

# University of Bergen

Department of Information Science and Media Studies



Master's Thesis in Information Science

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## The Impact of Interface and Gameworld Design on Player Experience

*The Case of Metal Gear Solid V: The Phantom Pain*

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## ABSTRACT

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This thesis was carried out within the Games and Transgressive Aesthetics project, located at the department of Information Science and Media Studies, at the University of Bergen. The goals for this project is however separate from those of its parent project, and instead focuses solely on the interface design in the digital game *Metal Gear Solid V: The Phantom Pain* (Kojima Productions, 2016). The thesis is presented through a multidisciplinary approach to digital games, with a human-computer interaction perspective.

The overall intent of the thesis is therefore to present a study in which a group of participants were observed while playing the game, with the objective of gaining empirical data on what role the interface and gameworld design had on each individual participant's experiences. Ultimately, the study revealed a digital game that, despite clear problems regarding its interfaces, still provides the player with an entertaining gameplay experience, held up solely by the strength of its gameworld interface and engaging gameplay. The thesis will outline both how the study was performed, as well present the results and analyse these using a theoretical basis of human-computer interaction and game studies.

## ACKNOWLEDGEMENTS

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This thesis is dedicated to my son, and his late mother.

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I would also like to offer a special thanks to all my participants, which made the study possible in the first place. They are anonymous, and can therefore not be mentioned by name, but I would still thank them all for giving your time to my study, and providing me with an abundance of quality data.

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## **KEYWORDS**

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Digital Games, *Metal Gear Solid V: The Phantom Pain*, Player Experience, Human-Computer Interaction, Interface Design, Gameworld Interface, Game Studies, Case Study, Empirical Data (Qualitative).

# 1 INTRODUCTION

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Let me introduce this thesis by presenting two unique examples observed from study:

Oscar is playing his first gameplay session of my study of *Metal Gear Solid V: The Phantom Pain* (*MGS V*). Oscar is controlling the avatar as he sneaks through an enemy base. The enemies are not aware of his presence, and the tension is thick in the air. Oscar is considering each of his movements with trepidation, as any wrong move will result in the enemies being alerted, and the likely death of the avatar. Suddenly Oscar comes to an impasse, he is staring right at a guard walking away from him, while another closes in from behind. Oscar makes a snap judgement and tries to sedate the enemy in front of him before being noticed. The first shot from his anaesthetic dart-pistol misses its mark, and the guard turns around and screams, Oscar makes a grimace and quickly tries to shoot again before the guard can call out to his comrades, he fires, and hits, but the enemy is wearing a helmet, and instead of the guard passing out, a loud Clang sound erupts, followed by the enemy shouting “Hostile!” Following this flurry of action, Oscar runs away while the enemies attempt to close in on his location, as he knows that he is outmatched, but by hiding he can regain the upper hand in a later confrontation.

Throughout this single minute of gameplay, Oscar stared intently at the screen, leaning forward as the tension rose, he is fully immersed in the gameplay, and his entire face emotes when unexpected situations occur within the game. This is the strength of the gameworld interface in *MGS V*, where it can completely immerse the player, and provide thoroughly engaging player experience.

The second example is from Williams second gameplay session.

William is controlling the avatar as he methodically stalks a powerful enemy with science fiction abilities, which if he is seen will shoot at him with a high-powered sniper rifle, and then escape by a mixture of high speed running and teleportation, much in the same way a character in a Stephen King novel would. William is moving forward by alternating between crawling and crouched walking to not make any sound, as he moves between obstacles to hide from the enemy’s vision. The tension is high, as he nears his pray, and with a couple of well-placed shots he will have finally bested this frightening enemy. As he prepares to fire he checks to make certain he has the correct weapon equipped, but in doing so, he inadvertently does the opposite, and swaps out his rifle in favour of his anaesthetic pistol.

Instead of coming out of the altercation victorious, the enemy is alerted to his presence, and teleports away. Frustrated by this situation, which left him drained of motivation to continue, he instead used the support team to air-drop a tank into the battleground, which he then unceremoniously blew up the enemy with. After the intense, push and pull of the encounter, it ended with an anticlimactic finish, chosen not due to its fun-factor, but instead because it was less time consuming, and offering an easy out. The choice was also bereft of any player skill, only required a few button presses, and a quick flick of the joystick.

This sequence took place after approximately one hour of gameplay, which was designed to introduce the basic gameplay features, and teach the player how to use the most important gameplay systems. Regardless of this, William was still unable to perform one of the most important actions for the game, and was instead left frustrated and confused. William is by his own admission a seasoned gamer, having owned multiple game consoles, and played a multitude of shooting.

This example highlights how the interfaces of *MGS V* are cumbersome to use, and are ultimately detrimental to the overall player experience the game provides.

These are only two distinct examples illustrate some of the different results from my empirical study of interfaces in the digital game *MGS V*. Both sequences are similar, and the gameplay when the player is interacting with the gameworld interface is enjoyable to both players, to the point where they become completely immersed in the game. However, while both examples end in failure for the player, Oscar's failure keeps him immersed and engaged with the game. His player experience is not impacted negatively, instead he met resistance, due to his own choices, and must learn a new way of approach, which in turn teaches him to play the game better. In Williams example, the immersion is broken, and the player experience is impacted in a negative way. A simple activity is made confusing, and he misreads a signal made by the game, due to an overabundance of moving parts in the equipment menu. This leads to a breakdown of the action -> outcome chain, where he feels that he failed, not due to his own choices, but because the game failed to inform him of whether he completed his desired action or not. Ultimately this leads to him losing both time, and his sense of immersion, as well as take away the sense of achievement he would have felt, had the game accurately indicated the outcome of his inputs.



I will return to the discussion and analysis of the different aspects of the interfaces found in *MGS V* in chapter 4, but before that I will first outline the design of my study, its theoretical background, and the mechanics present in *MGS V*.

## 1.1 RESEARCH GOALS

The focus for this thesis was to design a study that would enable me to analyse and discuss what the role of each of the specific interfaces in the digital game *MGS V* had regarding the experiences its players felt when engaging with the game.

The entire study itself was built around this research question:

*Does the interface and gameworld design found in MGS V have a role in the type of experience received by its players?*

Through this research question, the primary intent therefore became the following: → (1) Designing an empirical study which would investigate how five participants, with varied experience with digital games, experienced the traditional, gameworld, and physical interfaces found in the game *MGS V*. The design of which is described in detail in Chapter 3.

Then → (2) analysing this data to discover, what the impact of the interface design choices had on the participants' overall experience. A complete presentation of the analysis can be found in Chapter 4.

The study itself was conducted based on established methodologies, which are presented and discussed in chapter 2. While the research question behind the thesis, and empirical study was developed from an overall hypothesis that:

*Any gameplay that a player is subjected to provides some kind of experience – either positive or negative, and this experience may be further impacted by the design and implementation of the game's interfaces (traditional, gameworld, and physical).*

After having chosen the research question, I chose to use the digital game *MGS V* as the subject for my study. This choice was mainly affected by the release of the game coinciding with the start of my research, as well as the very positive pre-release previews the game had received. The game itself will be described in detail in chapter 2.

## 1.2 TOPICS OF THIS THESIS

Digital games today are designed as a multidisciplinary combination of programming, music, art, acting, as well as management and integration of these aspects, where each of these facets work together in unison to ultimately create a coherent fictional space which opens up for specific player experiences.

In today's gaming market, it is paramount to provide a good experience for the players. This is usually provided, not only through good and interesting content within the game, but also through superb interface and gameworld design.

Interface in this context is meant as the part of the system that allows the user to interact with the computer (Lauesen, 2005, 04), or in this case allows a player to interact with the gameworld, which itself is a world representation designed with a specific type of gameplay in mind, and represented through the information from the game-system that is made available to the player, and enables player interaction (Jørgensen, 2013, 03). The gameworld is in many ways the part of a game that the player is interacting with whenever he is playing the game. It is designed to provide the player with a specific type of gameplay and through the game-system information allows the player to perform the playing activity. While the gameworld is the sphere where the gameplay takes place, it is always through the usage of an interface that this is made possible. This line between gameworld and interface thus blurry and fluid, when ascribing what specifically is part of the interface versus what is part of the gameworld, and we therefore end up with what is known as the gameworld interface. Gameworld interfaces is the idea that the gameworlds themselves are also interfaces to the game system as an informational and interactive environment (Jørgensen, 2013, 04).

Due to the focus being digital games, the research basis for the study also requires a certain multidisciplinary nature, with the theoretical framework being derived from the fields of both game studies, and human-computer interaction (HCI), with the subfields of player experience, user experience, and interaction design being specifically important.

The thesis is however written within the field of social sciences, and the perspective will be presented through an information science lens. Therefore, although some of the theory is derived from the field of game studies, which had its origins within the humanities, this thesis will maintain an information science and HCI focus throughout.

Because of this, the writings will not go into areas of game design relevant to the fields of the

humanities or media studies, but will instead focus on the interaction and player experiences found when playing the digital game *MGS V*.

Although the study and thesis is focused solely on the interface design found in *MGS V* specifically, I do still expect that the learnings gained from this study can also be extrapolated, and thus have a general generic value, when considering the design of the Interfaces in other digital games.

## 2 TERMINOLOGY AND THEORIES

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The purpose of this chapter is to define and explain the terminology I have used for the remainder of this thesis, the theories used, explaining the perspective on digital games and *MGS V* and the mechanics found within this game.

### 2.1 THEORETICAL BACKGROUND

In this section I will present each of the fields, and discuss their relevance to my thesis, starting with an overhead view of my approach to social science research, before moving onto present the specific fields. After this I will present the specific research methodology used in this thesis, namely case study, empirical research, thematic analysis, and critical incident technique.

As previously discussed, this thesis takes a multidisciplinary approach, and will therefore combine theories and methodology from the fields of (1) Game studies - with theories mainly related to player experience, and (2) HCI - with some contributions from interaction design (IXD), usability, and user centred design, and additionally (3) overall theory from information science and the social sciences.

This perspective intends to consider the impact on the experience of players when interacting with the interfaces (traditional, physical, and gameworld) of a specific game. Due to this focus it is necessary to not only look to information science and HCI but also commit focus to game studies, and its subfield player experience.

The need for a multidisciplinary approach is itself derived from the fact that digital game interfaces, while borrowing conventions from other media, tend to put these into their own context. As Jørgensen (2013, 6-7) suggests:

“Digital games use many of the same techniques and metaphors that software interfaces use, such as menus, windows, and icons, and they often combine them with a cinematic style that aims at photorealism, often simulating the presence of a camera through the use of lens flares or water or blood splatter on the screen. This combination results in new conventions and a new functional aesthetic unique to digital games.”

Overall this means that, due to its participatory nature, games need to communicate not only its fiction and story, but also its interactive qualities through gameplay-relevant information,

and the presence of system information, and it is this specific interaction that I wish to study - how the game communicates its interactive qualities through its traditional interface, gameworld interface, and physical interface to the player, and through this gain empirical knowledge on how their design impact and shape the experiences the players ultimately gain.

### **2.1.1 Social Science Research**

Although multidisciplinary, the thesis is still written within the field of information science, and as such it has its basis in the field of social science research, meaning that it draws its conceptual and theoretical basis from social science methodology, while at the same time being closely related to the field of computer science. The main theoretical basis for my grounding within the social science field is ultimately based around the theory presented in Bryman (2012), which provided the guidelines for conducting qualitative empirical studies, and performing case studies. In fact, the entirety of the structure of my theory is derived from the design and implementation of a deductive case study as described by Bryman (2012). Additionally, I also applied the usage of a thematic analysis for processing my dataset, in order to find patterns which could then be analysed.

### **2.1.2 Human-computer Interaction**

My main take-away from the field of information science is an HCI focus. HCI as a field stands at the intersection of computer science, cognitive science and psychology, and can be described as:

“A discipline concerned with the design, evaluation, and implementation of interactive computing systems for human use and with the major phenomena surrounding them”  
(Hewett et al., 1992, 05).

The name, human-computer interaction has its origin in the 1970's and 80's, but was popularized by Card, Newell, and Moran (1983), after being developed as a sub-discipline of the fields of Human Factors, Management information systems, and computer science. HCI's goals, and methodologies which were established in the 80's has at this point expanded to the point where “HCI is now effectively a boundless domain” (Rogers, 2004). Much of the change came once computing shifted from only concerning hobbyists, and information technology professionals, to the emergence of personal computing, which included both

personal software, and personal computer platforms, and made everyone in the world a potential computer user (Carroll, 2013). This shift then highlighted the deficiencies of computers concerning the usability for those who wanted to use computers as tools. Which then lead to the conclusion that the usability of computers and their software had to improve. This concept of usability was, and still is the abridging technical focus of HCI, and was originally articulated in the slogan “easy to learn, easy to use.” Which turned out to be somewhat naïve, and has since been re-articulated and reconstructed (Carroll, 2013). Usability today often subsumes qualities such as fun, wellbeing, collective efficacy, aesthetic tension, enhanced creativity, flow, support for human development, and others.

As HCI grew, it expanded from its original academic home in computer science, to encompass fields such as: psychology, design, communication studies, cognitive science, information science, science and technology studies, geographical sciences, management information systems, and industrial, manufacturing, and systems engineering (Carroll, 2013). At the same time, its focus grew from personal productivity applications to include, visualization, informational systems, collaborative systems, system development process, and other areas of design (Carroll, 2013). A result of this growth was that HCI grew beyond its initial focus on individual and generic user behaviour, to include social and organizational computing, accessibility for the elderly, the cognitively and physically impaired, and for all people, and for the widest possible spectrum of human experiences and activities (Carroll, 2013).

Today there is no unified concept or title for a professional practicing HCI, and academic programs train everything from: user experience designers, interaction designers, user interface designers, application designers, usability engineers, user interface developers, application developers, technical communicators/online information designers, and more. HCI has therefore become the name for a community of communities (Carroll, 2013). The one connecting element across HCI communities today continues to be a close linkage of the critical analysis of usability, broadly understood with the development of novel technology, and applications, and is thus bound by the evolving concept of usability and the integrating commitment to value human activity and experience as the primary driver in technology (Carroll, 2013).

The field of HCI today is concerned with understanding contemporary human practices and aspirations, as well as study how those activities are embodied, elaborated, but also how they are possibly limited by current infrastructures and tools. HCI is therefore focused on

understanding practices and activities specifically as requirements and design possibilities, envisioning and bringing into being new technology, new tools and environments. As well as exploring design spaces, and realising new systems and devices through the co-evolution of activity and artefacts.

However, by understanding that HCI is inscribed in the co-evolution of activity and technological artefacts, it reminds us that HCI, as well as its concepts, and methods are always in a constant flux. This focus on theory development has been constant throughout the history of HCI, as the focus on the co-evolution of activities and artefacts has moved. Early theories, like the GOMS (Goals, Operations, Methods, Selection rules) model, was narrowly focused on the cognition and behaviour on individuals interacting with keyboards, simple displays, and pointing devices, while HCI then broadened as interactions became more varied and applications became richer (Carroll, 2013).

Today, one of the most significant achievements of HCI is its evolving model of integration of research and practice. Originally, this model was expressed through a complementary relation between cognitive science and cognitive engineering, but has since incorporated a diverse science foundation, notably from social and organizational psychology, activity theory, distributed cognition, and sociology, and an ethnographic approaches human activity, including the activities of design practices and research across a broad spectrum, for example theorizing user experience and ecological sustainability (Carroll, 2013). Ultimately HCI provides a blueprint for a mutual relation between science and practice that is unprecedented.

Although HCI was always discussed as a design science, or as pursuing guidance for designers, it was originally construed as a boundary, with HCI research and design as separate contributing areas of professional expertise. In fact, user experience design and interaction design were not imported into HCI, but were rather the first exports from HCI to the design world (Carroll, 2013).

The two fields of user experience (UX) design, and interaction design (IXD), are some of the most relevant fields to for this specific thesis, due to its focus on the design of the interface, and how and what experience using this interface provides to the players of the game *MGS V*.

### **2.1.3 User Experience Design**

UX as field has a huge number of definitions, all placing emphasis on slightly different aspects. Central to all is however the importance of how the end-user experiences a product,

i.e. the user's perception of how easy it is to use, its effectiveness, emotional satisfaction etc. The Nielsen-Norman group (2016) define UX as:

*“User experience encompasses all aspects of the end-user's interaction with the company, its services, and its products. The first requirement for an exemplary user experience is to meet the exact needs of the customer, without fuss or bother. Next comes simplicity and elegance that produce products that are a joy to own, a joy to use. True user experience goes far beyond giving customers what they say they want, or providing checklist features. In order to achieve high-quality user experience in a company's offerings there must be a seamless merging of the services of multiple disciplines, including engineering, marketing, graphical and industrial design, and interface design.”*

While Hassenzahl (2011) define UX as not concerning having good industrial design, multi-touch, or fancy interfaces, instead it is about *creating an experience through a device*.

The term UX is often used as a synonym for usability, user interface, interaction experience, interaction design, customer experience, web site appeal, emotion, 'wow effect', general experience, or as an umbrella term incorporating many of these concepts (Roto et al, 2011).

The word 'experience' takes on a more specific definition when discussing UX, than experience in general. In UX, the word explicitly refers to experiences derived from encountering (i.e. using, interacting with, or passively confronted with) systems, products, services, and artefacts, that a person can interact with through a user interface. While experiences in general covers everything personally encountered, undergone, or lived through (Roto, et al. 2011).

The verb 'experience' refers to an individual's stream of perceptions, interpretations of those perceptions, and resulting emotions during an encounter with a system. In practice, designers focusing on experiencing usually pay attention to specific interaction events, which may have an impact on the user's emotion - e.g., in game design, scoring a goal, or the appearance of a frightening character (Roto, et al. 2011). As a noun 'user experience' refers to an encounter with a system that has a beginning and end. It refers to an overall designation of how people have experienced a period of encountering a system. Typical examples of this perspective are placing the focus of UX design on a specific period of activities or tasks – e.g., visiting a website, or in the specific case of this thesis, the activity, or user experience of playing specific sections of the digital game *MGS V*. Evaluation in this case could focus on methods that can provide an overall measure for the experience of a certain activity or system use –



e.g., a retrospective questionnaire, or in my case, a retrospective interview, following a gameplay activity (Roto, et al. 2011).

UX as a practice has its roots in the principles of Human/User Centred Design, which can be summarized as: (1) positioning the user as a central concern in the design process, (2) Identifying the aspects of the design that are important to the target user group, (3) Developing the design iteratively and inviting user's participation, and (4) collecting evidence of user specific factors to assess a design (Roto, et al. 2011).

Additional to these, are also the UX factors: methods, tools and criteria used in UX work; representation of the UX idea; and positioning in the organization (Roto, et al. 2011).

In practice, the UX process starts with: (1) scoping out the factors that are known, because evidence exists, or are thought likely to be the drivers of UX in their particular instance, (2) identifying those factors that are critical to the success of the design and can be satisfactorily dealt with by the design team, given their own operational circumstances, (3) identifying those factors that are likely to need further investigation and, if so, the form that those investigations could take (Roto, et al. 2011).

When designing, a team will need to identify applicable and feasible methods, tools, and criteria that can be used to manage the UX factors throughout the process, which includes setting initial targets, managing the iterative development of design proposals, and supporting evaluation work during and after the design work (Roto, et al. 2011).

Overall, there are generally no overall measure of UX that is accepted, instead UX can be assessable in many different ways. For instance, there are tools for simply evaluating whether an evoked emotion is positive or negative, as well as methods and instruments specifically developed for evaluating qualities such as trust, presence, satisfaction, or fun (Roto, et al. 2011).

The choice of evaluation instrument or method, ultimately depends on the experiential qualities of the system that is targeted, as well as the purpose of the evaluation, in addition to other factors such as time, and financial constraints (Roto, et al. 2011).

#### **2.1.4 Interaction Design**

The final field connected to HCI that is relevant for this thesis is the field of Interaction design (IXD). IXD can be understood as the design of the interaction between users and products, specifically, it concerns the way people interact with products and services. The goal of

interaction design is therefore to create products that enable the user to achieve their objective(s) in the best possible way (Siang, 2017). IxD is often examined through the model of ‘the five dimensions of interaction design’ originally introduced by Gillian Crampton Smith (2007, 17), and expanded by Kevin Silver (2007). The five dimensions are:

1D: Words: encompassing text, such as button labels, that help convey the right amount of information to users.

2D: Visual representations: Graphical elements such as images, typography, and icons that aid in user interaction.

3D: Physical objects/space: Involves the medium through which users interact with the product or service, e.g., a laptop via a mouse, or mobile phone via fingers.

4D: Time: Relates to media that changes with time, such as animations, videos, and sounds.

5D: Behaviour: Concerned with how the previous four dimensions *define* the interactions a product affords, e.g., how users can perform actions on a website, or how users operate a car. Behaviour is also about how the product reacts to the user’s inputs and provides feedback.

Together the five dimensions allow interaction designers to consider the interaction *holistically* between a user and product/service. This in turn allows the designer to convey meaningful information – in the right amounts, at the right time – to optimize the user experience of using the product/service. Good interaction design results in products that mirror users’ expectations and enable ease of use towards action goals, i.e. designed works that are intuitive to grasp that only fail at frustrating users.

In their day to day work, interaction designers often conduct user research, create wireframes, and prototypes, as well as perform different types of evaluations in order to evaluate the efficacy, and usability of a product or prototype.

In addition to applying the usage of HCI, UX, and IxD theory throughout my study, I also adopted the Critical Incident technique (CIT) referenced in Rogers, Sharp, & Preece (2012, 291), as an analysis method from within the HCI field.

The CIT, although not originally an HCI technique, has since been adopted within multiple fields, from its origins within the US air force, to medicine, as well as IxD and HCI, where it

is chosen due to its value of highlighting problematic areas of a product, which may not always be noticeable during normal usage.

Due to the subject for the evaluation, and following analysis being a digital game, the other, final focus area for this thesis is game studies. However, before delving into what this specific field is, I will first present a definition of exactly what a digital game is.

### **2.1.5 Explaining Digital Games**

In recent years, digital games have grown immensely and is now considered among the favourite leisure activities of billions of people around the world (Nacke, 2009, 3). Digital games have become a top contender for a share of your individual leisure time.

Nacke (2009, 3) sites a study done by eMarketer (2009), that concludes that console, personal computer (PC), and web-based games have already become the number one favourite activity for men aged between 12 and 34 years. This shift has alone laid the foundation for a substantial new branch of information and communication technology industries, making games without a doubt an important economic force with the power to change our lives radically in the future (Nacke, 2009, 4).

This is further exemplified by the digital game *Grand Theft Auto V* (Rockstar, 2013), becoming the fastest selling entertainment product in just three days, selling more than \$1 billion worth of sales (Duffin, 2013). By the end of 2016, the game had shipped more than 75 million copies (Sarkar, 2017).

At the same time as the industry revenue for the digital games industry has seen an exponential growth in the last 10-20 years (Nacke, 2009, 4), game development teams have seen a similar growth, with teams going from a handful of developers to teams often numbering in the hundreds. The ending credits for *MGS V* itself lists over one thousand names that worked on the game in some capacity. This includes everything from developers, voice actors, motion capture, sound designers, quality assurance technicians, and more (Credits *MGS V*, Konami, 2015).

The term *Game* is however one that holds a large variety of meanings, ranging from animals used for hunting, to play activities performed by children. Because of this, I would therefore like to first define the breadth of the term *game*, and *digital game* used throughout this thesis.

Due to its myriad of definitions, and variety of activities that can be described under its umbrella, multiple scholars have attempted to define the word, albeit with a certain trepidation. Game historian David Parlett (1999) for instance, warns that any attempt to define the word *game* is a foolish endeavour. I will therefore make no attempt to define the word myself, but will instead present definitions put forth by scholars, and discuss their basis, and relation to this thesis. The first of which is renowned anthropologist Johan Huizinga's (1955) historical definition:

“[Play is] a free activity standing quite consciously outside “ordinary” life as being “not serious,” but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner. It promotes the formation of social groupings, which tend to surround themselves with secrecy and to stress their difference from the common world by disguise or other means.”

This quote outlines many of the basic qualities of any type of “play” or “game” activity, such as the fact that the act of playing is clearly outside of ordinary life, and although not in itself serious, it is still able to completely absorb the player. Additionally, the quote also defines “play” as a leisure activity which does not provide monetary gains. Finally, it also outlines “play’s” own fixed rules.

However, although a good definition of *play* or *game* in the most abstract form, it still encompasses all types of play activities such as hide and seek, board games, as well as digital games. Because of this I would like to present a more recent definition from Salen & Zimmerman (2003, 7, 11) as well, which has a larger emphasis on digital games.

“A game is a system in which player engage in an artificial conflict defined by rules, that result in a quantifiable outcome.”

This quote defines games as a system that is outside of the boundaries of so-called “real life” in time and space, and includes that the activity itself involves one or more players enveloped in some sort of conflict or contest that ultimately has a quantifiable outcome (Salen & Zimmerman, 2003, 7, 11). There are however certain outliers, which does not fit completely perfectly with this definition, such as roleplaying games (RPG), and simulators, such as SimCity. Salen & Zimmerman (2003, 7, 13) discuss RPGs as being able to be framed either way - as having or not having a quantifiable outcome. Although not all RPGs have an overriding quantifiable goal, players have session-to-session missions to complete, as well as

personal goals players set for themselves. Simulators, often do not have explicit goals either, and Salen & Zimmerman (2003, 7, 13) argue that they can be considered more like a toy than a game, even though simulators do have the possibility of player made goals much in the same way that RPGs do, meaning it ultimately comes down to how it is framed.

These two definitions cover the term *game*, and its qualities well, and when adding a final definition, from game's researcher Jesper Juul (2001, referenced in Salen & Zimmerman, 2003, 6, 8), we should have a clear idea of what constitutes a game, especially digital ones.

“...What computer science describe as a state machine. It is a system that can be in different states. It contains input and output functions, as well as definitions of what state and what input will lead to what following state. When you play a game, you are interacting with the state machine that is the game. In a board game, this state is stored in the position of the pieces of the board, in computer games the state is stored in variables, and then represented on the screen.”

When we put all three definitions together, we have an activity that is stored in variables in a computer, separate from ordinary life, and ultimately performed as a leisure activity for the users' entertainment.

### **2.1.6 Game Studies**

As mentioned previously, the other major focus area for this thesis is the field of Game studies. The field itself can in many ways be summed up by this quote by Jesper Juul (2005, 11):

“The relatively short history of video games is complemented by an even shorter history of research. It is only around the turn of the millennium that video game studies began to come together as a field with its own conferences, journals, and organizations.”

Game studies, and ludological research has so far been centred around aspects such as: the definition, function, design, development and impact of games (Nacke, 2009, 4). Although having its beginnings within the humanities, the field has since been adopted by multiple disciplines, and Nacke (2009, 4) illustrates that the major contributing fields to games research is: Science & Technology with 49.62% and Social sciences with 42.21% of all

publications according to the ISI Web of Knowledge. A more detailed search done via Scopus, also done by Nacke (2009, 5) presented games research's multidisciplinary nature even more clearly, with the major contributors being: Computer Science, Engineering, Medicine, Psychology, and Social Science. Although the formal creation of the field of Game Studies was not made until 2001, there are multiple examples of games research performed at earlier times, such as Neumann & Morgenstern's *Theory of Games and Economic Behavior* (1944), which discuss games scientifically, as well as multiple philosophical and educational debates in: Huizinga, 1938/1955; Clark, 1970; Avedon & Sutton-Smith, 1971; Costikyan, 2002; Caillois, 2001.

Game studies was initially intended as a way for humanities researchers to gain an understanding of games based in literature theory. However, although derived from the humanities, the term is often also understood as the scientific measurement of play activity, and the scientific understanding of gaming based on experimental data (Nacke, 2009, 04).

### **2.1.7 Player Experience**

Like game studies, the concept and idea to apply HCI methodology to games is a very recent prospect. This means that, not all of the terminology, and concepts have completely solidified and become norm yet, and the field is in an even greater flux than that which HCI has had during its lifetime thus far. Additionally, even the name of the field is a point of contention for many.

Throughout my research I have come across no less than three different names and descriptors for the field intent to study and improve the interaction between player and the game system. Nacke, in his 2009 doctoral thesis, suggests the name *affective ludology*, for the field of research which investigates the affective interaction of players and games, with the goal of understanding emotional and cognitive experiences created by this interaction. Just a few months prior to Nacke, however, Lazzaro (2008, 319-320) suggested defining the field as simply *player experience*, placing the field in close proximity with its counterpart user experience. Lazzaro does however state that the two have quantifiably different expectations, where in games the activity itself is at least as important as the end goal, while traditional software is typically a tool for a specific task or productive goal (Lazzaro, 2008, 320).

Bernhaupt (2010), on the other hand, along with other researchers, suggest that it is not necessary to separate game usability, and experience design from their older counterparts, but instead want to define the field as a sub-area to user experience, and call it *game-UX*.

Constant, through all the different suggested fields is however, a desire to take the teachings and experiences gained in the last 20 years in the field of HCI, and redesign and augment these for application within game design.

Although, there has been some form of user experience evaluation since the first versions of digital games, it was mainly based around simply playing the game, and trying to understand why it was not fun. One of the first actual design methods that migrated from HCI, is the use of heuristics to gauge the quality of the specific system. Federoff (2002), in her master thesis, put forth 44 unique heuristics for evaluating fun in games, after following the development of a specific game, and interviewing its developers. Since her initial model, the application and use of heuristics within game development has matured.

With Sweetser & Wyeth's GameFlow heuristics (2005), and in Bernhaupt (2010), eight years later, there were completely fleshed out heuristic evaluation methods for gauging different focus areas of the game experience, such as accessibility, or immersion.

In the last decade, there has been a certain give and take between the two fields of HCI and game development, where on one side HCI evaluation methods are being applied to game development, while HCI has also begun borrowing and investigating aspects of the gaming experience, such as immersion, fun, or flow to better understand the concept of user experience (Bernhaupt, 2010, 3-4).

Ultimately, all of the different suggested fields agree that the challenge of games is located on the level of game mechanics and strategy, and not on the level of the interface (Juul, and Norton. 2009). Which means that due to the activity of playing often coming down to mastering the game mechanics and strategy, it is doubly important for the interface to be well designed to allow the players to enter the process of playing the game, enjoying its challenges and playfulness, without being hindered by the interface, or other facets which may lessen the overall experience.

Jørgensen (2004, 396) suggested a countering slogan to that of usability and HCI, which says "easy to learn, difficult to master," which is intended to highlight the difference between games and traditional software, where a part of the experience of games is the act of learning how to play them, while traditional software should be easy to use from the start.

For this thesis, I choose to use the title *player experience* to describe the field, as I feel that simply applying design principles from UX wholesale would not lead to particularly well-designed games. Instead I feel that PX should learn from UX, but reapply, and redesign the methodology to fit with the design goals that digital games require.

In my thesis, I therefore use a great deal of theory from the field of game studies, and player experience, when analysing my empirical evaluation in chapter 4. Specifically, important was Jørgensen (2013), for the concept of Gameworld Interface, as well as the two heuristic evaluation methods, GameFlow, and Game Approachability Principles (GAP) (Sweetser & Wyeth, 2005; Desuivre & Wiberg, 2010), which were used to specifically highlight problematic areas found during my study, and indicate how certain game elements could be designed, and improved.

### **2.1.8 *Metal Gear Solid V: The Phantom Pain***

Here I will first present the context of the game, its history and narrative in broad strokes, before moving on to its gameplay features and mechanics in the following section.

*Metal Gear* as a series has a long history, and is one of the longest running digital game series of all time, starting in 1987 for the MSX home computer. Since its initial inception, the series has produced nine mainline entries, and five spin-offs. Throughout its entire history the series has been a cornerstone of Konami's digital games line-up, and the series creator, developer, and director Hideo Kojima, has worked on every mainline entry, and has through his work on the series been described as the games industry's first auteur (Cook, 2014). Each entry in the series revolves around a military operative codenamed Snake, which has been given a solo infiltration mission, often to stop various terrorist plots. The series as a whole presents an anti-war statement about soldiers trying to rid the world of war through means of war, presented through constant escalations of technology to achieve their goals. On a human level, the story is about men and women with lofty ideals being destroyed by the reality that in order to enact their ideals they first have to become the very things they are seeking to undo.

The *Metal Gear* series itself is one of the earliest examples of a stealth action game, cementing the gameplay type as its own genre. This genre is defined by its emphasis on avoiding enemy altercations, and instead using stealth to circumvent the enemy to reach the overall goal.

*MGS V* was chosen for this thesis due to it both being a highly anticipated title, both for me personally, as well as for a large of group of gamers. In addition, and just as important, the launch of the game on September 1st. 2015 coincided with the initiation of this thesis, which meant that *I would be able to recruit participants that had no prior experience with the game,*



as well as studying a digital game that is intended to present the pinnacle of technology available at that particular time.

### 2.1.9 The Main Mechanics of *MGS V*

*MGS V*'s gameplay is presented through an over the shoulder, dynamic third person view camera. This means that it has a forward-facing camera angle placed behind the player character, which allows the player to freely move the camera with one joystick / mouse, while moving the character with the other joystick / keyboard. This means that when the player is traversing the gameworld, the player is always aware of the characters position in the world, while also seeing everything in front of the character, as well as the characters back.



Figure 1. Camera angle while in game.

The gameworld interface in *MGS V* is presented in a way where system information is both “superimposed,” and “integrated.” This is an interface type that is often found in first-person-view games, and provides a perspective that allows the player to navigate the gameworld primarily by looking or listening for information integrated into the environment, but is also augmented by the use of traditional interface concept such as: Windows, Icons, Menus, Pointer (WIMP) features, or head-up-display (HUD) – 2D screen overlay, often referred to as “the interface and display information that is on-screen while the game is in progress” (Fox, 2005, 145).

While navigating in this game space, the player does not have a complete overview of where she is going, but must follow the wilderness to the constraints of the environmental layout.

*MGS V* provides an interactional environment that is limited only to specific objects and options that support the game mechanics. The player may only interact directly with certain objects in the gameworld, and only in limited ways. In *MGS V* these are limited to weapons, certain tools, and vehicles. The player character can pick up specific supplies or weapons from the ground, enter specific buildings and vehicles, use the environment for cover and destroy specific objects with weapons and other tools. This ultimately means that the gameworld is a very limited simulation of the physical world, where only specific gameplay options are available (Jørgensen, 2013, 92).

This world that the player inhabits in *MGS V* is also what is commonly described as an “open world” or “sandbox” game. When describing a game as “open world”, “sandbox” or “exploration”, we mean games where the player is generally left to his own devices to explore a large world, nothing forces the player’s motion into new areas, there is no auto-scroll, or artificial level barriers, and more often than not they feature one large map which the player is free to explore at his own devices (Harris, 2007).

In *MGS V*, the open world is split into two sections, Afghanistan and Africa, and once unlocked, the player can move anywhere within the environment. However once the player accepts a specific mission or episode, the game places a boundary around the specific area of the map in which the mission takes place.

In figure 1, above, the HUD is visible in the form of the equipped weapon indicator in the lower right corner. This is the only visible section of the HUD in normal gameplay, other than potential map markers, which is also indicated in figure 1, via the square icons on the left-hand side.

When the player is moving through the game space, this space becomes an ecological world that responds to the player’s activities and agency, which means that the gameworld is a player-centred space that revolves around the player’s activities (Jørgensen, 2013, 70). This agency is most noticeable when the player is noticed by the enemy, or when attacking an enemy base, whereupon the enemies will respond to the player’s actions by contacting neighbouring bases for reinforcements and additional weaponry. However, if the player has either sabotaged the communications equipment, or already subdued the nearby enemies, the game will react to this fact, and change its parameters.

The player agency of *MGS V* also allows the player to adopt a personal style of gameplay that suits the specific player. This means that the player is given a choice as to how he wishes to approach any objective, be it via stealth or a more direct approach. The player is also given

the choice of whether to go about the game in a lethal or non-lethal way, and most of the game is possible to complete without outright killing the enemies, save for specific missions.

In addition to the aforementioned HUD that is displayed during normal gameplay, the player also has access to three traditional WIMP interfaces, which are active during normal gameplay, as well as one which is accessible upon pausing the game

Each of the three in-game interfaces relate to different types of actions the player can perform. The largest of these is the iDroid, which contains the player's map, as well as information on the current mission, and management of the player's mother base (figure 2.). The iDroid, like all the additional HUD of the game is fictionalized as being part of the gameworld, meaning that although the HUD is a mediating technology that augments the game as an informational space, it also appears to have a natural appearance in the fictional setting in the game (Jørgensen, 2013, 93).

The iDroid is accessible by pressing a single button – tab on keyboard, and one of the centre buttons on a controller.



Figure 2. The map view of the iDroid, presented with a zoomed in view of the player character's hand, holding the device.

The second section of the WIMP interface is the equipment menu (figure 3). This menu allows the player to change the currently equipped weapon, as well provide access to other tools. The menu requires the player to press one of the directional buttons, while moving the

right joystick to the desired item, or by double pressing the button to swap item (on keyboard, the “1-4” buttons are used).



Figure 3. equipment menu, currently selecting the primary weapon by pressing up on the directional pad, or 1 on a keyboard

The last of the three in-game menus is the commands menu (figure 4.). This menu has two distinct functionalities. A single press will provide the player with voiced tips on the player's surroundings, while holding the button down allows the player to send commands to his current Non-Player Character (NPC) buddy.



Figure 4. Command menu, currently giving a command to an NPC buddy

In Addition to the three gameplay menus, there is also a pause menu (figure 5.) which allows the player to: (1) pause the game, (2) change the controls and graphical options, and (3) view tips for specific mechanics.

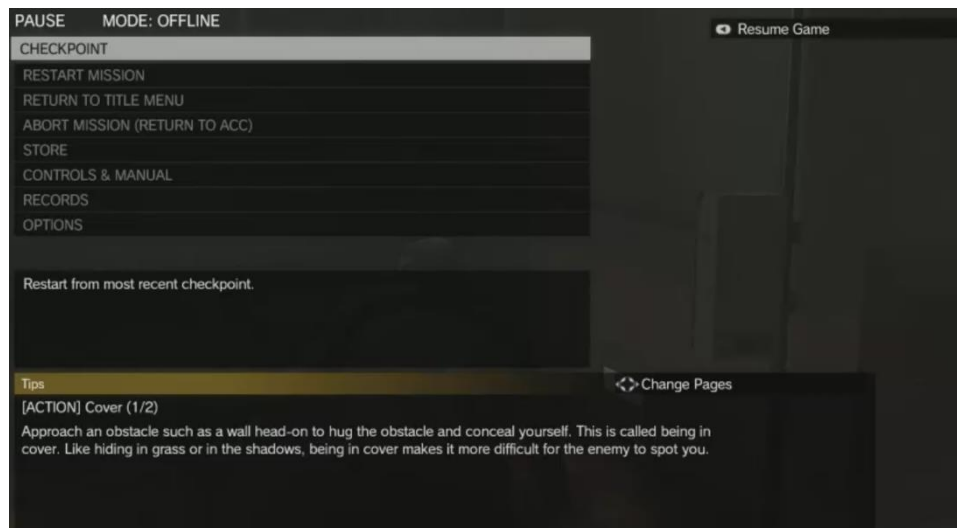


Figure 5. The pause menu, with options the upper left-hand side, and tips on the bottom portion of the screen

When considering ways in which to present the game user-interface, there are different trends which emphasise different aspects, such as player agency, or immersion. These often fall on a spectrum, either trending towards using the gameworld as an interface augmented by additional WIMP features, or towards integrating the interface into the fiction as completely as possible, aiming to create an unmediated experience (Jørgensen, 2013, 25). As I mentioned initially in this section, *MGS V*'s interface is presented as a combination of instruments that are part of the fiction, in addition to certain elements that are superimposed to provide the player with additional information which is not visible to the characters inside the gameworld. This design combination is described as integrated, ludic, and ecological (Jørgensen, 150-157).

Additionally, some information is integrated into the *MGS V* gameworld, but does not have fictional reality status and are instead presented purely for ludic considerations - such as icons that appear when the player character approaches certain objects, to indicate their interactivity. The iDroid interface on the other hand is a completely ecological instrument that is internal to the gameworld, and interacted with via the player character.

As for the auditory part of the gameworld interface, *MGS V* provides a combination of soundtrack features. In specific situations, or sections of the game background music plays which seek to immerse the player, and instil specific emotions in the players. Examples of this



is that while enemies are in an alert phase, a high-tempo soundtrack plays, then once, the player is able to get away and hide, the soundtrack changes to a more subdued cautious melody. Additionally, to the background music, the game also has a wide variety of in game sounds, and as well as sound cues that provide warnings to the player, such as a short loud pitched noise that is played if the player is spotted by the enemy. In fact, this so integral to the gameplay, that over the years, the MGS series as a whole has become renowned for this specific soundbite. Rounding out the sound design, voiceovers occur, both from in-game NPCs and enemies, as well as notifications from the player's support team, that impart commands and warnings to the player.

The mechanics, and interfaces discussed in this section, will be the basis for the analysis presented in chapter 4, where I will present, and discuss the results from my empirical study, as they pertain to my study, and overarching research question.

## 3 RESEARCH DESIGN

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The overall goal of this thesis is to study how the interface and gameworld design of the video game *MGS V* shaped the types of experiences its players have. To gain empirical data on how players experienced interacting with the gameworld interface, HUD, and physical interface, I conducted a case study of *MGS V*, where I tested five participants. This chapter will focus on the design of my case study, what methods of gathering data I used, and ultimately what methodology I implemented when analysing the raw data gained from the data gathering.

### 3.1 DATA GATHERING

When starting work on this thesis, I had a desire to study hands-on results gathered from actual players, and not just theoretical data from previous research. Combining this desire with my overall research question and goal for the thesis I created a list which also considered my time constraints and available equipment. From this I ultimately settled on developing a case study, that focused on gathering empirical data.

At its core, a case study entails a detailed and intensive analysis of a single case (Bryman, 2012, 66). Stake (1995, referred to in Bryman, 2012, 66) describes “case study research as concerned with the complexity and particular nature of the case in question”. Similarly, Bryman (2012, 68-69) describes a case study as, “the case is an object of interest in its own right, and the researcher aims to provide an in-depth elucidation of it”, continuing he states that “what distinguishes a case study is that the researcher is usually concerned to elucidate the unique features of the case.”

In my specific case study, I chose the game *MGS V* as my object of interest. The game was however not only chosen due to its interesting gameworld interface, and HUD design, but also because it matched perfectly with my parameters when I initiated my study. These parameters were mainly the need to have a very recently published game, with a high development standard, that was also well regarded by critics and fans of the genre. By applying these parameters, I could define a case in which the findings could be representative for its genre, and could thus be applied more generally to other cases. This means that my case study could be classified as a representative or typical case, which Bryman (2012, 70) describes a “case which exemplifies a broader category of which it is a member”.

One issue with, and standard criticism of case studies is however that its findings cannot readily be generalized (Bryman, 2012, 71). Although a counterpoint to this, made by case study researchers is that they aim to generate an intense examination of a single case, which they can then perform a theoretical analysis of. This theoretical analysis can then be used as both theory generation, and theory testing (Bryman, 2012, 71).

In my case I also intend to gather data on a specific case with the intent to then perform a theoretical analysis of the data, with the overall goal of gaining empirical knowledge on theoretical concepts of the impact of the design of the gameworld interface, HUD, and physical interface in a specific case.

Empiricism is an approach to the study of reality that suggests that only knowledge gained through experience and the senses is acceptable, meaning that ideas need to be subjected to the rigours of testing before they can be considered knowledge (Bryman, 2012, 711). In my case study the intent is as mentioned above, to test player experience theory in practice through the usage of a theoretical analysis, and a key component in this is to gather empirical data for the case study.

In other words, the viewpoints I intend to present in this study are a combination of the insights I gained from the case study and empirical data as well as theoretical and analytical insights gained from the fields of player experience and HCI. The case study I present in this thesis can in many ways be presented as a deductive study. Deductive theory is when a researcher, based on what is known about a particular domain and of theoretical considerations in relation to that domain, deduces a hypothesis that is then subjected to empirical scrutiny (Bryman, 2012, 24).

In practice, my empirical data gathering for the deductive case study was gathered through two means - interviews and gameplay sessions with five individual participants. The participants first played through specific sections of the game *MGS V*, and after each session completed an interview. In total, the participants each went through three gameplay sessions and four interviews.

### **3.1.1 The Case Study Participants**

The first step in gathering participants is deciding on criteria for the population that is required of the study. For my specific study, I wanted to gather a representative population with a varied degree of prior experience and skill with digital games. In order to my desired



selection, I employed a type of convenience sampling, in addition to the snowball method, where I first queried people from my personal network, and these then suggested other participants which had the relevant experience and characteristics to fit with the criteria of the different population groups for my study (Bryman, 2012, 424). In order to avoid gathering too much data to be adequately analysed, as well as avoiding duplicate data, I settled on having four participants, with the possibility of adding up to three more if deemed necessary, thus staying within a recommended number of participants (Rogers, Sharp & Preece, 2012, 447).

Ultimately, I ended up using a total of five participants due to one of the participants only completing two of the three gameplay sessions intended before moving away. The participants themselves were anonymous throughout the entirety of testing, and will therefore be referred to via pseudonyms throughout this thesis. The specific pseudonyms were based on the most popular Norwegian names in 2016 (SSB, 2017).

Before starting the first gameplay session I held an introductory interview with each participant to adequately gauge their game-literacy with digital games, as well as prior knowledge of *MGS V*, and the series as a whole. This was done in order to document their prior experience going into the study, and to establish a baseline of the skill present in the participants, as it will be relevant to how they perform, and what types of issues each participant may have in the gameplay sessions, and with the game.

The following is their personal accounts, derived from these interview sessions:

The first participant William, describes himself as an experienced gamer, having played games both on PC and console. His genre of choice is first-person shooting games (FPS), although having dabbled in third-person games as well. On the topic of the MGS series, he has no prior experience with it, although having some knowledge of *MGS V*, due to seeing pre-release trailers (William, introductory interview, 15.01.16).

Gaming experience: *Gears of War* (Epic Games, 2006), a lot of *Halo* (Bungie, Inc., 2001-2010), the *Grand Theft Auto* series (Rockstar Games, 1997-2016), and some *Splinter Cell* (Ubisoft, 2003-2016).

The second participant Oscar, also describes himself as an experienced gamer, having a predilection for 2D platformers, and side-scrolling games. He has prior experience with third-person shooting games, as well as previous titles. Oscar is also the only participant in the

study with prior experience with *MGS V* after having tried the game for approximately 5-10 minutes with a friend. Oscar describes his skill with digital games as okay to relatively good, but ultimately enjoys games more for their narrative, than for competitiveness, or difficulty (Oscar, introductory interview, 12.02.16).

Participant three, Nora has dabbled in games, but says that she rarely plays digital games outside of social situations. She does not own any type of gaming equipment and therefore only plays games when visiting friends. She personally describes her skill with games as very bad, and that she gets nervous easily, and thus has problems getting invested in games. Furthermore, she says that she is not especially interested in digital games, although certain exceptions exist. In regard to *MGS V* and the series itself, she has no prior knowledge, other than that the main character is “some random guy, that is very cool and runs around getting things done” (Nora, introductory interview, 02.06.16).

Gaming experience: *Tekken* (Bandai Namco, 1994-2017), *Mortal Kombat* (Midway/NetherRealm Games, 1992-2017), *Undertale* (Toby Fox, 2015), *World of Warcraft* (Blizzard Entertainment, 2004-2017).

Emma, the fourth participant describes herself as an experienced gamer. She follows the digital games scene closely, and knows about most games that are released. Personally, she plays what she calls fantasy games (Ed. note: games set in fantasy worlds, often populated with magic and fantasy creatures, most often in medieval settings), and usually plays very little first-person or other shooting games. Emma describes her skill with games as average, and plays more casually. Because of her inherent interest in games, she knows of *MGS V*, and the series, but has never played any games in the series. She has however seen other people play the game on YouTube, and thus has superficial knowledge of the game (Emma, introductory interview, 21.07.16).

Gaming experience: *The Elder Scrolls Series* (Bethesda, 1994-2017), *Dark Souls* (FromSoftware, 2009-2017), *Assassin's Creed* (Ubisoft, 2007-2017), *Bloodborne* (FromSoftware, 2015), *Undertale* (Toby Fox, 2015).

The fifth and final participant Lucas is the participant with the longest experience with digital games, having played the Nintendo Entertainment System, Gameboy, Sega Mega Drive, and

Super Nintendo while growing up. Lucas states that he had a break from games, and has only recently returned with the Nintendo Wii and Xbox. Today he owns both a PlayStation 3 and 4. Discussing his skill with games, he stated that “it really depends on the game, if I like it and enjoy it, I can get through a game quite quickly, and if not I won’t bother”, citing the action role-playing game *Bloodborne* (FromSoftware, 2015), as a game which initially seemed interesting, but was ultimately too frustrating to be enjoyable for him. Regarding the *MGS* series itself, he has never played *MGS V*, but had played one of the earlier title once many years ago. He further elaborated that the main reason for not playing the *MGS* games is that he is more comfortable with fantasy-themed games, and does not often enjoy games that feature gunplay, saying that “Sword and magic-type games, as well as fighting games is more my style” (Lucas individual interview, 04.07.16).

One thing to consider when performing testing with participants is the relationship between researcher / interviewer and the participants. The relationship between the participants and the person doing the gathering must remain clear and professional throughout the entire data gathering (Rogers et al., 2012, 223). One way to achieve this is to have the participants sign an informed consent form which outlines the purpose of the study, and how the data will be used. This allows the participants to be informed and allows them the option to choose whether to be a part of the study. Another issue to consider is whether the participants have any incentive for participating in the study, as this may colour the results if the participants feel coerced into any specific answer. In preparation for this particular study, I had all of the participants sign a consent form before any testing had taken place, allowing the participants to be informed in regard to what type of data was to be gathered, how it would be gathered, as well as indicating the overall duration the testing would entail. Furthermore, no incentives were provided to the participants in the study, and participation was therefore completely voluntary.

### **3.1.2 The Data Gathering Sessions**

The data gathering for the study was performed over the first half of 2016, with two of the participants completing their sessions early into the year, and the following three completed throughout the spring and summer. This section will outline the structure I used for gathering

the empirical data for the study, starting with outlining each of the gameplay sessions, before moving on to discuss the equipment, as well as each of the gameplay sessions and interviews.

Sessions (date and duration)	Session 1 (Episode 1 (episode 0 for the pilot))	Session 2 (Episode 11)	Session 3 (Episode 30)
William	(PILOT) 15.01.16 - 1 hour, 2 min	29.04.16 - 23 min	27.10.16 - 25 min
Oscar	12.02.16 - 44 min	29.04.16 - 11 min	
Nora	01.06.16 - 43 min	08.06.16 - 27 min	04.08.16 - 50 min
Emma	21.07.16 - 48 min	21.07.16 - 21 min	21.07.16 - 45 min
Lucas	04.07.16 - 45 min	28.07.16 - 49 min	28.07.16 - 47 min

Figure 6. Table of completion times and dates for data gathering sessions

The testing was structured into three phases, all of which featured an interview and a gameplay session. Each test session was intended to be approximately one hour, with 45 minutes devoted to gameplay and 15 minutes for the interview. The first session however ran slightly longer due to an additional introductory interview. During the gameplay sessions, the participants were recorded via audio recording as well as a camera placed in a fixed position focusing on the participant’s face (see figure 7.). The gameplay was also recorded via screen capture. The camera footage was used as ancillary with the screen capture of the actual gameplay thus providing data on facial reactions alongside the situations happening within the game. The audio capture was mainly used for the interviews, but was also used during the gameplay sessions to ensure that any vocal comments during gameplay was also preserved.

Because I collected data both visually and auditory, I was free to engage with what was happening and observe the action. This observation helped to fill in details and nuances that would otherwise be missed.



Figure 7. - Facial reaction together with screen capture of Oscar during his first session of the study

The gameplay sessions featured three distinct episodes, taken from different areas of the game, chosen due to its focus on specific gameplay features and situations such as its use of UI, tutorial, and overall length. The three episodes were picked from the overall 39 episodes in the game, these being episode 1, 11, and 30. For the first test session I was debating whether to run episode 0 or 1, which I ultimately decided by testing episode 0 as a pilot study to ensure that the proposed method is viable before beginning the real study (Rogers et al., 2012, 225). For this study, I tested the entire first episode of the game, while using all the same data gathering equipment as that of the actual study. The pilot study allowed me to study which episode would be optimal for testing purposes, gauge the optimal duration for the gameplay session, as well as trying out both the testing equipment and the intended interview questions. Due to the duration, and overall amount of cinematics featured in episode 0, I chose to use episode 1 for the first session of the data gathering.

Although episode 1 is technically the second episode of the game, the first episode is gameplay-wise very different from the rest of the game, and as such, episode 1 contains an introduction to most of the basic gameplay elements needed for the rest of the game. Additionally, the episode also features an introductory area that functions very similarly as a tutorial, as remarked by Oscar:

“... after I got into it, there was a pretty nice tutorial / mini tutorial, which I liked at the start of the mission” (Oscar, Session 1 interview, 29.04.16).

the focus of this session was to study how fast the participant became comfortable with playing the game, given the information presented in the game. Furthermore, I also wanted to test how well the game guides the player towards accomplishing his tasks, how well the

tutorial area worked, and how well the different physical interface devices worked for each individual participant.

The second gameplay session featured episode 11, and was chosen because of its very different structure from that of episode 1. While the first episode introduced the participants to the necessary mechanics, this episode required the use of all previously learned skills, as well as new ones. Additionally, this episode featured a boss fight - a concept that appears in many games, in which the player must fight an antagonist with higher strength, offering the player an added challenge (Gamespot, 2017), which created more pressure for the participants. The focus of the episode was: (1), to see whether the participant was able to learn and use more advanced mechanics, and (2), study how the participants responded to a high intensity situation by being forced into a confrontation with a superior opponent.

The third and final session featured episode 30, taking place much later in the game, and close to the climax. This episode was chosen because of its open nature, which allowed the participants to use different approaches, as well as utilizing everything learned up to this point, and adapting it to new and different situations. The focus of this test was to study how well the participants were able to use all of the previously learned skills, while also being placed in a large sandbox situation. Additionally, it also allowed me to study the participants improvement over the course of all three phases.

After each gameplay session, the participants were interviewed one on one about the preceding gameplay. The interviews themselves were semi-structured, with an additional unstructured section included. For each interview, the participant was first asked a series of questions from a prewritten script, where the participant was probed to say more until no more information was forthcoming. Following this there was a discussion derived from what happened during the gameplay, and was therefore unstructured. The unstructured section was intended to close out the interviews, after the pre-planned section, although in some of the interviews, the interview subject began commenting on the gameplay before any specific questions had been voiced. In this situation, I instead probed for specific situations, or comments connected to the gameplay, before moving on to the prewritten script. All of the discussion that occurred during the interviews was recorded, and later transcribed and

translated. Both the interview questions and answers can be found in the appendices (sections 7.2 and 7.3.).

## **3.2 CONSIDERATIONS WHEN PERFORMING DATA GATHERING**

With any type of evaluation there are practical and ethical issues that need to be taken into consideration. The first part of this section presents a discussion on how these issues were handled for this study. The second half of this section pertains to other issues that may come up during a study, such as its reliability, validity and potential biases that might be present in the data.

### **3.2.1 Practical and Ethical Issues**

For this specific study, I considered three specific biases and practical issues that may arise from the design of the study.

The first issue is to make certain that the participants present a representative subset of the population of users whom a product is targeted (Rogers et al, 2012, 461). For my study, I recruited participants that were between the age of 20 and 35, that had either a prior or current interest in digital games.

This specific age group was chosen due to it being the second largest age group of digital game players, following players under the age of 18 (Statista, 2017). Which would require specific considerations when designing the study, such as parental consent, as well make sure no harm would come to the children (Bryman, 2012, 130). Additionally, the Norsk Samfunnsvitenskapelig Datatjeneste (NSD), would require more rigorous requirements before approving the study.

Ultimately, this meant that the 20-35 demographic age group would be much easier to design an evaluation around, in addition to being more easily accessible for me, due to the possibility of recruiting participants close to my personal network.

One specific consideration did however need to be made. As apparent from my interviews, only two of the participants had any specific experience with this genre of digital games, while two of the other participants said that they actively avoid games featuring shooting, opting instead for games featuring a fantasy aesthetic, with medieval weaponry and magic.

However, due to the focus of this study being the interface, gameworld interface and physical interface, this preference should not impact the validity of the study to a large degree.

The second issue considered was the length of the evaluation. Although there are no written rules concerning the length of time an evaluation should have, it is still necessary to consider a reasonable time to expect the participant to be engaged to not exhaust them or cause discomfort (Rogers et al., 2012, 461). However due to the overall length of the game - my personal preparatory playthrough of the game took approximately 60 hours, there was no practical way of testing the entirety of the game. As stated earlier I therefore decided that three episodes and a maximum of 45 minutes for each session would have to be enough and would be sufficient to deliver enough data answer my research questions, without exhausting my participants. Additionally, special consideration was made when concerning the difficulty curve when studying the results from the later episodes.

These were the primary practical issues that was considered during the study, however due to my input from human participants, I also had to consider specific ethical issues as well. These issues mainly concerned protecting the privacy of the humans who have their activities tracked and logged during evaluations. The main way to protect participants' privacy is to not have their names be associated with the data collected, nor disclosed in written reports (Rogers et al, 2012, 463).

For my study, I applied to the NSD to get my study approved. This is a requisite for master projects that are completed at the university. The NSD has guidelines that ensure that the participants' rights are not violated, and that all data collected is anonymous, safely stored, and destroyed/deleted after completion of the study. Additionally, they require all participants to be informed, through a consent form outlining how the study will be performed, what data will be collected, and how this data will be stored. To adhere to the NSD guidelines, all my participants signed a consent form (found in appendix 7.1), while all mention of the participants have been anonymised, and are only referred to through pseudonyms.

Additionally, any images of the participants have had their facial features obfuscated to not give away the identity of the participants. Concerning the data that has been collected, everything has been stored securely on password protected personal computers, located in locked rooms.



### 3.2.2 Reliability, Validity, and Biases

When performing research, it is important to consider the reliability of the results and if they can be replicated by another evaluator or researcher. It is also critical to ensure the validity of the measures to answer your key questions and consider any biases that may be evident in the results (Rogers et al, 2012, 471-472). In this specific study, the data should have some reliability to be replicated, although it would likely depend on what type of participants other researchers chose to use. Concerning the validity of the evaluation method, I have attempted to make certain to gather all possible data from the participants - via audio, video, and screen capture, to uphold as large a degree of validity as possible.

Biases occur when an evaluator is sensitive to certain kinds of design flaws, or the evaluator fails to notice certain types of behaviour because he deems them unimportant (Rogers, et al, 472). This means that, all evaluations are likely to contain biases, which means that one must be constantly aware of the specific biases present, to be able to work to avoid or reduce them as much, and as often as possible. In my study, I have outlined four specific biases, or areas where I was especially vigilant to not allow any damaging bias to occur:

1. During the observation, my preconceptions may cause me to only observe specific behaviour
  - To alleviate this concern I recorded screen, video, and audio, which could be reviewed later, therefore allowing me to observe behaviour I might not have noticed when performing the testing live.
2. During the interviews, my questions and tone of voice might mark my biases subconsciously, which in turn could affect the interviewee, influencing their answers.
  - Overall difficult to deal with, considering it concerns my subconscious, but I attempted to formulate the questions as open-ended as possible, to allow the participant to form their answers as freely as possible, without my influence colouring their response.
3. Smith, Flowers, and Larkin (2009, 35) describe the issue that as a researcher, it is impossible to adopt the players' experience, instead accounts will always be given second-hand, meaning that a double hermeneutic approach is necessary in the interpretive process, in which the researcher is trying to make sense of participants' reports, while the participants themselves make sense of their own experiences.
  - This is pretty much unavoidable in this type of approach, but does not have to invalidate the data, as long as I am aware of the status of the data as such.

4. The study was designed based on a specific hypothesis, and a research question, which may create a certain bias in regard to the specific results I observe.
  - This bias is also unavoidable due to the design of my study. It can however be alleviated by having the research question and hypothesis solely as a way of focusing the data, but not colouring the results themselves.

By being specifically aware of each of these biases, and potential issues that may arise from the study, I was able to make certain to reduce or eliminate specific issues as they arose.

### **3.3 STRUCTURING THE RAW DATA**

After gathering the raw data, I combined the data into more logical pieces which consisted of editing the game capture together with the participants' facial reactions, as well as, additional audio capture from the gameplay sessions. This was done for each of the participants, separating each of the three sessions into more digestible pieces. The audio capture from the interviews was also transcribed, as well as translated, to fit more easily with the language of the overall thesis.

Once this organisation and parsing was done, I split the data and interviews into two sections. This was done to apply two different analytical methods for each of the sections. The data from the gameplay data was then analysed using Critical Incident Technique, while the interview data was analysed using Thematic Analysis.

Critical Incident Technique (CIT) is a set of principles that originally emerged from the United States Army Air Forces, where the point was to identify the critical requirements of good and bad performances by pilots (Flanagan, 1954). CIT in its basic form has two principles:

“(a) reporting facts regarding behaviour is preferable to the collection of interpretations, ratings, and opinions based on general impressions; (b) reporting should be limited to those behaviours which, according to competent observers, make significant contribution to the activity” (Flanagan, 1954, 355).

It was later adopted for usage in an HCI context, where it is used as a method of gathering facts, or incidents, from domain experts or less experienced users of an existing system, in order to gain knowledge of how to improve the performance of the individuals involved (User

experience professional's association, 2012). When using the CIT in HCI, the use of well-planned observation sessions satisfies the first principle, while the second principle, is still relevant to HCI as incidents that are significant or pivotal to the activity being observed, in either a desirable or undesirable way (Rogers et al., 2012, 290). The focus therefore becomes to identify specific incidents that are significant, to later be analysed in order to show how clusters of difficulties are related to a certain aspect of the system or human practice. The investigator, or evaluator can then develop possible explanations or solutions for the source of the difficulty (User experience professional's association, 2012).

The benefits and advantages of the CIT is described by the user experience professional's association (2012) as:

1. Its ability to identify possible sources for serious user-system or product difficulties.
2. Its possibility to provide recommendations for improvement, to hinder similar situations from occurring.
3. Its usefulness when problems occur, but the cause and severity is not known.
4. It provides a high return of interest, and cost effectiveness, due to its ability to highlight major problems, in addition to being able to be performed by one investigator, over the course of a few weeks.

For my study, I chose the CIT mainly due to its high value, regarding time investment, as well as it being a very good tool for gathering valuable empirical data from the large amount of raw data collected through my gameplay sessions. Additionally, the use of the CIT allowed me to concisely observe the most critical problems that occurred for the participants during their gameplay, while still allowing for the observation of more common events that also occurred, by using direct observation during the actual evaluation, which were written down while the evaluation was being performed.

Thematic Analysis (TA) is a social science method for analysing qualitative data, and was itself developed at The National Centre for Social Research in the UK (Bryman, 2012, 579). The method or framework is described by Ritchie et al. (2003, referenced in Bryman, 2012, 579) as a matrix based method for ordering and synthesising data.

The concept therefore becomes to construct an index of all central and sub themes found in the raw data, and represent them through the usage of a matrix. These central and sub themes are essentially recurring motifs in the text that are then applied to the data (Bryman, 2012, 579).

The main purpose of TA is to identify patterns across a dataset in order to provide an answer

to the research question being addressed. Researchers often use TA to gain insight and knowledge from the gathered data, and by using TA to distil data, researchers can determine broad patterns that will allow them to conduct more granular research and analysis (Komori, 2017). The method is highly inductive, where themes emerge from the data that is gathered and are not imposed or predetermined by the researcher (Komori, 2017).

When using TA for my study, I extracted the relevant segments from the transcribed interviews, which were then inserted into a matrix. After constructing the matrix, the data was then ordered into central and sub themes.

These themes could then be used as basis for a more granular analysis together with the CIT, in order to study exactly how the participants experienced the different interfaces in *MGS V*, as well as pinpoint the specific situations that caused the specific experiences to occur. Both the TA and the CIT matrixes can be found in the appendices (in sections 7.6, 7.4, and 7.5).

Ultimately, I chose these two methods for analysing my dataset mainly because of how they complemented each other, when applying them to each type of data I intended to gather.

When initially designing the study, I considered multiple other approaches, such as building the study around one of the PX methods outlined in Bernhaupt (2010). However, I decided against this, because I felt that applying the TA and CIT as two well established methods for analysing a dataset of empirical data would yield better results.

## 4 ANALYSIS

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This chapter is structured into five separate sections, each focusing on a singular aspect of *MGS V*'s interface. The analysis was done by presenting the results gained from my data gathering methods described in the previous chapter, linked with relevant theory from the fields of HCI and Game studies, with theory relating to PX, gameworld interfaces, usability and HCI being especially important.

After having discussed each of the different aspects of the interface, I will take a step back, and present an overview of the results discussed in the analysis, as well as consider the possible impact made by the interface on the game overall.

The five sections, of the analysis, which together affect how the player experience the game are:

1. Visuals and Interface – This section focuses on the areas of the game seen during normal gameplay by the player, and discusses areas such as the traditional interfaces, and gameworld interfaces.
2. Sound and audio – focusing on the auditory portion of gameplay, and how the game conveys the gameplay through sound cues, ambient noise, and music.
3. Physical interface, and motor responses – focusing on the physical actions the player must perform in order to play the game
4. Immersion and concentration – focusing on how the interface allows players to get immersed into the game, as well as how this immersion is potentially broken.
5. Learning and accessibility – focusing on how the player learns to play the game, and how the game is accessible to its players.

The first two sections therefore focus on the overall sensorial activities of the players in the game, both sound and visuals. While the third focuses on how the input device is designed to facilitate the gameplay. The final two sections focus on the cognitive mechanisms internal to the player for linking the input and outputs necessary to play the game.

The analysis itself makes use of both subjective and objective assessments of the empirical data derived from the data gathering. Nacke (2009, 84) describes two ways in which empirical measurements of player cognition and emotion can be done:

by either “(1) measuring it as [an] objective, context dependent experience with physiological measures (usually electrodes) of how a player’s body reacts to a game stimulus, or (2) assessing it as [a] subjective, interpreted experience with psychological measures (usually questionnaires) of how a player understands and interprets their own emotion.”

My analysis resembles the latter approach, in that I assess the empirical results gained through my CIT analysis, derived from the gameplay sessions, in addition to interview sessions parsed through my TA, in which the experience was interpreted and voiced by the participant himself, as he understands and interprets his own experiences.

#### 4.1 VISUALS AND INTERFACE

Jørgensen (2013, 21) describes the role of the game user interface to be a functional and effective communications system that fulfils basic principles at the same time as it supports the specific gameplay experience intended. This approach closely resembles the desires of traditional interfaces, which Norman (1990) argues should not “stand between” the person and the system being used. Instead “both the interface and computer should be invisible, subservient to the task the person was attempting to accomplish” (Norman, 1990, 217).

In my gameplay sessions, I observed multiple detractors from the usability of *MGS V*’s interface, the clearest of which were the following:

In his second session, Oscar spent approximately two minutes trying to traverse the iDroid interface (see figure 8) in order to both find and implement certain actions.



Figure 8. Missions tab of the iDroid system.

Oscar himself, however did not find this to be especially damaging stating that:

“They’re [the interface] are made in a way, where the game continues even if you’re in the menus, which helps a lot, since that means you can’t just spend an unlimited time in them, like the first time I tried to use them I spent so long that the boss had moved, so that helps with the experience” (Oscar, session two interview, 29.04.16).

William on the other hand felt that:

“There was definitely too much to scroll through, and too much stuff. It was frustrating to choose from all the different bombardments, especially since the menu with those, all of them had the same icon, meaning you had to read all of the names. I expected a more intuitive menu. It felt like a system that was initially made to be simple, but was later expanded with a bunch of new stuff, so it was frustrating to have that much stuff, so without a little help I probably would’ve been completely lost” (William, session three interview, 27.10.16).

This problem that William raises in his interview, mainly comes down to a problem of the *visual affordances* provided by the iDroid interface, as well as providing excessive functionality (Sweetser & Wyeth, 2005).

*Visual affordances* is a concept discussed by Norman (1988, 13), and it means that “perceived affordances help people figure out what actions are possible without the need for labels or instructions.” By excessive functionality, it is meant that players may become distracted from the tasks they want, or need to focus on (Sweetser & Wyeth, 2005). This is a common mistake of designers, which is dangerous, due to clutter and complexity making implementation, maintenance, learning, and usage more difficult (Shneiderman, 2005, 13).

This means that, due to the design of *MGS V*'s interface, William could not perceive any visual affordances that would allow him to understand what each of the different options did, without having to stop his gameplay look, and focus on reading each of the possible options, before he was able to return to the gameplay.

The iDroid was therefore experienced by William as “confusing” and “too complex”, indicate that the design of the interface does not provide sufficient usability for its user to enable the tasks to be effortlessly carried out (Shneiderman, 2005, 12).

The second detractor that was voiced by the participants, as well as observed through the gameplay sessions was the cumbersome nature of the implemented equipment menu. On the topic of this interface section Oscar stated:

“The actual menu thing [idroid] is good, but the equipment menu, that one I just can’t seem to work out, it just bounces everywhere, and I can’t figure it out” (Oscar, session two interview, 29.04.16).

The same sentiment was echoed by all the participants, such as with Lucas:

“I struggled a bit with controlling the equipment menu because it just jumps around so fast that I can’t really get it to work all the time” (Lucas session two interview, 28.07.16).

This means that the equipment menu fails to provide the player with a sense of control over the game interface and input device, which leaves the player wanting more control over processes and actions (Sweetser & Wyeth, 2005; Saunders & Novak.2007, 20).

There was one additional detractor to the implementation of the iDroid system. However, this specific issue was not observed through my empirical study. Instead, this was a problem observed during my personal playthroughs when designing the study. I decided against having this section as a part of the gameplay sessions, because of its uniquely unfriendly design, which would likely colour the participants’ opinion of the entire game. Before describing the specific issue, I will first provide some quick context.

Throughout the game, the player builds his personal mother base by extracting enemy soldiers from the gameworld, which are then used to complete tasks, such as developing more advanced weaponry. By the time the climax of the first chapter arrives – around episode 22, the player has likely recruited at least five hundred soldiers to his base. Then, as part of the narrative, these soldiers begin to die as an infection spreads through the mother base, leaving the player with two choices: (1) he can push through the next narrative section, while a soldier dies every 10-20 seconds, or (2) he can attempt to find the root cause of the infection and quarantine infected soldiers, which is the optimal choice.

However, herein is the specific problem, to quarantine the soldiers, the player has to scroll through the entire list of soldiers to (1), find the shared trait among the infected, and (2) select, and quarantine each of these soldiers (see figure 9.).

This effectively means that the player must stop his gameplay experience completely, then



repeatedly scroll through a long list of names, an activity that keeps the player completely removed from the gameplay for more than an hour. Additionally, due to the way the interface is designed, the player also must traverse this interface completely by gamepad, or keyboard, and individually study each specific soldier, mark him, then move on to the next.



Figure 9. The personnel management tab of *MGS V*

note: this particular base has 840 personnel members, as noted in the top right corner.

The implementation of this section in the game is baffling. While most of *MGS V* is designed to allow the player to always do the actions he wants to perform himself, with as little interruption from other systems as possible. This section suddenly freezes all gameplay activities completely and forces the player to instead spend his time managing a traditional interface. This interface also does not follow general usability heuristics such as *error prevention* contingencies, *user control and freedom* with support of undo/redo options, or *recognition rather than recall* (Nielsen, 1995).

Although I would have very much liked to have empirical data of the experience this sequence provides, I ultimately decided against it because: (1), it would take too long to be able to complete in one gameplay session of 45 minutes, and (2) having the participants play through this section as one of three episodes in the game would likely colour their entire opinion of the game, which, although a negative experience, it still only approximately an hour of gameplay, in a game that takes about sixty hours to complete.

The pause menu holds many of the same problems as the equipment menu, with a lack of control over the interface. This was observed in Oscar's first gameplay session, where he had to pause the game to find the controls for getting on his horse - a situation which occurred after the participant received adequate guidance for getting on the horse but once he wanted to get off the horse, no such guidance was given. Ultimately the participant had to enter the options menu to study the controls for the game in order to ultimately find the correct button. This however proved to be an additional hurdle due to the game only displaying the controller options for playing with an Xbox 360 controller, even though the participant was currently playing with mouse and keyboard. When discussing this in his interview Oscar stated:

“When I couldn't find the controls, I checked the options, but it only displayed the Xbox controller settings, so I had to compare which buttons did what on the illustrations there, then go into the change controls options for mouse and keyboard and compare buttons to find how I actually got off the horse. I couldn't see directly how to do it” (Oscar, session one interview, 12.02.16).

However, while the pause menu is a problem, it also arose from another possible problem area. Oscar was initially uncertain as to how to perform an action, after having forgotten the initial guidance given for this particular action. This could signal a problem with *the amount and type of demonstration* given to the player (Desurvire & Wiberg, 2010), which can be combated by having gameplay be modelled in more than one way, where features are clearly presented with how to perform gameplay features (Sweetser & Wyeth, 2005).

Another issue that arose regarding the pause menu happened during William's first session. When uncertain about how to employ the use of the game's cover mechanics, William entered the pause menu at the behest of an in-game tip, however after having missed the tip section of the menu (see figure 5, under the mechanics section in chapter 2, above), William tried to search other parts of the menu instead. While searching the *controls & Manual* option, William selected the manual choice, and instead of being presented with the manual, William was instead prompted to visit an external webpage to view it (see figure 10.). The prompt displays the necessary web address, but will not actually direct the player there, instead he would have to write down the address and retype it into a web browser, or google search for the manual.

Ultimately William ended up giving up on understanding the cover mechanics, and instead

shook his head in confusion, before closing the menu entirely (William, gameplay session one, 15.01.16).

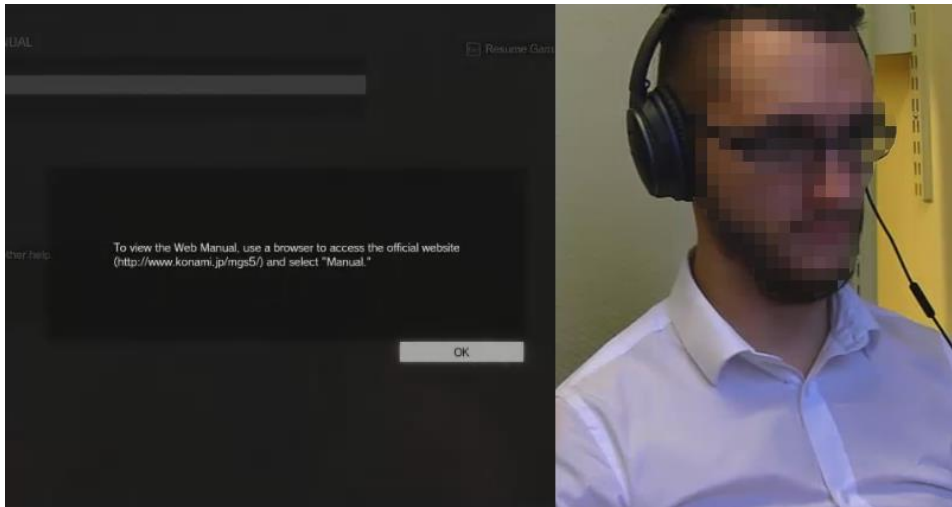


Figure 10. William being presented with the option to leave the game to read the game's manual.

Online manuals are nothing new and offer certain advantages over physical manuals, such as always being available and updated (Shneiderman, 1998, 525-526), however it does require that the information is easily accessible, something which the manual option in *MGS V* is not. Having an external link, which itself is not a clickable link forces the player to move through multiple levels of additional steps to achieve his goal, which cause unnecessary frustration, that could easily have been eliminated. Additionally, this carries the risk that the player may forget what he was doing within the game, as well as the opposite, forgetting what was read in the manual, when re-entering the game (Shneiderman, 1998, 527-528). Ultimately it also hampers the flow of the game, where a player should be able to start playing the game without reading the manual (Sweetser & Wyeth, 2005).

#### 4.1.1 Informal context of the interface

Above everything the interface is a communication tool, and it is therefore important that the interface can identify different kinds of information and use different signals depending on the nature of the information an optimal interface must have a priority system that is able to separate between critical and less important information, while also prioritizing the player's experiences and needs in a specific gameplay situation (Jørgensen, 2013, 39).

Throughout the gameplay sessions, I observed how the interface in *MGS V* attempts to communicate information of various degrees of importance to the player, one such example is how information related to *MGS V*'s guns are conveyed to the player.

One of the main mechanics of *MGS V* is its gunplay, which often work in unison with its stealth mechanics. This means that more often than not the player uses guns to take down enemies while hiding. Because of this, there is a heavy reliance on silencers throughout the gameplay loop for the player. The silencers themselves break after continued usage, and is therefore presented to the player as a limited resource. However even though this is critical information for the player, this information is presented in subtle ways: (1) when breaking the gun emits a sharp noise, (2) a small indicator in the bottom right of the screen is depleted (see figure 11.), (3) the suppressor itself disappears from the muzzle of the weapon.



Figure 11. The state of the suppressor is indicated in the lower left portion of the weapons icon, represented by a white bar that depletes upon usage.

This mechanic is presented to the player in three distinct ways, through: (1) audio, (2) interface, and (3) gameworld, meaning that the player can perceive the immediate outcome of the action. However, in all three sessions this was an issue that was repeated for each participant. The participants remained unaware of the mechanic of the silencers breaking until informed by me in the interviews. William stated in the interview following his third gameplay session:

“I was a bit disappointed in the weapon, in that it made a lot more noise than expected,” [is informed by the interviewer that the silencer broke], “ooh, so it broke, I didn’t notice that, well that makes sense then” (William session three interview, 27.10.16).

Later in the same interview, when voicing frustrations, he explicitly mentioned the lack of an indicator for the suppressor breaking as being frustrating.

Although the test subjects only played *MGS V* for a total of two and a half to three hours, I argue that the design of the indicators for the breaking of a silencer in *MGS V*, although presented in a myriad of ways, does not communicate this primary concern to the player in an adequate way. This indicates that *MGS V* lacks an optimum interface as something that “has its priorities straight to enable the player to be given the immediate sense of what their biggest concerns are and what the secondary concerns are. Ideally it should be elegant and have as few moving parts as possible to communicate the vital issues (Jørgensen, 2013, 39). This could also stem from a problem of providing the player with the appropriate feedback at appropriate times (Desurvire & Wiberg, 2010; Sweetser & Wyeth, 2005). Another possibility is that the game has too high of a workload for its players – or at the very least for my participants, the GAP heuristics state that “Games should have a high workload, while remaining appropriate for the perceptual, cognitive, and memory limits of the players“ (Sweetser & Wyeth, 2005), and the problem could either be that there is too much visual information for the player to process at any given time, or that the participants for my study, did not have enough time to adapt their memory limits to those required by the game.

Another necessity for the informal context of the interface is to provide the player with an interface which remains internally consistent, regarding supporting player expectations (Jørgensen, 2013, 43). Consistency is also an interface design principle for many experts in HCI, such as Nielsen (1994), Rogers et al., (2011, 28), and Shneiderman (1998, 74), and concerns the use of similar operations and elements for achieving similar tasks (Rogers et al., 2011, 28).

Overall, most of *MGS V*'s interface behaves consistently throughout the game, although it does have certain detractors. In Oscar's first gameplay session, he received an indicator from the interface, presenting the possibility of placing enemies inside port-o-potties, as well as a tip for picking up enemies. He tested both, by subduing an enemy and placing him within the

port-o-potty. However, after picking up a second enemy Oscar was unable to put him back down, due to the port-o-potty now being full, and the interface not providing information as to how to perform the action of putting the enemy back down.



Figure 12. Oscar visually confused about not being able to find the correct button.

In his post-gameplay interview, Oscar remarked:

“I noticed that there were contextual prompts displaying what I could press when I approached different things, like when I approached the port-o-potty, an icon appeared indicating that I could either hide in it, or stuff an enemy inside. But because it appeared here, I expected the same when I was later carrying around an enemy. Which lead to me running around for minutes trying to find the right button” (Oscar, Session one interview, 12.02.16).

This likely stem from the same problem, as mentioned above – a problem with the amount and type of demonstration given to the player (Desurvire & Wiberg, 2010).

Additionally, throughout the gameplay sessions the prompts for performing actions was inconsistent, where at some points the game would display the button for performing actions using a controller, when no such input device was plugged into the computer.

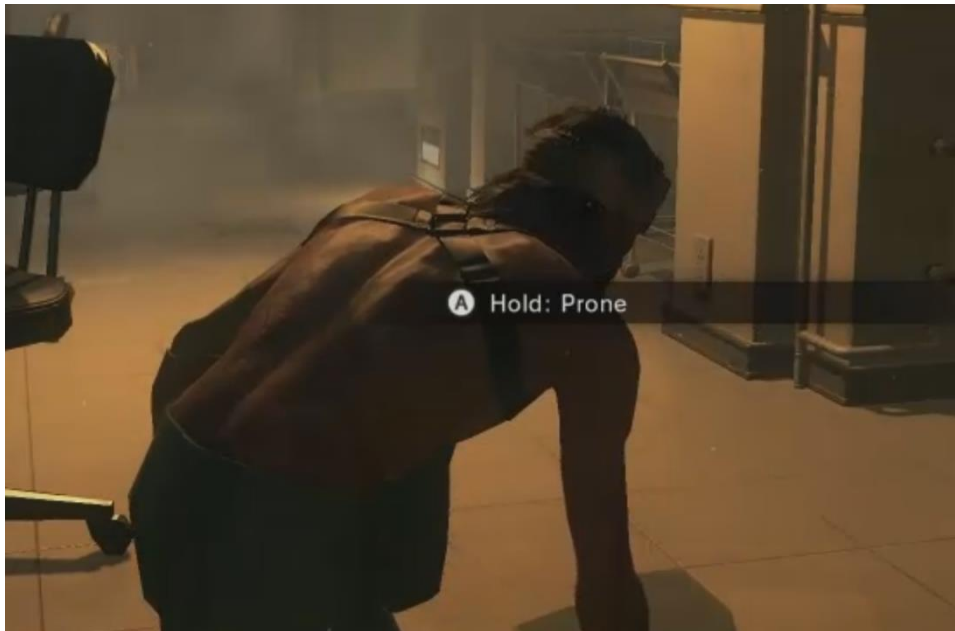


Figure 13. The game displays a prompt for Xbox 360 while the player uses Mouse and keyboard.

The controls themselves also had a consistency issue, where Lucas became visually frustrated in his third session when he tried to control an armoured tank, but was unsuccessful due to the controls changing from normal movement to a tank specific setup, which he was unfamiliar with. When asked about this, Lucas commented that:

“I really don’t understand why they completely change the controls for moving the tank. I had finally gotten used to the normal controls, then they threw a completely new way to control the game at me, which made me very confused” (Lucas session three interview, 28.07.16).

While the tank controls, are likely from a specific design choice of the developer, the controller prompt issue, is likely due to the game being developed for console first, then being converted to PC at a later point in development. Consoles only have one type of input device available at any one time, while a PC on the other hand has multiple. It is therefore likely that there is a problem with the code-snippet checking for the type of input currently registered, and then reverting to the base option, when it is unclear what input device is currently in use.

During the gameplay loop, the game usually adheres completely to its own internal consistency, which in turn makes it more confusing, in addition to making it stand out, when an issue appears to detract from the informal context of the interface.

#### 4.1.2 Gameworld as Interface

Dissimilar from traditional software, the design of game user interfaces cannot simply be reduced to the design of icons and menus. Instead it requires creating an informational space that can mediate between the player and game system, while also supporting specific game activities, i.e. the gameworld interface, in addition to the traditional interfaces which allow for the interaction with these activities (Jørgensen, 2013, 21; 144-145).

In *MGS V* the interface and gameworld hold a close relationship, with the two overlapping and seamlessly slide into each other. In *MGS V* parts of the interface is deeply integrated into the gameworld, and one such example is the player being able to place map marker into the gameworld, as was observed in the second gameplay sessions, where multiple participants used the binoculars to mark a position on the map, then used the iDroid interface to activate certain abilities which then impacted the gameworld via air bombardment (Nora, and Oscar, second gameplay sessions, 08.06.16 and 29.04.16).

Another example presented in the gameplay sessions was how the entire gameworld act as an interface which changes depending on how the player approaches the situation, Oscar stated:

“The first time I tried to enter one of the bases, and it didn’t work, I instead kind of went around the entire thing” (Oscar, Session one interview, 12.02.16).

In this gameplay session, Oscar first tried to enter an enemy base, but ended up being overrun by enemies. This then caused him to interact with the gameworld in a different way, where he instead opted to enter the base from the other side, and reached his objective mostly uncontested, and without interacting with any of the enemies.

One of the reasons why the gameworld functions well in these situations is due to the player receiving clear immediate goals and feedback guiding them while they play the game (Sweetser & Wyeth, 2005).

While playing the game, all the individual participants picked up on different ways of interacting with the gameworld, and the AI NPC’s within the game. By being noticed by the enemies or attacking, the enemies become aware of the player, and respond by attacking. By remaining hidden however, the player can choose whether to circumvent the enemies entirely



and instead complete his goals with minimal interaction with the enemies. Or the player can also choose to use his stealth to silently eliminate the enemies to make traversal easier to complete. Overall this gameworld has three states regarding the enemies; (1) the enemies are unaware of the player character, (2) the enemies are aware of an intruder, but does not know where the intruder is, and (3) the enemies are aware of the player, and are actively trying to eliminate the player, as well as contacting enemies from nearby areas to surround and defeat the player.

These states are communicated to the player through multiple channels. The sound changes depending on the state of the enemies, while the interface superimposes icons above the head of the enemy, and around the player character both indicating the changes (see figure 14), therefore providing adequate feedback for the player to alter his playstyle accordingly (Sweetser & Wyeth, 2005). This state dependent sound design, and sound design itself will be the focus of the following section.



Figure 14. Red exclamation point above the head of an enemy indicating to the player that he has been seen.

Another area to consider is the how the player's window into the gameworld is presented, via the perspective used in the game. *MGS V* provides a third person perspective, which allows the designer the opportunity to put information directly onto the avatar's body. This is itself beneficial since the avatar is always on the player's screen, where it is usually the visual focus, and thus allow the designer to create more elegant and integrated user interface, while also reducing the burden put the traditional WIMP interface (Jørgensen, 2013, 129).

During my gameplay sessions, the participants could use the third perspective to more easily get their bearings when initially starting the game, such as Oscar which spent about half a

minute in his first gameplay session, just orienting himself by moving the camera around the avatar, then used the binoculars, which use a first-person perspective, to get a better sense of exactly where to move, once he had his bearings. Ultimately this allows the player to have a feeling of control over their character, and their movements and interactions in the gameworld (Sweetser & Wyeth, 2005).

The third perspective is also used to provide the player with additional information, through putting information on the avatar's body. During normal gameplay, the avatar has all of the equipment he has on him clearly visible, i.e. heavy weaponry on his back, and left-hand side, as well as a knife, and pistol sheathed on his back and right side, respectively. Specific clothing used is also shown on the avatar.

### **4.1.3 Conclusion**

Overall the results indicate that while the gameworld interfaces were found enjoyable by the participants, despite smaller issues, the traditional interface had larger issues that detract from the experience of playing the game. The main gameplay interface - the iDroid, was likely the one that worked best of these during normal gameplay. Participants did however, state that they needed time to get acquainted with it, due to the lack of visual affordances and excessive functionality found within it. Additionally, the iDroid also contains larger problem areas, which were not observed during the study, which reflect an interface, with a low amount of usability, and is therefore not conducive to an enjoyable player experience

For the participants, the equipment menu was likely the least enjoyable aspect of the interfaces in *MGS V*, and the gameplay sessions. All the frustrations from this menu was derived from a lack of discernibility, which caused the participants to feel a lack of control over processes and actions related to this particular menu.

Although not directly impacting the gameplay in *MGS V* the pause menu also holds multiple issues, such as difficulty of finding adequate descriptions of the which inputs required which actions, as well as the problematic presentation of the game manual, which requires that the player writes down a URL to access the manual through the web. Additional to the issues experienced by the participants when using the interfaces, there were also issues regarding the consistency of how the interface and controls behaved.

## 4.2 SOUND AND AUDIO DESIGN

Sound is an important technique for conveying information to the players that does not interfere with the visual aspects of the gameworld. Additionally, sound can convey less important aspects, and emphasise specific information that may be of high priority to the player. In the study *Tonic measurement of audio user experience and player psychophysiology in games*, Nacke (2009, 187-207) found that music and sound in games is generally perceived with high arousal, evoking negative as well as positive feelings during gameplay more intensely than other conditions. Jørgensen (2009a, 2010) also makes the case that sound not only works well with the philosophy of ubiquity but is also an effective medium to use to integrate the interface into the gameworld, regardless of whether the sound signals used are arbitrary or naturally occurring in the game universe. Additionally, Laurel (1993, referenced in Nacke, 2009, 147) also states that the “tight linkage between visual, kinaesthetic, and auditory modalities” is the key to a sense of immersion [in digital games].

In *MGS V* sound is used both to supplement the interface and visual aspects of the gameworld, as well as providing the player with tips and guidance when traversing the world.

This supplementary position is most noticeable in instances when the player engages, or is noticed by the enemies, like the example in the section above, or by the player moving close to unseen markers in the world, which trigger audio tips from the support team. The visual aspects of the gameworld is supplemented by the audio by having unique sounds for anything from rain falling on the camera while looking up, to foliage rustling as the player runs past. Additionally, the music that plays during gameplay changes depending on which of the three states the game’s enemies presently are in, i.e. (1) if the enemies are unaware of the player, very little music is played, relying mostly on ambient effects, (2) if the enemies are searching for the player, a tense melody plays, (3) when engaged in combat with the enemy, action heavy music plays. All of which work together to supplement the mood of the game at any given time, and work to enhance the gameplay for the player.

Gathering empirical data on the experience of the sound design was however somewhat difficult with my chosen data gathering techniques, and to circumvent this I had to focus specifically on observing changes in demeanour, and expression during the gameplay sessions. By doing this I observed that Oscar, during his first gameplay session changed expression and demeanour during more intense situations, such as leaning forward, and

grimacing as he reacted to the gameplay. Oscar also noted that the sequences where the avatar was in direct conflict with the enemies were especially stressful (Oscar, session one interview, 12.02.16).

When playing, the player is provided with tips from both in-game NPC's and voiceover from the support team. In Oscar's first gameplay session, a support character aided with using the binoculars to mark objects of interest. This support functionality did however provide the wrong information to the player later in the session, where Oscar received a support call to get to high ground to perform surveillance of a base, while he was already positioned on a mountain, after having passed the base in question multiple minutes earlier. Oscar stated that this interruption was somewhat confusing, since he had no way of performing the action indicated by the support character (Oscar, gameplay session one, 12.02.16). Ultimately however, Oscar ignored the support team and instead continued his chosen path. It does however stand to reason that although Oscar chose to ignore the statement, another player may instead attempt to perform the action, and come away frustrated due to the action itself being impossible to complete.

Contrary to Oscar's experience with the audio support given by the NPC's, Lucas found them to be very helpful in his second gameplay session, stating:

“I understood the objective of the mission, which was clear, and it was made even clearer when I couldn't move an inch without being shot at. Additionally, the guy on the coms thing [support team] told me the same thing. I also found that if I used the binoculars I could get information [from the support team] about where it was smart to hide etc., which was really nice” (Lucas, session two interview, 28.07.16).

Although the sound design provides adequate feedback at appropriate times, there are certain discrepancies which affect the experience in a negative way, leading to a loss of immersion, confusion, and sometimes also frustration. In Nora's first gameplay session, there was a sequence where she was sneaking through an enemy base, attempting to be as silent as possible, to not alert the enemies to her presence, the avatar however did not act in the same way, instead when approaching doors while crouched, the avatar would forcefully open doors, to the point of the door swinging violently back and forth, making a lot of noise in the process. On the topic of this Nora stated:

“Another thing was the amount of noise he made, like when opening doors, which also startled me, but the nearby guard didn’t notice, which I found a little funny. Additionally, I bumped into some pots and stuff, which made a lot of noise, but went completely unnoticed” (Nora, session one interview, 01.06.16).

This is a clear disconnect between the sound design of the game, and the enemy and avatar behaviour, which breaks the linkage between the modalities of the visual, kinaesthetic, and audio, to the point where it not only broke Nora’s immersion, where she at one point was completely immersed, to the point where she startled herself by making noise, only to instead of experiencing a situation where the game reacted to her actions, her immersion broke and she audibly stated “I bumped into the bucket, and you [referring to an enemy soldier] didn’t hear anything?! Seriously?” (Nora, gameplay session one, 01.06.16).



Figure 15. Nora’s immersion is broken, when the AI fails to react to sound made by the player

Although sound is mostly used to supplement the interface and visual aspects of the gameplay, *MGS V* also sometimes employ the usage of sound alone to convey certain actions to the player. In William’s first session, he was presented with a tutorial section where he was accompanied by NPCs which provided guidance for how to perform certain actions, most of the dialogue was also represented as tips located in the HUD of the game, however as the mission progressed, William was given dialogue for how to perform certain actions, which was not presented within the HUD. In his interview, he stated that:

“I expected there to be information on the display about the things that the NPC’s were telling me about, kind of a translation into inputs, another thing [is that], I have a problem understanding games where you get notifications in dialogue about which buttons to press, which naturally leads me to expect the information NPC’s say as help text as well. Like when you’re [the player] riding the horse with the NPC, he tells you to shoot the enemy that we’ve already confirmed is immortal, which if the game had displayed text stating the same, I’d believe him, but since it didn’t, I didn’t believe the NPC, since he might not have all the information. So ultimately, I started by not listening to him, and instead tried to shoot the trees around the enemy, but that didn’t do anything, and most certainly didn’t stop him.” (William, session one interview, 15.01.16)

#### **4.2.1 Conclusion**

Based on the observations, the sound and music design of *MGS V* worked very well to supplement the interface and visual aspects of the gameworld, which overall helped the participants become more immersed into the game. However, an effect of the sound working together with the gameworld interface, is that when the modality between the two is broken, such as through sound cues being played at the wrong times, or the AI not picking up on noises made by the avatar, this had a very clear impact on the immersion and the experience of the participants. When this happened the participants’ immersion was broken, and caused them to pause their otherwise enjoyable gameplay, and visually react.

### **4.3 MOTOR RESPONSES**

Janet Murray (1997, 146) describe the physical game controller as a “threshold object” that takes the player into the game environment: it is both a physical device to hold in the hand and an imaginary device in the fiction. This means that the physical interface acts as a mediator to allow the player to enter the game environment, and is often intended to fade into the background, to the point where the activity of using the physical interface becomes second nature, and the player can be completely immersed in the game to the point where the physical interface becomes an extension of the player.

In my study, I had the participants attempt to play *MGS V* using either mouse and keyboard, or a game controller, and required all the participants to attempt to use both at some point throughout the study, a table of the physical interface used for each participant for each session is found in figure 16.

	Session 1		Session 2		Session 3	
	M+K*	Controller	M+K	Controller	M+K	Controller
Oscar	X			X		
William	X			X		X
Nora	X		X			X
Emma	X		X			X
Lucas*		X		X		X

Figure 16. Physical interface for each session

\*note: M+K = Mouse and keyboard

\*note: Lucas was unable to play with M+K due to hardware restrictions

Nacke (2009, 249-250) presents a phenomenon he describes as interaction fatigue, which is when the player must exert cognitive processing to be able to interact with a specific physical interface. This means that by having a complicated physical interface, cognitive processing is taken away from the act of playing the game itself, and thus make the act of playing more mentally taxing, as well as distracting the player from the ability to be immersed in the game itself. This concept of fatigue is also touched upon by the GameFlow heuristics (Sweetser & Wyeth, 2005), which state that “players should feel a sense of control over the game interface, and input devices,” in addition to stating that “workload should be appropriate to for the perceptual, cognitive, and memory limits of the players.”

Throughout my study interaction fatigue became an issue from the very start of the gameplay sessions. As mentioned above during the interface section, some confusion also derived from the prompts and tips presented on the screen displaying the button inputs for the wrong input device. However aside from that specific issue, there was also an element of fatigue that derived from the immense number of buttons required to control the game when using mouse and keyboard (M+K). Oscar stated in his first post-gameplay interview that:

“There were a lot of buttons to keep track of, especially with the binoculars, which had F to bring it up, then V to zoom, then another one to mark enemies, and another example where I had to press something to crouch, then hold either CTRL, or Shift to move slowly, while the opposite was true for running. And if you pressed space while sneaking around, he threw himself forward, which can potentially have fatal consequences. One example was in the latter part of the mission where I suddenly threw the guy I was supposed to save because I pressed the wrong button” (Oscar, session one interview, 12.02.16).

Similar concerns were raised by other participants, such as Emma which said that:

“There were some funky controls though”, and Nora that stated that “I feel surer of myself while using M+K, than I would with a controller... but due to all of the extra buttons it was a bit difficult nonetheless. So overall it becomes a trade-off, on keyboard there is a lot to remember, but on a controller, I’d have problems with controlling the camera.” (Emma and Nora, session one interviews, 27.07.16 and 01.06.16).

For Oscar, the input device used impacted the way he chose to play the game, stating that he started shooting all the enemies because “stealth with a keyboard was really fucking hard” (Oscar, gameplay session one, 12.02.16).

On the topic of using a controller versus M+K. the participants unanimously stated that using a controller was easier by the end of the three sessions, after having played using both M+K and controller. Nora for instance initially struggled in her sessions while using M+K, but after having to change to a controller, her comfort level rose significantly, and she progressed much more fluently through the final gameplay session, even though the actual mission was much more difficult, after which she stated,

“It went much better with a controller, even though I have a lot less experience with it” (Nora, session three interview, 04.08.16).



Emma had similar comments stating:

“It was actually much better with a controller. I actually managed to zoom with this one, and although it is also possible on a keyboard, I didn’t manage to familiarize myself with all the buttons and functions, but on a controller, this was much faster... Overall it feels like there is more to get acquainted with on a keyboard, since the buttons are more spread out. It is however easier to shoot with a mouse, but probably easier to move around on a controller” (Emma, session three interview, 21.07.16).

### **4.3.1 Conclusion**

Throughout this section, the results point to M+K providing the participants with a sub-optimal playing experience, where the participants did not feel in control over the input device, and instead felt a sense of interaction fatigue due to having to spend cognitive attention towards remembering the buttons required to play the game. The controller on the other hand allowed the physical interface to melt away, and they were able to have a better experience.

## **4.4 IMMERSION AND CONCENTRATION**

Concentration itself pertains to how a player can enter a state of intense focus on play where the players concentration leads to being immersed, and entering a state of flow. The flow concept was first introduced by Csikszentmihalyi in 1975 and was based upon studies of intrinsically motivated behaviour of artists, chess players, musicians, and sports players (Nacke, 2009, 68).

The actual concept of flow, and flow of gameplay is however not the focus of this thesis. Instead the main intent is to study how the design and implementation of the interface - both physical and in game, may impede or impact the player from becoming immersed when playing. In fact, Nacke (2009, 69-70) describes a major caveat to the prerequisites for entering flow experience, which is that the experiences are not empirically testable, and are instead based on fuzzy conceptualizations like challenge and skill. Digital games do however provide immediate, clear goals, such as levels or missions, high scores, health bars or life indicators, which always allow evaluation of individual progress (Nacke, 2009, 70).

Which means that, although measuring a specific player's flow status is empirically impossible, evaluating a player's progress, and focus during gameplay is something that is more easily attainable. Additionally, Klimmt (2003; White, 1959), presented the concept of *effectance* of actions in digital games, where player actions directly and visibly impact the gameworld. *Effectance* is likely to manifest as pleasure, and is something which is observable, and can thus be assessed with empirical methods (Nacke, 2009, 71). This is also highlighted in the GameFlow heuristics, which state that "players should feel emotionally, and viscerally involved in the game" (Sweetser & Wyeth, 2005).

In my study, I observed that when immediate goals were difficult for a player to assess, the enjoyment of the play experience was negatively affected as well. After having escaped a group of enemies by running away from both the objective and the enemies, Nora hides behind a rock for a long time, she is visually shaken up, uncertain of herself and how to proceed (Nora, gameplay session one, 01.06.16). A similar situation happened to William in his second session, where he is uncertain as to how to defeat an enemy boss, and runs around for approximately two minutes without any progress. By the end, he gets visually frustrated, and sighs heavily (William gameplay session two, 29.04.16).

Here it seems that the game fail to deliver meaningful play and leads to a breakdown somewhere in the action > outcome chain, as described by Salen & Zimmerman (2003, 6, 10). This is a situation where the player does not know what do next, which could be fixed by adding additional information to the on-screen interface, or highlights on a map, which helps to direct the player (Salen & Zimmerman, 2003, 6, 8).

Additional markers were however present during Nora's session, although it is likely that she was unable to notice them, due to her emotional state. William's session on the other hand did not have any additional highlights to guide him, instead he only knew the main objective of his mission.

There were also occurrences which suggested frustration by the participants themselves

"It took a while before I understood that "this person is not actually an active object before she landed somewhere", It was like when she was moving positions, the game object disappeared, and even though I saw a shadow when she moved, there were no possibilities to shoot her in this period, and only when she was actually stationary.

This kind of made the thing feel a bit boring when I noticed it, and it kind of sucked” (William, session two interview, 29.04.16).

On the other hand, I also observed situations, where the participants were clearly immersed in the game, and visibly reacted to situations within the game. One such instance was in Oscar’s first gameplay session, where he is almost caught by the enemy, and visually tenses up, and breathed a sigh of relief when got behind cover (Oscar, gameplay session one, 12.02.16).



Figure 17. Oscar breaths sigh of relief after almost being caught by an enemy.

#### 4.4.1 Conclusion

Throughout my gameplay sessions it was observed that, during the normal gameplay loop, when immediate goals were present, and concisely conveyed to the participants, the experience was very immersive, and projected a high amount of effectance from the participants.

However, once the participants became uncertain as to where to go, or what to do, they were easily frustrated, and lost all sense of immersion.

#### 4.5 ACCESSIBILITY AND LEARNING PATTERNS

This section will discuss the accessibility of *MGS V*, as it pertains to the design of its interface and gameworld, how the game teaches the player, as well as how the player learns through gameplay.

The main point of consideration when designing digital games is that players should be able to sit down and play, without having to resort to a manual, or spend their evening before feeling that they are in control (Jørgensen, 2013, 19; Sweetser & Wyeth, 2005).

This means that developers need to design their interface and gameworld in such a way that they are welcoming to players, and does not overwhelm players with complicated functionality and interface. To do this game designers often start games with introductory tutorial levels, which intend to ease the player into the game, while introducing systems over time instead of overloading the player with too much information.

It is however important that learning the game, and playing the tutorial is not boring, but part of the fun, and ultimately feels like playing the game, and not walking through an interactive manual (Sweetser & Wyeth).

*MGS V* provides the player with a traditional tutorial mission to start off the game. This mission teaches the game's main mechanics through on-screen prompts, text boxes, and in-game NPC's. The player is locked into the tutorial until he manages to complete the necessary action or each section, thus forcing the player to learn each mechanic before moving on. However, this function does not work completely as intended, as demonstrated when William failed to learn how to use the game's cover mechanics - as described during the preceding interface section above.

For a player that is unfamiliar with digital games, and/or third person action games, the type of tutorial used in *MGS V* works mostly as intended, and might even be relieving to some, as it reduces the possibility of failure to almost zero. It does however come at the expense of more experienced players which also have to sit through a segment focused on activities they have already mastered, such as moving the camera, and avatar.

For William, he stated that:

“The start was incredibly unnecessary, starting with the whole *look up* thing” [the game starts by forcing the player to move the camera in different directions]

“...Especially since the difficulty curve rises fairly quickly after this. Other than that, there were quite a bit of messages that popped up on the HUD, which was okay, when they appeared, by went sort of without explanation. For instance, when you get used to doing things through messages in the HUD, like press C to do X, or E to do Y, and then suddenly it just says ESC for actions, right at the same time the enemy is about to

shoot you. And then when I pressed ESC, it just brought me to the pause menu [referencing the cover mechanics situation described in the interface section] and I didn't see that there was any information there, so that was very confusing for me, so I would've liked some more information on the HUD itself" (William, session one interview, 15.01.16).

In a later interview William stated that:

“there was just way too much tutorial handholding in the first session I played, to the point where they asked me to move the camera around, which reminded me of the first Halo game, and not at all in a good way” (William, session three interview, 27.10.16).

William did however describe himself as an experienced player, which means that he is more likely to be frustrated by an overabundance of tutorials, than a less experienced player would have.

Closely related to the design of a game's introductory area, is how the game presents its difficulty. Most accessibility guidelines (Sweetser & Wyeth, 2005; game accessibility guideline, 2017) suggest providing the player with the choice to alter the game's challenge to fit the specific player. This then alters the difficulty of puzzles, and the implementation by the enemy AI (reduced speed, health pool, etc.).

*MGS V* does not offer the player any choice in difficulty at the start of the game. Instead the enemies become smarter, and use stronger equipment as the game progresses.

Additionally, once you progress through the game, enemies in earlier missions get balanced to the same state, which means that for my study, the participants played against AI enemies that were effectively balanced towards players that have completed the majority of the game. This issue is also compounded by the fact that the game only allows a player to keep one save-profile at any time.

While some games offer difficulty settings, or a dynamic difficulty adjustment, *MGS V* instead relies on the player using specific tools to make progress easier.

While this does provide the player with a sense of control over the actions they take, and the strategies they use, instead of following designed paths made by the developers (Sweetser & Wyeth, 2005), this also has the possibility of the player becoming frustrated, when their own chosen path turns out to be a more difficult choice.

This was observed during my third sessions, where both Emma, and Lucas chose to attack an enemy base head-on, even though they were unsuccessful. Nora and William on the other hand, altered their playstyle, and found an easier path, and were ultimately more successful.

Among the specific tools made to allow the player to progress more easily, the chicken hat is the most game altering. The chicken hat tool makes the player more difficult to be noticed, and should the player get noticed, the enemies will laugh at the player character instead of triggering an attack on the player. The tool itself becomes available after the player has died three times in a specific mission.

During my gameplay sessions, this tool was offered multiple times, but never used by the participants, Oscar stated that:

“It was fun to be able to use the chicken hat if I wanted to make things easier for myself, but I declined to use it though” (Oscar session one interview, 12.02.16).

The fact that he, and all the other participants declined it, even though the item is designed to be an aid to the player is something to consider.

This is likely due to two reasons, the first of which is likely related to the nature in which the item is presented to the player. In society chickens are known for being cowardly creatures, and many use the statement “are you chicken?” to point out someone's cowardice. Therefore, the presentation of the chicken hat in *MGS V* can easily be felt as taunting to the player, as well as ridiculing the any player that has to rely on the chicken hat to progress through the game.



Figure 18. The chicken hat worn by the game's protagonist

The other reason is likely related to players' inherent desire to get better and overcome the obstacle set by the game instead of having to bypass the difficulty. Some players might not be as experienced with digital games as Oscar is however, and may therefore become stuck with the choice of either feeling ridiculed by the game, or losing enjoyment in the game itself due to repeatedly dying in the same section of the game, which was ultimately the experience that both Lucas and Emma was left with after their third gameplay sessions.

In-game death is however also often an integral part of playing as a way to provide challenge to a player. This challenge must however be designed in a way that is not too punishing, and therefore removing the fun from the activity. On the other hand, if in-game death is supposed to be a motivating factor for learning to play it could be expected that a death experience should evoke some negative emotions so that players are motivated not to die again and learn by repetition (Nacke, 2009, 209-210; Jørgensen, 2013, 60).

In his post-gameplay session one interview, Oscar said that:

“as for the actual gameplay, I felt like it went well, especially considering this is the first time I've played the game. I did make some mistakes, but that is that, and the game is very good at saying “hey, you died, but why don't you just try again from this checkpoint”, so that you didn't lose a lot of time or work, and additionally the enemies you've already marked remained that way after you died, which makes you feel like you haven't lost all your progress” (Oscar session one interview, 12.02.16).

William held a similar opinion, although slightly more negative to the way death was presented:

“Well no, there wasn't anything especially difficult. Although I did die a couple of times, but learned quickly what they wanted me to do, kind of like where you take a death to learn not to do it again sort of. Other than that, it wasn't difficult, just bad info, then I died, and now I know what to do” (William, session one interview, 15.01.16).

Another observation made during the gameplay sessions was how, upon death some of the participants completely changed their tactics, and opted for a new way to approach their target, while others instead continued with the same activity that caused the initial death. This was especially apparent in the final gameplay session, when the participants were tasked with

infiltrating a large enemy stronghold. Two of the participants - Lucas and Emma, opted for a frontal assault, which did not work particularly well, leading to multiple deaths, and ultimate failure to complete the mission (Lucas and Emma, gameplay session three, 28.07.16 and 21.07.16). After the session, both participants stated that they would have liked to try a more stealth focused approach (Lucas and Emma, session three individual interviews, 28.07.16 and 21.07.16). William and Nora on the other hand, changed both their approaches throughout the session, once the initial attempt failed, and were ultimately much more successful in the mission overall. William stated:

“I tried a semi-stealth approach on my first attempt, where I tried to kill everyone without being noticed, but that didn’t work, ha-ha” (William session three interview, 27.10.16).

Ultimately, William opted for a full stealth approach where he finished the mission with minimal enemy contact.

One area where both usability and accessibility overlap is interactable objects in the gameworld interface, Jørgensen (2013, 146-147) states that “Objects should be designed in a way that clearly shows how the objects should be interacted with, and the interaction should be tailored to the needs that the user might have with respect to that object.”

This is reflected by both the Game Accessibility Guidelines (2017), which state that “Players with cognitive and vision impairments can have difficulty distinguishing which UI elements or in-game items are intended to be interactive, and are sometimes not familiar with the same metaphors and conventions as other players.”

While Donald Norman states that the user interface should not get in the way, or require energy to interact with, instead it should facilitate the interaction to allow the user to focus on his job (1990, 210).

In *MGS V*, interactive objects are not indicated, instead an icon appears on the screen of the player when close to an object which can be interacted with. Due to this presentation, the participants in my study organically stumbled upon multiple different interactable objects, which augmented their gameplay style, or provided them with new avenues of approach.





Figure 19. HUD displaying the specific ways, in which the player can interact with the port-o-potty.

In Nora's third gameplay session, she stumbled upon a cracked wall, which she could climb, and thus circumvent a heavily fortified entrance to an enemy base (Nora, gameplay session three, 04.08.16). In similar fashion, Oscar noticed that port-o-potties was an interactable object when stepping close to one, and then later used this information to hide an unconscious enemy within one (Oscar, gameplay session one, 12.02.16). This method of indicating interactable objects is consistent throughout the entire game, and always behave in the same way. Additionally, as the player progresses through the game, the player's NPC support team will point out specific objects in the nearby vicinity.

#### 4.5.1 Conclusion

In this section, I have studied how *MGS V* tries to teach its players, in addition to how accessible the game is to different types of players. This is a subject that the previous sections also touch upon such as the importance of providing an intuitive interface, and different options for physical interfaces, and therefore, the section itself was focused on topics that had not already been discussed previously.

The results presented in the section show that *MGS V*'s implemented tutorial does allow the player to get acquainted with the games systems in a mostly adequate way, although providing a slight overabundance of hand-holding in the opening segments, which caused some unnecessary frustration.

The game's overall difficulty is handled in a way that is not recommended by accessibility

guidelines, where the game does not provide a setting for the player to change the difficulty to fit their personal preference, instead the player is forced to play the way the designers intended, and if this proves too difficult for the player, the only options are to either be ridiculed by the game by equipping a chicken hat, or stop playing altogether.

The game is however designed in a way that is conducive with repeat attempts in order to become better at the game, although how this is experienced by the player varies from one individual to another.

Ultimately, this means that *MGS V* is not very accepting to players with special needs, or that do not fit with their intended player skill.

Before moving on to the final discussion, I have a summary of my observations presented in the figure 20 below.

	Visual / Interface				Audio	Physical Interface		Concentration		Accessibility	
	Idroid	Equip	Pause	Game-world	Enhancing	M+K	Controller	Effectance	Immersion	Tutorial	Learning
William	X	X	X	O	X	X	O	X	O	X	O
Oscar	O	X	X	O	X/O	X	O	-	O	O	-
Nora	X	X	-	O	X	X	O	X	X	O/X	O
Emma	X/O	X	-	O	-	X	O	-	-	-	X
Lucas	X/O	X	-	O	O	-	O/X	-	O	O/X	X

X - Frustrating, - not experienced / commented, O - Enjoyable / not damaging

Figure 20. Overview of participant opinions presented in the analysis

## 4.6 DISCUSSION

Throughout the analysis I have taken a focused look at each facet of *MGS V* based on the original observations from my gameplay sessions and interviews, presented through the lens of my thematic analysis, and critical incident technique. I then took the analysed dataset, and discussed, and compared the results to player experience, and HCI theory, to ultimately reveal how the overall experience of playing *MGS V* was felt by my participants.

The two main results that my study revealed was that, (1) the overall usability of the traditional interfaces (WIMP/HUD) in *MGS V* was not especially enjoyable to the participants, and (2) the gameworld interface and gameplay itself was inductive to a mostly enjoyable player experience.

The problems with the traditional interfaces is mainly due to,

(1) The iDroid providing the participants with very little visual affordances, causing the participants to have to spend a longer time to understand the interface, which overall detracted from the gameplay experience (Nielsen, 1988, 12; Nielsen, 1990, 210).

(2) The iDroid is also plagued by excessive functionality, causing the interface to feel cluttered and overly complex (Shneiderman, 2005, 13).

Additionally, the iDroid, does not follow traditional usability heuristics, meaning that it is not effective interface, and may instead hinder the player, causing an unsatisfactory experience (Nielsen, 1995).

(3) The other main interface used during gameplay, the equipment menu, is frustrating to use due to having too many moving parts, causing unnecessary frustration when trying to distinguish what the results of their actions were, which is a problem of discernibility, where the participants could not perceive the immediate outcome of the action performed.

This is well known problem as described by Salen and Zimmerman, 2003. This ultimately means that the menu fails to provide the player with the proper degree of control over processes and actions (Saunders & Novak, 2007, 20).

Additionally, there were (4), consistency issues with the way *MGS V* helps the player to perform specific actions, According to Jørgensen (2013, 43), this is one of the central principles in game-interface design for supporting player expectations, which means that when it is not there it detracts from player expectations and causes much unnecessary frustration.

The final area (5) with usability problems is the pause menu, which presents wrong information to the player, in the form of controls schemes for a controller when using M+K. This is likely a result of conversion from console development to PC which often results in games having an overly cumbersome way to access its online manual (Jørgensen, 2013, 50; Shneiderman, 527-528).

The player experience provided by the gameplay and gameworld interfaces was mostly functional, and enjoyable for the participants, but ultimately more attainable when they were controlling the game via a console controller. There were certain situations that distracted the

player and reduced the overall enjoyable experience given by the gameworld interface, but ultimately, the participants agreed that the act of playing the game, was mostly an enjoyable affair, so long as they could play unhindered by the traditional interface.

Fortunately, the traditional interfaces take up very little of the players attention during normal gameplay. Instead, the interface usually takes a backseat position, in order to allow the gameworld interface, and gameplay to speak for itself

This means that the design of *MGS V* follows the goals for ubiquitous computing, which aim to hide much of the technical functionality of the computer system away from the user (Jørgensen, 2013, 38). Ultimately, this works in *MGS V*'s favour, hindering the traditional interface from impeding the players enjoyment and ability to do things in the gameworld.

Another way to study how *MGS V* manages to provide a good PX is to study how the game introduces mechanics in a way where the player learns to use mechanics in a way which is conducive to having fun. What I mean by this is that the way in which mechanics are introduced to the player will affect how the player then use these mechanics. One example of this is in the first mission. The player is likely to die at some point in the mission, and when he does he is reverted to a moment only seconds before, where he can try again, but now has new information for how to progress. Oscar stated:

“the game is very good at saying “hey, you died, but why don’t you try again from this checkpoint”, so that you didn’t lose a lot of time or work, and additionally the enemies you’ve already marked remained that way after you died, which makes you feel like you haven’t lost all your progress.” (Oscar, session one interview, 12.02.16)

Through this functionality *MGS V* teaches the player that it is okay to die, learn from it, and then use that information to get ahead. This means that a death event is not too unforgiving, and instead a useful mechanic which allows for experimentation without causing undue frustration.

One problem with the way *MGS V* uses the introduction of mechanics to teach the player however is that due to the open world, and allowing the player to play in the specific way he himself want, some player may subconsciously choose ways to play that are not as conducive for an enjoyable gameplay experience. The previous games in the *Metal Gear* series stealth gameplay was forced on the player, and therefore designed with this in mind. In *MGS V* however, stealth is only one of many options, and while stealth is still one of the main

mechanics, it is also completely possible to play through the entirety of the game without using stealth.

In my study, I observed that the most enjoyable situations for the participants were when they used stealth to progress through the mission. Unfortunately, however, not all the participants picked up on this, which affected the overall experience. This was most noticeable in the third session, which was also the most divisive, with two participants employing an action game approach (Lucas and Emma), and the other two employed the use of the stealth mechanics (William and Nora).

Both of the two participants that used stealth described this session as the most enjoyable session in the study. William described playing through the last session as “very heart pounding” and “exciting”, while Nora said “Now it was actually fun. Earlier I was really nervous, and disliked it. The second session was kind of mediocre, but now I eventually got to a point where I’d really like to play more” (William and Nora, session three interviews, 27.10.16 and 01.06.16). Conversely, the other two participants, which did not use stealth found the mission to be much more difficult. Emma said:

“There were too many enemies, which I didn’t really know how to deal with, so the mission became really difficult for me” (Emma, session three interview, 21.07.16).

This could therefore indicate that by putting less pressure on the player to use stealth - a core mechanic for the entire series of games, and instead providing equal opportunity for the player choose for themselves, the player may possibly end up playing in ways that are ultimately conducive to playstyles which are inherently less fun.

This could also be an example of a problem with the way *MGS V* handles difficulty. The difficulty design, does not follow accessibility guidelines, which means that that if a less experienced player, or a player with reduced physical capabilities were to attempt to play the game, they are forced to either adhere to the difficulty set by the game, or alternatively choose to use the chicken hat, and be mocked by the game, or stop playing.

As a general observation, the result of the analysis show that *MGS V* is a flawed game with a fair share of issues, but despite these issues, the game is still able to provide the player with a good experience through its strong gameworld interface, and gameplay, despite the sub-optimal usability of its traditional interface.

## 5 CONCLUDING THOUGHTS

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In the previous chapter I concluded my analysis of the interfaces found in *MGS V*, based on the empirical data gathered from my study. The study itself was based on a multidisciplinary theoretical background, mainly pertaining to the field of HCI, and game studies, with the sub-field of player experience being especially important.

Through this study, I arrived at a conclusion that although flawed due to sub-optimal usability practices used for its traditional interfaces, *MGS V*'s player experience was still mostly enjoyable for the participants of the study due to a strong fundamental gameplay loop, and good design of its gameworld interface. This last chapter is intended to close out the thesis with concluding thoughts about how the study went, what could have been better, and future opportunities.

### 5.1 TAKING EVERYTHING INTO CONSIDERATION

The results I gained from the gameplay sessions, and interviews were invaluable, and I would not have been able to complete the study without the usage of them. Together they provided valuable, and sometimes unexpected results which were indispensable when testing the initial hypothesis and research question of the study.

Performing the evaluations for this study have been highly rewarding, with both interesting results, while also being interesting and enjoyable to perform.

The study itself was however much more time consuming than I initially anticipated. Which is something that I intend to address with more rigorous planning and scheduling for any projects in the future.

For this study however, scheduling was especially difficult due to the time table of the chosen participants, and is something that should be considered more closely in the future. Tertiary to the evaluation, there was also a lesson to be learned about relying on specific software. In my study, I relied upon the usage of video capture software which I was familiar with from earlier, instead objectively choosing software which was the most fitting. Due to this software, I ultimately had to restart my second gameplay sessions at two separate occasions, due to unplay-ability. One of these occasions even forced me to have to reschedule an entire

session, due to the software all but crashing the game. Ultimately, I wound up changing the software in the middle of the study.

After having considered all the results of the study, it would also be valuable to consider the initial hypothesis and research question which in itself was the basis for everything that came previously throughout the thesis.

The initial hypothesis for the study was that:

*“Any gameplay that a player is subjected to provides some kind of experience - either positive or negative, which may further be impacted by the design and implementation of the game’s interfaces (traditional, gameworld, and physical). “*

Each of the three interfaces had a clear observable impact on the participants’ experience when playing *MGS V*. The traditional interfaces attributed to a mostly negative experience, while the gameworld interface was mostly positive. The physical interface however, was both positive and negative, depending on which specific input device was used by the participant - using a console controller was positive experience, while using M+K was too complicated to remember, and therefore led to a more negative experience.

The research question for the thesis, which was itself built upon the aforementioned hypothesis, was:

*“Does the interface and gameworld design found in MGS V have a role in the type of experience received by its players”*

The interface and gameworld definitely played a role in the participants’ overall experiences, where using the traditional interfaces more often than not lead to decrease in enjoyment for the participants. Using the equipment menu for instance, lead to a clearly negative experience, that left the participants with a feeling of frustration and confusion.

The gameworld interface, and gameplay on the other hand were clear highlights for the players, which lead to feelings of immersion and enjoyment.

Ultimately, it was discovered that the durations which had the least amount of necessary interruptions by the traditional interfaces, were the most enjoyable for the participants. Additionally, the experience of interacting with the physical interface was very different, depending upon which type of input device was used. When the participants were using a controller, the interface melted away, allowing the player to focus all of their attention on the gameplay. Discussing the physical interface, the participants’ sentiments echoed those of Donald Norman (1990, 210), stating that the controller allowed them to play the game,

without having to think of using the interface.

Therefore, the results from the study concludes that the interface and gameworld design found in *MGS V* did indeed have a significant role in the gameplay experience the players have when playing the game.

In general, I feel that I have been able to provide a satisfying answer which has some generic value to my research question, and reached my goal of studying how the interaction between the player and *MGS V* was affected by its interfaces. Therefore, although I feel satisfied with these answers, as well as with the design and execution of the study, there are still some shortcomings that I was unable to overcome, and that I wish to overcome when performing studies in the future.

The first of these was: (1) A small participant pool in comparison to population of players of digital games. The study itself only contained five representative participants, all of which were located within the same age group, and geographical location. This means that it is unlikely that the opinions of these five participants completely mirror the overall sentiments of the approximate six million players of *MGS V* worldwide (Makuch, 2016).

Therefore, I feel that a study of this nature would benefit from being both expanded with more participants, as well as potentially being supplemented with quantitative data from questionnaires, which could be compared to the qualitative data, and give credence to the results. Additionally, I feel that inviting designers and personnel working within the digital games industry, and having them impart wisdom through interviews would also be a large benefit for similar studies.

(2) The entire study was performed by me alone, which could cause specific biases within the results due to my personal view. The simplest way to alleviate this would have been to perform the evaluation as a team, which could then eliminate each other's personal biases.

(3) The test area used for the evaluation only covers a small vertical slice of the entire game. This could be improved by either performing more tests, or inviting more people, to test more areas of the game. Ultimately however, due to the long length of the game, and time available for completion of this thesis, testing the game in its entirety would be incredibly time consuming, almost to the point of impossibility.



## 5.2 FUTURE OPPORTUNITIES

After having spent many an arduous hour performing my study, researching and writing this thesis, it is my utmost hope that the results described within this thesis may trigger more studies of the design of the interfaces in digital games, as well as allowing game designers to consider the points made by this thesis, when designing the interfaces in their own digital games.

I therefore hope that the content of the thesis will lead to discussions upon the validity of my conclusions regarding the importance of considering the design of interfaces within digital games, both from an HCI perspective, as well as a player experience perspective.

Ultimately the focus of the study found in this thesis was very focused upon *MGS V* and its specific interfaces, therefore it would likely be interesting to both study other games' interfaces, as well as perform a deeper study of this specific game, perhaps by employing the usage of medical equipment in the same vein as Nacke (2009), for studying the cognitive reaction of participants when interacting with each of the specific interfaces in *MGS V*, as well as other games.



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## 7 APPENDICES

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### 7.1 CONSENT FORM

# Forespørsel om deltakelse i forskningsprosjekt

## UX In Games - Creating a Usability framework and applying it to the game Metal Gear Solid V - The Phantom Pain

### Bakgrunn og formål

Formålet ved studien er å studere brukeropplevelsen av et gitt spill gjennom en bruk av et utvalg av teorier innen brukeropplevelse (User Experience (UX)). Utvalgt spill for denne studien er *Metal Gear Solid V: The Phantom Pain*.

Studien blir utført som en del av et masterprosjekt i informasjonsvitenskap ved Universitetet i Bergen.

Studien vil teste hvordan brukervennlighet (Usability) og brukeropplevelse (UX) i diverse aspekter spillet *Metal Gear Solid V: The Phantom Pain* oppleves av personer med forskjellig erfaring med spill.

Disse aspektene er; Brukergrensesnitt, menystruktur, styring med diverse enheter for inndata (mus, tastatur, spillkontrollere).

## Hva innebærer deltakelse i studien?

Studien er strukturert i tre faser, hvor hver fase innebærer en spilløkt samt et intervju. Hver spilløkt forventes å vare i 15-20 minutter, mens intervjuene forventes å vare i omtrent 10 minutter. Totalt vil deltakelse i studien vare i maksimalt 90 minutter.

Hver fase er fokusert på et bestemt område som skal studeres.

Alle spill øktene vil bli filmet med videokamera, hvor fokuset er på både ansikt, samt spillingen.

Alle intervjuene vil bli tatt opp med diktafon.

## Hva skjer med informasjonen om deg?

Alle personopplysninger som blir lagret, vil bli behandlet konfidensielt, og vil bare være tilgjengelig for student, samt veiledere.

All lagret data (lydopptak og video) blir lagret under et tilfeldig valgt pseudonym som filnavn. Selve dataen blir ikke videre anonymisert, og personer kan derfor bli gjenkjent gjennom stemme, og ansikt. Dataene lagres adskilt fra annen data fra prosjektet.

Deltakerne vil ikke kunne gjenkjennes i masteroppgaven, men deltakere vil bli referert til gjennom det tidligere nevnte pseudonymet, samt en beskrivelse av tidligere kjennskap til videospill. Utsagn fra deltakerne kan bli sitert i masteroppgaven.

All data som blir samlet inn - som ikke publiseres i selve oppgaven vil etter publisering bli slettet, foreløpig tidspunkt for denne slettingen er månedslutt mai 2016.

## Frivillig deltakelse

Det er frivillig å delta i studien, og du kan når som helst under datainnsamlingen trekke ditt samtykke uten å oppgi noen grunn.

Dersom du trekker deg, vil alle opplysninger om deg bli slettet.

Dersom du ønsker å delta eller har spørsmål til studien, ta kontakt med:

Prosjektleder:

Kjetil Buer

Telefon: 92443662

Veileder:

Kristine Jørgensen

Telefon: 55584113 / 90946649

Studien er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste AS.

## Samtykke til deltakelse i studien

Jeg har mottatt informasjon om studien, og er villig til å delta

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(Signert av prosjektdeltaker, dato)

## 7.2 INTERVIEW LEGEND (NORWEGIAN)

Intervjuene er strukturert slik at de etterfølger en spilløkt, og spørsmålene stilt vil derfor bygges opp mot det deltakeren har opplevd i denne økten. Denne intervjuguiden er derfor strukturert etter temaer som vil bli tatt opp i hver fase, mens spørsmålene som blir stilt vil potensielt formulert på forskjellige måter ut ifra hvordan opplevelsen har vært for deltakeren, samt at intervjuene er planlagt å være semi-strukturerte og kan derfor utvikle seg forskjellig ut i fra respons fra deltakeren.

### 1. Fase - læring av spillsystemer, inndata (Oppdrag 1 - Prologue)

Spørsmål:

Generelt:

1. Hvordan vil du beskrive din kjennskap til spill generelt?
2. Hvordan vil du beskrive dine ferdigheter i forhold til spilling?
3. Har du kjennskap til dette spillet (*Metal Gear Solid V: The Phantom Pain*)?
  - Ellers kjennskap til spillserien?
4. Kjennskap til sjangeren (stealth action, 3rd. person fps)

Oppfølging fra spill ferdigheter/tidligere kunnskap (game approachability):

Synes du spill elementer ble introdusert på en god måte? (elementer som sniking, skyting etc.)

følte du at disse elementene introdusert med gode mellomrom?

Til spilløkten

1. Hva syntes du om spilløkten?
  - Er det noen situasjoner du vil dra frem som spesielt minneverdige?
  - Hvis dårlig, hvorfor?
2. Hvilke deler av spillingen opplevde du som spesielt vanskelig (om noen)?
  - Hvorfor?
3. Kan du spesifisere hvilken del av spillingen du likte best?

- Hvorfor
4. Nå havnet du litt mitt i narrativet, i og med at vi hoppet over første oppdrag, men hva syntes du om dette narrativet? (innhold etc.)
    - synes du det var en passende mengde narrativ i forhold til spilling?
  5. Ga episoden deg lyst å spille mer av spillet?
  6. Hvilken form for inndata foretrakk du for spillingen (Mus/tastatur, kontroller (PS4, PS3, Xbox360))?

I tillegg vil det forekomme en diskusjon ut i fra det som blir observert under spillingen.

## **2. Fase - Bruk av avanserte mønstre, avansert meny bruk (Oppdrag 11)**

Spørsmål:

Denne fasens oppdrag inneholder bl. annet en boss kamp som undersøkelsen vil hoppe over, dersom deltakeren har problemer med å fullføre denne. Det vil stilles spørsmål rundt dette, ut i fra hvordan utfallet er for deltakeren.

Deltakeren vil også bli bedt om å gjennomføre forskjellige aktiviteter inne i spillets meny, og vil bli spurt om hvordan dette påvirket spill opplevelsen.

1. Hvordan opplevde du å bruke menyene?
  - Hvordan opplever du at det å gå inn i menyer innvirker på innlevelsen i spillet? (underbygger det opplevelsen, eller tar den deg ut av spillopplevelsen)
    1. Fant du frem til de nødvendige områdene av menyen?
    2. Vil du beskrive meny bruken som et fornøyet aspekt av spillopplevelsen?
2. Fortell hvordan du opplevde boss kampen?
  - kan du beskrive spillopplevelsen? (god/dårlig etc)
  - Var det innforstått hva du behøvde å gjøre fra starten? (eller mer prøv å feil?)
3. Hvordan vil du sammenligne denne spilløkten med den forrige?
4. Kunne du tenke deg å spille mer av spillet? (har dette endret seg siden den første fasen?)
5. Kan du fortelle om bestemte situasjoner du fant spesielt minneverdige i denne spilløkten?

I tillegg vil det forekomme en diskusjon ut i fra det som blir observert under spillingen.

### **3. Fase - Bruk av alle spillsystemer samtidig, egenvalgt tilnærming til inndata samt spill metode (Oppdrag 30 - Skull Face)**

Spørsmål:

1. Tok du i bruk avanserte spillsystemer som helikopter, buddy, combat support, loadout drop in?
  - Hvordan endret opplevelsen din når du brukte disse?
  - Kan du huske bestemt minneverdige øyeblikk hvor du tok i bruk disse?
  - Har du noen bestemte frustrasjoner knyttet opp mot bruken av disse?
2. Hvilken tilnærming til oppdraget foretrakk du, og hvorfor (stealth, loud etc.)?
3. Hvordan vil du sammenligne denne spilløkten opp mot de to forrige?
4. Har du noen minneverdige øyeblikk hvor du kom på kreative løsninger for å oppnå bestemte objekter?
5. Hva er meningen/følelsene din ang. spillet, og har den endret seg siden tidligere faser?
  - Kunne du tenkt deg å spille mer av spillet?
6. Var det noe bestemt fornøytelig eller frustrerende i denne spilløkten?
7. Hvorfor har du valgt denne bestemte inndatametoden?
  - Oppfølgingsspørsmål kan forekomme i form av hva som fører til dette valget (tidligere erfaring, følt mer kontroll etc.)
  - Hvis du skulle spille gjennom spillet på egenhånd, hvilken inndatametode ville du valgt?
8. Hva er din helhetlige erfaring/følelser etter alle tre fasene?
9. Hvordan opplevdes det å få må mer kontroll på spillets input?
10. Hvordan opplevdes det å få flere verktøy å rutte med i løpet av spillingen?
11. Har denne undersøkelsen gitt deg lyst til å spille spillet mer? (Hvilke bestemte elementer tiltrekker deg mest etc.)
12. Hva synes du om spillets narrativ etter alle tre fasene? (spilleren vil bli gitt utvidende informasjon/video materiale om ønsket slik at narrativet blir mer sammenhengende)



I tillegg vil det forekomme en diskusjon ut i fra det som blir observert under spillingen.

## 7.3 INTERVIEW TRANSCRIPTS (NORWEGIAN)

### 7.3.1 William

#### Fase 1

Lærer av spillsystemer, inndata osv.

Test utført med prologue episoden

Starter med noen generelle spørsmål:

1. Generell spill erfaring.

W: har spilt, ganske mye spill, data og tv spill. Ja, mest konsoll. Men spill som CS på pc. Ellers ikke så mye fps.

2. Ferdigheter i forhold til spill.

W: kommer ann på sjanger, men relativt erfaren med fps, men litt uvant å spille i 3. Person. Veldig sånn, ja sånn men begynner å bevege meg inn på selve spillet. Men sånn som å dukke bak ting (cover mechanics) vandt til Gears of War, der er det en veldig enkel måte å dukke på, standardisert, og ikke veldig tilpasset, og var litt annerledes her i dette spillet.

Men ja generelt gode, men ikke akkurat profesjonelle kan en jo si.

3. Kunnskap/kjennskap til spillserien MGS.

W: Nei, bare sett videoer, ikke spilt det selv. Heller aldri prøvd serien.

4. Sjanger kjennskap

W: Eneste jeg har spilt der, er splinter cell, husker ikke hvilket. Der er en i multiplayer, 3. Pers. De er vel også i 3. Pers, såvidt jeg husker. Husker ikke helt, er for lenge siden.

5. Introduksjon av spill elementer - sniking, skyting osv, læringskurve etc.

W: Begynnelsen var ekstremt unødvendig, det å starte med "look up" - hvem ville sagt det i den virkelige verden. Hvis en person sitter foran pc'en med mus og tastatur og har kjøpt spillet, bude de vel vite hvordan de bruker en mus. Spesielt når kurven

deretter stiger relativt ganske fort opp. Ellers så var det en del beskjeder, som kom opp på HUD, var ok når de kom, men mye var uforklart. F.eks når en først blir vant til å få opp nøyaktig hvordan man gjør ting gjennom beskjeder på HUD'en, som trykk C for å gjøre X, eller E for å gjøre Y, også plutselig kommer det opp trykk ESC for actions, i det fiendene skal til å skyte på deg.

Kjetil: De mener såvidt jeg husker Action button, det de definerer som det, og vil gi mer utfyllende informasjon om det.

W: ja så jeg trykket på ESC, som bare fikk meg til pause menyen

Kjetil: Ja, og helt nederst på den så står det utfyllende informasjon om hva Action Button vil si og sånt, men det er litt dumt plassert, og ikke så lett å se in the heat of the moment.

W: ah, ja men det så jeg ikke, så det var veldig forvirrende, så det hadde vært veldig greit om det kom litt mer informasjon opp i HUD'en, sånn at det var litt mer informerende.

Kjetil: ja, i tillegg så hadde det kanskje vært greit om de hadde definert det litt mer klart enn bare Action button

W: Ja. skjønte ikke helt det, og ellers helt OK.

Skulle også, kanskje at mens karakterene snakker til deg, så gir de hint til at du skal f.eks gjøre noe, og da forventet jeg at det skulle komme som en slags oversetting til HUD'en med spillkontroll.

Det føles litt urealistisk, siden han skal være en veldig legendarisk kriger, så blir det litt merkelig at han skal stå der forvirret og ikke vite hvordan han faktisk sikter med våpenet sitt.

Kjetil: hehe, ja er enig der, men det er for såvidt noe de også har gjort i de tidligere spillene, med at karakterer forteller han at han må f.eks "Snake, you need to use the action button to fire", ellers så tror jeg de har ment at, etter at du har fått pistolen, så er det meningen at det brannslukningsapparatet og det, skal være en liten øvelse på å bruke pistolen og det, før du faktisk kommer i møte med motstandere. Som en slags dynamisk trenings ting, men det er mest en antagelse.

#### 6. Hva synes du om spill økten

W: Nei, det var spennende, ble skikkelig stresset et par ganger. Merket at spillet gjorde veldig inntrykk. Det var veldig filmatisk og det var veldig bra, samtidig som jeg synes det var veldig treigt i starten, det var veldig mye cutscenes, som jeg godt synes kunne

vært mer interaktive. Bare det at de låser, alt ned til kameraet, at alt er låst liksom. I stedet for å kunne bevege kameraet i det minste. Det var litt slitsomt.

7. Minneverdig øyeblikk.

W: første gangen jeg så han flamme fyren, tenkte jeg bare WTF, sjanger skifte baaam.

Kjetil: hehe, ja welcome to a steven king novel, all of a sudden.

W: hehe, ja det var sånn, hehe, yes so this is a part of the game, så etter det så var det ikke så mye som overrasket meg. Eller jo, når han senere kom flyvende på den flammende hesten, med hun spøkelses damen (er egentlig en gutt), så tenkte jeg bare, wooah, they jumped the shark, iallefall nesten, men var veldig sånn "hva i all verden".

8. positive/negative opplevelser

W: ja, herregud, den ene scenen der du skal på en måte lure disse folkene som inn på den warden (sykehus avdelingen), og skal gjemme deg sammen med kompisen din, det fungerte helt ok, det var liksom ikke helt mega easy, men det som irriterte meg, men det var automatisk, at han plutselig hoppet inn i tingene, som endte opp med at han kastet seg inn for å gjemme seg, når jeg prøvde å komme meg unna, og du føler at du har masse folk etter deg, og han gjør ting som jeg egentlig ikke ville at han skulle gjøre. Det var frustrerende, og det mest negative.

9. Noe som var vanskelig å gjennomføre

W: hmm, nei, var ikke noe kjempe vanskelig. Men var et par ganger hvor jeg døde, men lærte veldig for da, hva en skal gjøre, hvor på en måte jeg tok en død og lærte veldig med en gang at jeg ikke skulle gjøre det sånn. Eller så var det ikke vanskelig, det var bare dårlig info du døde, da vet jeg hva jeg skal gjøre.

En annen ting. Vanskelig og vanskelig, jeg hadde iallefall vanskelig med å forstå spill der, du får beskjed i tekst, i spillet, om hvilke knapper du skal trykke på for å gjøre, så forventer jeg å også få den informasjonen i tekst, som folk sier, f.eks når du rir på hest med han fyren som basically er en cowboy, som ber deg om å skyte han fyren som allerede er bevist å være udødelig, med en hagle, hvis det hadde stått på skjermen i tekst, så hadde jeg trodd på han, men jeg har det med å ikke tro på karakterer i spill, siden de kanskje ikke har all informasjonen siden de er i ett spill, men hvis det hadde kommet opp på skjermen som en spillmekanikk, så hadde jeg skjønt det med en gang, men hadde jeg dødd igjen, så hadde jeg skjønt at det og gjort det med en gang.

Kjetil: Ja, jeg er enig, med deg i at det ikke føles logisk å skyte på fyren som har vist at han kan suge til seg kuler og skyte de tilbake på deg, men jeg tror ideen er å skyte han for å dytte han bakover, og ikke direkte å skade han.

W: ja, ja, men igjen så vet jeg at trykket på en hagle ikke får deg til å stoppe, jeg prøvde å skyte trærne for å stoppe han, men det gjorde jo ingenting.

10. Narrativ.

W: egentlig veldig generisk, ingenting jeg ikke har sett før, bortsett fra brennende fyr som ikke kan ta skade, basically tåler alt utenom vann da, eller som kanskje var en hallusinasjon. Nei, eller føles det som en hvilken som helst 80 talls action film, men jeg likte det da. Det er ikke unikt i det hele tatt, bortsett fra innholdet med han brennende fyren, men et godt utgangspunkt for et spill.

11. Passende mengde narrativ?

W: alt for mye narrativ, spesielt når narrativet ikke er spesielt vanskelig å få med seg, så ville foretrukket om narrativet i stedet hadde blitt fortalt, f.eks mens du kravler på gulvet, så kunne f.eks kompisen din fortalt en del der, i stedet for cutscenes.

12. Mer lyst å spille mer av spillet

W: ja, absolutt, fikk veldig lyst å stjele pc'en din og spille mer av det.

13. Bruk av m+k

W: ja, det fungerte for det meste, men f.eks under cutscenes, så forventer man at en mus f.eks skal gjøre noe, men jeg tror det hadde vært bedre med en kontroller. For når du sitter klar på en mus og tastatur og ikke kan gjøre noe, som gir deg lyst til å slippe, men ja til skyting var mus og tastatur, flott, men usikker på om tastatur var veldig bra for å bevege karakteren, eller om kontroller ville vært bedre.

## Fase 2

1. Opplevelse av menyene

W: veldig intuitive, når jeg først fant de, og brydde meg om de, men jeg var veldig påvirket av første testen, hvor alt jeg gjorde var å løpe rundt, og ingen bruk av menyer, så jeg tenkte ikke over loadout eller annet, tenkte litt over noe lignende som telefonen i gta4, som kunne taes opp, men fokuset mitt var mer på å spille enn å tenke på loadout og sånt, og ser jo nå at hvis jeg hadde brukt menyen fra start kunne jeg nok fullført oppdraget på et min eller to.

2. Innvirket bruken av menyen, på opplevelsen av spillet

W: selv om jeg innså at ja det var en gadget som han tok frem, og for all del, menyene var enkle å navigere og kjempebra, men fordi animasjonene på å ta den fram var så rask så følte det ikke ut som at han dro frem noe gadget. Jeg følte at hele meny bruken ble veldig koblet fra spill opplevelsen, og ble mindre gameplay, og følte mer

som hacks, enn å ha noen enkle kommandoer - det var ikke det at det var vanskelig, men jeg ble trukket ut av spillopplevelsen.

3. Meny - fornøydlig aspekt?

W: likte det en kunne gjøre det, og det den tilbyde, men likte ikke at den på en måte var utenfor spillet, men likte at det var der, hadde den vært plassert et annet sted føler jeg den hadde gitt mer mening. Likte også at det åpnet for muligheter for å kunne leke seg.

4. Likte du bossen

W: Den var ikke veldig interessant synes jeg, fordi, jeg brukte veldig lang tid på å skjønne mekanikken for boss kampen, og det tok en stund før jeg forsto at "åja den personen er ikke et aktivt objekt før den har landet et sted", sånn som car chases i gta, hvor objektene ikke er som kjørende objekt, de kjører heller alltid en bestemt avstand fra deg. Det var som når hun løp fra posisjonene sine, så forsvant game objektet, selv om jeg så en skygge av hun når hun beveget seg, men var ingen mulighet til å skyte på henne i denne perioden, bare når hun sto i ro. Selv om det kunne vært kult så føltes det litt kjedelig når jeg oppdaget det, og det var litt kjipt.

5. Var det innforstått hva objektet var.

W: selve målet med oppdraget - drep hun som skyter på meg, ja sånn skytespill, ja eliminer motstanderen, så det var ganske ok, men fremgangsmåte var mye prøv å feil. Hvis jeg hadde gjort tidligere missions, og hatt like mye tilgjengelig som jeg hadde nå, og visst at jeg hadde disse tingene, så hadde ikke oppdraget vært spennende i det hele tatt, det hadde vært kjedelig og jeg hadde vist med en gang hva jeg skulle gjøre, og bare bombardert henne, eller tilkalt en tanks og fullført det hele med en gang, selv om det selvfølgelig er mange måter å fullføre det på da, som er ganske kult da.

6. Sammenlignet med forrige økt.

W: helt annet spill, det føltes som at det kunne vært utviklet av to forskjellige utviklere, det eneste som koblet sammen - bortsett fra samme protagonist, og at en bruker våpen, var at det hele var surrealistisk på en måte, og det var jo første biten, selv om det var på en helt annen måte. Det var heller demonisk og fantasy preg på, mens dette var mer saints row preg på etterhvert. Begynte mer sånn, typisk military fps, bare mer tullete egentlig. Over det hele en veldig annen opplevelse

7. Kunne du tenkt deg å spille mer?

W: Kunne gjerne likt å spilt det imellom, siden jeg ble litt forvirret rett og slett, hadde nok gitt mer mening, med handlingen som er imellom, med en overgang på en måte.

## 8. Minneverdige øyeblikk

W: når jeg innså at jeg kunne tilkalle en tank, og bare blafre henne ned, det var ganske minneverdig på en sånn “aw come’on - face palm”, men missionet i seg selv, det var jo ikke noe plot eller noe, også var det hele så ridiculous, at jeg valgte å bare fortsette med det å drepe henne (noe som fjernet resten av narrativet fra episoden).

En annen ting, var og at hun ble skutt et sted, også teleporterte hun seg til et vidt annet sted i en bevistløs tilstand, etter å ha bli skutt av en tank, selv om jeg går utifra at det er en spill ting hvor hun alltid skal ende opp der, men det var en veldig obvious disconnect følte jeg.

## 9. Andre tanker, kommentarer.

W: nei, men jeg savnet litt wall locks, det at spiller karakteren låser på en måte til en vegg, og med en gang du skifter retning på spaken, så unlocker han seg, mens her så fikk jeg ikke det til (det er en del av spillet), det var i allefall ikke intuitivt følte jeg da.

## Fase 3

### 1. Tok du i bruk avanserte spillsystemer som helikopter, buddy, combat support, loadout drop in?

- Hvordan endret opplevelsen din når du brukte disse?

W: Eeéh, jeg følte at jeg jukset litt, jeg følte ikke at det ga, det var gøy, men gøy som i saints row, der du tar oppdrag med alle mulig cheats på. Jeg prøvde meg jo først med sånne bombardments og sånt, det var jo fett det forsåvidt, men det hjalp meg ikke da, ikke på dette missionet der da, hunden hjalp jo ved at den fant fiender, miner og diverse. Eeéh, valget mitt av våpen tror jeg var litt futile, siden jeg bare brukte det en gang, på en vakt som jeg sikkert egentlig kunne sneket forbi , hehe, men det mest hjelpsomme var vel egentlig sneaking suiten, men det var jo litt vanskelig å hvor mye sneaking, hvor mye jeg blir oppdaget når jeg går og sånt da, så jeg krabbet på magen mest egentlig.

Ja, ellers la jeg merke til at sandstormen på hele tiden, det var jo da egentlig en ganske grei bugg da når jeg skulle snike meg gjennom hele basen, så den opplevelsen var jo da ganske bra hehe. Ellers vet jeg ikke, jeg følte jo fortsatt, iallefall i starten at faktisk hadde heart pounding, på grunn av at jeg døde første gangen, så var det heart pounding, selv om jeg hadde alt mulig utstyr med meg,

og jeg visste at ja dette går sikkert helt fint så var det likevel en følelse av at hvis jeg ble oppdaget nå så blir det ille likevel, så nei, ja det endret jo opplevelsen, det gjorde det definitivt.

## 2. Positivt/negativt

W: Både og, følte på en måte at siden jeg hadde så mye å velge mellom så var det på en måte litt sånn cheats aktig, som jeg sa, det følte liksom ikke som jeg satt meg opp mot noe vanskelig nå blir jeg glad når jeg er ferdig, men samtidig når jeg begynte å spille, og det gikk til helvete første gangen, og når det gikk bra andre gangen når jeg snek meg, så følte jeg på en måte at det var positivt, fordi at valget av suit, og hunden gjorde det hele bedre, fordi det var på en måte til missionet, det var planlagt, det var liksom her skal jeg snike, så det var bra, så det var både og. Det var litt mye, ja, følte at det fort kunne bli litt lett.

- Kan du huske bestemt minneverdige øyeblikk hvor du tok i bruk disse?

W: Ja, nei, det var jo sandstormen da, hehe, for all del det var ganske fett, hehe. Ble litt skuffet av våpen, det la jeg merke til, følte at hoved våpenet bråket mer enn jeg trodde.

Kjetil: ja du gikk tom for silencer.

W: åja jeg gikk tom, fikk ikke med meg det jeg. Den blir slitt ut liksom, aaah det gir mening, men det forklarer jo det da.

Kjetil: det kommer for såvidt en lyd når den slutter å fungere

W: ja riktig.

- Har du noen bestemte frustrasjoner knyttet opp mot bruken av disse?

W: Ja det var, altså i hvert fall å bla igjennom så blir det alt for mye, det var rett og slett for mye greier. F.eks var det litt frustrerende, der du kan velge mellom forskjellige bombardments, den menyen med forskjellige typer sånt, så var det samme ikon på alle, og du må da lese alle. Forventet egentlig en litt mer intuitiv meny. Det følte mer som et system som var laget enkelt, men så har det blitt lagt til en haug med nye ting, så det var litt frustrerende med at det var så mye ting, så uten litt hjelp så tror jeg hadde blitt lost, rett og slett.

Også var det litt frustrerende det med supressoren, at den begynte å bråke, det fikk jeg ikke med meg i det heletatt.

## 3. Hvilken tilnærming til oppdraget foretrakk du, og hvorfor (stealth, loud etc.)?

W: Foretrakk jo stealth siden det fungerte jo da, hehe. Prøvde meg mer på semi

stealth, hitman style første gangen, drepe alle sammen uten å bli oppdaget, men det gikk jo ikke, hehe. Og det var mest tror jeg fordi jeg trodde jeg skjøt rett på de, men jeg skjøt vist på de rett gjennom bakken, og det tok en stund før jeg la merke til det.

Så jeg foretrakk definitivt stealth, på det missionet i allefall.

Det var litt kjedelig til å begynne med, kanskje ikke kjedelig, men ble litt rastløst, fordi det følte som det tok evigheter, men så var det samtidig spennende da, hadde alltid på følelsen at jeg ville ta han der sånn at jeg ikke ble backstabbet, så ja foretrakk stealth altså, gjorde det.

4. Hvordan vil du sammenligne denne spilløkten opp mot de to forrige?

W: Nå følte det litt mer som et mission, de forrige, i hvert fall den første følte som en walkthrough, det var en helt annen spillopplevelse, det følte litt mer som i dont know, det var veldig on rails, det følte litt som, det var veldig typisk gta faktisk, fordi de første oppdragene på de, har alltid vært sånn du blir trukket på skinner, og deviatere du fra det så er du fucked, eller så stopper det også gir det beskjed om hvor du skal gå for å komme videre.

Det andre oppdraget følte mer som en skirmish liksom, og det var veldig magi i seg begge to, på en måte, mens her var det ingenting, og følte mer som en fps, det gjorde det, absolutt, helt annen spillestil, og likte bedre den siste, fordi det er litt mer meg, litt mer down to earth, nesten realistisk, hehe. Bortsett fra at du har en hund, som sier i fra hvor alle er innenfor hundre meter, og bak en vegg, sånn at du kan se de gjennom vegger og sånt, veldig god til å kommunisere, og det hele, og det var jo litt spesielt, men bortsett fra det så var det mer down to earth, så ja veldig annerledes.

5. Har du noen minneverdige øyeblikk hvor du kom på kreative løsninger for å oppnå bestemte objekter?

W: Det var definitivt den hulen som jeg magisk oppdaget i slutten, og det at du kunne, deaktivere miner synes jeg var litt kult. Så ja, vil kanskje ikke kalle det kreativt, men det med at du faktisk kan gå litt på siden, der det nesten ser ut som det skal være en sånn usynlig vegg og ikke kan gå, men at du faktisk kan snike deg opp den hulen, og på utsiden der det ikke er noen og diverse, de synes jeg var litt kult, og ikke noe alle oppdager, så det var kult.



6. Hva er meningen/følelsene din ang. spillet, og har den endret seg siden tidligere faser?

W: Tidligere fasene så var det ikke et spill jeg kunne tenke meg å spille fordi det ble litt for sært for min smak, det var litt for mye som skjedde på en gang, samtidig som det var litt sånn, hitman/call of duty, og i dont know Asylum, og litt sånn bioshock, syretripp på slutten, så ja liker definitivt bedre spillet nå og kunne tenkt meg å prøve det mer pga. Den fase tre her.

I tillegg var det aaalt for mye tutorial hand holding i første episoden jeg spilte, til det punkt at de ba meg om å styre kameraet, som minnet meg om det første halo spillet.

- Kunne du tenkt deg å spille mer av spillet?

Se forrige

7. Var det noe bestemt fornøyet eller frustrerende i denne spilløkten?

W: Det som var frustrerende var at jeg ikke følte at det var noen sånn grei måte på begynnelsen av spillet å på en måte ta fiendene, det er sikker det, men det har jo ikke jeg lært, og jeg er liksom litt vant til at på begynnelsen av missions så skal det være litt lett, og det var ganske frustrerende når ting begynte å skje og de oppdaget meg og sånt, vet ikke at de bare gikk rett på, og de ikke oppførte seg helt logisk forhold til det jeg forventet, men også frustrerende når jeg ble oppdaget, men det er jo litt mening også, og sier seg selv, ja bortsett fra det nei ikke noe spesielt

8. Hvorfor har du valgt denne bestemte inndatametoden?

W: Valgte kontroller, nå har jeg spilt litt fps på pc, men i det siste så har det mest gått i konsollspilling og jeg er veldig vant til xbox kontrolleren, og synes den fungerer ganske bra til aim og alt mulig og føler jeg har litt mer kontroll, også er det litt mindre knapper å forholde seg til. Det er egentlig mest preference by default egentlig.

- Oppfølgingsspørsmål kan forekomme i form av hva som fører til dette valget (tidligere erfaring, følt mer kontroll etc.)
- Hvis du skulle spille gjennom spillet på egenhånd, hvilken inndatametode ville du valgt?

W: Hadde nok valgt kontroller tror jeg, det er litt det der med at jeg ikke føler at jeg sitter komfortabelt med mus og tastatur, mens når jeg sitter med kontroller så kan jeg sitte mer komfortabelt, lent tilbake å sitte med en kontroller i fanget, i stedet for en planke som ligger foran meg, så det er litt det, så hadde nok valgt kontroller.

9. Hva er din helhetlig erfaring/følelser etter alle tre fasene?

W: Av spillet, ja nei, dette her med at det er sykt mye “greier”, du blir sikkert vant til det, men jeg er vant til mye mindre hud, mye mindre gadgets kan du si, på en gang i hvertfall, så samtidig som det sikkert kan være interessant og gøy å kombinere ting og sånt, så har jeg litt på følelsen at det blir veldig fort å bare bli vant til å bruke standard oppsettet og ikke bruke så mye av det, så da blir det litt mye på en gang. Synes f.eks at det å kunne se fiendene gjennom vegger var litt mye.

Og, ja, etter alle fasene så er det igjen dette her, at det ikke bare er så mye effekter, og effekter og drit, men det der magi greiene, som sikkert er en del av franchisen, men personlig så er det en veldig disconnect, men det var alt for mye i begynnelsen, for meg så var det litt for voldsomt. Nei, ellers kult spill, men ikke helt min greie, kunne spilt det mer nå, men hadde ikke kjøpt det, kanskje lånt det da men.

10. Hvordan opplevdes det å få mer kontroll på spillets input?

W: Føles jo mye bedre, det vil si, det var ekstremt frustrerende i begynnelsen, selv om det var utrolig tregt i begynnelsen, fordi læringskurven er nesten flat i begynnelsen også skyter den rett til værs, og det er ikke så intuitivt. F.eks fikk jeg ikke med meg hvordan å bruke cover mechanics, det er vanlig at det er på en knapp, men fikk det ikke til, men jeg fant det ikke, så det var ikke så intuitivt for min del da.

- Hvordan opplevdes det å få flere verktøy å rutte med i løpet av spillingen?

W: Det var jo interessant, men som sagt alt for mye, så det ble litt sånn kanskje litt vel overdone.

Nei, det var jo alt i alt positivt å få flere verktøy sånn at en kan customize til bestemte missions, men igjen alt for mye ting.

- Har denne undersøkelsen gitt deg lyst til å spille spillet mer? (Hvilke bestemte elementer tiltrekker deg mest etc)

W: Ja, nei, gikk litt inn på det i sted, ja litt mer lyst å spille mer pga. Denne fasen her, og det som tiltrekker mest, er vel det at det var litt mer, I don't know call of duty, swat geriljakrig liksom, litt mer likt ting jeg er vant til, og eller kan en kanskje si at mangelen på elementer som var med i de forrige fasene som gjorde meg mer interessert. Hehe.

## 7.3.2 Oscar

### Fase 1

Gir først litt intro informasjon

#### 1. Spill erfaring

O: generelt spilt mye, men mer 2d plattformere, enn 3. Pers skyting, som dette er, men spilt noe av dette også. Har også en del mgs spill tidligere, de har jo veldig varierende måte å kontrollere det på. Har også testet spillet hos en kompis i en 5-10 min tidligere.

#### 2. Spill ferdigheter.

O: Er ikke noe konkurranse gamer, men spiller mest for narrativ, på den måten er jeg god nok til å klare det meste der, men kommer jo da ann på spillet, men vil si at jeg er relativt god, ganske sånn ok.

Info om hvordan testingen vil bli gjort.

Og om senere spørsmål etter testingen.

#### 1. Hva synes du om spill økten

O: ble droppet litt midt inni alt. Det var litt sånn, litt mye på en gang, men etterhvert som du kom inn i det, så var det veldig bra med den tutorial - en slags mini tutorial som jeg likte i starten

#### 2. Positive/negative kommentarer til det du spilte

O: egentlig greit, når jeg ikke fant kontrollerene, så sjekket jeg options, men der stod bare xbox kontroller innstillinger, så måtte jeg sammenligne med hvilke knapper som gjorde hva på den illustrasjonen i options, og så gå inn på change controls for m+k, og sammenligne hvilke knapper, som sammenlignet gjorde hva på xbox for å finne ut hvordan jeg faktisk kom meg av hesten. Jeg kunne ikke direkte se hvordan jeg kunne se det.

La positivt merke til, at det kom kontekstuel opp hva en kunne trykke på når du kom bort til ting, f.eks når jeg nærmet meg en port-o-potty, så kom det opp med ikon at jeg kunne enten gjemme meg inn i den, eller stappe en motstander inni den. Men fordi det kom opp der, så savnet jeg det når jeg f.eks gikk rundt å bar på en fyr, for da kunne jeg ikke huske hva knappen var, som førte til at jeg gikk rundt å bar på en fyr i flere minutter fordi jeg ikke kom på hvilken knapp det var for å sleppe han ned.

Det var forøvrig veldig mye knapper å forholde seg til, spesielt med kikkerten, hvor det var trykk F for å ta opp kikkerten, så V for å zoome inn, så hadde å trykk på enda en knapp for å markere knapper, også var det, trykk noe for å gå ned på huk, også hold inn enten ctrl eller shift for å gå sakte, samtidig som det var motsatt for å løpe, og hvis du trykket på space mens du snek deg rundt, så kaster han seg frem over, som kan potensielt ha fatale konsekvenser. Et eksempel var i slutten av oppdraget, hvor jeg plutselig kastet han jeg skulle redde fordi jeg trykket på feil knapp.

3. Minneverdig opplevelser.

O: den kombinasjonen, med veldig åpent for hvordan en skal angripe et område, f.eks så prøvde jeg først å gå rett inn i den ene basen, men når det ikke fungerte, så gikk jeg liksom rundt hele grei, ikke at det gikk så mye bedre, også samtidig, så når jeg ble lei av å bli sett, men så kunne jeg lett skifte til å bare skyte folk alle folkene i stedet for å snike, så da var det fint at jeg bare kunne bestemme meg for vet du hva jeg bare skyter alle isteden, men det var jo egentlig mer stress det, men det var veldig balansert likevel.

4. Noe bestemt vanskelig

O: mest kontrollerene, med at det var veldig mye på en gang. F.eks for å velge våpen, så trykket jeg på 123, som gjorde meg var usikker på om jeg faktisk hadde plukket opp våpenet, eller bare sett over hva som var der, spesielt med alle animasjonene for at alt kommer opp veldig mye, spesielt går litt fort med alt actionet rundt.

5. Narrativ.

O: siden vi ikke har første oppdraget, så ble det ikke så mye introduksjonen, men eller så blir folk introdusert på en veldig god måte, på en veldig filmatisk måte, som på en måte en veldig god film, selv om selve narrativet ikke er så veldig god så er det veldig god presentasjon.

6. Passende mengde narrativ.

O: nå kom jo mesteparten på starten, som jeg følte var litt lang, men som bakgrunn, så har jeg spilt mgs4, som er kjent for å ha utrolig mye cutscenes, så jeg ble litt nervøs pga de erfaringene, men i stedet for sånn så ble jeg bare droppet inn i alt etter den første cutscenen som var veldig bra da.

Artig å kunne bruke kyllinghatt hvis jeg ville gjøre ting lettere for meg selv, men det sa jeg nei til da. Jeg så at spillet på en måte hadde sin egen form for humor, f.eks når de introduserte karakterene, så hadde de også solbrillene som også blir introdusert,

med full produkt trademark og det hele.

Men selve spillingen, synes jeg gikk bra, siden det er første gangen jeg har spilt spillet. Ja jeg gjorde jo en del tabber, men sånn er det, og spillet var veldig flink til å si at hey, nå døde du, men bare prøv igjen fra et veldig nært checkpoint, sånn at du ikke mistet noe spesielt tid og arbeid, i stedet for å ha en satt mengde liv osv. I tillegg så er fortsatt motstanderne du allerede har markert, markert etter at du døde, sånn at du ikke føler at du har mistet all progresjon.

7. Lyst til å spille spillet mer?

O: Ja, det gjorde det, jeg tror mer enn alt så ga det meg lyst til å spille med en kontroller, rett og slett fordi, kontrollene var på kontroller, så ville vel da ha vært lettere å sette seg inn i, samtidig så vet jeg fra å ha testet det på playstation at, det fungerer bra på kontroller.

## Fase 2

Diskuterer bruk av kontroller, Oscar velger Kontroller

1. Opplevelse av menyene

O: Greit, gikk litt frem og tilbake i fanene, men blir jo mer vant til de med spilling, ellers var det kort vei inn til hver ting.

2. Nødvendighet for å bruke menyene under spilling, opplevelse, immersion etc.

O: Menyene ser såpass ut som resten av spillet, at de tar meg ikke ut av spillet, det er jo også sånn at tiden fortsetter selv om du er i menyene, det hjelper veldig, da er det ikke sånn at en har ubegrenset med tid, som f.eks første gangen jeg skulle lete etter hjelp i menyen brukte jeg så lang tid at hun (bossen) hadde flyttet seg, så det hjelper med opplevelsen

3. Er meny bruken et fornøylelig aspect

O: ja det gir deg en god del mer muligheter og bredde til det en kan gjøre. Selve den menyen er bra, men den menyen for å bruke våpen, den får jeg ikke til, den bare spretter rundt. Den skjønner jeg ikke hva jeg skal gjøre med. Men meny bruken er litt morsom fordi den presenterer informasjonen, samtidig som du bruker informasjonen, du har kart der osv, istedenfor minimap, så isteden for det så har du en egen ting, som jeg synes fungerer veldig bra.

4. Selve boss kampen

O: Kort, men det tror jeg er fordi jeg gikk all out, og bombet bossen i tryne liksom.

- Ga det en god opplevelse at den ble kort, synes du?

O: for meg så var den dårlig, men så jo at jeg brukte masse credits på det så hvis jeg hadde vært mer inne i spillopplevelsen, så hadde jeg nok prøvd å gjøre det på en billigere måte. Og funnet en løsning som hadde kostet mindre, noe som jeg liker i spill, med det strategiske elementet, og det å gjøre det fort og gælig, koster noe, og du taper noe på det, så jeg skjønner poenget, og at det er mulig å gjøre det enkelt for meg, men for meg som kun spilte den bossen, så synes jeg det var litt enkelt.

5. Ble det forstått hva du skulle gjøre fra start

O: jeg skjønner jo poenget, det jeg tenkte at jeg kanskje skulle finne i menyen var, mer sånn, kanskje en smokescreen, som jeg hadde droppet i mellom for å bevege meg fremover, sånn typisk som når man spiller spill er at hvis det er en sniper så er det på en måte et puzzle map for å komme seg frem.

Første instinktet var egentlig å bare spurte frem, men det hadde ikke gått, så det var jo litt prøv og feil.

6. Sammenlignet med forrige økt.

O: Kortere, det var mye mer med meny bruk å gjøre, den første var mye markering og strategi på å snike seg frem, mens denne var mer på bruk av meny systemer og sånt. Jeg synes denne var enklere selvfølgelig, siden jeg nesten tapte sånn 3-4 ganger forrige gang. Var hakket mer spennende denne gangen, siden du sa at dette var en boss, så ble det med en gang mer spennende

7. Lyst å spille mer?

O: mer interesse nå ja. Den første gangen, var jo, da var det på en måte bare starten, med mer basic, mens her var det mer utstyr og mer muligheter. I forrige oppdrag, så fant jeg f.eks ting rundt, som diamanter og sånt, og her så jeg liksom hvordan jeg brukte de og sånt, så fikk på en måte sammenhengen, den progresjonen, så det ga meg mer lyst til å spille.

8. Spesielle minneverdige situasjoner

O: på slutten av oppdraget, så sa han ene på radioen at jeg kunne ta livet av bossen, og da holder snake pistolen mot hodet hennes, og da følte jeg at jeg kunne ha trykket på en knapp og skutt henne, noe jeg ikke gjorde, men det likte jeg, det ble ikke presentert overfladisk, men du kjenner med en gang at her er det et moralsk valg likevel, noe jeg likte veldig godt, og var en veldig spennende måte å presentere det på, ved at kameraet

presenterte seg mye mer filmatisk, med bossen i en offer stilling, som for meg gjorde valget enklere - å redde henne.

### 7.3.3 Nora

#### Fase 1

Har en kjapp diskusjon av hva som kommer til å skje osv. Før start av testen.

1. Kjennskap til spill

N: Dårlig, spiller lite, ikke så mye og ikke så ofte. Har spilt WoW, slåssespill (MK, Tekken osv), WoW jeg har mest erfaring med, ellers ratchet and clank, sånne litt lette spill, ikke mye skytespill.

2. Ferdigheter med spill

N: En dårlig gamer, veldig dårlig. Jeg blir så fort nervøs og klarer ikke å tenke, så tar tid for meg å sette meg inn i ting, spesielt hvis jeg ikke er veldig interessert i spillet, sånn som nå.

3. Kjennskap til *MGS V*

N: Folk har nevnt det, men ikke noe spesielt

4. Kjennskap til serien

N: Eneste jeg vet er at det er en random fyr som er veldig kul og løper rundt og får ting gjort.

5. Kjennskap til sjangeren.

N: Både ja og nei, ikke akkurat denne typen her, men spill som Ratchet and Clank er jo 3. Pers hvor du skyter, men der er jo fokuset på platforming

6. Introduksjon av spill elementer

N: Det var det, egentlig, men jeg skjønnte det ikke med en gang, og fikk ikke helt til å trykke på alt som jeg skulle. Så ja det var bra introdusert, men ikke helt for meg på en måte. Jeg ble litt satt ut, og glemte underveis hvilken knapp som gjorde hva.

Det gikk veldig fort, så kunne tenkt meg litt mer info underveis, for å minne meg på hva og hvordan ting gjøres, sikker mange som ikke ville likt det, men jeg kunne trengt det.

Klarte rett og slett ikke å sette meg helt inn i det

7. Mellomrom mellom introduksjon av elementer

N: Mye på en gang, kanskje derfor jeg hadde problemer med å få med meg alt og huske alt. Men det kan jo ha mye med at jeg ikke spilte oppdraget før dette da.

8. Hva syntes du om spill økten

N: Ble litt interessant i slutten, når jeg begynte å få ting til, spesielt i slutten når jeg fikk de til å sove, og ikke ble sett. Men ble rett og slett for nervøs til å få alt til.

9. Minneverdige situasjoner

N: Det at jeg kastet meg ned på bakken uten å mene det, som fikk meg til å skvette. Også bråker han så mye, som når han smalt opp døren, som jeg skvatt av, men nærmeste vakten hørte det ikke, som var litt morsomt, samme var det når jeg kom borti noen kanner, som bråket, men de hørte det ikke.

10. Negativt minneverdig

N: Nei, som sagt, var mest når jeg glemte ting, og ikke visste hva jeg skulle gjøre, som igjen gjorde meg frustrert.

11. Spesielt vanskelige ting.

N: Ja, å komme meg igjennom akkurat det punktet, som jeg nå tenker på at jeg bare kunne gått rundt egentlig, jeg hadde jo en hest så kunne jo bare ridd rundt hele campen. Så hadde jeg sikkert kommet lengre inn i oppdraget også.

Synes over det hele at jeg klarte meg overraskende bra, som var ganske kult. Selv om jeg tømte et halv magasin på en fyr som var alt for langt unna, så jeg traff han ikke.

12. Narrativ

N: Ganske greit, litt stressende, med tanke på tidspresset, men det ga jo også en viss spenning, pga tiden du har. Dette hjalp jo og pga. dag/natt syklusen i spillet, men det tok meg litt tid før jeg la merke til det. I didn't get it at first, hehe.

13. Narrativ forhold til spilling

N: Følte det gikk litt fort, plutselig, ellers var det greit mengde egentlig. Kanskje litt lite.

14. kontroller/ mus tastatur

N: Egentlig ganske greit, føler jeg er mer sikker med m+k enn med kontroller, fordi jeg er mer erfaren med m+k, men med alle de andre knappene ble det litt vanskelig



likevel. Så det blir en trade off, på keyboard var det mye å huske på, mens på en kontroller kommer jeg til å ha problem med å styre kamera.

## Fase 2

Gir først litt refreshing til tester ang. Kontroller

Tester vil fortsette å teste med m+k

### 1. Opplevelse av testen

N: Det tok litt tid før jeg skjønnte hva jeg skulle gjøre, spesielt med kart/menysystemet. Også var det det å skjønne hvor langt unna bossen faktisk var. Etterhvert så skjønnte jeg også hvor mye jeg kunne bevege meg rundt og sånt da

### 2. Opplevelse av menyer

N: Våpen menyen var litt vanskelig, siden den popper opp så fort og sånt, men den kart menyen fungerte veldig greit, når jeg skjønnte den

### 3. Immersion og meny bruk

N: Jeg synes det er ganske greit å ha sånt. Det hadde sikkert vært lettere å få til på kontroller enn med m+k.

I seg selv så liker jeg egentlig ikke å leve meg for mye inn i sånne spill, synes det påvirker meg på en dårlig måte, så den meny bruken og det holder meg på en måte i denne verdenen.

### 4. Fant frem i menyen

N: Etterhvert ja, men tok litt tid. Det var flere ting der jeg kunne brukt, men så de ikke før senere

### 5. Meny bruk, fornøydlig aspekt av spill opplevelse

N: Ja, synes det var greit, den var egentlig oversiktlig, men ble litt stresset, så tok meg litt tid før jeg faktisk tok meg tid til å se meg rundt i den

### 6. Opplevelse av bossen

N: Irriterende, den var egentlig ikke så vanskelig, i forhold til det jeg trodde, men var egentlig ganske greit å bevege seg rundt, men irriterte meg litt når jeg ikke fikk han til å gjøre det jeg ville at han skulle gjøre, fordi jeg ikke fikk kontrollene helt til.

### 7. God eller dårlig spill opplevelse

N: Greit, egentlig, midt på treet.  $\frac{3}{5}$  opplevelse

8. Innforstått hva en skulle gjøre

N: Prøv og feil, mye prøv å feil. Men etterhvert når jeg skjønnte mer så gikk det bedre.

9. Sammenlignet med forrige økt

N: Mye bedre, mer åpent og kunne bevege meg litt mer, men sist gang gikk jeg feil i forhold til der oppdraget sa jeg skulle gå

10. Lyst å spille mer?

N: Ja, egentlig, kunne tenkt meg å prøve litt mer

11. Endret seg siden forrige fase

N: Ja, når jeg spilte forrige gang så hadde jeg egentlig lyst å bare si fuck this å gi opp, men så tenkte jeg nei, jeg er nødt til å prøve en gang til, og sette opp en strategi, så ja, har lyst å prøve mer.

12. Minneverdige opplevelser

N: Ikke som jeg fanget opp noe spesielt, jeg kommer ikke på noe, nei

### Fase 3

Tester velger utstyr og bruker litt tid på å gjøre seg vant til kontroller før start av oppdraget

1. Bruk av avanserte spill systemer

N: Ja, var mye bedre å bruke de nå enn forrige gangen, men var litt vanskelig å treffe med f.eks sleep bombardment.

2. Endring av opplevelse pga systemene

N: Synes ting var lettere, men det var mye pga. Kontrolleren i stedet for m+k.

3. Minneverdige øyeblikk

N: Ja, det var veldig gøy å få til å bruke hunden min til å elektroshocke en motstander, var en veldig kul ting å se, ellers så hadde jeg en veldig fin bombardment med sleep greie også.

4. Frustrasjoner

N: Mest at jeg hadde en tendens til å trykke feil knapp, så var mange ganger jeg trykket feil på menyen, selv om jeg visste at det var feil, og ble mest irritert av meg selv.

På den andre siden var det veldig tilfredsstillende både å bombe bossen forrige gang, men også nå å få til å bruke disse tingene bedre.

5. Tilnærming til oppdraget

N: Jeg likte det å bare snike meg rundt / krype rundt, og gikk veldig greit. Likte også å bedøve motstanderne, i stedet for å drepe alle. Synes det var mer gøy enn å skyte etter alt

6. Sammenligning med tidligere økter

N: Følte dette var mer gøy, mye fordi jeg brukte hunden min og konsoll kontroller, det fikk egentlig ting til å føles lettere, til tross for at oppdraget er vanskeligere i seg selv.

7. Kreative løsninger

N: Å bruke sandstorm var veldig greit, og kom meg veldig rundt med den. Ellers også det at jeg sneik meg frem mellom lyskasterne deres.

8. Følelsen ang. Spillet, endring?

N: Ja, den har det, nå var det faktisk gøy. Tidligere var jeg så veldig nervøs og mislikte det, og etter andre fasen var det litt midt på treet, men nå til slutt fikk jeg faktisk lyst til å spille mer. Generelt synes jeg spillet virket mye morsommere nå i slutten.

9. Inndata system

N: Ja, likte veldig mye mer å bruke konsoll kontroller, over m+k. Jeg hadde definitivt brukt en konsoll kontroller, helst en xbox kontroller. Liker forøvrig xbox kontrolleren bedre enn dualshock fra playstation, så ville helst ha brukt det.

10. Helhetlig erfaring / følelse

N: Det var gøy, jeg har ikke gjort så mye dette her, så det var veldig gøy.

Jeg følte meg mer bestemt og sikker på hvordan jeg skulle bruke verktøyene mine.

Likte også veldig godt den følelsen jeg fikk når jeg snek meg rundt, og kjente litt på stresset når jeg såvidt kom meg rundt vaktene og ikke ble sett.

11. Mer verktøy å bruke

N: Jeg følte meg så powerful med alt tilgjengelig, og det var veldig gøy.

12. Hvilke elementer av spillet tiltrekker

N: Liker friheten til å bestemme selv hvor og hvilken vei jeg kan gå, og hvordan jeg kan gå frem. Jeg liker at du har mange muligheter.

13. Andre kommentarer

N: Gikk mye bedre med kontroller, selv om jeg er mindre erfaren med det, så var det mye bedre

### 7.3.4 Lucas

#### Fase 1

1. Kjennskap til spill

L: Nei, begynte å spille tv spill på NES, og Gameboy, samt sega mega drive hos venner før super nintendo kom, som vi også spilte, også ikke så mye på en god stund, før jeg hadde en Xbox, og en Nintendo Wii, og i nyere tid så har jeg hatt både en PS3 og PS4, og har nylig spilt Witcher 3.

2. Ferdigheter

L: Kommer ann på spillet, hvis jeg liker det, og synes det er kjekt å spille, så kan jeg komme igjennom det relativt fort, hvis ikke så gidder jeg fort ikke, og så blir det bare liggende. Er ofte noe som på en måte må selge meg på det.

3. Kjennskap til MGSV

L: Ikke til akkurat dette MGS spillet, men har testet et av de tidligere spillene for veldig lenge siden.

4. Kjennskap til MGS

L: Jeg vet at han heter Snake, og at han er en Army, Intelligence, agent dude, som du skal utføre missions med. Men en av grunnene til at jeg ikke har spilt de så mye, er fordi jeg ikke er så begeistret for å gå rundt å skyte, gir du meg en katana så er jeg mye mer med, hehe.

5. Kjennskap til sjanger.

L: Har vært borti sjangeren, men er ikke såne spill eeg spiller mest av, er mer interessert i sverd og magi type ting, samt slåssespill egentlig.

6. Mening etter spilling

L: Føler jeg burde vært igjennom en tutorial, blir veldig fort kastet ut i handlingen, spesielt hvis en ikke har spilt forgjengerne, ikke minst lært seg de forskjellige våpnene. Selve spillingen var forsåvidt greit, men savner litt tutorial da. Det irriterte meg litt at de ikke gikk ned med en gang når jeg skjøt de, fordi jeg ikke la merke til at jeg skjøt med en bedøvelses pistol. Jeg synes det manglet litt informasjon, og kunne f.eks gått tilbake og sett litt på hva oppdraget faktisk ville at jeg skulle gjøre, det var ikke innlysende at jeg faktisk kunne se rundt på idroiden og finne det der.

Det var forøvrig veldig greit at det var et checkpoint rett på utsiden av campen som

gjorde at jeg kunne teste ting litt ut, så hvis jeg hadde prøvd igjen, så ville jeg nok testet det samme igjen, bare kanskje med litt mer stealth.

7. Spesielt vanskelige ting

L: Nei, må være, kanskje, når jeg ble oppdaget, så ble det veldig vanskelig, men det er jo også en viktig ting i spillet og da, alt skal jo ikke være kjempelett, da er det jo ikke morsomt, da er det jo bortkastet, så må jo kjempe litt også. SÅ hadde jeg hatt litt mer feel for våpen og sånt så hadde det gått litt bedre da.

8. Minneverdige øyeblikk

L: Jeg likte det at du, ikke bare kan trykke på førstehjelp og instantly heale, men at du i stedet må komme deg unna for å få det til. Ellers så var det et granat kast hvor jeg tok ned 4-5 folk som var veldig gøy da.

9. Narrativ

L: Altså, det eneste jeg har fått med meg er at er noen jeg skal redde, og jeg har solbrillene hans, så det er ikke så mye informasjon.

10. Lyst å spille mer

L: Ja, kunne vært spennende å spille det mer, likte det f.eks mer enn Bloodborne, hvor jeg daua og daua, mens her var det jo en viss progresjon.

## Fase 2

1. Opplevelse av menyene

L: Gikk litt bedre nå, men slet litt med å styre med våpen menyen, den hopper så fort at jeg fikk den ikke helt til hele tiden.

Ellers synes jeg var dårlig gjort at hun jeg sloss mot hadde så mye overnaturlige evner, som var litt dårlig gjort siden jeg hadde dødd hvis jeg hadde gjort det samme.

Forventet ikke det på forhånd iallefall da.

2. Opplevde å gå inn i menyen

L: Hoved menyen gikk greit, og er kjent med lignende fra tidligere, men likte ikke våpen menyen.

3. Immersion og menybruk

L: Jeg synes at du trenger å bruke litt menyer, hvis en skal kunne tilkalle air support og sånt, så må det jo være en måte å gjøre det på, og ikke bare trykke på en knapp, så jeg liker litt det systemet der. Men hadde litt problemer med å finne alt med en gang,

men det kommer jo av at jeg bare har spilt små deler da, så hadde jeg hatt mer erfaring føler jeg selv at den menyen hadde fungert veldig bra og gått veldig fort.

4. Fornøyelig aspekt med air support osv.

L: Ja, det var veldig kult å kunne gjøre disse tingene. Å tilkalle ammo og sånt var forøvrig veldig accurate, ved at jeg nesten fikk den i hodet når jeg hentet inn en sniper rifle.

Jeg synes det også var veldig greit å ha med den hunden, som fant henne for meg av og til (innen ca 40m in game), det gjorde prosessen med å finne henne litt lettere også. For meg som gamer, så hadde jeg tatt hu med sniper rifle, siden jeg selv synes det er litt feigt, eller cheating og bare drepe hu med en airstrike, så hadde jeg sittet hjemme, så hadde jeg ikke gitt meg før jeg til slutt hadde tatt hu med sniper rifle.

5. Opplevelse av boss kampen

L: Det var til tider vanskelig å finne hu, og tok litt tid før jeg fant ut hvor jeg kunne bevege meg, siden hun så meg over alt, også måtte jeg komme meg inn i kontrollene igjen. Også oppdaget jeg ganske fort at geværet jeg hadde ikke hjalp i det hele tatt siden jeg måtte komme meg nærmere henne, så hadde jeg hatt sniper rifla fra start av, kunne jeg bare skutt henne med en gang.

6. Innforstått hva oppdraget krevde

L: Ja, jeg visste jo at jeg skulle drepe en person, det var helt klart, og det var jo enda klarere når jeg ikke kunne gå en meter før jeg ble beskutt, i tillegg så forteller jo han ene på com greia det samme. Jeg fant forsåvidt også ut at hvis jeg brukte kikkerten så fikk jeg intel på hvor det var smart å gjemme seg osv da. Som var veldig greit.

7. Sammenlignet med forrige

L: Følte jeg fikk mer dreisen på det hele denne her runden. Første gangen så trykket jeg jo feil og skifta bort våpenet når jeg skulle angripe. Men var jo noen problemer her også, som når jeg ikke klarte å sikte med våpenet, og zoomet inn og ut med kikkerten i stedet.

8. Kunne ønsket å spille mer?

L: Både og, det virker greit nok, men jeg foretrekker sverd og magi og sånt.

9. Har det endret seg siden forrige gang.

L: Det er vel omtrent det samme, men det går mest på den typen spill jeg liker, jeg foretrekker slåssespill eller kampsport ting, eller fantasi ting med sverd osv da.

10. Minneverdige øyeblikk

L: hehe, når kikkerten ikke ville skyte siden jeg trodde det var våpenet mitt i starten.

Det var jo også den ene irritasjonen, når jeg prøvde å kaste en granat, men fra posisjonen jeg sto på så nådde den akkurat ikke frem, mens hadde jeg kommet på det et minutt tidligere så hadde jeg klart det fra den posisjonen, men før jeg kom tilbake dit så flytta kjerringa på seg. Ellers så var det jo positivt at jeg ikke døde denne gangen da.

### **Fase 3**

Jeg følte jeg kom litt dårlig ut siden jeg skjøt de i starten, og da etter det så ble checkpointen min lagret til at de var på high alert, så det ødela litt, isteden for at jeg fikk en mulighet til å prøve å snike meg rundt. Men fikk i det minste blitt mer kjent med skytingen og tanks styringen da. Og siden de alt var på high alert så endte jeg opp med å drepe alle som var i basen, men det ble jo ikke så lett siden det hele tiden kom flere av de da (er en satt mengde folk i hele basen, men alle flokker etterhvert til der du er som derav gir følelsen av at det hele tiden kommer nye folk)

1. Bruk av avanserte systemer

L: På alle måter, hehe.

2. Endring av spill opplevelse pga disse

L: Jeg følte at jeg i allefall fikk en større sjanse hvis jeg brukte air support osv, så lenge jeg klarte å markere de, så fikk jeg drept de med air support, som igjen ga meg litt mer mulighet til å bevege meg rundt

3. Minneverdige øyeblikk knyttet til disse

L: Hehe, når jeg veltet tanksen. Ellers var så fant jeg fort ut hvor mye lettere ting ble hvis jeg fikk market folk med kikkerten før jeg prøvde å eliminere de, siden det da ble mye lettere å treffe de med air support osv.

4. Frustrasjoner knyttet til disse

L: Nei, egentlig ikke, jeg var jo allerede oppdaget, så jeg hadde på en måte akseptert at de skjøt etter meg, så da gjorde det meg ingenting å bare bombe de.

Ellers så ser jeg det er mye jeg kunne ha lært, hvis jeg skulle spilt spillet mer på et senere tidspunkt.

5. Tilnærming til oppdraget

L: På grunn av at jeg var litt uheldig med når checkpointet mitt lagret seg, så fikk jeg ikke så mye andre alternativer enn å bare gå inn loud og skyte alt, men jeg hadde nok prøvd en annen approach om jeg hadde hatt en annen checkpoint, f.eks å prøve å snike meg rundt de.

6. Sammenlignet med tidligere tester

L: Jeg følte at jeg hadde mindre kontroll, på forrige testen hadde jeg bare en person å ta høyde for og passe meg for, mens her kom det hele tiden grupper på 4-5 etter meg, så det ble mye på en gang. Det at de beveger seg korrekt på en militær måte, gjør det jo også vanskeligere for meg når jeg har kommet opp i den situasjonen da.

7. Mening / følelse nå, i forhold til tidligere

L: Altså, jeg fikk jo mer sans for spillet etterhvert da. Jeg koset meg jo en del når jeg løp rundt nå i slutten

8. Interesse for å spille spillet mer

L: Joa, jeg kunne nok tenkt meg å prøvd litt til, men vet ikke om jeg villet betalt for det, så kanskje i første omgang så hadde jeg lånt det av noen og prøvd det litt mer.

9. Fornøyelig / frustrerende øyeblikk

L: Frustrerende var jo at de allerede hadde sett meg, også var det jo det at jeg hele tiden glemte å sjekke hvor mye ammo jeg hadde igjen, som var litt frustrerende da.

Ellers så var det veldig morsomt at en av soldatene ble bombardert av de andre soldatene fordi han gikk for å sjekke området jeg nettopp hadde vært på samtidig som de bombet alle områdene de hadde sett meg på, så det var veldig morsomt å se.

10. Bruk av controller

L: Både og, av og til følte jeg at jeg ikke skjønnte hvorfor de fullstendig endret styre måte for tanksen, når du endelig hadde blitt vant til normal styring, så kommer en helt annen måte å styre på gjør ting fort veldig forvirrende. F.eks det at skyteknappen, kjører tanksen fremover istedenfor å skyte når du er inne i tanksen.

Så jeg tror jeg hadde klart å komme meg frem mye mer, hvis jeg faktisk hadde fått tanksen til å fungere.

11. Helhetlig erfaring/følelse

L: Nei, altså det er klart at når du blir kastet rett ut i det så blir det litt mye, men det virker som det er veldig mye å by på, og mye å lære, så det virker som det er et ganske



dypt spill da.

Eneste er at jeg synes fortsatt våpen menyen er veldig tungvint, og slitsom å bruke.

12. Følte du at du fikk mer kontroll/mer komfortabel etterhvert

L: Ja det gikk jo mer automatisk etterhvert, og jeg hadde nok kommet meg mer inn i det om jeg hadde spilt, men våpen menyen slet jeg fortsatt litt med, også glemmer jeg fortsatt å faktisk sjekke ammo

13. Opplevelse av å få mer verktøy osv.

L: Gir mye mer muligheter, og gjør at du faktisk kan klare å ta disse overnaturlige bossene sånn som i forrige oppdraget jeg spilte, ellers så hadde en jo fort blitt låst til å bare snike seg rundt gjennom hele spillet.

14. Gitt lyst til å spille mer

L: Ja, både og, men er jo også andre spill jeg heller ville spilt da

15. Elementer tiltrekker deg til spillet

L: Vel det er forskjellige ting som er veldig like andre spill da, i witcher og har du jo en åpen verden med en hest, og snikingen kan jo minne om assassins creed osv. Ellers så har jeg jo muligheten til å samle planter her også da, hehe.

Men eller så blir det jo sånn som om oppdragene er spennende og morsomme, og gir meg lyst til å fortsette med det, men det er jo klart at dette spillet gir meg jo veldig mange forskjellige måter å komme meg gjennom oppdragene på, og det er jo et veldig bra aspekt

### **7.3.5 Emma**

#### **Fase 1**

1. Kjennskap til spill

E: Veldig god, vet om de fleste spill, men det jeg spiller mest selv, er fantasy type spill, og ikke skytespill. Har hørt om spillserien da, hørte også en del om hele den konami v. kojima situasjonen i fjord da

2. Ferdigheter med spill

E: Middels, fordi jeg blir ikke alt for avhengig, som sikkert hadde gjort meg bedre til spill, men spiller mest casual. Har for såvidt spilt igjennom dark souls serien, som er

kjent for å være vanskelig da, så har noe ferdigheter, men igjen så er jo det fantasy da, så det blir et godt stykke unna skytespill som dette da. Har forsåvidt spilt assassins creed, av spill som er litt nærmere enn dette kanskje da.

3. Kjennskap til *MGS V*

E: Har hørt om det, har bl. annet sette folk spille det på youtube kanaler jeg følger, så kjenner en del til det på den måten.

4. Kjennskap til sjangeren

E: Nærmeste jeg har spilt er vel assassins creed, men har kjennskap til spill som thief, dishonoured og deus ex som kan ligne litt da.

5. Hva synes du om økten

E: Det var kjempegøy, overraskende spennende egentlig. Det var litt funky kontrollere da (brukte m+k), det er greit at det er masse menyer, og mye å gjøre som er bra, men siden jeg er ny så fikk jeg ikke helt til å bruke alle disse menyene da, men med mer spilling så vil nok det gå bra.

6. Minneverdig hendelser

E: Ride på hesten, samt å skyte fra hesterygg, minnet meg på en måte om occarina of time, men der kan du ikke styre hesten samtidig da, så dette var jo på mange måter mye bedre. Ellers minnet det meg ikke noe på andre spill, som er ganske bra da.

7. Frustrerende situasjoner

E: Dette her med at jeg ikke kan alle kontrollene, osv. Og at jeg ikke visste hvordan jeg sniker rundt og komme meg unna, også trengte jeg sikkert ikke å ta alle sammen som var der, og bare plukket med meg papirene og stukket videre.

Likte veldig godt at jeg kan gjøre ting på den måten jeg hadde lyst til å gjøre ting, og evt. Skippe over ting, det var annerledes enn f.eks assassins creed hvor en må gjøre ting på en bestemt måte, og det oftest repeterer det samme flere ganger.

8. Vanskelige ting

E: Nei, det var ikke så mye vanskelig, men la merke til at når jeg skjøt var den firkanten (reticule) som viser hvor jeg skyter ble veldig stor, men la ikke merke til med en gang at det betydde at jeg skjøt veldig spredt og ikke traff noen ting.

Ellers så var det meste veldig straightforward og ganske lett å lære.

9. Narrativ

E: Varte litt lenge før jeg faktisk fikk begynne å spille, men hvis jeg hadde mer

kjennskap til disse karakterene så hadde det nok med en gang vært mer spennende også, selv er det egentlig noe jeg liker i spill, liker å få story og se mer av de karakterene jeg liker, men her var det litt meh.

10. Interesse for å spille spillet mer

E: Ja, egentlig. Det gjorde det.

11. Bruk av m+k

E: Det var ok, men bortsett fra styring av hesten var litt vanskelig, selv om jeg var glad for at hvis du trykket shift så løper hesten en stund uten at du må holde den inne. Så det var litt vanskelige kontrollere, på noen ting.

## Fase 2

1. Opplevelse av bruk av menyer

E: Ja, jeg glemmer hele tiden hva jeg skal trykke på, men blir nok vant til det. Husket ikke helt på hvordan jeg hentet inn ammo og nye våpen. Fant for det meste frem til det jeg ville ha, men måtte ha litt hjelp til det

2. Fornøylelig aspekt med bruk av meny

E: Nja nei, det er ting jeg ikke helt liker med det, men hvis jeg får spilt litt mer så blir det kanskje litt bedre.

Det er sant at, med sånne menyer så kan en fort bli tatt ut av spill opplevelsen, men på den andre siden så er det litt nødvendig med de menyene for et spill som dette også som skal ha så mange muligheter som det har også. Men for meg så ødela det i allefall ikke noe da

3. Opplevelse av boss kampen

E: Irriterende, fordi hun er litt OP (overpowered) på en måte da, og hun jukser da, hehe. Litt overnaturlig i forhold til lille snake. Men det skal jo være vanskelig også da. Men det var gøyt faktisk da, når jeg fikk våpenet mitt som jeg trengte da.

4. Innforstått hva oppdraget krevet

E: Prøvet og feilet en del i starten, og tenkte for meg selv, prøvde å finne ut hva jeg skulle gjøre. Siden jeg har spilt en del spill så kjenner du fort igjen forskjellige mønstre/aspekter, så med en gang jeg så henne fra den avstanden, så var det på en måte innforstått at hvis jeg kom for nærme så kom hun til å løpe vekk. Men det er mest fordi jeg har spilt mye spill da.

Ja, ellers forstår jeg hva som jeg skulle gjøre, og igjen pga. Erfaring så viste jeg på mange måter hva som kom til å skje hvis jeg gjorde x eller y. Så isteden tok jeg henne fra avstand.

Jeg tenkte egentlig å enten ta en sniper rifle eller en rocket launcher, men er jo mye morsommere med rocket launcher, spesielt siden jeg var litt irritert på henne på det tidspunktet

5. Sammenlignet med forrige oppdrag

E: Mye morsommere egentlig, altså første oppdrag var litt mer planlegging og finne ut hva som skal gjøres, mens her var det mer action på en måte.

6. Interesse for å spille mer

E: Ja, jeg pleier egentlig ikke å spille skytespill, men siden jeg har både hørt om spillet, og sett folk spille det, og i tillegg hørt om det fra barndommen, så kunne jeg faktisk tenkt meg å spille det mer.

7. Minneverdige situasjoner

E: Det mest irriterende var vel at bossen hoppet langt bort hele tiden, på en overnaturlig måte. Lurer på om det minnet meg på noe som Unreal Tournament eller noe i den duren.

### Fase 3

1. Bruk av avanserte systemer

E: Brukte vel det meste bortsett fra air support, da jeg tenkte at jeg skulle vente med det til jeg kom lengre inn i basen, men kom aldri så langt

2. Endret spill opplevelse ut i fra bruk av disse systemene

E: Ja, bruken av tanksen kom meg i det minste nærmere da, men ble litt fort ødelagt da, så burde nok tenke på det neste gang.

3. Minneverdig øyeblikk

E: Egentlig ikke, har spilt krigsspill før på samme måte, så var ikke egentlig noe minneverdig i seg selv

4. Frustrerende øyeblikk

E: Vel, kom meg ikke inn en gang, eller kom inn den første såvidt da. Frustrasjon, ja det var alt for mange motstandere, som jeg ikke visste hvordan jeg skulle håndtere, det var et veldig vanskelig oppdrag for meg.

Skulle nok heller utnyttet mer av de verktøyene jeg egentlig hadde tilgjengelig

5. Tilnærming til oppdraget

E: Skulle nok heller vært mer sneaky ja. Hadde nok vært lettere om jeg hadde sørget for at ikke alle visste at jeg var der.

Var heller ikke så lett å styre tanksen jeg hadde med meg egentlig, men det er kanskje på en måte realistisk også, de er jo i virkeligheten ganske uhamslig å styre et sånt beist.

6. Sammenlignet med de tidligere oppdragene

E: Åå det var mye vanskeligere, for de første har det mye mer vært en og en fiende, mens her var det veldig mange flere. Selv om jeg drepte sikkert 15 av de, så var det alt for mange av de. I tillegg så var det mortar embankments som hele tiden fant meg og skjøt på meg, men den går jo ann å komme seg unna, selv om jeg ble litt stuck da.

7. Mening om spillet

E: Det er fortsatt et gøyalt spill, men skulle bare ha kunnet ha spilt gjennom hele opp til det oppdraget, siden det er mye jeg føler jeg har gått glipp av. Men det var jo ikke helt realistisk å få til noe sånt i denne konteksten da. Men var jo også greit å få prøve litt forskjellige nivå da, det synes jeg.

8. Kontroller bruk

E: Mye bedre med kontroller, faktisk. Ja, der klarte jeg faktisk å zoome, selv om det også går på tastatur, men for meg ble det for masse å tenke på, på så kort tid, så klarte ikke å sette meg nok inni knappene og funksjonene, men på kontrollen var det mye kjappere, men det er kanskje fordi jeg jukset litt siden jeg brukte tastaturet først. Det blir på en måte mer å sette seg inn i på et tastatur, siden knappene er mer spredt rundt, men igjen det kan være mulig at det er raskere når en først har satt seg inn i knappene på tastatur. Det er jo forsåvidt lettere å skyte på k+m, men kanskje lettere å bevege seg på kontroller.

9. Valg av input device senere

E: Hadde selv valgt kontroller.

10. Helhetlig følelse

E: Ja, jeg synes egentlig alt var spennende og interessant, hele tiden uansett nivå, selv om det var litt stort hopp mellom første bossen til det siste oppdraget, det var det kanskje, men det er kanskje bare meg.

Jeg hadde forøvrig litt problem med checkpointet jeg fikk på siste oppdrag, da det ble lagret akkurat når jeg var omringet av motstandere, så hver gang jeg døde så havnet jeg midt oppi alt. Som var veldig kjipt da.

11. Opplevelsen å få mer verktøy å rutte med

E: Ja, er jo greit nok å ha alle verktøyene er jo greit, men spørsmålet er jo mer på hvordan jeg skulle bruke disse tingene - det hadde ikke jeg peiling på iallefall, siden jeg ikke fikk lært alt organisk.

12. Interesse for spillet nå etter testingen

E: Ja, egentlig. Egentlig bare fordi jeg satt meg ned og prøvde spillet selv sånn at jeg fikk litt mer feel for det, siden jeg tidligere bare har sett andre spille det, og det er jo helt annerledes egentlig. Så sånn sett så har denne testingen gjort at jeg fikk lyst å spille det mer

13. Hvilke elementer tiltrekker

E: Ja, den åpne verdenen spesielt, det tror jeg er litt nytt i sånn krigs/skytespill, og at det er litt mer forskjellig utstyr og ting som kan gjøres enn ting jeg har sett tidligere.

## **7.4 CRITICAL INCIDENTS (LIST)**

### **Oscar – P1**

Participant uses M+K

07.42-8.01 - takes participant almost 20sec to orient himself with the camera and binoculars, and find the base with the binoculars.

08.31 - marks the wrong target, support character corrects him, and tells him where to place the marker. Marks the right target approximately 10sec later at 08,44

09.29 - participant makes a face to the camera, perhaps indicating the somewhat intrusive nature of the camera capture.

11.32 - participant has to pause the game in order to find the controls for getting off the horse - note: the game displays a tip to check out controls once in control of the horse, although very easy to miss, additionally the tip would only show controls for the xbox360 controller and not for ps4 or M+K

12.22 - participant finally manages to get of the horse.

14.39 - participant follows ingame control tips and places a guard in a port-o-potty

15.25 - participant successfully manages to sneak up on an enemy and grab him, finishes by choking the enemy, rendering him unconscious.

15.50 - participant picks up a guard, but is visually confused when he can't find the button to put him back down.

16.54 - participant finally get a button prompt telling him how to put down the guard. Note: this button prompt does not appear until the player stands still with a guard on his shoulders.

17.23 - participant once again checks options for button usage, this time to find the button to call his horse.

18.01 - participant skips Da Wiahlo village and goes straight for the main target.

18.20 - participant gets a support call about getting to high ground to surveil the base, while in a mountain pass, with tall rocks at both sides, note: this voice command is related to the base the participant skipped

19.20ish - participant gets stuck on rocks while riding the horse, running straight into trees and rocks multiple times.

20,20 - participant scouts out the enemy base using his binoculars

22,25 - participant opts for a straightforward approach into the base.

22.49 - participant is almost caught by the enemy, and visually tenses up, and breathes a sigh of relief when he gets behind cover

22.56 - after getting out of harm's way, the participant says "aah that was a mistake".

24.08 after tackling a guard, Oscar smiles, and is clearly enjoying himself.

25,44 - participant gets within meters of the target, but gets spotted by the guards, and ultimately killed

26.16 - participants starts again outside of the enemy base using a save checkpoint.

27.30 - opts for sneaking around the base on the second attempt

29.10 - gets spotted again, but runs away and hides from the enemy

31.08 - gets spotted by the enemy again, but manages to get away, participant now decides to shoot the pursuing enemies.

32.50 - find the target

34.22 - initially struggles with defeating enemies with shields but finds a solution by shooting them in the legs

36.24 - finally rescues the target, after having eliminated all nearby enemies

36.43 - while a cutscene plays, Oscar says to the camera that the reason for shooting everyone was because of “stealth with a keyboard was really fucking hard”

38.28 - gets spotted on the way out with the target, and fails the mission.

38.58 starts again at a checkpoint having rescued the target, and gets away this time.

39.00-40.00 runs all the way to the LZ - landing zone.

41.00 - after a cutscene Oscar rides the horse all the way to the new LZ

44,20 - completed the mission

## **Oscar – P2**

Participant uses an Xbox360 controller

04.19 - testing starts

05.03 - participant starts by baiting shots from the sniper before searching with binoculars

05.21 - participant finds the enemy with binoculars

05.57 - participant when thinking about using the rifle to take her down, states “I think I’m going to struggle with this”

06.21 - participant opens the idroid, thinks out loud “now how did I call in support”

07.17 - the sniper changes position, causing Oscar to exit the idroid

07.51 - participant finds the enemy again, and reopens the idroid, now having a clear plan, finds his target and orders an air bombardment through the idroid at 08.09

08.37 - participant eliminates the target.

09.52 - participant decides to spare the enemy



11.41 - completed the mission

## **William – P1\* Pilot**

Participant uses M+K

01.56 - session start

02.43 - participant is slightly frustrated after having to wave mouse around in order to fulfil the demands of moving his head up and down

17.57 - start of actual gameplay

19.11 - Participant is entertained, and laughs at the exposed butcrack of Ishmael

Overall note: the different prompts M+K v Controller seems bugged, in that the only time they have appeared is in the pilot test.

27.49 - participant dies after having been noticed by a helicopter, however the reaction time for this, considering Venom's position when the helicopter arrived, seems very small

28.29 - after being presented with tip for cover mechanics, a second time, the participant still does not notice its appearance at the bottom of the screen, instead checking controller options, as well as the manual. Note: controller options presented are for an xbox360 controller.

29.00 - the participant instead crawls through the section instead of trying to time his movement to search lights, thus also never learns the correct cover mechanics usage.

35.20 - Participant experiences some very wonky movement of Venom when bumping into Ishmael

35.40 - Participant dies very suddenly after moving an inch less than a second after being told to lie still

36.08 - Participant is slightly frustrated that Venom moves behind some curtains, by just moving too close to them

43.10 - Participant goes through the short gun-tutorial area by shooting a fire extinguisher - which is marked with a square objective marker

45.00 - participant shoots the first guard instinctively. Then gets spotted by the rest of the guards

46.01 - participant hides behind a bench while shooting the guards

47.10 - participant eliminates all of the enemies in the foyer

48.28 - participant spends two minutes running around the area, before triggering the next section by chance.

49.56 - participant starts the next section, with the man on fire.

Participant runs around aimlessly for almost 2 minutes

51.45 - participant triggers the next section, again by chance.

01.02.07 - Participant completed the mission

## **William – P2**

Participant uses an xbox360 controller for the session.

The session starts off with some technical difficulties, causing the session to have a false start then having to be restarted after 3 minutes.

03.25 - start of testing

03.30 - participant gets some initial tips on controller usage due to using M+K in the previous phase

03.30-6.30ish - participant get comfortable with controls

06.10 - participant spends some time getting a hang of the weapons menu approximately 10-15 seconds

06.30 - participant familiarizes himself with the surrounding area

07.30 - participant tries to use a smoke grenade as cover to get close to the enemy

08.31 - participant shoots a crow, mistaking it for the enemy

09.07 - participant is quick at learning movement using the controller

09.52 - participant shoots at the enemy from far away using the rifle, but misses

11.11 - participant tries to get close to the enemy by sneaking around

12.20 - participant successfully gets close enough to shoot the enemy with the rifle, after taking damage, the boss jumps away.

13.37 - participant successfully sneaks up and shoots the enemy multiple times

15.04 - participant attempts to change strategy to instead place bombs where the sniper will move to

16.35 - participant gets within 2 meters of the enemy, but is unable to hit her due to a wall

18.30 - participant runs around for approximately 2 minutes without any progress - participant starts to get visually frustrated, sighing heavily

18.55 - participant gets a hint for the idroid options, due to less experience with this system having only played the prologue mission, and not mission 1.

20.35 - participant calls in a sniper rifle

21.49 - due to being hit with a sandstorm the participant instead opts to call in a tank

22.01 - after noticing the option to call in a tank, the participant says "sweet".

23.01 - after getting in the tank, participant spends 20 seconds getting used to movement, then targets the enemy fires and instantly eliminates it.

23.54 - the mission ends when the participant drives over the enemy with the tank

### **William – P3**

- Participant employs a no-kill loadout

- Participant is using an Xbox360 controller for the session

01.16 - Participant is unable to find the button to zoom in with his sniper rifle

2.00 - Tranquilizes his first guard

02.22 - Game gives adequate hint of an enemy sniper, allowing the participant to hide

4.00 - Tranquilizes another guard, kills two

- Participant tries to use a methodical approach, but does not notice that the silencer for his weapon breaks, causing him to eventually be noticed

07.00 - participant triggers an alarm phase.

08.00 - participant orders two consecutive air bombardments, both moderately successful, causing participant to laugh

09.57 - Participant dies, and says lol, and laughs

- The participant uses the idroid map a lot to orient himself in the world, and study where the guards/mines are.

- After dying, the participant now tries to use stealth

- after loading his checkpoint, a weather effect was triggered (sandstorm), that is seemingly bugged, causing the rest of the participants playthrough to be affected.

15.00 William is now the participant that has gotten the furthest into the mission, out of all the participants.

20.00 - The participant is very close to being noticed, vocally indicates his stress, but ultimately gets away.

25.00 - The participant completes the episode

- After death, the participant crawls through almost the entire base, only killing one enemy on his way, which was ultimately unnecessary.

## **Nora – P1**

- Participant describes herself as nervous

- Participant chooses to use M+K

07.20 - participant can't find the tab button to open the idroid, tester helps her locate the button

07.00-11.00 approximately - participant has small issues with getting through the mini-tutorial for idroid and binocular use.

17.00 - Participant visually frustrated over not knowing what to do

17.00 - encounters the first enemy soldier

19.00 - Participant struggles with finding the right button to get up from crouch position, gets some assistance from the tester

22.00 - Participant walked in the opposite direction from the mission objective, and is at this point 1025m from the target.

27.00 - Participant goes into a mild panic after having been partially spotted by an enemy

33.00 - Participant hides behind a rock for approximately 5 minutes, uncertain about how to proceed, and is visually shaken up

## **Nora – P2**

Participant uses M+K for the session

- Participant uncertain as to how to proceed in the start of the mission, and hides behind a rock
- Participant is very unsure of herself, and how to use the tools available, states this to the camera.
- Technical problems with video capture causes large frame drops and is turned off.
- Participant uses an air bombardment after hints from tester.
- Participant misses with the air bombardment twice, but with the help of the map, and binoculars, she first locates the boss, and then hits her twice
- The enemy barely survives after two bombardments, and the participant attempts to take up the battle with her rifle and sneaking up on the boss.
- This proves difficult and instead the participant finishes the mission with a third and final bombardment

## **Nora – P3**

Participant uses an xbox360 controller for the test

The tests runs slightly longer due to the participant being in a tense situation when time runs out, instead time is called when the participant dies).

- The tester helps the participant build a loadout before the mission starts
- The participant selects a loadout with basic equipment, DDog, as well as sneaking armour
- Participant is visually happy with having DDog with her on the mission
- Participant uses the vacant area at the start of the mission to get re-acquainted with controls
- Participant uses a stealth approach to the mission

- Participant tries to go around the base by dropping down from the mountain, instead she falls to her death
- Participant is very calm and slowly makes her way through the base in order to avoid detection
- Participant finds a crack in the wall, and climbs up
- Participant gets to the first checkpoint in the mission without being seen by the enemy
- Participant tries to tranquilize two enemies at the same time, but they wake each other up.
- Participant uses a sandstorm to her advantage, progressing further into the enemy base
- Participant spots a landmine and disarms it.
- Participant spots a second mine, but gets too close, and it goes off, alerting the enemy
- Participant successfully hides from the enemy.
- Participant is getting very good at shooting the enemies with tranquilizer darts
- Participant successfully sedates two guards at the same time - while one is walking towards the other.
- Participant forgets to pay attention to the suppressor for the tranquilizer gun and almost alerts the enemies again
- Participant uses DDog to stun an enemy, and laughs while saying “Oh god, how fun!”
- Participant uses two sleep bombardments and successfully sedates multiple enemies, however another enemy outside of range, notices and begins to wake the enemies back up.
- Participant is almost spotted and tries to use support to trigger a sandstorm, however the enemies find her before the sandstorm arrives
- The test ends with the participant dying to the enemies after 50 minutes

## **Emma – P1**

Participant gets some introductory help with controls (movement related, taught in the prologue mission) - uses M+K for the test

- Tester mentions to the participant helpful tools in the idroid for use later.

- Participant gets slightly confused after getting tips for movement using a controller, when using M+K
- Participant spots a dummy soldier with binoculars and is initially confused, but laughs when she understands that it is a dummy
- Finds the intel in the Waksin base
- Participant does not complete the mission, but was on her way to the target when the 45 minutes were up.
- Participant has good control over the movement of both Venom and Dhorse throughout the mission

### **Emma – P2**

Participant uses M+K for the test

- Participant first tries to sneak her way to the boss carefully
- Tester gives small tips related to controller use
- Participant is startled after and vocally squeaks after getting hit with a grenade from the boss
- Participant calls in new equipment in the form of a bazooka
- Participant locates the boss with binoculars and shoots her with the bazooka
- After four bazooka shots participant eliminates the boss
- Participant completes the mission in 21 minutes

### **Emma – P3**

Participant uses an xbox360 controller for the test

- The tester helps the participant build a loadout before the mission starts
- The participant chooses to build a loadout with a rocket launcher, tank and Dwalker
- The participant uses a different character than Venom, stating that she prefers to use female characters, because she connects to them more easily, and that it helps to immerse her.
- Participant is spotted by the enemy while driving up to the base in her tank

- Participant states that she initially intended to use a stealth approach, but after being spotted goes for a frontal assault on the base.
- The frontal assault proves difficult, but the participant successfully gets to the first checkpoint
- note: however the checkpoint saves her progress while she is surrounded by enemies
- the participant calls in a sniper rifle and switches out the rocket launcher.
- Due to this test being the first with a controller, the participant has some issues with controls, which is exacerbated with her lack of experience with this genre of games.
- The test is stopped after 45 minutes; the mission was not completed.

## **Lucas – P1**

Participant is playing on a PS4, and thus uses a DS4 controller

- Some small issues with finding the idroid button in the start of the test
- Participant has some controller issues due to unfamiliarity with shooting games on console - shoots instead of zooming
- Participant practices controller usage in the mini tutorial area - Da Wialo
- Participant has some problems remembering to zoom on the binoculars
- Participant does not notice that he is using a tranquilizer pistol and thus shoots the first enemy with a dozen darts before the enemy passes out
- Participant uses half his ammo on the first enemy
- Participant is uncertain as to what the mission is
- Participant is badly hurt and uses first aid
- In the heat of the moment the participant forgets how to control Venom, and ends up punching the air, and throwing himself on an enemy multiple times.
- Participant lands a grenade taking out 5 enemy soldiers
- Participant gets more comfortable with the controls throughout the mission, but does not complete the mission in the allotted time, and the test ends with the participant in Waksin Base.



## **Lucas – P2**

Participant is playing on a PS4 and thus uses a DS4 for the test

- Participant starts the mission with looking around the map while hiding behind a wall
- Participant gets shot by the enemy while looking around with the binoculars
- Participant crawls away while getting shot at by the enemy
- Participant crawls away from the enemy, while scouting out the surrounding area
- Participant gets confused over the direction while searching for the boss with binoculars, and ends up looking in the opposite direction from the intended direction.

11.00 - DDog finds the boss, and the participant engages the boss, but forgets what the button for firing the weapon is, and instead zooms with the binoculars. The enemy gets away.

- Participant finds the boss again, and tries to shoot her with the rifle from the opposite side of the arena
- Participant struggles with using the weapon menu, and is visually dismayed.
- Tester gives a small hint about the idroid system
- Participant calls in new equipment in the form of a sniper rifle
- Participant fails to understand the visual indicator for the enemy sniper (clockwise indicator of the location of the enemy surrounding Venom)
- Participant completes the mission after 49 minutes, after a hint at using a different tool than the sniper rifle, and uses air bombardment.
- note: the participant would have been successful with the sniper as well, but it would have taken longer than the test parameters.

## **Lucas – P3**

Participant is playing on a PS4 and thus uses a DS4 for the test

- The tester helps the participant build a loadout before the mission starts
- Participant selects a loadout of battle armour, a sniper rifle and DDog

- Participant sneaks up to the base unseen
- Participant tries to snipe one of the enemies but is unsuccessful due to the enemy wearing a helmet, instead the enemies are alerted due to the loud sound of the sniper rifle
- Participant instead air bombards the front of the base multiple times, and states that he did not hit as many enemies that he had hoped for.
- Participant dies after trying to snipe the remaining soldiers after the air bombardment
- Because of an unfortunate save checkpoint the participant loads back into combat with the enemy.
- After getting away from the enemy, the participant finds a good vantage point to try to snipe the enemy, but fires prematurely due to not being completely familiar with controls
- Participant gets spotted due to the premature sniper shot.
- Participant once again bombards the enemy, and is more successful this time, eliminating most of the enemies, which in turn lose sight of him.
- Reinforcements arrive, and the participant is again noticed because of unfortunate positioning
- Participant once again runs and hides, and uses the time to call in a grenade launcher.
- The grenade launcher falls off the mountain, and the participant has to call in a second launcher.
- Participant continues to air bombard the enemy
- Participant dies again after missing his air bombardment
- Participant now fed up with bombardments, calls in a tank
- once arrived the participant presses the wrong button and send the tank back.
- Participant calls in a second tank
- Participant is visually frustrated over the changed controller movement of the tank
- Due to a new controller scheme for the tank, the participant drives the tank off the road and the tank tips over, with the only damage inflicted being a palm tree getting knocked over.
- The test is stopped after 47 minutes, the mission was not completed.

## 7.5 CRITICAL INCIDENTS (TABLE)

### Phase 1

William	Oscar	Nora	Emma	Lucas
Participant is using M+K	Participant is using M+K	Participant is using M+K	Participant is using M+K	Participant is playing on a PS4, and thus uses a DS4 controller
Participant is playing the prologue episode, as a pilot	07.42-8.01 spends 20sec to orient himself.	Participant describes herself as nervous	- Tester mentions to the participant helpful tools in the idroid for use later.	- Some small issues with finding the idroid button in the start of the test
02.43 - participant is slightly frustrated after having to wave mouse around in order to fulfil the demands of moving his head up and down	08.31 Marks the wrong target, participant spends 10 seconds to find the right target.	07.20 - participant can't find the tab button to open the idroid, tester helps her locate the button	Participant gets some introductory help with controls (movement related, taught in the prologue mission)	- Participant has some controller issues due to unfamiliarity with shooting games on console - shoots instead of zooming
17.57 - start of actual gameplay	09.29 Participant makes a face to the camera, perhaps indicating the intrusive nature of the camera capture	07.00-11.00 approximately - participant has small issues with getting through the mini-tutorial for idroid and binocular use.	- Participant gets slightly confused after getting tips for movement using a controller, when using M+K	- Participant practices controller usage in the mini tutorial area - Da Wialo
19.11 - Participant is entertained, and laughs at the exposed butcrack of Ishmael	11.32 Participant has to pause the game to find controls for dismounting off of horse. Note: The game presents a tip on controls, although easy to miss. Additionally tip only shows Xbox360 controls	17.00 - Participant visually frustrated over not knowing what to do	- Participant spots a dummy soldier with binoculars and is initially confused, but laughs when she understands that it is a dummy	- Participant has some problems remembering to zoom on the binoculars
27.49 - participant dies after having been noticed by a helicopter, however the reaction time for this, considering Venom's position when the helicopter	12.22 Participant finally manages to get of the horse.	17.00 - encounters the first enemy soldier	- Finds the intel in the Waksin base	- Participant does not notice that he is using a tranquilizer pistol and thus shoots the first enemy with a dozen darts before the enemy

arrived, seems very small				passes out
28.29 - after being presented with tip for cover mechanics, a second time, the participant still does not notice its appearance at the bottom of the screen, instead checking controller options, as well as the manual. Note: controller options presented are for an xbox360 controller.	14.39 participant follows ingame control tips and places a guard in a port-o-potty	19.00 - Participant struggles with finding the right button to get up from crouch position, gets some assistance from the tester	- Participant does not complete the mission, but was on her way to the target when the 45 minutes were up.	- Participant uses half his ammo on the first enemy
29.00 - the participant instead crawls through the section instead of trying to time his movement to search lights, thus also never learns the correct cover mechanics usage.	15.25 participant successfully manages to sneak up on an enemy and grab him, finishes by choking the enemy, rendering him unconscious.	22.00 - Participant walked in the opposite direction from the mission objective, and is at this point 1025m from the target.	- Participant has good control over the movement of both Venom and Dhorse throughout the mission	Participant is uncertain as to what the mission is
35.20 - Participant experiences some very wonky movement of Venom when bumping into Ishmael	15.50 participant picks up a guard, but is visually confused when he can't find the button to put him back down.	27.00 - Participant goes into a mild panic after having been partially spotted by an enemy		- Participant is badly hurt and uses first aid
35.40 - Participant dies very suddenly after moving an inch less than a second after being told to lie still	16.54 participant finally get a button prompt telling him how to put down the guard. Note: this button prompt does not appear until the player stands still with a guard on his shoulders	33.00 - Participant hides behind a rock for approximately 5 minutes, uncertain about how to proceed, and is visually shaken up		- In the heat of the moment the participant forgets how to control Venom, and ends up punching the air, and throwing himself on an enemy multiple times.
36.08 - Participant is slightly frustrated that Venom moves behind some curtains, by just moving too close to them	17.23 participant once again checks options for button usage, this time to find the button to call his horse.			- Participant lands a grenade taking out 5 enemy soldiers
43.10 - Participant goes through the short gun-tutorial area by shooting a	18.01 participant skips Da Wiahlo village and goes straight for			- Participant gets more comfortable with the controls throughout the

fire extinguisher - which is marked with a square objective marker	the main target			mission, but does not complete the mission in the allotted time, and the test ends with the participant in Waksin Base.
45.00 - participant shoots the first guard instinctively. Then gets spotted by the rest of the guards 46.01 - participant hides behind a bench while shooting the guards	18.20 participant gets a support call about getting to high ground to surveil the base, while in a mountain pass, with tall rocks at both sides, note: this voice command is related to the base the participant skipped			
47.10 - participant eliminates all of the enemies in the foyer	19.20ish participant gets stuck on rocks while riding the horse, running straight into trees and rocks multiple times.			
48.28 - participant spends two minutes running around the area, before triggering the next section by chance.	20.20 participant scouts out the enemy base using his binoculars			
49.56 - participant starts the next section, with the man on fire.	22.25 participant opts for a straightforward approach into the base			
50.00-51.45 Participant runs around aimlessly for almost 2 minutes	22.49 - participant is almost caught by the enemy, and visually tenses up, and breathes a sigh of relief when he gets behind cover			
51.45 - participant triggers the next section, again by chance.	22.56 - after getting out of harm's way, the participant says "aah that was a mistake".			
01.02.07 - Participant	24.08 after tackling a			

completed the mission	guard, Oscar smiles, and is clearly enjoying himself			
	25.44 - participant gets within meters of the target, but gets spotted by the guards, and ultimately killed			
	26.16 - participants starts again outside of the enemy base using a save checkpoint			
	27.30 - opts for sneaking around the base on the second attempt			
	29.10 - gets spotted again, but runs away and hides from the enemy			
	31.08 - gets spotted by the enemy again, but manages to get away, participant now decides to shoot the pursuing enemies.			
	32.50 - find the target			
	34.22 - initially struggles with defeating enemies with shields but finds a solution by shooting them in the legs			
	36.24 - finally rescues the target, after having eliminated all nearby enemies			
	36.43 - while a cutscene plays, Oscar says to the camera that the reason for shooting everyone			
	38.28 - gets spotted on the			

	way out with the target, and fails the mission			
	38.58 starts again at a checkpoint having rescued the target, and gets away this time.			
	39.00-40.00 runs all the way to the LZ - landing zone.			
	39.00-40.00 runs all the way to the LZ - landing zone.			
	44,20 - completed the mission			

## Phase 2

William	Oscar	Nora	Emma	Lucas
Participant uses an Xbox360 controller	Participant uses an Xbox360 controller	Participant uses M+K for the session	Participant uses M+K for the test	Participant is playing on a PS4 and thus uses a DS4 for the test
The session starts off with some technical difficulties, causing the session to have a false start then having to be restarted after 3 minutes.	04.19 - testing starts	- Participant uncertain as to how to proceed in the start of the mission, and hides behind a rock	- Participant first tries to sneak her way to the boss carefully	- Participant starts the mission with looking around the map while hiding behind a wall
03.25 - start of testing	05.03 - participant starts by baiting shots from the sniper before searching with binoculars	- Participant is very unsure of herself, and how to use the tools available, states this to the camera.	- Tester gives small tips related to controller use	- Participant gets shot by the enemy while looking around with the binoculars
03.30 - participant gets some initial tips on controller usage due to using M+K in the previous phase	05.21 - participant finds the enemy with binoculars	- Technical problems with video capture causes large frame drops and is turned off.	- Participant is startled after and vocally squeaks after getting hit with a grenade from the boss	- Participant crawls away while getting shot at by the enemy

03.30-6.30ish - participant get comfortable with controls	05.57 - participant when thinking about using the rifle to take her down, states "I think I'm going to struggle with this"	- Participant uses an air bombardment after hints from tester.	- Participant calls in new equipment in the form of a bazooka	- Participant crawls away from the enemy, while scouting out the surrounding area
06.10 - participant spends some time getting a hang of the weapons menu approximately 10-15 seconds	06.21 - participant opens the idroid, thinks out loud "now how did I call in support"	- Participant misses with the air bombardment twice, but with the help of the map, and binoculars, she first locates the boss, and then hits her twice	- Participant locates the boss with binoculars and shoots her with the bazooka	- Participant gets confused over the direction while searching for the boss with binoculars, and ends up looking in the opposite direction from the intended direction.
06.30 - participant familiarizes himself with the surrounding area	07.17 - the sniper changes position, causing Oscar to exit the idroid	- The enemy barely survives after two bombardments, and the participant attempts to take up the battle with her rifle and sneaking up on the boss.	- After four bazooka shots participant eliminates the boss	11.00 - DDog finds the boss, and the participant engages the boss, but forgets what the button for firing the weapon is, and instead zooms with the binoculars. The enemy gets away.
07.30 - participant tries to use a smoke grenade as cover to get close to the enemy	07.51 - participant finds the enemy again, and reopens the idroid, now having a clear plan, finds his target and orders an air bombardment through the idroid at 08.09	- This proves difficult and instead the participant finishes the mission with a third and final bombardment	- Participant completes the mission in 21 minutes	- Participant finds the boss again, and tries to shoot her with the rifle from the opposite side of the arena
08.31 - participant shoots a crow, mistaking it for the enemy	08.37 - participant eliminates the target.			- Participant struggles with using the weapon menu, and is visually dismayed.
09.07 - participant is quick at learning movement using the controller	09.52 - participant decides to spare the enemy			- Tester gives a small hint about the idroid system
09.52 - participant shoots at the enemy from far away using the rifle, but misses	11.41 - completed the mission			- Participant calls in new equipment in the form of a sniper rifle
11.11 - participant tries to get close to the enemy				- Participant fails to understand the visual indicator for the enemy



by sneaking around				sniper (clockwise indicator of the location of the enemy surrounding Venom)
12.20 - participant successfully gets close enough to shoot the enemy with the rifle, after taking damage, the boss jumps away.				- Participant completes the mission after 49 minutes, after a hint at using a different tool than the sniper rifle, and uses air bombardment.
13.37 - participant successfully sneaks up and shoots the enemy multiple times				- note: the participant would have been successful with the sniper as well, but it would have taken longer than the test parameters.
15.04 - participant attempts to change strategy to instead place bombs where the sniper will move to				
16.35 - participant gets within 2 meters of the enemy, but is unable to hit her due to a wall				
18.30 - participant runs around for approximately 2 minutes without any progress - participant starts to get visually frustrated, sighing heavily				
18.55 - participant gets a hint for the idroid options, due to less experience with this system having only played the prologue mission, and not mission 1.				
20.35 - participant calls in a sniper rifle				

21.49 - due to being hit with a sandstorm the participant instead opts to call in a tank				
22.01 - after noticing the option to call in a tank, the participant says "sweet".				
23.01 - after getting in the tank, participant spends 20 seconds getting used to movement, then targets the enemy fires and instantly eliminates it.				
23.54 - the mission ends when the participant drives over the enemy with the tank				

### Phase 3

William	Oscar	Nora	Emma	Lucas
Session needs editing before being included	Session not completed due to participant moving away.	Participant uses an xbox360 controller for the test	Participant uses an xbox360 controller for the test	Participant is playing on a PS4 and thus uses a DS4 for the test
		The tests runs slightly longer due to the participant being in a tense situation when time runs out, instead time is called when the participant dies).	- The tester helps the participant build a loadout before the mission starts	- The tester helps the participant build a loadout before the mission starts- Participant selects a loadout of battle armour, a sniper rifle and DDog
		- The tester helps the participant build a loadout before the mission starts	- The participant chooses to build a loadout with a rocket launcher, tank and Dwalker	- Participant sneaks up to the base unseen

		- The participant selects a loadout with basic equipment, DDog, as well as sneaking armour	- The participant uses a different character than Venom, stating that she prefers to use female characters, because she connects to them more easily, and that it helps to immerse her.	- Participant tries to snipe one of the enemies but is unsuccessful due to the enemy wearing a helmet, instead the enemies are alerted due to the loud sound of the sniper rifle
		- Participant is visually happy with having DDog with her on the mission	- Participant is spotted by the enemy while driving up to the base in her tank	- Participant instead air bombards the front of the base multiple times, and states that he did not hit as many enemies that he had hoped for.
		- Participant uses the vacant area at the start of the mission to get re-acquainted with controls	- Participant states that she initially intended to use a stealth approach, but after being spotted goes for a frontal assault on the base.	- Participant dies after trying to snipe the remaining soldiers after the air bombardment
		- Participant uses a stealth approach to the mission	- The frontal assault proves difficult, but the participant successfully gets to the first checkpoint	- Because of an unfortunate save checkpoint the participant loads back into combat with the enemy.
		- Participant tries to go around the base by dropping down from the mountain, instead she falls to her death	-note: the checkpoint saves her progress while she is surrounded by enemies	- After getting away from the enemy, the participant finds a good vantage point to try to snipe the enemy, but fires prematurely due to not being completely familiar with controls
		- Participant is very calm and slowly makes her way through the base in order to avoid detection	- the participant calls in a sniper rifle and switches out the rocket launcher.	- Participant gets spotted due to the premature sniper shot.
		- Participant finds a crack in the wall, and climbs up	- Due to this test being the first with a controller, the participant has some issues with controls, which is exacerbated with her lack of experience with this genre of games.	- Participant once again bombards the enemy, and is more successful this time, eliminating most of the enemies, which in turn loose sight of him
		- Participant gets to the first checkpoint in the mission	- The test is stopped after 45 minutes, the mission was not	- Reinforcements arrive, and the participant is again noticed

		without being seen by the enemy	completed.	because of unfortunate positioning
		- Participant tries to tranquilize two enemies at the same time, but they wake each other up.		- Participant once again runs and hides, and uses the time to call in a grenade launcher.
		- Participant uses a sandstorm to her advantage, progressing further into the enemy base		- The grenade launcher falls off the mountain, and the participant has to call in a second launcher.
		- Participant spots a landmine and disarms it.		- Participant continues to air bombard the enemy
		- Participant spots a second mine, but gets too close, and it goes off, alerting the enemy		- Participant dies again after missing his air bombardment
		- Participant successfully hides from the enemy.		- Participant now fed up with bombardments, calls in a tank
		- Participant is getting very good at shooting the enemies with tranquilizer darts		- once arrived the participant presses the wrong button and send the tank back.
		- Participant successfully sedates two guards at the same time - while one is walking towards the other.		- Participant calls in a second tank
		- Participant forgets to pay attention to the suppressor for the tranquilizer gun and almost alerts the enemies again		- Participant is visually frustrated over the changed controller movement of the tank
		- Participant uses DDog to stun an enemy, and laughs while saying "Oh god, how fun!"		- Due to a new controller scheme for the tank, the participant drives the tank off the road and the tank tips over, with the only damage inflicted being a palm tree getting knocked over.
		- Participant uses two sleep bombardments and successfully sedates multiple enemies, however another enemy outside of range, notices and begins to		- The test is stopped after 47 minutes, the mission was not completed.

		wake the enemies back up.		
		- Participant is almost spotted and tries to use support to trigger a sandstorm, however the enemies find her before the sandstorm arrives		
		- The test ends with the participant dying to the enemies after 50 minutes		

## 7.6 THEMATIC MATRIX

### Phase 1

	Play Systems	Controls	Movement	Equipment Menu	Avatar	Immersion	Difficulty	Approach	Opinion	State of mind	Enjoyment
Nora P1	Intro: Technically good - would've liked more info during. Had problems remembering everything	M+K was OK, but a lot to remember. M+K vs. Controller: Different tradeoffs. Many buttons to remember vs. camera movement.					Went surprisingly well. Frustrations: Forgetting controls and what to do.		Got interesting towards the end	I was really nervous	
Emma P1		M+K controls were a bit funky	OK, except on horse, which was difficult. Liked using shift to sprint on horse.		Liked the options provided, but lack of experience meant			Shot everyone on my way into the base, then	Enjoyed that I could do things my way, and that I could skip specific		Test made me want to play the game more

			Overall: some difficult controls for specific things		they were difficult			realized after that I could have snuck in and ran away,	things		
Lucas P1	Intro: would like to review objectives .  Liked the checkpoint system.	Would've liked a more detailed tutorial. Especially for weapons. Overall: Fine.		Couldn't get a good feel for the weapons.		Specifically enjoyed the first aid implementation	More difficult when being spotted, which I enjoyed.				I enjoyed it, and it could be interesting to play more.
William P1*	Learning curve way too easy at the start, with a too quick rise in difficulty	M+K OK for the most part. Shooting worked great with M+K.  Movement, probably better with controller	A lot of help popups on HUD, but with some inconsistencies, with some of it only on pause menu.				Not particularly difficult, although I disliked specific things.	*Check interview	Exciting, it made an impression. However really slow in the start, and too many cutscenes.		Definitely want to play more.
Oscar P1	Intro: bit much initially, but mini tutorial very good, and enjoyable	A lot of buttons to remember.  Using M+K made me want to use a controller instead.	Some large inconsistencies with controls for M+K v. controller.	Too much happening at the same time.			Mainly with the controls, specifically with a lot happening at the same time	Enjoyed the choice of how to approach and that I could switch from stealth to shooting.  Shooting more stressful, but still balanced	Enjoyable. Forgiving difficulty, allowed me to experiment. Also liked the humor.		Yeah I want to play more.

\* Pilot study

## Phase 2

	Play Systems	Controls	Movement	Equipment menu	VR/AR	Immersion	Difficulty	Approach	Opinion	State of mind	Enjoyment	Comparison
Nora P2		I have problems getting him to do what I want  Using menus would be easier with a controller		Pops up too fast making it difficult to use	Understanding it took some time	Don't like to get too immersed. The menus kept me in this world		A lot of trial and error	Not difficult, just annoying.  Overall: average 3/5		I would actually like to play more, while the previous one made me want to give up.	Much better, I could move more freely.
Emma P2					I constantly forgot what button to press, as well as how to get new supplies	With the menus, it's easy to get pulled out of the game. But personally it wasn't too damaging.		After some testing it was very obvious - maybe because I've played a lot of games though	Kind of annoying, but it should be a bit difficult.  Overall: Fun, when I got the weapon I needed.			More fun now. Previous one, was more planning, while this had more action
Lucas P2	Using support was really cool. Dog was practical.			Slightly better now, but it jumps around too quickly  Did not like the weapon	It was OK. I had some issues finding everything at first		At times she was difficult to find.	Objective was clear. And the support team help was very nice.		I got irritated at myself, when I mislicked the binoculars.		Felt I got more of a hang of everything this time around.

				menu.								
William P2			I couldn't get cover mechanics to work		Liked the possibilities it offers for playing around.	Menu use was disconnected from the play experience. It pulled me out of my immersion. Felt less like gameplay, and more like hacks.		A lot of trial and error, and not in a fun way. But I do like that there are many ways to complete the mission.	Not very interesting. Took me a long time to figure out, then once I did it felt boring, and kind of sucked	The participant was quite frustrated through the session.		Overall a very different experience. Felt like a completely different game.
Oscar P2				I just can't get it to work. It just bounces around.		The menu looks like the rest of the game. And that time continues helps with the immersion.	Very short, and too easy.	An element of trial and error. My choice of approach was too easy.				Much shorter, but also slightly more exciting.

### Phase 3

	Play Systems	Controls	Movement	Choice of input device	Equipment Menu	Idroid	Difficulty	Approach	Opinion	State of mind	Enjoyment	Comparison	Areas of interest/attraction
Nora	Much better,	Much easier	I manage	Really prefer		Kind of difficult	Felt more		Got frustrated	I got stressed	Very fun to	Opinion	Really enjoy the



P3	with more experience	now with controller instead of M+K	ed to sneak around, which was cool	d using a controller - specifically Xbox360		to hit things with bombardment.  Overall: really satisfying to use the options in the menu	fun, much because of my dog, and using a controller		ted at myself after knowingly pressing the wrong button	ed, but in an enjoyable way.	use both my dog, and sleep bombardment	definitely changed. Now it was actually fun. While early I was really nervous and disliked it. Second phase was OK, but this one really made me want to play the game	freedom to choose where and how to approach everything
Emma P3		Tank was very difficult to control - maybe kind of realistic though. Overall much easier with a controller	Probably easier to shoot with M+K, but movement was much easier with a controller	Personally I'd use a controller to play the game			Had some issues with the checkpoint system.	Probably should have been more sneaky. After alerting them it got really hard	There were too many enemies to handle. Overall: it was very difficult for me		Still a fun game, just wish I had tried the different areas and difficulties	The open world especially. Additionally the different equipment and things to do	

Luc as P3	Air suppo rt gave me a much better chanc e for succes s. They give you more option s, which is enjoya ble	Main contro ls work really well. But when using the tank the contro ls are compl etely differe nt.			Strugg le to use it, even after all three phases		Had an unfort unate start, and checkp oint saved at a really bad time		Got frustra ted after being spotte d. Overa ll: had some fun instan ces thoug h.	Altho ugh none of my plans worke d out. I was never frustr ated.	Got more feel for the game as it progress ed, and enjoyed myself quite a bit while running around at the end		I really like the options of how to get through the missions
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