted on the basis of the meaning properties associated with each NP. The motivation for and advantages of these approaches have already been discussed. However, there are certain dangers associated with a purely semantic/pragmatic approach, such as the inability to isolate typical grammatical constructions like modification and encoding of the partitive, possessive, and genitive. In the present chapter, premodification and the possessive construction will be analyzed in more detail. Genitive and partitive constructions have been left out of the present analysis.

In many studies, specific types of NP constructions are left out. Such limitation of the object of investigation may reduce the complexity of the data set and also enhance comparability to other studies. However, in the present study, the Semantic Wheel analysis was carried out without constraining the types of NPs included; that is, all NPs displaying the characteristics described by the model were analyzed, except for fixed adverbial expressions (see section 5.2 for the coding procedures and guide). The category of [+SR, +HK] thus contains, for instance, nouns that are part of possessive constructions and genitive constructions. Through the application of the discourse-level model described by Prince (1981), which was discussed in chapter 6, the process of singling out more contexts started from the perspective of a gradable concept of givenness. The use of different grammatical constructions is seen as indicating contrasting levels of givenness; most first mentions consisting of specific grammatical constructions like possessives and genitives are hidden inside the

category of containing inferrables, but since givenness is the critical measure, they may also occur in the category of evoked.

I became aware that specific, highly-fixed grammatical constructions may possibly influence the learners' performance when the category of containing inferrables was analyzed at DP I (see sections 6.3 and 6.5): 12 out of 14 occurrences in the L1 English group consisted of possessives, genitives, or partitives, and four out of six errors were linked to those construction types.²⁵⁵ Within the L1 Russian group, 20 occurrences out of 22 could be assigned to fixed grammatical constructions, but only one error was detected in a possessive NP. This observation led me to speculate as to whether these diverging patterns of errors reflected an ability to notice and internalize fixed grammatical patterns as recognizable and repeatable formulas. However, it is essential that both groups marked containing inferrables much more consistently than inferrables, indicating that fixed grammatical constructions may by and large have a facilitating effect.

Adjectivally modified NPs, on the other hand, may occur in all categories since adjectival modification in itself does not indicate level of givenness. Postmodification may, however, connect to levels of givenness that are possible to specify more closely, such as through anchoring (see section 6.2).

The reasons why the semantic/pragmatic approach of the Semantic Wheel and the discourse pragmatic approach of the Taxonomy of Assumed Familiarity seemed incapable of reaching a satisfactory level of insights, I believe, can be found largely in the discrepancy between the predictions and the obtained results: The L1 English learners were primarily predicted to successfully uncover the semantic/pragmatic similarities between definiteness in Norwegian and in English, and thus benefit from them. This main prediction is only partly corroborated, in consequence, the

²⁵⁵ These numbers are based on an accuracy analysis rather than on a marked/unmarked categorization (which would result in four out of five).

alternative prediction of P2, namely that the competition arising from different structural systems for definiteness encoding in English and Norwegian could hinder the L1 English learners from producing target like encoding of definites, should be investigated more closely as well. Furthermore, the rapid improvement of the L1 Russian group in the use of the indefinite article, compared to the unchanged level of inaccurate encoding of definites, was not predicted (see prediction P1, section 3.6). Finally, the clearly opposite profiles uncovered in the two groups at DP I, where the L1 Russian learners fail to encode [+SR, –HK] contexts, and the L1 English learners, conversely, fail to encode [+SR, +HK], was not anticipated, since the L1 English learners were generally predicted to outperform the L1 Russian learners. In consequence, these partially-confirmed predictions require further exploration, including a closer look into the other aspects of the nominal phrase construction that may serve as a means to address the alternative predictions of P1 and P2.

Recent research conducted within the usage-based approach to language learning has renewed awareness of the importance of formulaic learning and frequency in SLA (see Bybee, 2008; N. Ellis, 2006a, b, 2012). According to a usage-based approach, language is built on a set of constructions entrenched in the user's cognition by experience and frequency. Constructions differ in type and token frequency, some being more frequent and more productive than others. The possessive constructions must be considered highly conventionalized and fixed, and the token frequency is high. The types of referents that may fill the open slot are also largely flexible; in principle, all types of nouns, including, for example, nomina actionis, may fill the noun slot in a possessive construction. However, the morphological form of the possessed object is fixed, and this is determined by properties of the construction as a whole. Consequently, the learners' ability to absorb and internalize construction regularities may be critical to their success in adult second language learning.

In short, it seems worthwhile to consider factors beyond those of pure semantics and pragmatics for an explanation.

7.1. Adjectival and quantificational premodification

First, it should be noted that the succeeding analyses follows the coding principles outlined in section 5.2: The measure is thus accuracy based on the yardstick of the target language, and not a measure of marked vs. unmarked for definiteness as in chapter 6.

The reasons for singling out adjectivally modified NPs are numerous. Previous research has provided evidence identifying a tendency for higher rates of article omission when an adjective is premodifying a noun in English L2. Furthermore, premodified NPs have been shown to play a critical role in theoretical development. The instrumental role of adjectivally premodified NPs in Trenkic's Syntactic Misanalyses Account (2007, 2008) and Goad and White's Prosodic Transfer Hypothesis (2004, 2006) was first addressed in chapter 3. However, below I will review the major insights associated with premodification and article use. Co-occurrence of premodifying adjectives and more frequent rates of article omission among [-ART] learners has been attested in multiple independent studies (Goad & White, 2004, 2006; Pongpaioj, 2008; Robertson, 2000; Sharma, 2005a; Trenkic, 2004, 2007, 2008, 2009). As was also quoted in chapter 3, Sharma (2005a) summarized the role of premodification in her data in the following way: "... modified nouns are more likely to be associated with omission of the article, and quantified nouns actually favor null article" (Sharma, 2005a, p. 558). She further proposed an explanation relying on the disambiguating function assigned to modifiers, and hence the relative redundancy of the articles (see also chapter 6).

A tendency for higher rates of omission to co-occur with premodification is also documented in the present data material. The present results corroborate the idea that premodification may act as a trigger of article and suffix omission, and the presence of a premodifier may possibly even be regarded as a predictor of grammatical incompleteness. However, due to the language-specific Norwegian construction of "double definiteness," a straightforward comparison to findings achieved through

research on English as a target language is not possible. Additionally, it should be noted that whereas demonstratives in English are independent lemmas different from the definite article, in Norwegian determiners obligatorily applied in a premodified definite NP and demonstratives are partially expressed by overlapping forms (see chapter 2). As a consequence, when a determiner is applied to a Norwegian NP, its meaning is principally ambiguous. (This will be addressed further below).

The fact that Norwegian generally exhibits a structure containing two independent markers of definiteness in premodified NPs makes comparison to other target languages, such as English, difficult, particularly since the research shows a certain level of inconsistency with regard to whether omission of the definite article in L2 English in premodified NPs is explained as resulting from syntax, morphology, or semantics/pragmatics. That is, it is unclear whether the omitted determiner is regarded as missing, or whether it reflects a failed detection of the NP as definite and identifiable (see also section 3.3.3).

Sharma (2005a), quoted above, suggests an explanation that indirectly supports a pragmatic interpretation of redundancy; the premodifier in itself provides enough information to identify the referent correctly. To a certain extent, Sharma's position is recognizable in Trenkic (2008, 2009); the learners may allow the article in premodified NPs to be omitted because meaning is provided to an adequate level by the modifiers. However, Trenkic's (2004, 2007, 2008) account is initially based on syntactic constraints; [-ART] languages do not contain either determiners or a slot for determiners,²⁵⁶ and therefore articles are interpreted as adjectives; that is, this difference in syntax causes grammatical elements to be reclassified as lexical. Whenever processing load exceeds the resources available, the articles are in danger of being omitted. In newer works, Trenkic and Pongpairoj (2013), Trenkic, Mirkovic,

²⁵⁶ As also mentioned in chapter 3, the linguistic model for Trenkic's approach is Lyon's (1999) analysis of the DP.

and Altmann (2014), and Austin, Pongparoj, and Trenkic (2015) put more emphasis on limited processing resources as a factor that may inhibit repression of L1 structures. This approach clearly implies a step further away from an explanation that primarily relies on pragmatic aspects of definiteness. Goad and White (2004, 2006), in fact, hold L1–L2 differences in phonology to be the major factor causing article omission in premodified NPs (see sections 3.3.3 and 3.5).

Jin, Åfarli, and van Dommelen (2009) were presented in sections 1.1 and 3.5. NP agreement and the definite article/determiner are the main research objectives of their study, carried out on oral elicited data collected from L1 English and L1 Chinese reported to be end-state learners. Definite inflection is not analyzed. As discussed in section 3.5, they report that the L1 English learners omit more definite articles than the L1 Chinese learners do, and the number of errors seems quite high. For instance, the L1 English learners omit the masculine definite determiner in 52.9% of the obligatory contexts, while the L1 Chinese learners omit it in 16% of the contexts. It is unfortunate that no information concerning the suffixal encoding is provided, when such information would reveal more detail about the interaction between gender and definiteness. Jin, Åfarli, and van Dommelen (2009) also report a considerable degree of individual variation—half of the L1 English group behaved nativelike. The purpose of their study was first and foremost to add insight to the validity of the Full Transfer Full Access (FTFA) or the Failed Functional Feature Hypothesis (FFFH) (see section 3.1). I have no alternative explanation for the results obtained other than that of competition between gender and definiteness, and furthermore the processing load put on the learners by the task and test items. However, I suggested in section 3.5 that the Competition Model (Bates and MacWhinney, 1989; MacWhinney, 2005) could also add relevant insight to the interpretation of the results (see footnote 105).

With regard to the impact of L1s that exhibit similar structures and categories, Granfeldt's (2000) study of adult Swedish learners of French points in the opposite direction of Jin, Åfarli, and van Dommelen (2009): Omission of a definite determiner

occurs very rarely in the learners' French, which is interpreted as a facilitating effect of the L1. Granfeldt's results were first presented in section 3.5.

Finally, Nyqvist's (2015) study of Finnish university students' mastery of definiteness encoding in their Swedish L2 (see also section 3.5) reports that the double-definiteness construction in complex NPs is more difficult to encode accurately than simple definite and indefinite NPs. This result is generally in line with research conducted on L2 English among [-ART] learners.

7.1.1. The “double-definiteness” construction in Norwegian

For the following discussion, it is critical to point out that adding a preposed adjectival modifier or quantifier to a Norwegian definite NP leads to a structure that diverges from that of English. The definite inflection of the noun is most often preserved even though a determiner is added. This construction is generally referred to as “double definiteness,” a pattern associated with Norwegian and Swedish in particular. Examples 1–4 below display the double definiteness construction in Norwegian in all three genders and the plural.²⁵⁷

(1)	(M)	Den the.M/F	stor- e big-DEF	hund- en dog-DEF.SG.M
(2)	(F)	Den the.F/M	snill- e nice-DEF	jent- a girl-DEF.SG.F
(3)	(N)	Det the.N	gul- e yellow-DEF	hus- et house-DEF.SG.N
(4)	(PL.)	De the.PL	stor- e big-PL./DEF	hund- ene dog-DEF.PL

²⁵⁷ Adjective inflection signaling definiteness will not be explicitly addressed in this chapter. See section 2.1 for a comment on this grammatical feature.

Icelandic maintains a structure preserving the definite inflection without adding a determiner, while Danish generally exhibits the opposite pattern; a determiner is supplied and the inflection is omitted.

Danish:

- (5) **den** stor-**e** hund
 the big-DEF dog

Icelandic (NOM.):

- (6) stór-**i** hundur-**inn**
 big-DEF dog-DEF.SG

However, even though the double-definiteness construction is the main pattern in Norwegian, alternation between single and double definiteness occurs. In Norwegian, double definiteness in premodified NPs is associated with a degree of variability and optionality. First and foremost, this variation is a testament to the historical relations between Norway and Denmark, and the historical position of the Danish language is still traceable in the presence of single definiteness, mostly as a stylistic option primarily allowed in the Norwegian written variety of Bokmål.²⁵⁸

In *Norsk grammatikk for andrespråklærere* [Norwegian Grammar for Second Language Teachers], style and influence from the Danish language are emphasized as the main causes of optionality in the double definiteness construction (Hagen, 2000, pp. 55–56). Single definiteness typically occurs in highly conventionalized expressions, such as the following (all examples except (8) are taken from Hagen, 2000):

- (7) **Den** hellig-**e** ånd
 the.M holy-DEF spirit

²⁵⁸ Consult chapter 2 for a comment on the role of Danish in Norwegian and on the written standards of Norwegian.

And furthermore, in expressions that are perceived as close to proper names:

(8) **Den** norsk-**e** kirke
 the.M Norwegian-DEF church

(9) **Den** norsk-**e** bank
 the.M Norwegian-DEF bank

Alternation between double and single definiteness may also signal an intended specific (double) or a generic reading (single):

(10) **Det** god-**e** liv
 the.N good-DEF life

(11) **Den** samvittighetsfull-**e** lærer
 the.M. conscientious-DEF. teacher

In addition, single definiteness may function as a stylistic marker. Chiefly, Hagen claims that the single definiteness construction signals “literary/high style” (Hagen, 2000, p. 56).

In the *Norwegian Reference Grammar* (Faarlund, Lie, & Vannebo, 1997), two sources not discussed in Hagen (2000) are highlighted that exert influence on the choice of single or double definiteness, namely that of phonology and of abstract loanwords (*fremmedord*). Faarlund, Lie, and Vannebo (1997, p. 297) note the normality of omitting the definite inflection from definite premodified NPs when the modified noun is masculine and ends in *-n*. This is exemplified by the following:

(12) **Den** neste generasjon
 the.M next generation

If a definite inflection is added to the noun in (12), which is also quite possible, pronunciation is more demanding, and ultimately the suffix is barely perceivable. However, Faarlund, Lie, and Vannebo (1997) refer to this phenomenon only as a tendency. Phonology is likewise proposed as an explanation for single definiteness in

relation to neuter nouns ending in *-e*: In spoken language there is no audible difference between the bare and the definite form.

To sum up, double definiteness is, regardless of its striking redundancy, the main structure for modified NPs in Norwegian, both written and spoken.²⁵⁹ Single definiteness is possible, but is in most cases stylistically marked. Exceptions are proper names and highly conventionalized and formal expressions where single definiteness exposes a distinct meaning. Furthermore, single definiteness may signal a generic interpretation.

Note, however, that omission of the determiner is normally ungrammatical (see, however, footnote 266 for exceptions), meaning that the optionality observed primarily in Norwegian Bokmål always involves omission of the inflection.²⁶⁰ In other words, the optional pattern is that of Danish but not Icelandic. This is, in fact, interesting if we look beyond the historical aspect: When the noun is premodified by a numeral quantifier or an adjective, the determiner's *raison d'être* is fully grammatical (as opposed to having a demonstrative function), and it thus has no particular reason to remain in the NP rather than the inflection.²⁶¹ In fact, Norwegian children seem to favor an Icelandic pattern before the target double definiteness construction is attained (Anderssen, 2005). In the present data, both types of omissions are documented.

The above outline implies that learners of Norwegian as a second language are necessarily exposed to partly confusing and contradictory input from premodified

²⁵⁹ In relation to the general significance attributed to redundancy in SLA article acquisition studies, Torodd Kinn questioned whether the redundancy associated with double definiteness is principally any different from the redundancy of double encoding of number that appears when a quantifier indicating plural modifies a plural NP. His comment further raised my awareness regarding the question of what the learner perspective on redundancy actually is. Can it be that learners also sometimes, contrary to our expectations, anticipate the presence of redundant grammar, for instance, in relation to agreement?

²⁶⁰ See section 2.1 for a short outline of the relationship between the two written standards of Norwegian.

²⁶¹ In her work on L1 acquisition of definiteness and compositional definiteness in Norwegian, presented in section 3.5, Anderssen argues that the distinct meanings may be attributed to the definite determiner and the definite inflection: The determiner expresses uniqueness, while the suffix encodes specificity/referentiality (Anderssen, 2005, 2012).

definite NPs in both spoken and written Norwegian. Navigating in this space of optionality and stylistic variation must be difficult. In relation to the Pear Story, however, few of the properties that normally entail single definiteness are supported by the pictures. There is thus no need to apply particularly bookish or formal language or any conventionalized institutional names, since the events are highly concrete and common. Double definiteness could thus normally be predicted to be the preferred pattern in the Pear Story retellings.

7.1.2. Premodified definites vs. premodified indefinites: Possible L2 forms

The double definiteness construction renders premodified definites more complex than premodified indefinites. Double definiteness also doubles the chances of grammatical failure, since both a determiner and an ending may possibly be omitted. These grammatical errors are only in addition to the semantic/pragmatic error of substitution, and full omission, which, as we have stated before, may occur as a result of several different factors. In the analyses of premodified definite NPs in the present data, I distinguish between grammatical and semantic/pragmatic errors.²⁶² For adjectivally premodified singular indefinite NPs, however, which are the only contexts for modification of indefinite NPs where the article is preserved, possible errors may be classified as omission of an article or substitution. A further difference between modification of indefinite and definite NPs regards what happens when a quantifier is added to an indefinite NP: The indefinite article is *replaced* by a numeral or quantifier with an independent meaning, whereas for definite NPs the determiner signaling identifiability is obligatorily added. Indefinite NPs premodified by numerals and adjectives, such as *tre greie gutter* [three nice boys], are thus not comparable to the use of the determiner in modified definite NPs: *de tre greie guttene*

²⁶² It is important to underscore that a distinction between grammatical and semantic/pragmatic errors involves a considerable element of interpretation. Even though I strive to reach a plausible interpretation, I cannot with certainty access the intentions of the learners, and my interpretations thus arise from, and are biased by, the target norm perspective.

[**the three** nice boys]. Ultimately, definites and indefinites are not directly compatible.

7.1.3. Results: Premodified definite NPs

Three types of premodification, apart from genitives and possessives, occur in definite NPs in the Pear Stories: adjectivally premodified, quantificationally modified, and NPs with a preposed demonstrative or determiner (consult Table 2.2 in chapter 2 for an overview of positions within the nominal phrase). In the current discussion, attention is first and foremost directed to adjectival and quantificational modification, since NPs preceded by a determiner or a demonstrative alone are fundamentally different with a two-slot construction. Numbers for accuracy in relation to adjectivally and quantificationally modified NPs are given in Table 7.1 below. Numbers for the category of demonstrative + noun are presented separately in Table 7.3, followed by a short comment and discussion of the particularity of this construction (see section 7.1.4).

If we start out reviewing the results from the Semantic Wheel analysis in chapter 5, and in particular the results obtained within the category of [+SR, +HK], the rate of inaccuracy at DP I was 22.7% and 37.8% for the L1 Russian and L1 English learner group, respectively. At DP II the error rate decreased to 23.3% and 25.0%, and at DP III to 18.6% and 14.9%. The L1 English learners initially performed with an unexpectedly high rate of inaccuracy, but improved rapidly and considerably through the following DPs, whereas in the L1 Russian group the rate of inaccurately marked definite NPs remained relatively unchanged.

When adjectivally and quantificationally premodified definite NPs are singled out and analyzed, two patterns related to development and inaccuracy emerge. Table 7.1

provides the numbers for each category in isolation, while Figure 7.1 subsumes both adjectival and quantificational modification under one category.²⁶³

[+SR, +HK]		Adjectival			Quantificational		
		Inaccurate	Total	%	Inaccurate	Total	%
DP I	L1 Russian	2	6	33.3	4	8	50.0
	L1 English	5	5	100.0	3	5	60.0
DP II	L1 Russian	2	6	33.3	4	8	50.0
	L1 English	3	5	60.0	3	6	50.0
DP III	L1 Russian	1	2	50.0	2	6	33.3
	L1 English	1	3	33.3	0	4	0

Table 7.1 Inaccuracy rates in premodified definite NPs: adjectival and quantificational modifiers. Absolute and relative numbers. All DPs.

First, if we look at adjectivally modified definite NPs in isolation, the results from the present analysis generally mirror the trend identified in chapters 5 and 6: The L1 English learners perform surprisingly inaccurately at DP I, but approach the target norm steadily and rapidly through DP II and DP III. The L1 Russian learner group, on the other hand, outperforms the L1 English learners at DP I, but the level of inaccuracy seems to only weakly improve through DP I–DP III. The large gap between the performances of the two L1 groups at DP I observed here does not mirror the results obtained from the analysis of all NPs belonging to the category of [+SR, +HK] (see Figure 7.1) to the same extent as the developmental trend. Second,

²⁶³ The joining of adjectivally and quantificational modified NPs can be motivated by the presence of a certain variability in what is analyzed as an adjective in Norwegian and English. For instance, first, second, etc. are treated as quantifiers in Sharma (2005a), but they are subsumed under adjectives in the present study. This choice is based on Faarlund, Lie, and Vannebo (1997). Furthermore, the numbers are low, and in that perspective, since adjectival and quantificational modification are structurally similar, a joining of categories may also be advantageous.

for both groups the rate of inaccuracy is approximately twice as high compared to the whole category of [+SR, +HK] through all DPs.

Finally, and perhaps most interesting in the present context, when premodified definite NPs are excluded from the overall rates of inaccuracy (see section 5.3.1), we see that in both L1 groups inaccurately encoded premodified NPs affects the overall rates for [+SR, +HK] negatively at DP I and DP II, whereas the opposite effect is achieved at DP III for the L1 Russian group. In the L1 English group, the rate remains practically unchanged (see table 7.2 below). Note that the rate of inaccuracy within the L1 Russian group is kept remarkably stable through all DPs when premodified NPs are excluded.

DATA POINT	L1 RUSSIAN		L1 ENGLISH	
	Overall rate of inaccuracy [+SR, +HK]	Rate of inaccuracy: ÷premodified NPs	Overall rate of inaccuracy [+SR, +HK]	Rate of inaccuracy: ÷premodified NPs
DP I	22.7	20.9	37.6	32.9
DP II	23.3	21.0	25.0	22.0
DP III	18.6	21.9	14.9	14.9

Table 7.2 Premodified [+SR, +HK] NPs compared to the general results from chapter 5. Both groups. All DPs. Inaccuracy rates.

For quantificationally modified definite NPs, on the other hand, the L1 Russian learner group performs with an error rate of 50% and the L1 English group with an error rate of 60% at DP I. The error rate of 50% remains for the L1 Russian group of learners through DP I and DP II, while the error rate within the L1 English group decreases to 50% by DP II. At DP III the L1 Russian learner group sees improvement and L1 English learners perform at ceiling.

The high rates of inaccuracy corroborate previous findings documenting an overrepresentation of inaccuracy in premodified NPs (see section 3.3.3). It should be

noted that the absolute numbers are small (see Table 7.1). Nonetheless, at DP I all the texts written by L1 Russian learners, and all four texts written by the L1 English learners, contain errors when the NP is modified by either an adjective or a quantifier. At DP II all texts, except for one in the L1 English group, display occurrences, but only four out of seven texts within the L1 Russian group and three out of four within the L1 English group, exhibit inaccurately marked premodified definite NPs. Finally, at DP III, only two individuals within the L1 Russian group perform inaccurately, compared to two out of four in the L1 English group. Four out of seven within the L1 Russian group and three out of four within the L1 English group use premodified definite NPs at DP III.

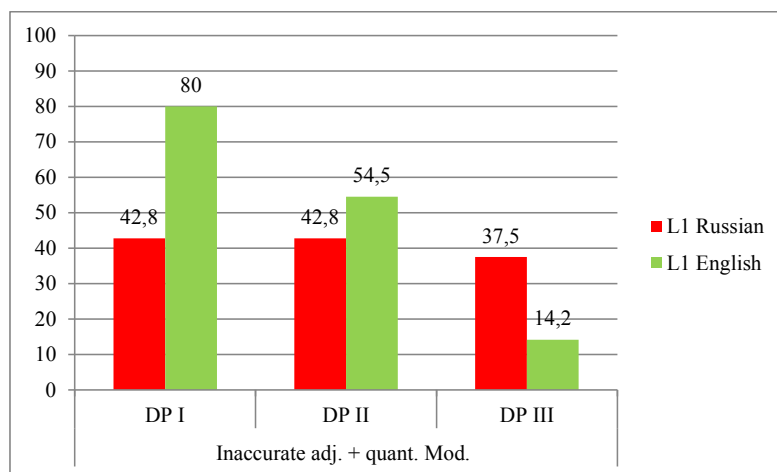


Figure 7.1. Inaccurately marked premodified NPs (adj. and quant.). Relative numbers. All DPs.

The description of double definiteness above shows that a greater complexity is associated with premodified definite NPs in Norwegian than in target languages such as English. This augmented complexity invokes the need for a more detailed look at the data.

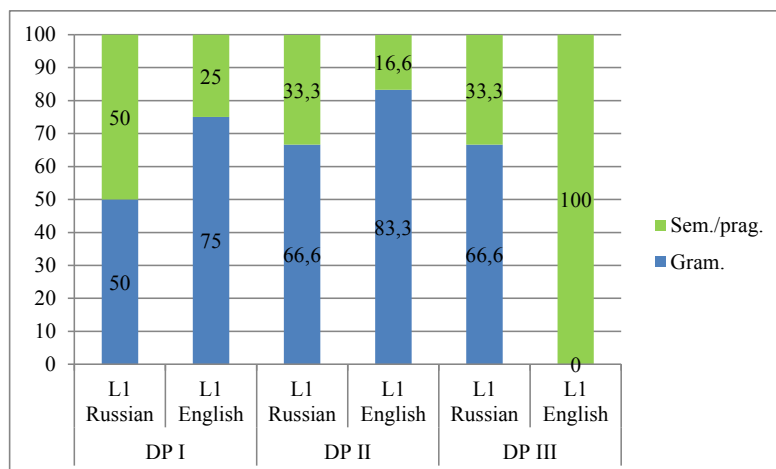


Figure 7.2. Proportion of error types in inaccurately marked premodified NPs. All DPs.

Figure 7.2 graphically displays Table 7.3 below, where both adjectival and quantificational modification is taken into account. The figure shows that apart from the L1 Russian group at DP I (and the L1 English group at DP III, but here the absolute number is low), the number of errors that classify as grammatical (that is, either the inflection or the determiner is omitted; see table 7.3. below), is higher than the proportion of errors that involve a full omission or a possible substitution.²⁶⁴ This may perhaps imply that the particular challenges associated with premodified NPs in the present material are located in the grammatical form, rather than in the detection or failed detection of semantic/pragmatic contextual properties. But, once again, it should be emphasized that such a conclusion is based on interpretations of the learners' language production on my part. In the L1 Russian group, full omission is only attested once at DP I, *ung liten gutt* [young small boy]. In the L1 English group, on the other hand, one occurrence of full omission is attested at each DP: *andre vei*

²⁶⁴ It should be stressed that drawing a line between substitution and omission is extremely complicated in this domain, and one feels particularly on shaky ground when the NP is given the plural form, because plural implies the suppliance of a plural suffix. But, it is still impossible to access the intention of the learner: Was the suppliance of a determiner intended, or was an indefinite meaning intended? If no sign of a definite determiner is present, I have chosen to treat the occurrence as an error rooted in semantics/pragmatics, but as in the main analysis, substitution is reserved for occurrences which are overtly and exclusively encoded for indefiniteness by the indefinite article.

[other way]. It is also important to note that most cases including omission of an element encoding definiteness, carry a plural marker; that is, full omission rarely occurs in premodified definite singular NPs. (See footnote 264 for an account of the relationship between substitution and omission in premodified definite NPs.

INACCURATELY MARKED DEFINITE NPs: PREMODIFICATION BY ADJECTIVE OR QUANTIFIER						
[+SR, +HK]	L1 Russian			L1 ENGLISH		
	GRAMMATICAL		SEMANTIC/ PRAGMATIC	GRAMMATICAL		SEMANTIC/ PRAGMATIC
	Omission of infl.	Omission of det.		Omission of infl.	Omission of det.	
DP I	alle pærer all pear.PL	to fulle kurvene two full.pl. basket.DEF.PL andre veien other way.DEF.SG	ung liten gutt young little boy tre gutter three boy.PL tre gutter three boy.PL	det stjålet pære the stolen pear den andre kurv the other basket det andre retning the other direction den to bokser the two box.PL de tre gutter the three boy.PL alle pære all.PL pear	andre sekken other sac.DEF. tre gutter three boy.PL	andre ²⁶⁵ vei other way
DP II	alle pærer all pear.PL all frukt all fruit alle tre gutter all three boy.PL	første episoden first episode.DEF.SG	resterende frukter remaining fruit.pl. 6 minutter six minute.pl.	den andre vei the other way de tre andre gutt the three other boy den tre gutter the three boy.PL den tre gutter the three boy.PL	andre veien other way.DEF.	ander vei other way
DP III	alle pærer all pear.PL	(en av) tre kurvene (one of) three basket.DEF.PL	små hjelpere small.pl. helper.pl.			andre vei other way

Table 7.3 Inaccurately marked premodified definite NPs. All DPs. English glosses and translation below example.

²⁶⁵ Note that *andre* is an inflected form marking either definiteness and/or plural, but it is also used in indefinite plural NPs.

Summary and concluding remarks

Premodified NPs were not elicited intentionally by the Pear Film. Consequently, the number of occurrences is limited and the present thesis does not include any research questions explicitly addressing the suppliance of definiteness encoding in premodified NPs. Nonetheless, some patterns have emerged that are difficult to ignore. Differences that are already loosely speculated to be L1 dependent seem to be amplified through the learners' use of definiteness encoding in premodified NPs. A distinguishing pattern related to the omission of inflection or determiners emerges from Table 7.2: While inaccuracy within the L1 English group is heavily dominated by preservation of the determiner and omission of inflection, not one single occurrence within the L1 Russian material consists of a premodified definite NP marked as identifiable by a determiner alone. That is, while both types of grammatical errors occur in the L1 English material (although omission of inflection is the dominating pattern), the only grammatical error type attested in this domain within the L1 Russian group involves omission of the determiner. A tendency for frequent omission of the determiner in the L2 Swedish of Finnish learners is also reported by Nyqvist (2015, p. 88). Whereas the pattern of inaccuracy within the L1 Russian group seems to reflect the "Icelandic" structure, the L1 English group to a large extent confirms a "Danish" pattern. From the perspective of acquisition, it looks like the L1 Russian group patterns alongside Norwegian children, while the L1 English learners rely on a pattern licensed by their L1. Contrary to a structure that omits the determiner, the observed structure within the L1 English group has some support in input.²⁶⁶

Despite the increased complexity entailed by the double definiteness construction, the two L1 groups seem to take different paths towards target like use of the definite category. However, the support in input and the low rate of full omission and

²⁶⁶ This is not completely true: There are isolated examples in Norwegian where determiner deletion is allowed, such as in examples like **Ø første dagen** (**Ø** first day.DEF). See also section 7.1.1.

substitution within the L1 English group are perhaps indicative of a shorter distance to go compared to the L1 Russian group. In that sense, some support is given to results from previous research holding that [-ART] learners face larger challenges than [+ART] learners in general, and in particular with premodified NPs. Yet, important for the present study, this tendency is not absolute since the L1 English learners almost across the board perform less targetlike than first anticipated.

7.1.4. A note on determiner + noun

Recall that the Norwegian definite determiner/article takes the form of distal demonstratives (see section 2.1),²⁶⁷ which means that the definite determiner supplied in premodified NPs also occur in non-modified (and modified) NPs with demonstrative meaning as exemplified in (13) and (14) below:

(13) Se på **den** bil-en!
 Look at that car-DEF

(14) **Den** gamle mann-en ved hav-et
 The old man-DEF by sea-DEF

Table 7.4 below reveals that NPs consisting of a definite determiner and an unmodified noun occur more frequently in the L1 Russian texts than in the L1 English texts. The rate of inaccuracy is by and large quite low, indicating that neither of the groups generally models the encoding of definiteness on definite determiner and uninflected definite noun, namely after the English model for definite unmodified NP (or alternatively: after the Russian model for an NP with an intended demonstrative (or possibly anaphoric) reading).

²⁶⁷ For the sake of clarity, and in order not to overinterpret the learners' intentions, I refer to this construction as "definite determiner + noun" throughout this chapter, although it conceals the inherent ambiguity between expressing demonstration and being neutral to demonstration.

NP-construction: definite determiner/article + noun		Inaccurate	Total	%
DP I	L1 Russian	2	12	16.6
	L1 English	0	0	0
DP II	L1 Russian	2	11	18.1
	L1 English	1	6	16.6
DP III	L1 Russian	2	11	18.1
	L1 English	2	4	50

Table 7.4 Inaccuracy in NP constructions of definite determiner + noun. Absolute and relative numbers. All DPs.

However, beyond that, the comparability to the construction applied when the NP contains a premodifier is limited, primarily because the determiner NP is a two-slot construction, and also because a possible omission of the determiner would not be visible when the result is still a grammatical definite NP, or alternatively a simple NP with an omitted definite suffix. Ultimately, the employment of this construction in the present material is problematic from a target language perspective because most often the pragmatic conditions for demonstration are not present. The same construction may, however, also be used anaphorically (see, for instance, J. Hawkins, 1978), but this use will also stand out as awkward if other devices that could disambiguate between referents equally well are available. In that sense, it is plausible to interpret the rather frequent use of definite determiner + noun as an example of overmarking of definiteness. Even though this construction is not very frequent in the material, in some of the learners' narratives, it actually seems to take an important role. This will be exemplified below.

Yet, few contexts for disambiguation and demonstration seen from a target norm perspective do not mean that the use of a definite determiner + noun in the L2 narratives could not match a particular form-function mapping in the L2. Nistov (2001a, p. 228) observes that an added demonstrative acts as an indicator of reintroduction of a referent in the L2 Norwegian Pear Stoires written by three adolescent Turkish learners. Another effect of a demonstrative is to add contrast and to disambiguate, although perhaps most efficiently in oral language use. In the present material no clear function seems to be exclusively attributed to this

construction, although definite determiner + noun occurs as a means of reintroducing the Pear Man in several of the narratives written by the L1 Russian learners (for instance, as shown in 6.3.5, at DP I, Ru-3 uses a proximal demonstrative and an inflected noun to reintroduce the Pear Man).

However, two individuals seem to be prone to add a definite determiner to the NP on a more general basis (Ru-10 and Ru-5). Below, an excerpt from Ru-10-1 clearly reflects a use of this construction that applies to environments beyond those of disambiguation and demonstration:

- | | |
|---|---|
| <p>(15) Mann-en pluket pærer, og gutt-en bærer
Ru-10-1 disse pær-ene.</p> | <p>Man-DEF picked pears, and boy-DEF carries
these pear-DEF.PL</p> |
| <p>Etterpå så jeg en jente som
syklet. Hun kjørte (syklet) forbi
den gutt-en som bærte pærer (kurven)
Den gutt-en har snudd seg, og
de pær-ene falt på jord-a.
Han ble skuffet.
Alle pær-ene lå på jord-a.
Det gikk tre gutter forbi. En av dem
lekte med håndtennis. To gutter av tre
så at pær-ene ble liggende på jord-a.
De begynte gjerne hjelpe til den gutt-en.
Alle pær-ene ble pluket, og
den gutt-en
fortsatt å sykle. Tre gutter gikk videre,
og en gutt så at den gutt-en mistet
sin hatt. Han leverte gjerne den.
Jeg så gjen den mann som pluket pærer.
Og de gutt-ene gikk forbi han. Alle fikk
pærer og spiste dem. Mann så at en kurv
var borte. Det føltes at de hadde ikke avtale.</p> | <p>Afterwards saw I a girl who
biked. She rode (biked) by
the/that boy-DEF who carried pears (basket-DEF)
The/that boy-DEF turned, and
the/those pear-DEF.PL fell on ground.
He was disappointed.
All pear-DEF lay on ground-DEF
It went three boys by. One of them
played with hand tennis. To boys of three
saw that pear-DEF-PL was lying on ground-DEF.
They started gladly help to the/that boy-DEF.
All pear-DEF.PL was picked, and
the/that-boy-DEF.PL
continued to bike. Ø Three boys-Ø went on,
and one boy saw that the/that boy-DEF.PL lost
his hat. He delivered gladly it.
I saw again the/that man-Ø who picked pears.
And the/those boy-DEF.PL went by him. All had
pears and ate them. Man saw that a basket
was gone. It felt like they did not have an
appointment.</p> |

Example (15) depicts a pattern of referent continuation where definite determiner + definite noun to a large extent functions as the general means to mark anaphoric NPs. Interestingly, when the Pear Man is to be reintroduced, the definite determiner + bare noun are used. By DP III, however, the definite determiner+noun construction has been repressed from all contexts except for the reintroduction of the Pear Man (and one additional anaphoric NP):

(16)	Den mann-en som plukket pærer	The/that man-DEF who picked pears
Ru-10-3	la merke til at gutt-en spiste	noticed that boy-DEF ate
	pær-ene.	pear-DEF.PL

7.1.5. Premodified indefinite NPs

In order to get a more complete overview, an analysis of inaccuracy in premodified indefinite NPs will be presented. However, as noted above, encoding of definiteness and premodification are not fully comparable between definite and indefinite NPs. Primarily, this is a consequence of the indefinite article being limited to the singular and thus being replaced by more informative quantifiers in referential plural contexts. Consequently, indefinites are not directly complementary to definites where the (grammatical) determiner is also required in plural contexts.

(17) Indefinite: **en** gul bil – tre gule biler
 a.M yellow car – three yellow cars

(18) Definite: **den** gule bil-**en** – **de** tre gule bil-**ene**
the.M yellow car-DEF.SG.M – **the.PL** three yellow car-DEF.PL

The following brief presentation addresses only premodified indefinite singular NPs.

INACCURACY IN PREMODIFIED INDEFINITE NPs						
	L1 Russian			L1 English		
	Inaccurate	Total	%	Inaccurate	Total	%
DP I	11	15	73.3	0	13	0
DP II	3	9	33.3	0	9	0
DP III	3	9	33.3	1	13	7.6

Table 7.5 Inaccurately premodified indefinite NPs. All DPs.

Once again, I argue that a closer look at premodification clarifies and reinforces the idea of differences between the two learner groups. In fact, Table 7.5 above reveals that, with the exception of one inaccurately marked NP in the L1 English material, the L1 Russian group alone performs inaccurately in singular indefinite NPs with a premodifier (as outlined above, this modifier must necessarily be an adjective). The relative rate of errors at DP I (73.3%) also exceeds the high rate of inaccuracy reported for the category of [+SR, –HK] in chapter 5. Compared to the L1 English group, where the absolute number of occurrences actually exceeds the L1 Russian group (see Table 7.5), the present results strengthen the impression that the L1 Russian group is susceptible to premodification as a trigger of article omission. This discrepancy between the groups also strengthens a hypothesis predicting indefinites and/or the indefinite article as the Achilles heel of the L1 Russian learners, while the definite inflection seems to play a similar role in the acquisition process for the L1 English learners.

For premodified definites the classification tags needed for error tagging are quite complex, whereas for premodified singular indefinite NPs the categories of “omission of an article/determiner” and “substitution,” that is, application of the definite form, seem to add enough detail.

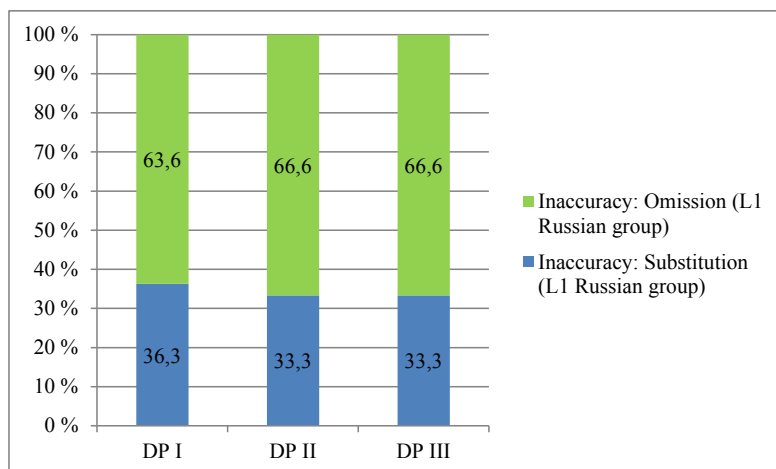


Figure 7.3. Distribution of error types in premodified indefinite NPs. L1 Russian group. All DPs.

Given the near absence of inaccuracy within the L1 English group, Figure 7.3 reports on the L1 Russian group alone. First, the figure illustrates a stable distribution of errors across DPs: one out of three errors represent substitution errors, while two out of three represent omission errors. It is tempting to speculate that the most considerable challenge is related to supplying the article, followed by the challenge of uncovering the identifiability status of a context. Moreover, a zero form may or may not indicate failure to determine the semantic/pragmatic context for the NP, while a substitution error is likely to indicate a failed detection of pragmatic status.

7.1.6. Section summary

The purpose of conducting independent analyses of premodified NPs was to be able to detect and clarify differences connected to L1 background. Even though the tendencies from chapters 5 and 6 were generally reinforced, the present analyses were also able to add more detail and establish a link to previous research on other L2s. First and foremost, the general level of inaccuracy increases when a premodifier is added. An exception to this pattern is found in indefinite premodified NPs among the L1 English learners. The rate of inaccuracy in premodified definite NPs decreases radically by DP III within the L1 English group, but remains stable within the L1

Russian group. Distinct error types within premodified definite NPs are associated with each group: Omission of inflection, but suppliance of the determiner, is heavily attested in the L1 English group, while the opposite pattern is characteristic of the L1 Russian group. It was suggested that the challenges weighed more heavily upon the L1 Russian learners, and this speculation was supported by the results from similar analyses of premodified singular indefinites, where the L1 Russian learners alone performed inaccurately.

7.2. Possessive constructions

This final section, which addresses the use of possessives in the L2 Pear Stories, primarily motivated by the highly-fixed nature of possessive constructions, in addition to the language-specific characteristic of allowing two types of possessive constructions that display diverging patterns of definiteness encoding.

Possessives represent a well-known category that can function as first-mention definites. Du Bois (1980) explicitly directs attention to this functional property of possessives in the Pear Stories. From the perspective of first-mention definites, he arrives at a principle outlining how semantic restrictions on definite first mentions are mainly determined by set membership and frames: “In sum, the more independent an object, the less likely it is to be definite on initial mention” (Du Bois, 1980, p. 236). For instance, body parts are more likely to be introduced in the definite form than is the Goat, even though it is certainly possible to imagine the Goat being introduced as part of a possessive construction. In the Pear Story film, a substantial number of candidates for a possessive introduction appear, perhaps in particular the many properties and belongings associated with the Bikeboy, such as his body parts, his clothes, and his bike. Situations allowing a broader employment of possessive constructions may also be created by the narrator, such as if the writer chooses to view the Threesome as the Bikeboy’s friends.

J. Hawkins (1978) pointed out in relation to genitive constructions that, similarly to associative anaphora, they are constrained by general knowledge and set membership. Possessive constructions also seem to be constrained by similar processes even though different languages may display different patterns of use. The principle of general knowledge and set membership does not seem to be violated by the learners. For instance, sentences such as “a man and **his** goat” do not occur.

Language-specific distributional patterns that distinguish Norwegian from Russian and English may be observed in relation to inalienable possession (see, for instance, Heine, 1997, for a cognitive introduction to possessive relations). In Norwegian, the conventional way of referring to inalienable objects, such as body part, allows but does not require a possessive:

- (19) Jeg har brukket arm-**en**
 I have broken arm-DEF.SG.M
 [I have broken **my** arm]

Generally, both Norwegian and Russian distinguish between alienable and inalienable possession in relation to body parts, while English does not. For inalienable kinship terms, on the other hand, the possessive relation is presupposed in Russian but not in either Norwegian or English:²⁶⁸

- (20) Mari bor hos foreldr-**ene** **sin-e**
 Mari lives with parent-DEF.PL her-PL.POSS.REFL
- (21) Mari živet u raditel-**ey**
 Mari lives at parent-PL.GEN

²⁶⁸ In Russian, possessive relations involving kinship terms expressed in the nominal phrase are normally presupposed. However, employment of a possessive pronoun is not ungrammatical.

Although simplified, a contrastive analysis account would predict an oversuppliance of possessive pronouns in the L2 Norwegian produced by the L1 English learners, and undersuppliance of possessives by the L1 Russian learners. Examining the targetlikeness of the use patterns of possessive constructions in discourse is, however, not the main focus of the present analysis.

In the analyses modelled after the Taxonomy of Assumed Familiarity in chapter 6, first-mention possessive constructions were classified as containing inferrables, while subsequent mentions were subsumed under evoked NPs. In the Semantic Wheel analysis, possessives classify as [+SR, +HK]. That is, possessive constructions relate to the same level of givenness as inferrables do, but are characterized by a strongly fixed grammatical form, and are thereby subsumed under containing inferrables (see section 6.2 for more details). Once again, a closer look into the use of this construction type in the present data reveals variation that may possibly relate to L1 background.

7.2.1. Possessive constructions in Norwegian

One characteristic of Norwegian is that it contains two independent constructions expressing possession that involve possessive pronouns. Here the double-definiteness construction alternates with a construction displaying single definiteness. However, the optionality with respect to possessive constructions occurs at a different level than that of double definiteness in premodified NPs, since optionality here arises as a choice between two distinct constructions. That is, once one type is selected by the language user, the construction is fixed: When the possessive is postnominal, double definiteness is required, and when the possessive is prenominal, it is followed by an uninflected noun in terms of definiteness encoding (number is still encoded).

Prenominal possessive:

- (22) De leverte **hans** **hatt** tilbake
 Ru-10-3 They delivered his.POSS hat back

Postnominal possessive:

(23)	Samtidig	han	mistet	hatt-en	sin
Eng-3-1	At the same time	he	lost	hat-DEF.M	his.POSS.REFL

Nevertheless, much like the alternation between single and double definiteness in general, the choice between prenominal and postnominal possessives largely depends on style. Hagen (2000, p. 382) asserts that the prenominal variant signals a higher level of formality compared to the postnominal variant, which is most commonly applied in spoken Norwegian. Beyond that, he also points out important differences at the level of phonology. In a footnote he provides a reference to Husby and Kløve (1998, p. 107), who treat the noun and the postnominal possessive together as a prosodic foot, and Hagen argues that the postnominal possessive thus bears a closer resemblance to inflection than to an attribute. The two constructions entail opposite stress patterns: A preposed possessive is typically stressed and follows an iambic pattern, while in the postposed possessive construction the noun receives the main stress. Interestingly, iambic compared to trochaic feet are associated with a greater acquisitional challenge in child L1 learning (see Anderssen, 2005; Kupisch et al., 2009; section 3.5 in the present study).

7.2.2. Results: Use of possessive construction in the present Pear Story material

Figure 7.4 displays the distribution in absolute numbers of the two possessive constructions in the L1 groups. Overall, the postnominal possessive construction is more popular by far, indicating that the learners do not seize the opportunity to avoid the required definite form by deliberately selecting a prenominal possessive structure.

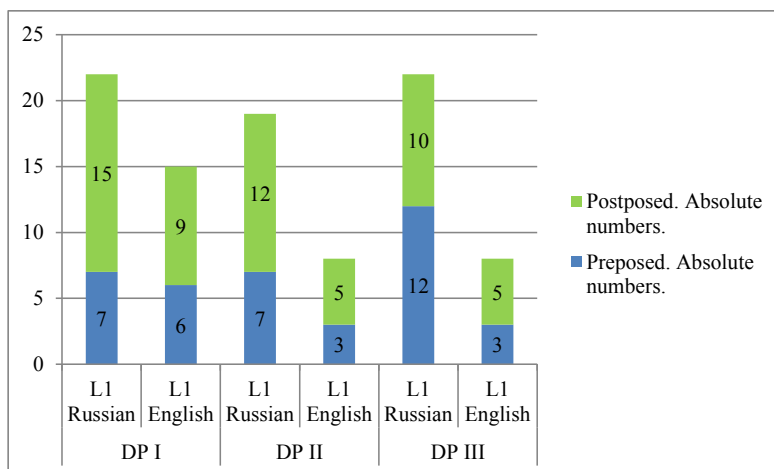


Figure 7.4. Preposed and postposed possessives. Absolute numbers.

It is worth noticing that the use of possessives in general decreases within the L1 English group at DP II and III, while it remains at more or less the same level in the L1 Russian group. Finally, at DP III, the L1 Russian group unexpectedly increases its use of prenominal possessive constructions at the cost of the postnominal variant. I have no explanation for either this or the reduced use of possessives within the L1 English group, although it may be a consequence of an increased level of language knowledge that improves the capacity to pay attention to style and variation, etc., as well as it equips the learners with more tools.

The inaccurate uses of possessives do not comprise many tokens. Within the L1 Russian group, only one error at each DP is documented. Within the L1 English group, errors occur slightly more frequently. Table 7.6 shows that the L1 Russian group outperforms the L1 English group in this category. Table 7.7 below provides more detail about this observation.

POSSESSIVES – INACCURACY	L1 RUSSIAN			L1 ENGLISH		
	Inaccurate	Total	%	Inaccurate	Total	%
DP I	1	22	4.5	4	15	26.6
DP II	1	19	5.2	3	8	37.5
DP III	1	22	4.5	0	8	0

Table 7.6 Inaccurate use of the possessive constructions. All DPs.

INACCURATE USE OF THE POSSESSIVE CONSTRUCTION Inherently definite				
	L1 RUSSIAN		L1 ENGLISH	
	PRENOMINAL	POSTNOMINAL	PRENOMINAL	POSTNOMINAL
DP I	sine stjålende pærene REFL.POSS.stolen pear.DEF.PL.		(seg lokk)* (seg kneer) (seg hatt)	sykkel si bike REFL.POSS. nabo hennes neighbor her pære hennes pear her bein** hans leg his
DP II	hans naboen his neighbor.DEF.SG			forkle hans apron his bene sin leg his arbeide sin work REFL.POSS
DP III	hans kurvene his basket.DEF.PL			

Table 7.7 List of inaccurate possessive NPs. All DPs. English glossing and translation below.

*The NPs in parentheses are not counted as errors since they display the right structure of definite encoding, although the three examples clearly depart from the target norm. In place of a possessive, a reflexive pronoun is applied.

**Three of the words that occur with an omitted definite suffix are neuter (*et bein/ben, et forkle, et arbeid*), where the final *-t* of the suffix *-et* is rarely pronounced. Perhaps this may explain the omitted suffixes. On the other hand, the postnominal possessive has the masculine/feminine form in two of four examples. The final two possessives are the uninflected *hans* [his].

Table 7.7 above can be summarized as follows: Inaccurate use of possessives among the L1 Russian learners involves an overuse of the definite form when the possessive is preposed; inaccurate use of possessives within the L1 English learner group displays omission of the definite form in the postnominal construction. The numbers are small, and not all learners in each group are even represented in these tables and descriptive statistics. Ru-5 and Ru-3 are responsible for the erroneous performance within the L1 Russian group, while Eng-4, Eng-3, and Eng-1 perform inaccurately within the L1 English group.

Example (24) and (25) below, displays the differences between the two types of errors: In (24) the definite suffix is attached to the noun in a preposed possessive construction, whereas in (25), where the postnominal possessive occurs twice, the noun is only inflected as anticipated by the target norm in the first occurrence.

(24) Ru-5-2	... hans nabo-en gikk forbi med en geit.	... his neighbor-DEF went by with a goat.
(25) Eng-3-1	Etterpå vi sett en liten gutt på et sykkel-en sin naerheten til mannen i traet. ... Mens gutt-en sykkelte på vei, sett han ei jenta også på sykel si	Afterwards we saw a little boy on bike-DEF his .POSS.REFL near to man-DEF in tree-DEF. ... While boy-DEF biked on road-Ø, saw he a girl-DEF. also on bike her .POSS.REFL

7.3. Summary and concluding remarks

I will argue that the main pattern worth noticing with respect to premodification and possessives is that when inaccuracy occurs in clearly fixed patterns, and in cases when these inaccuracies do not seem to necessarily relate to semantics/pragmatics alone, the two L1 groups depart from each other. They are clearly influenced by different features of the definite NP, which leads them to utilize substantially

different grammatical patterns: The L1 English learners are prone to omitting the definite article, and the L1 Russians to oversupplying the definite form.²⁶⁹ It is tempting to speculate how the single definiteness construction in relation to possessives may affect the learners' production; that is, it may be worth asking whether redundant marking actually is counterintuitive, or whether repeated and subsequent marking of all determining and descriptive attributes of a complex NP is equally well-motivated in the logic of learning, considering the Russian nominal paradigm that encodes pronominal attributes for case, number, and genitive.

Finally, the sudden high level of accuracy within the L1 Russian group is interesting and perhaps implies that the grammatical cues exposed by the possessive construction have a facilitating effect on these learners. It would be an interesting topic for future research to examine the role of highly-fixed nominal phrase constructions in the acquisition of definiteness encoding: To what extent may [-ART] learners model their suppliance of definiteness encoding chiefly on intelligible "rules," in contrast to [+ART] learners' propensity to utilize their L1 knowledge and thereby model their L2 grammar on the first language?

7.4. Chapter summary

In the preceding chapter, a set of specific NP constructions have been isolated and studied independently from the two other analyses which related to the semantic/pragmatic level and the discourse level. These specific NP constructions included premodified NPs and possessive constructions. Both construction types involve the language-specific feature of double definiteness.

²⁶⁹ Oversuppliance of definite inflection in possessive constructions is also reported in Nyqvist (2013), who studied Finnish adolescents' acquisition of Swedish. However, since Swedish does not exhibit a postnominal possessive construction, Nyqvist's material cannot fully complement and inform the present discussion.

Although the numbers were relatively small and all rates of inaccuracy were considerably diminished by DP III, the results confirmed a tendency observed in the two previous analyses: Inaccuracy most often involve omission of the definite inflection for the L1 English learners, whereas it involves omission of a determiner or overgeneralization of the definite form for the L1 Russian learners.

8. Summary and concluding remarks

The present chapter reviews the main findings of the study and seeks to evaluate the results in light of the applied framework, its scope, and limitations. Since the present study is closely intertwined with the tradition of L2 English article acquisition studies, I attempt to appraise its value as a contribution to the field of L2 article/definiteness acquisition. First I will revisit the research questions and predictions in order to summarize the results and discuss some possible explanatory factors. It is clear that even though the analyses have mapped some interesting observations, much more research is required in order to arrive at any firm conclusions. In that light, an important purpose of the present chapter is to identify relevant intervention points for future research.

The main findings may be summarized as follows: At the time of onset, the L1 Russian learners were prone to omit the indefinite article, whereas the L1 English learners showed a propensity to omit the definite inflection. During the three data points, the L1 Russian learners increased their use of indefinite articles, but continued to omit definite encoding at a relatively stable rate. The L1 English learners, however, improved their use of definite encoding considerably during the three data points, and their encoding of indefinites was almost at ceiling at DP III.

In short, during the time of data collection, the L1 Russian learners in terms of development seem to have integrated the indefinite articles in their L2 Norwegian grammars, whereas the L1 English learners saw a similar development in relation to encoding of definites. The impression that the two learner groups experienced different challenges was reinforced when specific NP constructions were examined: The L1 Russian learners tended to omit determiners (both definite and indefinite) in premodified NPs, while the L1 English learners tended to omit the definite inflection when they performed inaccurately both in premodified NPs and possessive constructions.

8.1 Revisiting the research questions and predictions

Three research questions and three predictions, which emerged from the literature on L2 article/definiteness acquisition, have guided the study. Because most previous research has been conducted on English as a target language, the need to account for differences in linguistic structure related to the realization of grammatical definiteness in Norwegian and English has added an additional layer of complexity to the present study. The incorporation of alternative predictions that accompany several of the main predictions was motivated by this cross-linguistic complexity. The few studies on L2 definiteness acquisition in a Scandinavian language, seem to have been conducted independently of the tradition of research on L2 English article acquisition. In chapters 1 and 3, I argued for a different path in close agreement with the research on English as a target language. Two primary reasons warranted this approach: The importance ascribed to semantics and pragmatics in models of definiteness enables comparison at the level above linguistic structure, and further, the relative consistency in the findings across different L2s suggests that there are certain commonalities valid across target languages in how definiteness is learned. These arguments encouraged the adaptation of hypotheses and models stemming from studies of L2 English into the present study of Norwegian L2. However, patterns diverging from those observed in L2 English have also been documented (see, for example, sections 5.3.1.2 and 7.1.3), mainly in relation to the inflectional encoding of definites where Norwegian (and Swedish) differs from English (Axelsson, 1994; Jin, Åfarli, & van Dommelen, 2009; Nyqvist, 2013, 2015). The present study aimed to integrate cross-linguistic differences in a design that could account for anticipated similarities based on previous research but also potentially diverging patterns arising from differences in structural realizations in both the target language and the learners' L1s.

The overarching question of the study put forth in section 1.2 was:

How do L1 effects, universals of discourse, and L2 specific features interact in the encoding of grammatical definiteness by learners of L2 Norwegian with Russian and English L1s?

Each prediction, presented in section 3.6, is surveyed below in light of the results reported in chapters 5, 6, and 7. First however, we revisit the research questions:

RQ 1: Are the L1 Russian learners inhibited or delayed in their use of definiteness encoding in Norwegian as a consequence of their L1, as supported by previous research on other L2s, or may the absence of an L1 grammatical category of definiteness be more advantageous to learning than a contrast relation is?

RQ 2: Are the L1 English learners facilitated in their use of definiteness encoding in Norwegian as a consequence of their L1, as generally supported by previous research on other L2s, or is their learning process conversely inhibited by L1–L2 contrast relations?

RQ 3: If there is an interaction between L1 effects, L2 effects, and universal principles of discourse in the learners' L2 models of definiteness, does each variable affect the learners equally, or does one override the others?

On a general basis, the research questions and predictions were motivated by the literature on article acquisition. However, in order to account for the cross-linguistic relations and their possible influence on the learners, Ringbom's (2007) work on cross-linguistic influence, in combination with the contrastive linguistic relations outlined by Tokowicz and MacWhinney (2005, based on the Competition Model (Bates & MacWhinney, 1989; MacWhinney, 1997; MacWhinney, 2004)), comprised the point of departure for outlining research questions 1 and 2. RQ 1 aspired to account for [–ART] learners, whereas RQ 2 focused on the [+ART] learners.²⁷⁰ The intention was, on the one hand, that the combination of two frameworks emphasizing different aspects of cross-linguistic relations in second language learning could account for (1) developmental patterns that would not differ substantially from that observed in other [+ART] target languages, and (2) the idea that a language

²⁷⁰ In Tokowicz and MacWhinney (2005), however, the cross-linguistic relations are originally meant to capture comprehension, yet, in the present study, it is assumed that the same type of contrasts may also play a role in production (see section 3.6).

constellation of Norwegian, Russian, and English would, conversely, on the other hand, lead to mappings that differed from those mainly attested in studies of L2 English article acquisition. The final research question addressing the interaction between universals, L1, and L2 emerged more directly from the literature review on article acquisition.

8.1.1 Prediction 1: [-ART] learners

Prediction 1 related to the L1 Russian learners. They were, based on a large body of previous research, mainly expected to be more challenged than the L1 English learners by the category of grammatical definiteness in Norwegian, since this category is not encoded in their L1. The main prediction was formulated with two alternative predictions. Alternative (a) ranked above (b) and (c), meaning that if (a) was not confirmed unambiguously, alternative (b) and (c) would have had to be explored further. Prediction 1 was primarily investigated in the Semantic Wheel analysis reported in chapter 5. The following summary draws on the results from this analysis based on a measure of accuracy. The yardstick was thus the target language norm

P 1: [-ART] learners

- (a) The L1 Russian learners will face more challenges in the marking of definiteness in Norwegian because their L1 does not grammaticalize definiteness.
 - i. The L1 Russian learners will omit more marking than the L1 English group.
 - ii. The L1 Russian learners will substitute more marking than the L1 English group.
- (b) The L1 Russian learners will have an advantage in the lack of conflicting realizations of definiteness in Norwegian and Russian.
- (c) The knowledge of a third [+ART] language (L3) will overrule the impact of the L1 and entail a model of definiteness encoding that is highly similar to that of the L1 English learners.

Prediction 1 (a), which hypothesized that the L1 Russian learners would face more challenges with the encoding of grammatical definiteness in Norwegian because their L1 does not encode this category, also specified the type of evidence expected if the prediction were supported. Based on previous research, it was expected that the L1

Russian learners would omit more marking and substitute more marking than would the L1 English learners. The tradition of Huebner (1983), further pursued in Master (1987), Parrish (1987), and Thomas (1989), identified an initial dominance of the definite article: The indefinite article was acquired later and the definite article was documented to be overgeneralized to contexts requiring the indefinite article. This line of research was also inspired by child L1 acquisition studies, where similar patterns were documented.²⁷¹

Were the L1 Russian learners inhibited in the encoding of grammatical definiteness? At an overall level Prediction 1 (a) seemed to be supported in the data. However, this conclusion should be discussed further for each data point, and in the literature. At DP I, the L1 Russian learners omitted more indefinite articles than did the L1 English learners, but they omitted fewer definite suffixes. Both learner groups substituted definite for indefinite forms at DP I, but the L1 Russian learners did so to a larger extent than the L1 English learners did. Overgeneralization was also more persistent within the L1 Russian group: At DP III, substitution of definite articles occurred in texts written by three L1 Russian learners, but not in any of the texts written by L1 English learners (see section 5.3.3). However, it is important to underscore that the pervasiveness of overgeneralization of the definite inflection was nowhere near the rate documented in Huebner (1983), which at the most reached 86% in [+SR, -HK] contexts (see also section 3.1.1). The peak of overgeneralization in the present data occurred at DP I and accounted for 42.8% of all errors occurring in [+SR, -HK] (see section 5.2.2).

The initial high rate of omitted indefinite articles (37.8% at DP I for the L1 Russian group, see section 5.3.1) also ties into the findings from previous research: [-ART]

²⁷¹As we saw in chapter 3, these studies were also largely concerned with the relationship between specificity and hearer knowledge. Even though the present study has adopted the framework of Bickerton (1981) and Huebner (1983), issues related to the prior establishment in the learner's grammars of encoding of either specificity or hearer knowledge have been slightly downplayed mainly since the elicited fictional narratives yielded very few instances of generic NPs and nonspecific/nonreferential NPs. That is, the preponderance of NPs were specific and alternated between being combined with the function of [+HK] or [-HK].

learners have been documented to experience more trouble with indefinite articles than with definite articles in L2 English, as well. Furthermore, these findings also seem largely compatible with previous findings from studies of L1 Scandinavian acquisition (Anderssen, 2005; Svartholm, 1978) and L2 Swedish acquisition (Axelsson, 1994; Nyqvist, 2013) (see section 3.5). Axelsson noted that the L1 Spanish learners in her study were more accurate with indefinite NPs than were the [-ART] L1 Finnish learners: "...Finnish learners acquire *boken* [bok.DEF] before *en bok* [a book], while Spanish learners acquire *en bok* before *boken*" (Axelsson, 1994, p. 101).

Finally, overgeneralization of the definite inflection was most frequent in the data for the L1 Russian learners, but overgeneralization of the indefinite article to definite contexts also occurred within the L1 Russian learner group at one data point, DP II. On the whole, the learners' models of definiteness encoding seemed to undergo the most radical changes in terms of the indefinite article between DP I and DP II (the rate of inaccuracy decreased from 37.8% at DP I to 25.3% at DP II, and finally to 22.5% at DP III; see Tables 5.6 and 5.7). The overgeneralization of the indefinite article to contexts requiring definite encoding hence coincided with the general drop in error rate. On a theoretical level, the substitution of the indefinite article implied that the learners' grammars exhibited no constraint preventing the indefinite article from being substituted. This observation corroborated Ionin and colleagues (Ionin, 2003; Ionin & Wexler, 2003; Ionin, Ko, & Wexler, 2004; see also section 3.3.5 in the present study), who predicted and observed that substitution could go both ways. Yet, perhaps most important in the present context, this finding suggests that the learners may have been more inclined to overgeneralize at developmental stages where a particular target form was about to become an integrated part of the grammar.

At DP I, the L1 Russian learners navigated somewhere in the landscape between CEFR levels A2 and B1 (most of them were preparing for the official test measuring at the B1 level) (see section 4.4). This was also the point when the learners' performance appeared to most closely model that of the typical [-ART] learner

known from the early literature on L2 English: high rates of omitted indefinite articles, high rates of substituted definite inflection, and a relatively high rate of omitted definite inflection (the accuracy rate was right below 80% for [+SR, +HK] and 62.2% for [+SR, -HK]; see Table 5.4 and also sections 3.1 and 3.2). If we compare to, for instance, Thomas's (1989) overall results (proficiency level not taken into account), we see that the [-ART] learners studied by Thomas supplied definite articles in 80.9% of the anticipated contexts, but they supplied indefinite articles in only 59.0% (see section 3.1.1). Later, however, on the way from DP I to DP III, the L1 Russian group's encoding of grammatical definiteness underwent certain changes: At DP III, the use of indefinite articles increased considerably, but the supplience of definite encoding seemed to stabilize.²⁷² The developmental profile attested in the L1 Russian learner group is reminiscent of that detected among the L1 Russian learners in Master's (1987) cross-sectional study: Compared to the other [-ART] learners, the use of the definite article seemed to develop more slowly than the indefinite article in the L2 English grammars of the L1 Russian learners. In Master's own words, also quoted in section 3.1.1, the L1 Russian learners were characterized by a "less steep climb" with *the* and a "more steep climb" with *a* (Master, 1987, p. 81).

Were the L1 Russian learners facilitated by the absence of L1–L2 competition?

Alternative (b) cannot be seen independently of the results for the L1 English learners, yet it predicted that the L1 Russian learners could more readily establish a targetlike system of definiteness encoding in the L2 since there was no conflict between the L2 and L1 in this area. If we compare the L1 English learners to the L1 Russian learners at DP I, there might be some truth to this, but only in the case of the definite encoding: At DP I, the L1 Russian learners used the definite encoding more consistently than did the L1 English learners (the rate of inaccuracy was 22.7% for the L1 Russian learners versus 38.0% for the L1 English learners, see Table 5.4,

²⁷² This is perhaps predictable from Trenkic (2009) and Trenkic and Pongpaioj (2013) who claim that even though accuracy increases, omission of articles in redundant contexts persists. This will be discussed further below.

section 5.3.1). However, at DP II and DP III, the L1 English learners caught up with the L1 Russian. In fact, at DP III, the rate of inaccuracy in the category of [+SR, +HK] was higher within the L1 Russian learner group than in the L1 English group (18.6% vs. 14.9%, respectively; see section 5.3.2). Nonetheless, it is tempting to speculate whether this initial advantage in relation to definite NPs may possibly be related to the extensive NP inflectional system of Russian; that is, the L1 Russian learners were more used to NP inflection than were the L1 English learners (see also chapter 2). May this knowledge have transferred into their Norwegian?²⁷³ On the whole, also in terms of general development, the present results seem to tie into those of Master (1987). In his study, [+ART] learners reached an accuracy rate of 90% for article use at the mid-mesolang level, whereas for [-ART] learners this stage was not reached until the high mesolang level (Master, 1987, p. 29; see section 3.1.1).

Were the L1 Russian learners influenced by their knowledge of other [+ART] languages? The knowledge in the L1 Russian group of other [+ART] languages was not tested directly, and the insight into this variable in the present study is thus only indirect. As stated in sections 1.1 and 1.4, the propensity to transfer from one L2 to another depends on several variables, such as psychotypology, proficiency, recency and so forth. If we take psychotypology into account, there would be good reasons to expect some influence from English (and other [+ART] languages). However, since information about knowledge of other languages was based on self-report, the level of proficiency was difficult to evaluate reliably (see section 4.3.1). Alternative (c) predicted that if the learners were indeed relying on knowledge of other [+ART] languages, their pattern of definiteness encoding would resemble that of other [+ART] learners. This was not confirmed in general, but Ru-6 and Ru-10, in line with the L1 English learners, generally exhibited high rates of accurately encoded

²⁷³ Something similar is suggested by Axelsson to account for the relative ease of encoding Swedish definites among L1 Finnish learners compared to L1 Spanish learners. Axelsson draws on Slobin's Operating Principles (1973) and claims that the L1 Finnish learners are more used to noticing the ending of words (1994, p. 148). See Axelsson (1994) for a complete reference to Slobin (1973).

[+SR, -HK]. Their reported level of English knowledge was *intermediate* and *basic*, respectively.²⁷⁴

8.1.2 Prediction 2: [+ART] learners

Prediction 2 focused on the [+ART] learners of the study. The literature on L2 English article acquisition suggests that these learners would benefit from their L1, and that they would be able to transfer their L1 system of article use into the second language. However, if we consult the literature on L2 Scandinavian, this assumption should be slightly adjusted: Jin, Åfarli, and van Dommelen (2009) and Axelsson (1994) provided evidence identifying the definite NP as a possible challenge to [+ART] learners, with respect to both the determiner (Jin, Åfarli, & van Dommelen, 2009; Axelsson, 1994) and the inflection (Axelsson, 1994) (see section 3.5 and above). Their research indicates that the encoding of definites in Norwegian and Swedish may be more challenging to [+ART] learners than the definite article is for [+ART] learners of English.

On the whole, the attention to form and structural competition seems to be increasing in the research on both L1 article acquisition (Anderssen, 2005, 2007; Kupisch et al., 2009) and L2 article acquisition (Austin, Pongpaioj, & Trenkic, 2015; Goad & White, 2004, 2006; Trenkic, Mirkovic, & Altmann, 2014). The L1 acquisition literature has focused on the difference between a definite suffix and a definite (and an indefinite) article, whereas the L2 literature has increasingly attended to structural competition between an L1 and an L2, as well as prosodic constraints in the L1 hindering the development of new patterns in the L2. The idea of conflict between different linguistic cues is articulated clearly within the Competition Model (Bates & MacWhinney, 1989; MacWhinney, 1997, 2004), and may capture the possibility that the L1 English learners' encounter with Norwegian definiteness encoding is different

²⁷⁴ In two of the learners' narratives lexical forms and orthography that could possibly be traced back to English were detected (see section 1.4).

than what has generally been attested in studies involving [+ART] learners of L2 English. Alternative (a) of Prediction 2 ranked above alternative (b) in the sense that if (a) could not be affirmed, (b) would have to be considered. Below, however, both alternatives are integrated in the same discussion. The following survey is based on the results reported in chapter 5, that is, the Semantic Wheel analysis measuring accuracy on the basis of the four categories of specific reference and hearer knowledge, and the target norm.

P 2: [+ART] learners

- (a) The L1 English learners will benefit from their L1 because, despite formal differences, their L1 encodes the same semantic and pragmatic functions by grammatical definiteness as Norwegian does.
- (b) The L1 English learners will be inhibited in their use of definiteness in Norwegian due to the formal contrasts between English and Norwegian in the realization of grammatical definiteness.

Were the L1 English learners facilitated by their L1 in the encoding of grammatical definiteness in Norwegian?

At DP I, it was clear that the L1 English learners had advantages when introducing referents into discourse with the indefinite article. In this domain, the difference between the L1 Russian and L1 English learners could not be disregarded. At this stage of development, the two learner groups appeared to be entertaining opposite models for definiteness encoding: Whereas the L1 Russian learners omitted indefinite articles (and substituted definite inflection), the L1 English learners omitted definite inflection (see Table 5.4, section 5.3.1). This result was not initially anticipated but it is interpretable within the perspective of competition articulated in the alternative prediction (b), which holds that the structural contrast between the L1 English definite article and Norwegian definite inflection may have prevented the L1 English learners from producing target like definite NPs. In order to interpret the results from DP I, both alternatives must be invoked: Alternative (a) can account for the use of

indefinite articles, whereas alternative (b) can account for the failure to encode definites.²⁷⁵

Through data points II and III, the L1 English learners underwent considerable change; with the exception of one learner, they rapidly moved towards the target norm encoding of definiteness. The rate of inaccuracy decreased dramatically; by DP III, the group as a whole practically performed at ceiling in the category of [+SR, –HK], and also performed considerably more accurately with NPs occurring in [+SR, +HK] contexts (the rate of inaccuracy was 6.1% for [+SR, –HK] and 14.9% for [+SR, +HK] at DP III, see section 5.3.2). This change suggests that the L1 and L2 realizations of definite encoding compete, which might in turn have affected the use of definite inflection at DP I, diminished in parallel with the learners' L2 development. It may thus be that, during the period of data collection, the L1 English learners discovered the functional similarity underlying the formal contrasts between Norwegian and English definiteness encoding, and thereby became more aware of the required definite inflection in Norwegian. Moreover, the learners may have reached a stage in development that enabled them to process grammar (possibly perceived as redundant) even when this grammar deviated from the L1. (Recall, however, that whereas the encoding of definiteness became increasingly targetlike, the level of general proficiency remained almost unchanged.)

In conclusion, when the development of the L1 Russian learners and the L1 English learners was compared, similarity, in the sense of Ringbom (2007), ultimately appeared to be advantageous, although structural contrasts may have prevented the learners from producing target-like inflection at certain stages of development. In the end, the analysis of premodification and possessives in chapter 7 revealed some important details that could distinguish the learners on the basis of L1 background:

²⁷⁵ It is worth noting, though, that conflict in the domain of gender assignment for indefinite articles did not seem to affect the L1 English learners negatively, or prevent them from assigning an indefinite article to encode introduction. For definites, on the other hand, if conflict was a relevant element, it seemed to have a stronger inhibiting effect.

When the L1 English learners were inaccurate with these structures, the inaccuracy seemed inextricably linked to the definite inflection. The L1 Russian learners displayed the opposite pattern: When they were inaccurate, the inaccuracy never affected the suppliance of the definite inflection; rather, they omitted definite determiners and oversupplied definite encoding in possessive constructions (see sections 7.1 and 7.2). This result will be discussed further below (section 8.1.4).

8.1.3 Prediction 3: Discourse universals

Prediction 3 was investigated in chapter 6 and aimed to account for the possible impact of discourse universals invoked in RQ3:

RQ 3: If there is an interaction between L1 effects, L2 effects, and universal principles of discourse in the learners' L2 models of definiteness, does each variable affect the learners equally, or does one override the others?

The overall motivation for investigating the impact of discourse universals emerged from the literature on second language article acquisition. In the research tradition, it is widely assumed, implicitly or explicitly, that [–ART] learners in particular will resort to universals of language, and economize and adjust their L2 models of grammatical definiteness based on a system of universals of discourse (Chaudron & Parker, 1990; Huebner, 1983; Jarvis, 2002; Robertson, 2000; Sharma, 2005; Trenkic, 2002, 2009; Trenkic & Pongpairoj, 2013). Prediction 3 also maintained that there would be a difference between [+ART] and [–ART] learners:

P 3: *Discourse universals*

Different environments for the use of grammatical definiteness and the gradability of givenness will affect L1 Russian and L1 English learners differently.

- i. In line with previous research, because Russian does not encode definiteness grammatically, the L1 Russian learners will resort to universals and their L2 Norwegian definiteness encoding will be more strongly guided by discourse universals than will the L2 of the L1 English learners.

- ii. L1 transfer based on the similarity relation between grammatical definiteness in Norwegian and English will override a dependence on discourse universals alone in the L2 Norwegian definiteness encoding of the L1 English learners.

The present approach to this topic was based on Sharma (2005a), who applied Prince's (1981) Taxonomy of Assumed Familiarity to a data sample of spoken nonnative English. The purpose was to investigate whether the data would reveal effects resembling those observed in Sharma (2005a).²⁷⁶ Sharma detected relatively clear patterns of article use based on discourse universals; namely, the speakers seemed to entertain a marking system for familiarity based on a principle of "the more familiar, the less marking."²⁷⁷

The present analysis integrated some additional aspects from the SLA literature that elaborated on those from Sharma: The analysis was further motivated by a frequent assumption and observation in L2 data that is conceptualized as a *redundancy effect* (see Trenkic, 2009).²⁷⁸ This concept has, as seen in chapters 3 and 6, often been invoked in the following situations: when article omissions/bare nouns were frequent in topic position (Huebner, 1983; Jarvis, 2002; Trenkic, 2002b; Young, 1996), with second-mention NPs and current NPs (Jarvis, 2002; Trenkic, 2002b), and finally with referents easily recoverable from the context (Robertson, 2000). Bare nouns in these environments have been identified as a typical structure that would indicate a discourse model licensed by universal principles. The typical model of discourse universals diverges from that of the target language since explicit encoding is restricted to a more confined group of contexts.²⁷⁹ In short, the expected system of

²⁷⁶ Even though Sharma's data are spoken and cannot directly be classified as learner language, the argumentation put forth in her study is largely reminiscent of that found in L2 studies. For example, throughout the study, she refers to Jarvis (2002) and Young (1996).

²⁷⁷ Note that the intervention point for the analysis reported in chapter 6 is restricted to full NPs; that is, it does not include a full hierarchy of referent accessibility as known from Givón (1983a, 1983b, 1984, 1992) and Ariel (1990), which also encompasses pronouns and Ø anaphora.

²⁷⁸ Note that the literature explicitly addressing and discussing this topic in SLA includes more recent data than Sharma's study (Trenkic, 2009; Trenkic & Pongpoiroj, 2013).

²⁷⁹ The notion of discourse universals comes across as having a particular meaning in SLA article studies. All natural discourse displays, and is organized by, universals of discourse; however, in the present context, the type of discourse model referred to, is one that gradually restricts explicit encoding to less familiar contexts.

encoding would require the most encoding with new entities, less encoding with inferrables, and the least encoding with evoked entities. However, as specified in the prediction, this effect was only predicted to be displayed overtly in the L1 Russian learners' L2 grammars of definiteness. The L1 English learners were, on the other hand, expected to transfer their L1 system for definiteness encoding. The measure of the analysis conducted in chapter 6 was marked vs. unmarked for definiteness.

The analysis carried out in chapter 6 addressing marking and non-marking did indeed uncover more details than did the analysis in chapter 5 which was based on a measure of inaccuracy. At DP I, it was demonstrated that four out of seven L1 Russian learners did show patterns in their Pear Stories that could be indicative of a model based on discourse universals; that is, these learners mostly used bare nouns with inferrable and evoked entities (see section 6.5.3, Table 6.4). The remaining three L1 Russian learners displayed the opposite pattern, supplying more bare NPs with new and inferrable entities.

More surprisingly, the L1 English learners patterned along with the group of four L1 Russian learners, leaving more evoked and inferrable NPs unmarked than new entities. The picture changed through DP II and DP III: Bare nouns were no longer used in contexts for inferrable NPs and were almost never used in contexts for evoked NPs in the narratives written by the L1 English learners; when bare nouns did occur, they occurred in highly familiar contexts. The pattern that gradually emerged within the L1 Russian group displayed clear differences from that of the L1 English group, although the two groups' use of bare nouns showed approximately the same rate of unmarked nouns in evoked contexts at DP III: As the number of bare nouns in new contexts decreased, the rate of bare nouns in evoked contexts remained stable within the L1 Russian group.

Within the domain of full NPs, the learner would thus restrict uses of encoded NPs to the less familiar contexts and leave the noun bare in other environments that contain more familiar discourse referents.

Did discourse universals seem to affect the learners' models of definiteness in a way deviating from the target norm?

Sharma concluded her study by saying that:

...this study has shown that systematic divergence in a stable nonnative variety can indeed be identified in quantitative terms. Furthermore, the results indicate that, rather than acting as opposing forces, language transfer and universals might enter into complementary partnerships. (Sharma, 2005a, p. 563)

The present L2 data cannot be said to depict an equally harmonic trend. I believe the analysis reported in chapter 6 has provided two valuable insights: First, the results at DP I suggested that, if discourse universals were a real force in the participants' L2 definiteness learning, it appears that they represent a stage equally necessary for both the [-ART] learners and [+ART] learners to traverse. Second, for the L1 Russian learners, despite development in time and proficiency, article omission seemed to be most resistant to change in evoked contexts. This latter finding suggested that for the [-ART] learners, a resort to discourse universals may have represented a much more persistent state. Yet, this framework cannot explain why evoked and inferrable NPs challenged the L1 English learners more at initial stages than the L1 Russian learners. If we combine the present results with those of the Semantic Wheel analysis presented in chapter 5, it is clear that the results from DP I readily transfer into challenges related to the indefinite form for the L1 Russian learners, and to challenges with the definite form for the L1 English learners. Moreover, the L2 specific encoding of identifiable and nonidentifiable NPs might have affected the L1 English and the L1 Russian learners differently (although at DP III, the L1 Russian learners and the L1 English learners omitted definite inflection at an approximately equal rate (see sections 5.3.2 and 6.4)). In short, there may have been an interaction and a certain correlation between L1 background and discourse universals, but an explanation relying on discourse universals cannot account for all the patterns detected by the analysis in chapter 6.

8.1.4 Discussion: Discourse universals and competition between L1 and L2

Seen as a whole, the results are multifaceted and they do not unequivocally form one unifying pattern, nor do they seem interpretable under one unifying account. Upon closer examination, the variation among and within individuals seems too extensive to convincingly support the idea that the learners held models licensed by discourse universals in the sense outlined in chapter 6. Yet, as stated above, a tendency toward the persistent use of bare nouns with evoked NPs was detected among the L1 Russian learners.

The subsequent paragraphs will discuss three patterns considered to be the most important in the results from the present study: (1) The persistent tendency for the L1 Russian learners to omit encoding with evoked NPs, that is, the absence of change in this category for the L1 Russian learners; (2) the tendency for the L1 Russian learners to fail to encode [+SR, -HK]; and finally, (3) the initial tendency for the L1 English learners to omit definite inflection.

In chapter 6 which analyzed the use of bare nouns within the framework of the Taxonomy of Assumed Familiarity, we saw that even though definite inflection with given NPs (categories EV, EVS, EVD) was omitted at approximately the same rate within both the L1 English learner group and the L1 Russian learner group at DP III (14.2% for the L1 Russian learners and 13.3% for the L1 English learners (see Figures 6.7 and 6.10)), the L1 groups diverged in that in the L1 Russian learner group's development did not occur to the same degree for evoked NPs as it did for the L1 English group. Whereas the L1 English learners produced increasingly more target like definite NPs (the rate of unmarked evoked NPs decreased from 25.7% at DP I to 13.3% at DP III), the L1 Russian learners did not experience the same

improvement (from 17.9% to 14.2%).²⁸⁰ Trenkic and Pongpairoj (2013) state, as already mentioned in chapter 6, that omission of encoding in contexts where marking is (may be perceived of as) redundant and development have not yet been accounted for. According to them, definite articles continue to be omitted in redundant contexts, only at a lower rate as proficiency increases. This holds for most of the learners in the present study. However, an explanation drawing on redundancy did not appear very well-suited to account for the initial *equally* high rates of bare nouns with new and evoked entities. That is, only at DP II and DP III were bare nouns used predominantly in given contexts, even though it seems counterintuitive that a model of definiteness encoding based on discourse universals should strengthen at the same time that the learners become more target like on a general level. Yet, such a pattern is of course possible. Furthermore, the finding that the L1 English learners also behaved in line with the redundancy hypothesis conflicts with previous findings on [+ART] learners (Jarvis, 2002; Trenkic & Pongpairoj, 2013). In summary, the tendency in the present data for the learners to display patterns that are possibly based on discourse universals cannot be consistently confirmed across individuals and across time. Might there be other explanations?

Trenkic and Pongpairoj (2013) have argued, as mentioned in the introduction to chapter 6, that a Gricean explanation is insufficient to account for the overall high level of omission in redundant contexts. On the whole, they argue that since [+ART] learners do not adopt this strategy, and since non-definiteness languages are also highly well-functioning (which makes it difficult to distinguish more redundant contexts from less redundant contexts), other explanations should be explored. In Jarvis's (2002) study, L1 related patterns blend with universals of discourse, as he speculated that the high rates of bare nouns among L1 Finnish learners in salient contexts may have been due to "the L1 Finnish convention of avoiding (what Finns

²⁸⁰ However, Ru-10 is perhaps an exception, as the number of bare nouns in evoked contexts diminished between DP II and DP III. Yet, within the L1 Russian group there seemed to be an "either/or" tendency when it came to the encoding of definites.

perceive to be) redundant marking” (Jarvis, 2002, p. 416). This could also be a plausible explanation for the L1 Russian learners’ tendency to keep omitting definite inflection. Yet, is it then well-warranted to explain the learners’ models of definiteness, which deviate from the target model, as relying on discourse universals, or could indeed such a pattern be constructed based on the L1 alone? In other words, where do universals end, and where does the L1 start?

Trenkic and Pongpairoj’s (2013) alternative explanation, put forth in a study eliciting online data (see sections 3.3.4 and 6.1.1), proposed that when referents are salient in discourse, they occupy more space in the working memory. Consequently, the activation of highly-salient referents may prevent the speakers from repressing the L1 form, that is, a noun not marked for definiteness. This explanation cannot be verified in written language; nonetheless, it might still be that the learners “forgot” to mark referents already activated because their working memory resources were saved for other more acute processing tasks. On the other hand, would an explanation more in line with Slobin’s (1996) thinking-for-speaking approach capture the core results? Thinking for speaking would hold that [–ART] learners lack the training required to encode the grammatical distinction of identifiability, and therefore they consistently fail to identify and encode the relevant contexts (see also section 1.4). We will leave this issue for a short while and further explore the L1 English learners’ challenges with the definite form.

In the Semantic Wheel analysis reported in chapter 5, it was shown that the L1 English learners encoded the category of [+SR,+HK] less accurately than the L1 Russian learners (the rate of inaccuracy was 37.6% within the L1 English group). At DP III, they improved and caught up with the L1 Russian learners, who seemed to stabilize in their use of bare nouns with evoked NPs. That is, at DP III, the two groups encoded definites at approximately the same rate. Despite the fact that both groups omitted definite encoding, I would argue that the same explanation should not be used to account for the behavior of both groups. Below, I will attempt to clarify

this argument. My conclusion involves both L1–L2 competition and some universal aspects of language.

When premodified NPs and possessives were examined in chapter 7, two patterns were uncovered. These patterns related to the type of errors produced by the learners. I will now propose an explanation based on these errors since they elucidate some differences regarding the L1 English and the L1 Russian learners' encounter with Norwegian grammatical definiteness. At DP I, the L1 English learners were outperformed by the L1 Russian learners in the encoding of premodified definite NPs. Moreover, only one single error was detected with premodified indefinite NPs within the L1 English group through all DPs. In this category, the L1 Russian learners performed most inaccurately. The patterns and rates of inaccuracy for premodification thus generally followed those of simple NPs in the present material (see chapters 5 and 7); that is, surprisingly high initial rates of omission of definite encoding among the L1 English learners, but more rapid improvement than what was attested within the L1 Russian group. The double definiteness construction, explored in chapter 7, revealed interesting patterns. Within the L1 Russian group, many of the learners' errors involved an omitted determiner, whereas the majority of errors within the L1 English group consisted of NPs with an omitted suffix but a preserved determiner. In other words, the L1 Russian learners were more inclined to preserve the suffix, while the L1 English learners were more prone to preserve the determiner. The same tendency emerged in the use of possessives: The L1 English learners omitted the definite suffix, while the L1 Russian learners employed definite inflection also in contexts where a bare noun was required by the target norm (that is, the prenominal possessive construction). How can these patterns be explained?

I suggested earlier in relation to double definiteness and premodified NPs that the L1 Russian learners displayed a pattern of encoding in premodified NPs that is similar to the pattern observed in Norwegian children (Anderssen, 2005, 2007, see sections 3.5 and 7.1). L1 English learners, on the other hand, seemed to model Norwegian complex NPs after their first language (see section 7.1). Kupisch et al. (2009) and

Anderssen (2005, 2007) suggest that children's early sensitivity to trochees can cause Norwegian and Swedish children to establish the definite form prior to their German and English peers. At the same time, Goad and White (2004, 2006) discuss the possibility that their L1 Turkish speaker of English may be prohibited in her production of ART + ADJ + N because this structure cannot be modelled in Turkish prosody. Could it be that the L1 Russian learners were initially sensitive to NP inflection due to their L1 model? That is, did the L1 allow these learners to benefit from the trochee structure and did the L1 equip them with the ability to notice the inflectional system of Norwegian more easily in speech? Note that the Russian learners' L1 did not have a competing structure that blocked a processing of Norwegian noun inflection (see Ellis, 2006a). Conversely, could it be that the L1 English learners were prevented by their L1 ART + N structure from noticing the definite suffix in speech, and therefore experienced greater initial difficulty with producing this structure also in writing?²⁸¹ For the L1 Russian learners the same mechanism may operate with indefinites. In conclusion, this is a possible, but highly tentative, explanation for the opposite initial patterns displayed by the L1 learner groups.

Finally, as the L2 gradually became increasingly entrenched in the learners' grammars, the functional similarity between Norwegian and English definiteness may have helped the L1 English learners overcome the initial challenges arising as a consequence of competition. Perhaps, Russian had the opposite effect on the L1 Russian learners.

The above section has identified and discussed the chief findings of the present study. I have also tried to provide a possible explanation, and, suggest some areas for future research. There are, of course, some limitations associated with this explanation, many

²⁸¹ It must be emphasized that the present material does not convincingly document transfer of the L1 English ART + N structure with simple NPs; that is, the challenge is not that the L1 pattern is transferred directly, but rather that the inflection is omitted in a process of simplification.

of them arising from the study as a whole. These will be addressed below in the evaluation part of this chapter.

8.2 Closing remarks

Below, I will address and reflect upon some aspects concerning the relevance and validity of the study overall.

8.2.1 Final reflections upon the object of study

The focus of the study has been encoding of grammatical definiteness in L2 Norwegian. The category of definiteness is complex, and navigating in the vast literature on definiteness and article acquisition has not been an easy task: The category of definiteness is studied within several theoretical disciplines, and from an empirical point of view, its various realizations in different languages also contribute to its high complexity.

In the present study, the approach to grammatical definiteness emerged through the literature on L2 article acquisition. If we examine the literature as a whole, we see that the theories of definiteness applied in SLA studies range from highly theoretical approaches framed within discourse semantics (see, for instance, Ionin & Ko, 2003; Ionin, Ko, and Wexler, 2004), to functionalist approaches originating in Givón's work (1983, 1984; e.g., Chaudron & Parker, 1990; Huebner, 1985; Jarvis, 2002) to more descriptive accounts such as the work of Bickerton (1981, e.g., Sharma, 2005a) as it is adopted in Huebner (1983, e.g., Butler, 2002; Huebner, 1985; Master, 1987; Parrish, 1987; Tarone & Parrish, 1988; Thomas, 1989; Trenkic, 2002b; Young, 1996), and also to Hawkins's work originally developed within generative semantics (1978; e.g., Ekiert, 2010a, 2010b; Liu & Gleason, 2002; Robertson, 2000; Snape, 2008).

More recently, however, the comprehensive work of Lyons (1999) which explores definiteness and related phenomena from a typological and descriptive perspective,

seems to establish as a perspective on definiteness in studies of L2 article/definiteness acquisition (e.g., Ekiert, 2010a, 2010b; Trenkic, 2004, 2007, 2008, 2009). This is also the approach of the present study, where Lyons's (and Lambrecht's (1994)) view on definiteness as not only a language-specific grammatical category, but also a universal semantic/pragmatic category has provided the theoretical foundation for the analyses. The Semantic Wheel of NP Reference (Bickerton, 1981; Huebner, 1983) and the Taxonomy of Assumed Familiarity (Prince, 1981) have helped further specify the category of grammatical definiteness by outlining different (sub)meanings and uses.

In order to analyze the data in the present study, two models were applied that have different relationships with semantic/pragmatic aspects of definiteness. In the Semantic Wheel, both semantic and pragmatic elements of the category of definiteness are singled out, whereas in Prince's Taxonomy pragmatic aspects of givenness and definiteness at the discourse level are accentuated. I have therefore identified definiteness as a semantic/pragmatic category throughout the study, but I have tried to make explicit that the Semantic Wheel invites a study of both semantic and pragmatic aspects, while the Taxonomy primarily pertains to pragmatics. However, Prince's Taxonomy also provided an entry to the third and final chapter of analysis addressing specific NP constructions. On the whole, I will argue that the broad approach of multiple methods of analysis, including a combined perspective of the target norm and a function-to-form approach, applied in the present study has been critical to its outcome.

Discourse universals and L1 transfer: Interwoven factors

The present study aimed to explore how L1 structures and universals of discourse interacted with L2 specific patterns of encoding of grammatical definiteness. It has not been possible to demonstrate conclusively that one factor overrules the other, although the crosslinguistic relation between the L1 and L2 may to a large extent predict the major patterns. What has, however, become clear during this work, is how these forces are subtle, complex, and merge together in models of definiteness

encoding where it is very difficult to isolate one from the other. The fuzzier of the two concepts seems to be discourse universals.

Since all natural languages and learner languages display discourse universals (see, for instance, Klein & Perdue, 1992), this means that universal principles of discourse, regardless of language-specific patterns of encoding, such as grammatical definiteness, play a part in discourse organization, even in L1s that do not encode grammatical definiteness. Consequently, when [–ART] learners are reported to display an L2 pattern that deviate from the target norm but which is possibly modelled after universal principles of discourse, is it then more sound to interpret this pattern as L1 transfer, or should it be regarded as behavior that resorts to a level of cognitive universals of language? To what extent is it necessary to invoke universal principles of discourse in order to explain omission of redundant marking? Whether the learners' models of definiteness are licensed by discourse universals or the L1 primarily appears as a difficult question when the behavior (that is, omission of redundant marking in highly familiar contexts) is limited to [–ART] learners. In the present data, both [+ART] and [–ART] learners showed tendencies resembling those detected in other studies (Avery & Radišić, 2007; Jarvis, 2002; Sharma, 2005; see section 6.3). However, it was impossible to unequivocally attribute this behavior to either the impact of universals or to L1–L2 competition (see the discussion above). For future research on the interplay between discourse universals and L1 transfer, I thus believe that [+ART] learners represent the key, rather than [–ART] learners.

8.2.2 Widening the scope: design and methodological approach

The present analyses have been carried out on written narratives collected during the period of approximately one year through three data points. Seven L1 Russian and four L1 English learners, recruited from public Norwegian classes, participated in the study.

Two models, well-known from the literature but not previously applied to L2 Norwegian data, have guided the data analyses. These models have been useful for

the organization of the analyses, but they have also to some extent prevented, for instance, a full use of the Pear Story. That is, the models have been given a stronger focus than the Pear Story as a source for definite and indefinite uses. A study with a stronger qualitative and independent design would perhaps have allowed a more nuanced study of each individual within a *learner variety perspective* (Klein, 1998; see also section 4.1).

Validity and generalizability: strengths and limitations

A strength associated with the design of the present study is that it has provided results comparable to those of other studies, and it has shown that even though the individual learners behave and develop differently, there is evidence in the data of a shared understanding related to a common L1 background. I have strived to carefully uncover both unifying and diverging patterns through three largely interwoven analyses, but future research should aim to examine individual variation and variability more closely. However, even though the present material is not large enough to allow generalization, there are advantages surrounding longitudinal research which is difficult to compensate for in cross-sectional studies.

In chapter 4, epistemological and ethical aspects associated with the validity of the study were addressed. I believe the validity of the present study must first and foremost reside in the consistency between theory, predictions and methodology (as has been emphasized by Chaudron (2003) as one way of ensuring validity), and finally, in the interpretation of the results. Dörnyei (2007, p. 50) mentions Campbell and Stanley's (1963, p. 5) notion of *external validity*, which pertains to the validity arising from the potential of generalizability. In this respect, as mentioned above, the present study unfortunately falls slightly short due to the sample size. However, I do believe that if the study is viewed as a part of the larger body of research on definiteness and article acquisition, and if the value of the longitudinal aspect is appreciated, a certain potential for extrapolation outside its own pages may arise.

For the future study of L2 Norwegian definiteness acquisition, I think a mixed methods design incorporating both a) experimental data from a large population, and

b) smaller-scale longitudinal data that could account for the full depth of individual variability, as described in De Bot, Lowie, and Verspoor (2007) (see also chapter 4), could provide pertinent insight. For the continuation of the present study, I believe extending the population to include learners with other [+ART] and [-ART] backgrounds, such as L1 German and L1 Mandarin learners, could add more evidence. Indeed, the present study has uncovered that there is a need for a more nuanced account of [+ART] learners which is rare in the literature.

In section 4.2, different tasks used in studies of L2 article acquisition were addressed, and it was concluded that even though some task-based variation is documented in the literature, there seems to be a stable core of findings that are frequently replicated in L2 article/definiteness acquisition studies (see also chapter 3). Triangulation, primarily by including oral data, but also through more experimental designs, would be essential for further exploring the validity of the tentative explanation sketched out in section 8.1.4.

In general, I see the strengths of the present study also as a source of its weaknesses. Although, longitudinal data permit detailed analyses of learner developmental, there may be obstacles associated with longitudinal data, such as increased vulnerability to participant dropout, the practice effect, and panel conditioning (see also chapter 4). On the other hand, compared to cross-sectional studies, longitudinal studies undisputably provide valuable sources of insight into the developmental process, variability and variation between learners.

Ethical and societal concerns in the present and future study of SLA

As also discussed in chapter 4, recruitment posed a greater threat to the study than did participant dropout. However, I have argued that recruiting students from public language courses, rather than from classes given to exchange students only, can be valuable. The ethical concerns associated with an almost exclusive focus on one particular population of L2 learners in the U.S. are addressed in Ortega's (2005a, 2005b) insightful contributions to a special issue of *Modern Language Journal* on methodological, epistemological, and ethical dimensions of SLA. In fact, Ortega

writes: “Instructed SLA as a field has tended to investigate formal L2 learning across contexts and populations where elective bilingualism and middle class privileges are the norm” (Ortega, 2005b, p. 433). She concludes by making a strong call for the research community to widen its scope in order to produce increasingly relevant knowledge: “Thus, for the project of SLA to advance, it is imperative to forge theories on the basis of evidence from many different types of contexts for L2 learning that are currently almost entirely absent from our research ...” (Ortega, 2005b, p. 434). Perhaps the increased present-day attention to heritage languages and multilingualism, along with the shift in focus from cognition to environment that arose from the social turn (see Atkinson, 2011; Block, 2003; Firth & Wagner, 1997; Ortega, 2005a), will renew the awareness of the importance of the full environment surrounding the learning process. This discussion resonates with issues mentioned in the introductory chapter that touch upon the larger epistemological and ontological questions of the discipline: What is, in fact, the intended object of study of SLA? Moreover, what are the frameworks and the ultimate goal of research on second language acquisition? Ortega’s (2005a) summarized introduction to the field of instructed SLA clearly articulates that the research community does not agree on these issues; that is, the question remains as to whether SLA should be an enterprise primarily focusing on cognitive aspects of learning, or whether the discipline should involve a broader social, educational, ethical, and even political scope.

In section 1.3, a brief survey of the history of the scientific field of SLA up to the present was provided. The final paragraphs of the section focused on the rise of usage-based approaches to language learning and the shift from a purely cognitivist view of language to a view that also regards language learning as the result of “interaction of multiple agents in speech communities” (Larsen-Freeman, 2011, p. 49) and acknowledges the role of the learners’ surroundings (see Block, 2003; Firth & Wagner, 1997). The present study has focused on linguistic aspects of language learning, and it is unfortunate that they could not include more aspects of the language history and learning biographies of the participants, since the present

approach alone cannot provide the full picture. In order to incorporate more aspects, a different research design and methodology would have been required that lent more weight to individual variation, naturalistic data, and ethnographic methods (Larsen-Freeman & Cameron, 2009, p. 206). Furthermore, I believe a possible next step for this research would involve a stronger bottom-up focus that emphasizes variability and variation in and between individuals in a design where reductionism is not an independent goal. This approach could grant more insight into how external variables affect the acquisition of grammatical definiteness.

The intended audience of the present study

Finally, the main aim of this research was to further the general study of L2 article acquisition, and the study thus addresses the research community as the audience. I believe that the present study has succeeded in contributing to a platform from which new research questions may arise. Moreover, the results have the potential to help balance the weight attached to semantics/pragmatics, on the one hand, and structural features, on the other. The main results corroborate previous research emphasizing the impact of cross-linguistic differences between languages, and they suggest that the structural features of the L1 may act as both a hindrance and a facilitating factor in the production of L2 structures.

However, the present study has also been conducted for learners and teachers of Norwegian as a second language. Little is known about the acquisition of grammatical definiteness in L2 Norwegian, and this is a modest attempt to shed some light on the process of both [+ART] and [-ART] learners' acquisition of Norwegian as a second language. The present results suggest that in initial stages, teaching should focus on the indefinite article for Slavonic learners, but on the encoding of definite NPs for L1 English learners. It seems that it is important to make the learners aware of cross-linguistic similarities and contrasts. In that sense, the learner, the teacher, and the educator are also intended recipients of this work.

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English: Fluctuation, transfer or both? *Second Language Research*, 24(2), 227–250.

Appendix 1: Letter of approval

Norsk samfunnsvitenskapelig datatjeneste AS

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Marte Nordanger
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Universitetet i Bergen
Sydneplassen 7
5007 BERGEN

Vår dato: 21.08.2013

Vår ref:35067 / 3 / MSI

Deres dato:

Deres ref:

TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 06.08.2013. Meldingen gjelder prosjektet:

35067 *Definiteness and aspect in the Norwegian interlanguage of Russian and English learners*
Behandlingsansvarlig *Universitetet i Bergen, ved institusjonens øverste leder*
Daglig ansvarlig *Marte Nordanger*

Personvernombudet har vurdert prosjektet og finner at behandlingen av personopplysninger er meldepliktig i henhold til personopplysningsloven § 31. Behandlingen tilfredsstiller kravene i personopplysningsloven.

Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, ombudets kommentarer samt personopplysningsloven og helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema <http://www.nsd.uib.no/personvern/meldeplikt/skjema.html>. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, <http://pro.nsd.no/prosjekt>.

Personvernombudet vil ved prosjektets avslutning, 31.07.2016, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen


Vigdis Namtvedt Kvalheim


Marte Byrkjeland

Marte Byrkjeland tlf: 55 58 33 48

Vedlegg: Prosjektvurdering

Avdelingskontorer / District Offices

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Appendix 2: Information letter to participants.

Forespørsel om deltakelse i forskningsprosjektet

Arbeidstittel:

«Russisk og engelsk som førstespråk i norsk som andrespråk»

Bakgrunn og formål

Jeg er doktorgradsstipendiat ved Universitetet i Bergen og forsker på russisk- og engelskspråkliges tilegnelse av norsk. Jeg forsker på hvordan ulike førstespråk påvirker læringen av norsk. Formålet med prosjektet er å studere hvordan førstespråket påvirker norsklæringen, med den hensikt å kunne påpeke spesielle utfordringer for de enkelte grupper, samt å kunne forklare bakgrunnen for disse.

Informantene i studien må ha russisk eller engelsk som førstespråk. Nasjonalitet er ikke viktig. Det er aktuelt med mellom 10 og 15 voksne informanter fra hver førstespråksgruppe. Studien involverer også 10 førstespråksinformanter fra hver språkgruppe (norsk/russisk/engelsk).

Hva innebærer deltakelse i studien?

Å delta i studien innebærer å se en stumfilm på knappe 6 minutter og gjenfortelle den skriftlig på norsk (engelsk/russisk). I tillegg vil jeg be om at du beskriver skriftlig en bildeserie. Dette skal gjøres tre ganger med noen måneders intervall. Førstespråksinformantene skal bare gjøre det en gang. Hver innsamling vil ta maksimalt en time. Tidspunkt for innsamling kan skje på dine premisser.

For deltakelse i studien vil du få et gavekort for hver innsamling på 150 NOK.

Hva skjer med informasjonen om deg?

Du vil bli bedt om å oppgi enkelte personopplysninger, som kjønn, utdanningsbakgrunn, hvilke språk du snakker i tillegg til førstespråk og norsk, og når du snakker norsk. Prosjektet er meldt til Personvernforbundet for forskning, Norsk samfunnsvitenskapelig datatjeneste (NSD). Alle opplysninger om person, og informasjon som kan knyttes til person vil behandles konfidensielt. Også ved publikasjoner vil informantene være anonymisert. Det vil kun være jeg som har tilgang til persondata. Etter at studien er avsluttet (31.07.2016) vil informasjon som kan knyttes til person slettes.

Innsamlingen vil starte høsten 2013. Jeg regner med å ta siste innsamling innen utgangen av 2014.

Frivillig deltakelse

Det er frivillig å delta i studien, og du kan når som helst trekke ditt samtykke uten å oppgi noen grunn. Dersom du trekker deg, vil alle opplysninger om deg bli anonymisert.

Dersom du ønsker å delta eller har spørsmål til studien, ta kontakt med:

Marte Nordanger

E-post: Marte.nordanger@lle.uib.no

Tlf.: 97956148/55582401

Appendix 3

J. Hawkins's Location Theory (1978). Nongeneric uses of the definite article.

All examples except (6) are from J. Hawkins (1978). (6) is from Liu and Gleason (2002).

1. Anaphoric uses
Bill was working on a lathe the other day. All of a sudden **the machine** stopped running.
2. Visible situation uses
Pass me **the bucket**.
3. Immediate situation uses
Don't go in there. **The dog** will bite you.
4. Larger situation uses based on specific knowledge
The Prime Minister has just resigned.
5. Larger situation uses based on general knowledge
Halifax is a sleepy little Yorkshire town. **The town clerk** was involved in a scandal last year.
6. Associative anaphoric uses
We went to a wedding. **The bride** was very tall.
7. Unfamiliar uses with explanatory modifiers
The fact that there is so much life on earth.
8. Unfamiliar uses with nonexplanatory modifiers
My wife and I share **the same secrets**.

Appendix 4: Text length

TEXT LENGTH			
All DPs			
PARTICIPANT	DP I	DP II	DP III
RU-1	221	133	120
RU-3	197	151	205
RU-4	161	188	124
RU-5	248	218	219
RU-6	124	164	187
RU-7	136 (187)	81 (133)	90 (155)
RU-10	247	197 (237)	248 (270)
ENG-1	264	200	142
ENG-3	149	143	165
ENG-4	269	244	229
ENG-5	141	195	235
MEAN	196	174	178.5
MEAN L1 RUSSIAN	190.5	142.7	170
MEAN L1 ENGLISH	205.7	195.5	192.7

Appendix 5: Proficiency level assessment. Raw data.

Candidate	Datapoint I			Datapoint II			Datapoint III		
	Rater 1	Rater 2	Rater 3	Rater 1	Rater 2	Rater 3	Rater 1	Rater 2	Rater 3
Ru-1	B1+	B1	B1	B1/B2	B1/B2	B1 (+)	B2/B1	B2	B1
Ru-2	A2-	A2	A1/A2						
Ru-3	B1/A2	B1	B1	B1-	B1	A2/B1	B1	B1/B2	B1
Ru-4	A2/B1	A2/B1	A2/B1	B1	B1	B1	B1+	B1	B1 (-)
Ru-5	B1/A2	A2/B1	A2/B1	B1/A2	A2/B1	B1	B1-	A2/B1	A2/B1
Ru-6	A2/B1	A2/B1	B1	B1/A2	B1	A2/B1	B1	B1	B1 (-)
Ru-7	A2	A2	A2/B1	A2/B1	B1	A2/B1	B1/A2	B1	A2/B1
Ru-10	A2+	B1	B1	B1+	B1	B1	B1/B2	B1/B2	B1
Eng-1	A2-	A2	A2	A2/A1	A2	A2	A2/A1	A1/A2	A2
Eng-3	A2	A2/B1	A2	A2-	A2	A2	A2	A2/B1	A2
Eng-4	A2-	A2	A2	A2	A2/B1	A2/B1	A2-	A2	A2
Eng-5	A2	A2/B1	A2/B1	B1/A2	B1	A2/B1	A2/B1	A2/B1	A2/B1