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Towards a new Bergen Electronic Edition**

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**Please not that this POSTPRINT is far from identical with the published version.**

**1 Introduction**

The 1998 OUP publication of “Volume 1” of *Wittgenstein’s Nachlass: The Bergen Electronic Edition* (BEE) made around 4000 pages of the Wittgenstein *Nachlass*, from the so-called middle period, available in diplomatic, normalized and facsimile edition. A second volume followed in 1999, and the complete edition, consisting of five CD ROMs, appeared in 2000. Hereby the Wittgenstein *Nachlass*, as it had been classified by G.H. von Wright in his *Nachlass* catalogue, was made available to the public. BEE was prepared at the Wittgenstein Archives at the University of Bergen (WAB) during the second half of the 1990s, while work producing the “machine-readable version” of the *Nachlass* – which formed BEE’s basis – begun at WAB already in 1990.<sup>1</sup> Despite some scholarly and technical deficiencies, BEE is still appreciated by the scholarly community; it is after all the only existing scholarly edition giving full access to the Wittgenstein *Nachlass* in both facsimile and edited text versions. The full impact of the edition can only be assessed in a long term perspective, since most new results from BEE based Wittgenstein research are still in the making or just about to be published. Additionally, BEE remains too attached to the rapidly developing field of digital editorial philology to permit an adequate view of it within this context. It is, however, a fact that increasing numbers of theses, articles and books appear which would not have been written without BEE, although this is not to say that they would not have been *possible* without BEE.<sup>2</sup> It is simply clear that the production and publication of BEE have created a climate where conditions are much more conducive than has been the case before to Wittgenstein research with an eye to his *Nachlass*.

Today, WAB together with OUP and IntelLex Corporation is laying plans for the preparation of a new edition. While I in this article will not present the details of what the next BEE will look like, I will still present some central points of change and improvement. I should, at the same time, point out that the possibilities, perspectives, and challenges under which the new BEE is to be conceived, are much larger than what can be presented here. One example is the implementation of semantic enrichment, semantic Web technology and ontologies (see Pichler & Lanestedt 2007): though I personally am much in favor of them, I will in this article primarily concentrate on intended changes and additions which among the Wittgenstein research community seem uncontested and generally welcomed. Semantic enrichment which includes metadata about themes and topics of the text (see Hrachovec 2000, “toothache”) are not part of such agreement and seem to many a bit too much “cutting edge”, or to unjustly blur the distinction between edition and interpretation. One exception I will make regards the issue of what at WAB is called “interactive dynamic editing” which, though it is by many Wittgenstein researchers considered as “too postmodern”, I will discuss and defend.

It would be a mistake to work on the preparation of the new BEE in such a way that a possible later inclusion of additional or alternative elements would be hindered; in fact, it is implicit to the

character of preparing electronic resources to provide for and anticipate the possibility of later changes and add-ons. For the production of the new BEE WAB will make renewed use of its “machine-readable version” of the *Nachlass* in order to keep the process as open to revision as possible. Such an editing and working philosophy presupposes the implementation of text encoding techniques and standards, and therewith a methodological and technical separation of the marked-up machine-readable version (or electronic text archive, as we might rather say today) from editorial outputs thereof, of which BEE is one example.

The BEE is not a project growing at WAB in isolation. On the contrary, it is substantially embedded in close international cooperation, and would without such cooperation indeed not be possible. This goes for scholarly, technical and financial matters. Therefore, one point of this article is also simply to acknowledge the significant role which international collaborative projects, such as the EU projects “COST Action A32”<sup>3</sup> and “DISCOVERY”<sup>4</sup>, and the Austrian FWF project “C&V Revisited”<sup>5</sup> have had in the endeavor of continuing to make the Wittgenstein *Nachlass* more widely available in constantly improved versions since its first publication in the BEE of 2000.

## 2 Rectifying deficiencies and mistakes

When discussing what a new, revised BEE shall look like, a good starting point is naturally the question: What is wrong, or no longer good enough, with the current BEE? Let’s start with the simplest of all questions: What is wrong with BEE 2000, on its *own* premises? Which are the mistakes and deficiencies which we would or should have wanted to avoid already then, in 2000?

Deficiencies and mistakes falling under this category can be grouped as follows:

- (1) Mistakes in the transcription of the *Nachlass* items (e.g. reading mistakes), and in the enrichment with metadata (e.g. dating and identification of references).
- (2) Deficiencies in the editorial decisions made, incl. editorial markup and apparatus.
- (3) Deficiencies in the facsimile rendering of the *Nachlass*, e.g. inadequate resolution, fragmentary capture and uneven quality.
- (4) Deficiencies which arose in the process of producing BEE from the machine-readable version, due to technical faults and incorrect parameters.
- (5) Deficiencies in the BEE software and output format, FolioViews<sup>6</sup>.
- (6) Missing facsimiles or missing transcriptions of items.<sup>7</sup>

While the advantages and benefits of using BEE by far outweigh its deficiencies, there is no question that these flaws should be corrected to the degree it is possible. Group (4) mistakes will be removed when the machine-readable version is re-processed correctly and the outputs produced anew. One example of group (4) flaws is the diplomatic version’s rendering of the blank lines with which Wittgenstein separates his *Bemerkungen* from each other: In BEE, *one* blank line appears where in the original there are *two* blank lines (which to most will still be acceptable), yet, incorrectly, *none* where in the original there is only *one* blank line. This way, Wittgenstein’s division of the text (and thought) into units becomes less visible. This was of course not intended when conceiving the diplomatic version, but a small deficiency in the process of filtering BEE out of the machine-readable version which had large consequences. One example of group (5) deficiencies concerns the free text search functions, where “and”, “or” and “not”, and any combinations that involve them, are not searchable in the same way as other words, since these words are also used as operators for combined searches (one can find them, though, by putting them into quotation marks). Equally, this kind of deficiencies will simply disappear by choosing a new output format which is correct on these points. With regard to (6), the missing

transcriptions and facsimiles are easily added, provided, that the required funds are available, these items and their whereabouts identified, and the permissions to publish them in place.

Greatest attention by far should be given to groups (1)-(3). To cure group (3) deficiencies may demand significant financial input: A considerable number of pages may need to be re-photographed or scanned, in order to achieve Wittgenstein facsimiles which throughout meet the demands of Wittgenstein scholarship. But while group (3) deficiencies have been pointed out only by a few scholars, it is predominantly group (1) flaws which are felt to be most disturbing. At the same time, this is also the field where the Wittgenstein research community is most able to contribute with corrections, and, in fact, has already done so. Since 2002, a list of “Mistakes in BEE” is available on WAB’s website, which is the result of careful users’ spotting of transcription mistakes, which are then collected and posted on this site.<sup>8</sup> The “Mistakes in BEE” site is a good example of collaborative work where WAB external scholars feed into WAB and its BEE project valuable input from which in the end the entire community benefits. While WAB itself does not have the resources to undertake a second proofreading of all its transcriptions, user participation and involvement have in this field contributed and continue to contribute a large number of important corrections.

Instances of group (2) flaws, or at least *candidates* for such instances, include some features of the normalized version, such as the treatment of “erroneous text blocks” (which are suppressed), and the rendering of Wittgenstein’s own text alternatives (where the BEE is by some seen to blend different writing stages when it combines the base text with the latest alternative rather than the earliest). Other issues belonging to this group are the rendering of editorial interventions (where editorial *omissions* go unmarked), the rendering of graphics in the normalized version (which are rendered as facsimiles, while one might argue that they should be normalized too and thus redrawn), and much of the rendering of notation more generally. Editorial decisions concerning these and other cases will be carefully reconsidered when designing the filters for the new BEE.

Additional deficiencies may be said to be caused simply by the passage of time since the original publication in 1998/2000. They relate to technical platforms and software continuously changing and plunging ahead. BEE was designed for Windows 98, and utilizes a version of FolioViews, which is no longer supported. While the BEE FolioViews infobases which contain the edited text versions still run under Windows XP, the BEE facsimile file viewer, InfoView, does not. However, a Windows XP compatible picture viewer can be affiliated with BEE through a simple change in the local settings for the edition. Many users of BEE have pointed out that they wish online Web access rather than a CD or DVD edition on a local or network drive. While we should not forget that local carriers still have certain advantages over Web access, use of the latter is surely to be provided for. This is easily possible with the machine-readable version being encoded in TEI(P5) guided XML format and a range of XSL stylesheets being created for its further processing and filtering for presentation on the Web.<sup>9</sup>

### **3 Docking on to other Wittgenstein primary resources**

While BEE contained only items from the *Nachlass* as catalogued by G.H. von Wright, much material which is important for understanding Wittgenstein’s philosophy is also found in other sources such as his correspondence (ICE 2004). It would therefore definitely be of great benefit to Wittgenstein research to have the *Nachlass* and the correspondence interlinked. Such interlinking can happen on several levels, for example the chronological where texts from the same time are referred to each other, or through the inclusion of a shared biographical and historical-cultural commentary (on this see further below).

First steps towards connecting the *Nachlass* with the correspondence were undertaken in 2001-04 with the “Wittgenstein MS101 from September 1914” project.<sup>10</sup> It was the explicit target of this project to bring together complementary resources and competences, in order to produce, with a small sample from the Wittgenstein *Nachlass* (Ms-101, recto pages 12r-30r) as its test-bed, a resource on the Web which would demonstrate the advantages of such cooperation, and which would be freely available for the benefit of Wittgenstein research. WAB provided the primary source texts and the editorial standards, methods and tools for their publication; the Brenner Archives and Brian McGuinness provided relevant correspondence; Michael Biggs supervised the rendering of graphics material, provided additional correspondence, including postcards in image format, and coordinated the project together with WAB. InteLex Corporation, distributor of the BEE normalized version on the Web, functioned as evaluation partner and assessed the results from the perspectives of a professional publisher of humanities databases on the Web. The Web resource the project resulted in is still up and running today and gives insight into several technical and scholarly aspects of making Wittgenstein *Nachlass* material available on the Web, while also enriching and interlinking it with Wittgenstein correspondence.

In addition to interlinking BEE with the correspondence, it makes much sense to interlink it also with other primary sources. Among them are (what often is still called) the “published” or “collected works”, but also publications of smaller items, like memoirs, lecture notes, or recollections and notes of conversations. To have the *Nachlass* interlinked with such *Nachlass* external Wittgenstein publications could be of special value for those who approach the *Nachlass* from the perspective of exactly these previously published and well-established works, and often through translations of them. While such researchers may find it difficult to use the *Nachlass* otherwise, they would thus be enabled to use the map of the “published works” to enter and explore the *Nachlass* in familiar and proven ways.

I should point out that what I am talking about here is not the preparation of *one* resource which includes the *Nachlass*, the correspondence, other primary sources, and other complementary secondary sources, such as a biographical and historical-cultural commentary, but rather the preparation for interlinking them. This means that each resource is marked-up in such a way that it permits docking on to the other complementary resources, either directly or via a translation tool. Users may want to have one resource only, for example the *Nachlass*, and should still be able to make sensible and functional use of it as an independent resource. However, with adding more resources to one’s research platform, the interlinking function which already was there in the *Nachlass* resource before (though only producing “broken links”), can now be put to work. A structuring of the research platform along these principles has many advantages, including that the providers of the single resources can each continue to improve their own products without interfering with the work of the others. Naturally, success with the overall result presupposes thorough communication and cooperation between the providers, both of the resources and the platform. Such cooperation was partly already exercised in the “C&V Revisited” project (2006-08) where a new electronic edition of *Vermischte Bemerkungen / Culture and Value* was interlinked with a biographical and historical-cultural commentary: Here work on the text edition and work on the commentary ran in parallel and independent of each other, and their actual interlinking took place only through a Web site.

#### **4 Preparing the inclusion of biographical and historical-cultural commentary**

In addition to *Nachlass*, correspondence and other primary sources, a third type of resource belongs in the basic kit of the well-outfitted Wittgenstein researcher: a biographical and

historical-cultural commentary. The BEE is neither interlinked with the Wittgenstein correspondence, other primary sources, nor such commentary. Yet such a commentary is of great benefit not only for the study of the correspondence (for which it is already written thanks to the Brenner Archives in Innsbruck), but also for *Nachlass* research which contains a great number of explicit and implicit references to writers, artists, scientists, or other persons, but also to places and events. If the *Nachlass* is going to be interlinked with the correspondence which already is accompanied by a biographical and historical-cultural commentary, then the completion of this commentary for the entire *Nachlass* would only be natural. And even if it should not be possible to interlink the *Nachlass* with the correspondence, it will be thoroughly appropriate to realize such a commentary.

A biographical and historical-cultural commentary must first identify and make explicit all relevant references: Here WAB had already developed a function in BEE for searching and focusing on persons or works mentioned or referred to in the *Nachlass*. Complementary to this work and developing it further, Hans Biesenbach has produced a monograph which lists *Nachlass* remarks where Wittgenstein quotes or refers to other works, be it philosophy, literature, other scholarly works, incl. science, or art, and in addition quotes the actual passages referred to (Biesenbach 2008). Secondly, the references must then be commented upon according to the standards of biographical and historical-cultural commentary. The work of the Brenner Archives, identifying and commenting all reference to names, places, events, persons, literature, music, art, etc. for the correspondence, is paradigmatic for this. By extending this work to the entire Wittgenstein oeuvre, Wittgenstein research will be provided with a uniquely helpful resource to relate Wittgenstein's life and work to the wider biographical and historical-cultural context, and hereby to draw new and, even if not new, now at least empirically more grounded conclusions.

To enrich part of the *Nachlass* with such a commentary, and to thereby test conditions and possibilities for such enrichment of the *entire Nachlass*, was an important task of the already mentioned project "C&V Revisited", a cooperation between WAB and the Brenner Archives. Though the primary aim of this project was to create a new electronic edition of the text known as *Culture and Value*, this alone would have left the project incomplete (and the possibilities of cooperation between the two institutions underexploited). Since several book editions of *Culture and Value* had been produced before, it was now not only time to produce an edition that from scratch was planned as an electronic edition (which is different from putting an existing book edition in electronic form), but also to enlighten the text with a biographical and historical-cultural commentary. The resulting resource provides an important guide to a text which otherwise can remain little understood and underexplored.

### 5 Improving the reference system

An edition which goes online, docks to complementary resources and is enriched with a biographical and historical-cultural commentary, demands a stable reference system with unique identifiers for each text unit of reference. The more telling and intuitive the names for the units are, the better. On *Nachlass* item level (manuscripts and typescripts), BEE used the von Wright catalogue numbers. For reference on page level, Wittgenstein's own or the librarians paginations were used, or, where such were lacking, paginations were created. But no system was established for reference on *Bemerkungen* level (such a reference system is however important to Wittgenstein research).<sup>11</sup> Since then, in the DISCOVERY project, a new system has been employed to furnish each *Bemerkung* with a unique and unambiguous name or siglum.

The *Bemerkung* siglum is composed of a sequence of "subnames": The name of the overarching *Nachlass* item in which the *Bemerkung* is found, the name of the page(s) on which it stands; and

the name(s) for the segments of which the *Bemerkung* consists. The *Nachlass* item is identified through a prefix “Ms-” (for manuscripts) or “Ts-” (for typescripts), respectively, followed by the von Wright *Nachlass* catalogue number. “Ms-115” for example refers to the *Nachlass* item, which in the catalogue has the number 115, belonging to the class of manuscripts. Page names are given through following either Wittgenstein’s or the librarian’s pagination, or introducing a new pagination. In the siglum, the page name follows after the name of the *Nachlass* item, separated from it by a comma; “Ms-115,20” e.g. is the page in Ms-115 which has the page name “20”. But, as said, the reference system does not stop here; it continues down to *Bemerkungen*-level. “Ms-115,20[2]” is then the siglum for a specific single *Bemerkung* and refers to the second block of text on page 20 in Ms-115, thus to the remark: “Wie, wenn man ...” A *Bemerkung* can go across page breaks and sometimes goes over several pages; also this will be mirrored in the siglum. In the end, each of the more than fifty thousand *Bemerkungen* in the Wittgenstein *Nachlass* is identified through such a unique siglum.

The same system of reference is also applied to the facsimiles. One clear improvement is therefore that every *Nachlass* page can have the same name in the facsimile and text editions. Ms-115,20.jpg is thus a JPG file with a facsimile of Ms-115,20 – page 20 of Ms-115. Moreover, if *Bemerkungen* additionally are demarcated also in the facsimiles, they can then receive the same name as the corresponding *Bemerkung* in the text edition. In the current BEE, the naming of the facsimile files is not equally informative, since the facsimile files for an item are simply named 1 to n – starting with 1 for the first page, usually the Front Cover, and continuing from there until n, which in most cases leads to the fact that facsimile file names and names of pages in the text edition are not easy to correlate. In my own experience, it contributes significantly to user-friendliness and the quality of research when facsimile and text edition share the same system of reference.

The *Bemerkung* was made a unit of reference and the center of research and philology already in the “Tracing Wittgenstein” project which ran from 2001 to 2004.<sup>12</sup> In one of the project results, the “Wittgenstein MS115 in APE” resource, one finds for each *Bemerkung* of the first part of Ms-115 an interlinked philosophical commentary, and without losing contact with either the commentary window, the *Bemerkungen* text, or the navigation structure window, one can easily move around between the three, or between the units in the navigation window, the latter allowing quick access to other pages or remarks of the manuscript.

With each single *Bemerkung* receiving a unique name siglum, the *Nachlass* component of Wittgenstein research becomes easier to refer to, better traceable and tractable, and most of all: communication about it becomes more straightforward and less vulnerable to misunderstandings. Both Wittgenstein’s and one’s own arrangements and rearrangements of the text, both virtual and actual, become exactly describable.

### **6 Adding further metadata**

Since now the Wittgenstein *Nachlass Bemerkung* can be taken as one’s basic unit, attaching helpful metadata to each *Bemerkung*, such as dating, information about where it is published, whether it is written in secret code, from where it came and to where it goes (text genesis), where it previously was published in the so-called published works, etc., etc., becomes easy to implement. In fact, it often makes more sense to attach these metadata to Wittgenstein’s work at *Bemerkungen* level, than at higher levels. For it is primarily the single *Bemerkungen* rather than higher units or even the entire item, where changes in these respects take place.

A kind of metadata which is especially important for Wittgenstein research concerns text genetic relations in the *Nachlass*. Drawing genetic paths between the remarks can to some extent be done on the level of entire *Nachlass* items, or at least, of some substantial parts of them (like Ms-115, second part); but in order to get the full picture, it should also to be done on *Bemerkungen* level.<sup>13</sup> Information about text genetic paths tells us more when related to the single *Bemerkung* than to larger or smaller units, while at the same time, by extracting information on the migration of single *Bemerkungen*, it will also be possible to obtain information about the movement of groups of *Bemerkungen*, and thus larger units. Moreover, with the possibility to focus on the single *Bemerkung* and to work with it as one's basic unit, it becomes much easier to explore and discuss the alternative arrangements which Wittgenstein had produced or envisaged for his *Bemerkungen*, thus to also focus on his *composition* activity, than without it.

I do of course not want to say that there should not also be metadata which directly relate to groups of *Bemerkungen* and higher levels, such as the entire item, for example information about the manuscript's status, the number of pages, writing materials. Equally, some other metadata will need to be included at lower levels, such as sentences. These extensions into higher and lower levels shall not, however, hinder the Wittgensteinian *Bemerkung* being tractable and traceable as a unit on its own.

Some of the metadata which I am referring to, already exist. Biggs & Pichler 1993 and Keicher 2001 include exact information about where a specific *Nachlass* part is published in the "published" or "collected works", and have thus already created bridges to interlink the two. Maury 1981 and 1994, Pichler 1997, Rothhaupt 2008, and PI 2001 are examples of works which contain exact information about specific areas of Wittgensteinian text genesis. These metadata can with benefit be implemented in the new BEE. Again, this will particularly suit those who want to take the "published works" as their entrance key to *Nachlass* research. But such metadata will be a great asset to any *Nachlass* search, and the preparation of single *Bemerkungen* reference will in particular prove helpful where one is interested in queries such as "Give me all 'Geheimschrift'-*Bemerkungen*", "Find me all *Bemerkungen* which are published in *Philosophical Grammar*", "Present me all *Bemerkungen* which make part of the genetic path of PI §1", and so on.<sup>14</sup>

### 7 Strengthening dynamic editing

BEE 2000 can be considered a combined edition (see Pichler & Haugen 2005) which consists of several interlinked sub-editions: A facsimile, a normalized and a diplomatic edition. It is exactly this triple structure which permits it to serve several purposes at the same time. With regard to the diplomatic and normalized versions, we can say that, roughly speaking, the second primarily focuses on Wittgenstein's "text acts", while the first records his "writing acts" and attends to the text-carrier rather than the text itself. To try to do both in *one and the same* editorial presentation can lead to undesirable confusions and mis-presentations (this goes for any scholarly editing). It is, however, important to keep in mind that the diplomatic and normalized versions are produced through filtering and conversion from one and the same source, WAB's machine-readable version of the *Nachlass*. The philosophy and practice of editing the *Nachlass* in three (or more) versions, and of allowing for renewed and revised production of these versions from its basis, the machine-readable version, we call "dynamic editing": Its text constitution is dynamic and revisable, and the edited text itself, presented in different versions, is conceived dynamically rather than statically.

It surely makes sense to supplement BEE's diplomatic and normalized versions with an additional output version which we can call "typescript version" and is a rendering of typescripts which

removes from it all handwritten revision in it. In fact, the desire to focus on a typescript's typewritten part alone has been recorded decades ago, e.g. when Kenny remarked to Rhees that the Big Typescript would have been better edited "as it stood" (Kenny 1984: p.37; as a response see Rhees 1996). Such a rendering is possible, in addition to a diplomatic version which can distinguish the typewritten layer from the handwritten revisions through for example use of different colors, and a normalized version which can fuse both into a "final" rendering. Again, one has to keep in mind that this does not involve producing a different source transcription, but just marking in the one and only 'master' transcription everything handwritten, and every hand-produced writing act, in such a way that the typewritten can be filtered and processed independently from everything which is the result of handwritten revision.

Most users have responded positively to WAB's dynamic editing and have had no problems switching between working with book editions which usually present only *one* text version, and working with BEE. However, some users have reacted negatively to an extension of the dynamic aspect into what at WAB is called *interactive* dynamic editing; they fear, with regard to its possibilities, a "postmodern" direction in development (with which I disagree). While dynamic editing provides the user with a number of pre-produced and interlinked text presentations such as the diplomatic and normalized versions, interactive dynamic editing in addition permits the user to filter and prepare, through a Web interface, from the machine-readable version differing supplementary versions, and thus to take on aspects of the editorial role oneself.

I would like to give some examples of the application of interactive dynamic editing, which should be acceptable (at least in terms of their practical value) also to those who otherwise are skeptical about interactivity in the area of scholarly editing. Interactive dynamic editing can be used to filter or rearrange the *Nachlass* texts according to the marks and numbers which Wittgenstein often assigns to his *Bemerkungen*. Being able to do so can be of tremendous benefit for research on Wittgenstein's principles for the composition, i.e. arrangement, of his works, and thus also the status of specific items. This is even more valid since we don't yet know enough about the function of certain marks (like, for example, the asterisk sign in the "Bände" from the early thirties), and such a filtering tool can then permit easy extraction of all *Bemerkungen* and only the *Bemerkungen* which are marked by Wittgenstein with a slash, or an asterisk, or a backslash, etc., or a specific combination of them, which in turn can help us to see what the marks are about. Or, interactive dynamic editing can be used to organize the entire *Nachlass* text chronologically, since each *Bemerkung* will be tagged with a date, and this information can be used to filter and sort the data of the machine-readable version according to chronology rather than for example adherence to *Nachlass* item.

Another text element which is easily manageable through interactive dynamic editing, is soft line-breaks. While as a rule at WAB in the 1990s such line-breaks were not recorded for manuscripts, but only for typescripts, today at WAB work on this is being caught up. Edited text outputs which follow the original line order have many advantages, one of them being that they easily permit comparison of edited text version and facsimile. At the same time, the positions of soft line-breaks are often inessential to one's research interests, and therefore it is also desirable to be able to suppress them; this is best done through direct user controlled interactive editing and filtering.<sup>15</sup>

In addition to the diplomatic, normalized and typescript output versions, one could think of still others, say, a version somewhere between diplomatic and normalized, which, in distinction to the first, omits those deletions which "disturb" the reading (where the parts deleted don't fit syntactically into the context), and in distinction to the second, still retains deleted parts the inclusion of which helps understand the resulting text<sup>16</sup> (but not without indicating that they are



deleted by Wittgenstein). Such an “in-between” version could also remove some burden from the normalized version allowing it only to mark editorial interventions on word-level, while in this sort of version *every* editorial intervention could be indicated (and in the diplomatic version no editorial intervention is implemented). Moreover, one could imagine the “typescript version” itself to perform in both a diplomatic and a normalized dress, the latter allowing searches across unified orthography and grammar, while the first reads the typescript “as it stood”. But, in fact, such add-ons lead us exactly to the point where interactive dynamic editing already is: All of this can be made available to user-defined filtering, and it may just be that as soon as there is sufficient agreement on the legitimacy of one’s filtering and conversion parameters (as there surely already is for the “give me the typewritten text only” interest), the interactive dynamic editing scenario loses much of that “risky” dimension which the skeptics are suspicious of. The issue is then not different from other issues in text philology and interpretation, where scholarship demands from both editors and users to describe and justify their methods along with the results they produce.

### 8 Perspective

Today, a decade after publication of the BEE, we can confidently say that we have continued to make progress toward and can look forward to a new and improved edition of BEE. WAB’s machine readable version of the *Nachlass* is transferred from MECS-WIT to TEI guided XML markup, both being internationally recognized standards, and XML a primary standard for publication on the Web. Having the machine-readable version in XML keeps the necessary flexibility when converting it to editorial outputs, and brings more sustainability with regard to maintaining it than has been the case before. Where in BEE we had a less informative reference system and nomenclature, now not only each page, but also each single *Bemerkung* can receive its distinct name and figure as an independent holder of a Web page. Dynamic editing is extended to include, at the very least, also a “typescript version”, and the profile of the diplomatic and normalized versions is being improved. While the possibility to work with entire items as research objects is retained, an additional option to have the single *Bemerkung* as research unit is being added. While semantic and ontology enrichment was little used for BEE then, they may now be increasingly utilized when preparing search and query functions. BEE was a closed resource, now its interlinking with other primary resources and the enrichment with further metadata are on the agenda. BEE was once a fixed resource, now having it on the Web will make it more easily extendable and updatable.

In this paper, except for the short discussion of interactive dynamic editing, I have hardly touched upon possible topics of revision and change which are more contested, such as semantic enrichment *en large*, the inclusion of philosophical commentary and ontologies, or the implementation of collaborative workspaces. Nor have I discussed technical details of e.g. updates or possible personal workspaces. Issues like these not only pose technical challenges, but even more “societal” ones. They can demand coordination of individual use and expectations with collaborative working environments. They also confront traditional understandings of what an edition is, what it is supposed to deliver, and what it is *not*, with something much more than and different from an edition: a digital working desk, sharable with others, where what we adhere to when we think of typical scholarly editions, may be only a part. I don’t think that the next, second, BEE will be like this, but the third one could be. Many of the things which are on the agenda today, were far on the horizon when BEE 2000 was conceived, and some of them may even now only make scant appearances in the next version. But while they may fully enter the third BEE, also then new perspectives and technologies will be available for which we must first develop a culture and methodology before we can implement them.<sup>17</sup>

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<sup>1</sup> On Wittgenstein’s *Nachlass* and WAB’s work find more in Huitfeldt 1994 and 2004, Cripps & Ore 1997, Krüger 1999, Pichler 2002 and 2005. Reviews of BEE include Jantschek 1999, Hrachovec 2000 and 2006, Roser 2001, Schulte 2002, Binder & Haller 2002, McGuinness 2002, Soulez 2003, Raatzsch 2003??, Bremer 2003. Specifically on digital Wittgenstein scholarship see Hrachovec & Köhler 2001, McEwen 2006, Stern 2007, De Mul 2007.

<sup>2</sup> Though they might have been difficult to achieve, since full access to the *Nachlass* would have then only been available to those researchers who had the Cornell or other (black and white) facsimile available or even access to the originals. This highlights another benefit of BEE – it has reduced the number of people who must handle the original manuscripts.

<sup>3</sup> “Open Scholarly Communities on the Web”, see [http://wab.aksis.uib.no/wab\\_cost-a32.page](http://wab.aksis.uib.no/wab_cost-a32.page) and <http://www.cost-a32.eu/>.

<sup>4</sup> “Digital Semantic Corpora for Virtual Research in Philosophy”, see [http://wab.aksis.uib.no/wab\\_discovery.page](http://wab.aksis.uib.no/wab_discovery.page) and <http://www.discovery-project.eu/>; also see Bartscherer & D’Iorio 2007.

<sup>5</sup> “*Culture and Value Revisited*”, see [http://wab.aksis.uib.no/wab\\_fwf-cv.page](http://wab.aksis.uib.no/wab_fwf-cv.page) and [http://www.uibk.ac.at/brenner-archiv/projekte/wittg\\_vermischtes/index.html](http://www.uibk.ac.at/brenner-archiv/projekte/wittg_vermischtes/index.html); also see Mayr & Wang 2007.

<sup>6</sup> Folio Bound Views, Version 3.11.3, Folio Corp. 1992-1996.

<sup>7</sup> This includes items 307 and 308 for which neither facsimiles nor edited text versions, and item 203, for which only edited text versions could be published. With regard to facsimiles, for items 105, 106, 107, 112 and 113 only facsimiles in black and white could be included. Sporadic facsimile lacunae occur in a number of other items; for a detailed (though not entirely complete) list see BEE, *Introduction*. It had not been possible to include items 307 and 308 because their location and identity seemed a puzzle. At least for “Mulder V”/Ts-308, the puzzle may be solved. Ts-308 is, I think, the typescript of which von Wright (confusingly) says in his catalogue, that he had not included it in the catalogue, namely a typescript of 57 pages, kept in the Schlick *Nachlass* (*Inv.-Nr. 184, D. 5.*), which is essentially a typewritten *Reinschrift* of Ms140 (see Fabian 2007, p.52, and Iven 2009, p. 79): “Eight typescripts are known of dictations by Wittgenstein to Schlick. One of them, however, is essentially a typescript version of 140 (the manuscript, to which Wittgenstein referred by the name ‘Grosses Format’). This typescript I have not listed in the catalogue...” (von Wright 1982, p. 56). Indeed, in the catalogue’s first version of 1969, Mulder V was *not* included, and what was called items “307” and “308” then, was in fact the Blue and Brown Books (which later have received the numbers 309 and 310). My conjecture is that von Wright, when changing his mind and eventually (for reasons which we don’t know) including Mulder II and Mulder V as today’s items 307 and 308, consequently renamed the earlier 307 and 308 into 309 and 310, but forgot to correct the above quoted comment. – Since the production of BEE, also new *Nachlass* items were discovered; on this see the appendices in this volume.

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<sup>8</sup> <http://wab.aksis.uib.no/bee-errors.htm>

<sup>9</sup> The machine-readable version consists of marked-up source transcriptions in platform independent file formats. An example shall serve to illustrate what is meant with mark-up: When representing text features of Wittgenstein's Nachlass, e.g. the underlining of a word, we can do this by using the underline function of a word processor such as MS Office Word. When doing mark-up in the sense used here, however, we attach an explicit marker to the word specifying that it is underlined in the original transcribed, e.g. "<u>word</u>". This explicit way of recording a document/text and its properties permits processing the information attributed to the document/text in multiple ways (including to disregard it), which leads to much greater flexibility, control and sustainability than when doing it in the "Word" way. Mark-up should follow standards with regard to both its syntax and its nomenclature and rules; regarding the first, WAB today follows XML, and regarding the second the TEI proposal P5. For an introduction to both, see <http://www.tei-c.org/Guidelines/P5/>. The project of conversion from the original MECS-WIT mark-up, involving a major effort, was begun in 2001 and received a significant financial boost through the DISCOVERY project. Samples of *Nachlass* transcriptions in the current TEI(P5) guided XML format are available from WAB's *HyperWittgenstein* site [http://wab.aksis.uib.no/wab\\_hw.page/](http://wab.aksis.uib.no/wab_hw.page/).

<sup>10</sup> See <http://wab.aksis.uib.no/sept1914/home.html> and [http://wab.aksis.uib.no/wab\\_sept1914.page](http://wab.aksis.uib.no/wab_sept1914.page).

<sup>11</sup> Here I pass over the possibility of using a technical system of reference provided by FolioViews, i.e. referring to BEE's "records", which – for the normalized version – correspond to Wittgenstein's *Bemerkungen* (while, in the diplomatic version, the records correspond to the *Nachlass* pages). I should mention that WAB's *machine-readable version* (but not BEE) contained a system for reference on *Bemerkungen* level.

<sup>12</sup> See <http://wittgenstein.philo.at/> and [http://wab.aksis.uib.no/wab\\_115ape.page](http://wab.aksis.uib.no/wab_115ape.page). Project members included Herbert Hrachovec (Vienna), Dieter Köhler (Karlsruhe) and Alois Pichler (WAB).

<sup>13</sup> I have tried to give an example of this in Pichler 1997.

<sup>14</sup> As said in the introduction, here I consciously pass over a type of metadata which addresses semantic rather than structural features. Examples include enrichment with metadata about the philosophical subject treated in a certain remark, which can be exploited to e.g. "Show me all *Bemerkungen* which speak about private language", or enrichment which allows to "Show me all personal remarks", "Show me all remarks belonging to philosophy of mathematics", etc. etc. While I personally see more advantages than disadvantages with enriching the edition in such a way, the value of semantic enrichment is rather controversially regarded among Wittgenstein researchers. Semantic enrichment is implemented in the DISCOVERY project, and BEE already has parts of such enrichment, when it for example offers classifications of *Nachlass* graphics or mathematical notation.

<sup>15</sup> For an experimental site of interactive dynamic editing, visit <http://wab.aksis.uib.no/transform/wab.php>.

<sup>16</sup> Cases in question include entire sentences or remarks deleted by Wittgenstein, and text alternatives.

<sup>17</sup> Parts of this paper have, in addition to the Lisbon conference in 2008, been presented at other conferences and meetings, including the ALWS annual Wittgenstein Symposium in Kirchberg in 2006 and the *Nordic network for Wittgenstein research* conference in Norwich in 2008. I would like to thank the organizers and participants of these meetings for valuable discussions. I would also like to thank Hans Walter Gabler, Claus Huitfeldt, Allan Janik, Christine Madsen, Cameron McEwen, Brian Rogers, Deirdre Smith, Jonathan Smith, who all have made valuable comments on drafts of this paper.