Single-Player Games and the Self:
(Game)Play and Transformations

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Abstract

This dissertation presents a qualitative research project aimed at understanding and describing how transformative learning processes transpire in gameplay with digital single-player games. With the aim to understand how transformative processes are constructed and internalised in this sensitive and private activity of solitary gameplay, an investigation into game studies literature on the experience of gameplay and transformative learning theory in connection to games led to a frame of exploratory research. The main research question concerned how identity, or the self may be constructed or maintained in solitary play with single-player games, and how such processes could be defined from the perspective of transformative learning theory. A theoretical synthesis led to a theoretical frame consisting of existential and experiential viewpoints on the subject of transformation in relation to games and gameplay. This combined theoretical frame indicated that a problem-centred and transdisciplinary approach to the research question was necessary. In this, the project views play as a continuum of processes and has attempted to research this continuum as close to the activity of solitary play as possible without disturbing the activity itself, and thereby the processes.

The frame of solitary play with single-player games, along with an understanding of the sensitivity of the processes that transpire within this meant that a novel research design had to be attempted. Taking inspiration mainly from ethnographic research methods, the resulting research design consists of 4 sequential stages all leading to the final analysis. I present this combined research design as the DisPlay Method: The first stage concerns gathering gameplay video directly from participants. The main goal of this stage was to gather gameplay video that would represent the participants' original play experiences specifically with single-player games in the context of their everyday life activities. The second stage is a video analysis, which is used to identify potential transformative processes occurring in the gameplay. The video material was watched from beginning to end and journalised. Moments and situations of interest were marked and given an analytical memo for use in the later video-elicited interview. Four observational criteria were iterated to aid the analysis and the final selection of moments to use in the interview. These four criteria concerned Movement, Pauses, Opportunity for radical action, and Unexpected behaviour. The third stage is the video-elicited interview, where participants are shown the identified moments of interest and are able to articulate what transpired in that particular moment of gameplay. With the mnemonic assistance of their own gameplay video, the participants were able to give detailed accounts of their lines of thought and emotions, and were able to express their meaning-making processes in the situations as they had transpired. The fourth stage is a differentiation analysis, which triangulates the data from the previous stages. The main aim is to organise the participants' statements in connection to processes, and how these statements relate to the video data. This preparatory stage before the final analysis is necessary, as the video-elicited interview produces statements that are connected to processes, process-elaborations, and meta-reflections. Overall, the research data that the analysis and results of this research are based on consists of 184 hours of gameplay footage and 13 video-elicited interviews. The games participants played were mostly within the roleplaying game genre.

The final analysis and theorisation show how the player is constantly in a state of both being and becoming something in gameplay. A central argument is that players form a Playful Self, which is an intersection between the personal lifeworld of the player, and the player as situated in the gameworld. The playful self is this state of being and becoming, as this intersection is that of self-perception through a reflected self. This self-perception emerges as the player at any given time activates their personal biography and personal identity in relation to the gameworld, their biography with this gameworld (game biography), and their playful identity as it is created in their relation to the gameworld. As such, the playful self is the intersection of the player's Lifeworld self and an experience of self through the gameplay.

Transformative processes in gameplay both constitute and are dependent on this playful self. Within the player, evaluative processes of learning lead to changes in functionality and sensitivity in relation to the game. These internal evaluations are guided by the gameworld presentation and representations, and lead to enactments of sociality within the game. These internal evaluations leading to interaction as enacted sociality are what transform the playful self and thereby the player within the gameplay activity. The relations of these selves and the internal evaluations that lead to transformation are presented in a final model of transformational processes in solitary gameplay.

In the final chapter of the dissertation, these findings and the methods used in the project are discussed for their applicability and limitations. Specifically, there are ethical concerns in the use of the method as it can give access to very private activities and the emotional complexes in these. While the effect of transformation in gameplay on the person as a whole is still somewhat conceptual, the model allows for new questions to be asked in terms of play and internalisation processes. In this, the hope is that it could be functional for further research into how players transform in the many different aspects of gameplay. In this, there are many open questions that can lead to further empirical research and game design research, be it for educational, entertainment, or serious purposes.

Resumé (Danish)

Denne afhandling præsenterer et kvalitativt forskningsprojekt, der har haft til mål at forstå og beskrive hvordan transformative læringsprocesser bliver konstrueret og internaliseret i leg med digitale single-player spil. Det overordnede forskningsspørgsmål omhandler hvordan identitet, eller "selvet" bliver konstrueret, opretholdt og udvikler sig via leg (play) med singleplayer spil, og hvordan sådan en proces kan defineres ud fra transformativ lærings teori. Undersøgelse af emnet via perspektiver fra spil-studier (game studies) litteratur og transformativ læringsteori, gav anledning til en ny rammesætning af eksplorerende forskning hen imod oplevelsen af 'gameplay' (leg med og i et spil), altså selve oplevelsen af a lege med et digitalt spil. En teoretisk syntese ledte til en teoretisk rammesætning af eksistentielle og erfaringsdannelses synspunkter om emnet transformation i forhold til spil og gameplay. Denne kombinerede rammesætning indikerede at en problem-centeret og transdisciplinær tilgang til forskningsspørgsmålet var nødvendig. Spil-aktiviteten med single player digitale spil anskues i projektet som et kontinuum af processer, og da leg med single player spil ofte er en aktivitet, som bliver praktiseret alene i privatlivets rammer, har det ligeledes været målet at observere dette kontinuum så tæt som muligt på selve spil-aktivitet, uden at forstyrre aktivitetens private rammer og dermed de sensitive processer der kan foregå deri.

Den ovenstående rammesætning, og en forståelse af sensitiviteten af spil-aktiviteten, ledte til en konstruktion af et nytænkende forskningsdesign, som primært tager inspiration og afsæt i etnografiske forskning metoder. Dette forskningsdesign består af 4 sekventielle stadier, som alle leder frem mod den endelige analyse. Jeg præsenterer denne kombinerede forsknings metode som DisPlay Metoden: Det første stadie består i at indsamle gameplay video direkte fra projektets deltagere. Målet med dette var at indsamle video, som repræsenterede deltagernes originale (visuelle) gameplay oplevelser med et single-player spil (eller flere) i konteksten af deres hverdagsliv og hverdagsaktiviteter. Det andet stadie består af en videoanalyse, hvis mål er at identificere potentielle transformative processer i selve gameplayet. Videomaterialet blev gennemset fra start til slut og blev journaliseret. Specifikke øjeblikke og situationer blev markeret med analytiske "memo" til brug i de efterfølgende video-eliciterede interviews. Til hjælp for videoanalysen og den endelige udvælgelse af hvilke videoklip der skulle præsenteres til deltagerne i interviewet blev fire observations kriterier udviklet og anvendt. De fire kriterier drejede sig om: Bevægelse, Pauser, Muligheder for radikale handlinger, og Uventede handlinger. Det tredje stadie er video-eliciterede interviews, hvor deltagerne bliver vist de udvalgte videoklip fra deres gameplay, og hvor deltagerne har mulighed for at artikulere hvad der skete og hvad de oplevede i disse øjeblikke af gameplay. Med mnemonisk assistance fra deres eget gameplay gav deltagerne detaljerede beretninger om deres tankerækker og følelser, og var i stand til at udtrykke deres meningsskabelses processer som de havde været i de udvalgte spilsituationer. Det fjerde stadie er en differentieringsanalyse, som triangulerer data fra de tidligere stadier. Hovedmålet med dette stadie er at organisere deltagernes udtalelser i sammenhæng med processer og hvordan disse udtalelser relaterer sig til videomaterialet. Dette forberedelsesstadie er nødvendigt før den endelige analyse, da de video-eliciterede interviews producerede store mængder af udsagn som har forbindelse til processer, uddybende forklaringer

om processer og meta-refleksioner. Forskningens analyse og resultater er baseret på sammenlagt 184 timers gameplay video og 13 video-eliciterede interviews. De spil som deltagerne spillede, var primært indenfor rollespil genren.

Den endelige analyse og teoretisering viser hvordan deltagerne konstant er et stadie af at "være" og "blive til noget" i deres gameplay. Et centralt argument er at spillere former et Legende selv (Playful self), hvilket er et skæringspunkt mellem spillerens personlige livsverden og spilleren situeret i den pågældende spilverden. Det Legende selv, er en tilstand af 'at være' og 'at blive til', da dette skæringspunkt består i selvopfattelse gennem et reflekteret selv. Denne selvopfattelse opstår, når spilleren til enhver tid aktiverer deres personlige biografi og personlige identitet i forhold til spilverdenen, sammen med deres biografi med denne spilverden (spilbiografi), og deres legende identitet, som den skabes i deres relation til spilverdenen. Således er det Legende selv skæringspunktet mellem spillernes livsverden-selv og en oplevelse af sig selv gennem gameplayet.

Transformative processer i gameplay både udgør og er afhængige af dette Legende selv. Internt i spilleren fører evaluerende læringsprocesser til ændringer i funktionalitet og følsomhed i relation til spillet. Disse interne evalueringer er styret af spilverdenens præsentation og repræsentationer, og fører til "indført socialitet" (enactments of sociality) i spillet. Disse interne evalueringer, som fører til interaktion som indført socialitet, er det, som transformerer det Legende selv og dermed spilleren i gameplay-aktiviteten. Sammenhængen mellem de forskellige "selv" og de interne evalueringer, der fører til transformation, præsenteres i en endelig model for transformationsprocesser i ene-leg med single-player spil (solitary gameplay).

I afhandlingens sidste kapitel diskuteres disse resultater og de i projektet anvendte metoder for deres anvendelighed og begrænsninger. Konkret er der etiske betænkeligheder ved at metoden kan give adgang til meget private aktiviteter og de følelsesmæssige komplekser i disse. Mens effekten af transformation i gameplay på selve personen som helhed til dels stadig er konceptuel giver modellen mulighed for at stille nye spørgsmål i forhold til leg og internaliseringsprocesser. Det er håbet, at både modellen og det præsenterede forskningsdesign kan være funktionelt for yderligere forskning i hvordan spillere transformerer sig i de mange forskellige aspekter af leg i og med digitale spil. I dette er der mange åbne spørgsmål, der kan føre til yderligere empirisk forskning og spildesignforskning, værende det til uddannelsesmæssige eller underholdningsmæssige formål.

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Chapter 1: Introduction

With this dissertation, I present a qualitative research project that has focused on players' experiences within single-player gameplay. The aim has been to understand transformative processes in the activity of solitary play with digital single-player games and to present a description of how such transformative processes transpire. That play with single-player digital games has the potential to transform the player has been the subject of research and discussion from a variety of perspectives. To name but a few, Stefano Gualeni and Danial Vella have explored the subject from the view of anthropological philosophy, stating that the player can explore, experience, and transform themselves in relation to the play experience (2020). That is, that the player is within an embodied state of experience in play with digital games, which allows for novel understandings of themselves as they are allowed to be within and perceive the world from other perspectives. An existential relationship between and within worlds, which allows for transformations and even therapeutic experiences. In taking a qualitative approach to games and identity, Adrienne Shaw argues that expressions of identity in active processes of difference and sameness are in part based on a willingness for exploration (2014b). Playing alone, as Shaw finds, allows for empathic identification processes that are not necessarily bound by sameness between the player and the actions taken within the gameworld, which affords play with new identity forms. While there are many more perspectives on the role and function of transformation in play (which I will elaborate throughout this dissertation), a frame as to what my research has focussed on in this regard is in order.

This project set out to explore phenomena of player transformation in play with single-player digital games through qualitative and transdisciplinary research. The research has aimed to explore and understand potential transformative processes within the intricacies of single-player gameplay, and has focused on internalisation and transformation as a phenomenon of learning and play. More precisely, the aim of the research has been to understand the inner existential and experiential processes and states of players as they play single-player games in their habitual settings. A central research question guided the iterative and analytical movements between theory and research:

> How may identity or the self be constructed, maintained, and/or developed in solitary play with single-player digital games, and how can such processes be defined from a perspective of transformative learning theory?

Transformation in this research is regarded in the view of transformative learning theory. That is, that changes in the individual transpire on the basis of internalisation processes within the player in the act of play, which lead to new forms and potentials of self and identity within interaction with a gameworld. A key reason for this is the very long history of learning theory as embedded into a large variety of activities, and far from only relegated to the classroom or education in general. Learning, as with many other constructs, can be very difficult to define, yet the overall concept of learning is perhaps the more important aspect of choosing this

theoretical lens. It is (in a constructivist sense) about internalisation processes that lead to changes within the individual learner, increasing skill, ability, meaning-making potential, and/or competency, and which may change the individual in terms of identity and self-perception. And while that may seem simple, it is important to note that these processes range from simple knowledge assimilations to grander reconstructions of an individual's identity and self-reflection through singular, multiple, or consecutive internalisation processes. As I alluded to in the beginning, single-player play in some manner or form includes constructs of identity or the self as a developing entity in playful engagements. In this activity, the possibility space of the player in terms of these constructions differs from multiplayer play in the way the game instigates and affords transformations through relation (Leino, 2013, 2015). Importantly, players' transformative processes are at the centre of attention in this research via the player-and-game relationship. This means that the focus lies within the activity of gameplay itself and has accordingly been explored with the aid of 12 participants. Seven of these were active participants during the project period, while the remaining 5 were a part of a previous research project (evaluation and inclusion of this research data is elaborated in Chapter 3).

The focus is on the single-player activity and practice, as it is a play form that should potentially be considered a baseline of play with digital games (Simon, 2006). As I present in Chapter 2, it also seems to be the vastly preferred, if not the most prominent form of play activity. The issue that arises is that there is little empirical research incorporating transformative learning theory to describe what transpires in this activity from a processual standpoint. That is, a gap in knowledge concerning how transformative processes of play are constituted in solitary gameplay, and how these constitutions interact on the level of the player's both conscious and unconscious forms of being and meaning-making in gameplay. Processual analysis and understanding play as a continuum of processes are key components throughout this dissertation and are underlying features in most of my arguments and essential for the understanding of play and transformation. While Chapter 2 elaborates on these arguments, it is important to state that there is a need to understand how transformations in single-player play function. Not only is there a rising focus on the subject within a variety of academic fields (some of which I mention while situating the research later in this chapter), but the lived experiences and practises of solitary play also need to be recognised for the highly complex learning processes that these entail. This is of course not something new within the field of game studies, but in uncovering new perspectives on how learning and transformation takes shape in gameplay new research perspectives and directions can emerge. The key element in my research in this direction is *how* learning and transformation transpire, rather than *if* or *how much*. With this underlying perspective, the research presented here should be of interest to a wide variety of research fields, not least research concerning aspects of play and learning.

Synthesising transformative learning theory and game studies literature in order to understand play and internalisation processes, the focus of this research is on transformation in gameplay as it occurs in normal everyday play with single-player games. This habitual frame of normal and everyday play is important as transformative processes are highly influenced by the setting and environment in which they may occur, and the actions and interactions that are possible within this frame. Yet habitual activities and practices are problematic to access when

the basis of these is an inherent context of solitude and privacy. This led the empirical research towards a problem-centred -transdisciplinary approach, which means that the methods and the theoretical basis do not conform to the traditions of any mono-disciplinary mindset, nor does it completely conform to interdisciplinarity. Rather, the transdisciplinary nature of the project means that it is centred around problems and exploration, both in terms of methods, theory, and analyses. As such, the research project is situated as a transdisciplinary one through the development of methods and accompanying methodology. As Patricia Leavy writes: "Transdisciplinary research practises are issue- or problem-centred and prioritize the problem at the center of research over discipline-specific concerns, theories or methods" (Leavy, 2016, p. 9). Practically, this means that the research as a whole has the potential to shed light on something new across a wide field of interests. Yet it also means that the paths to these realisations are not disciplinarily well defined, and as such risk criticism from many fronts. A novel research method was however necessary in order to accommodate the intimacy of solitary play with single-player games, leading ultimately to a four-stage multimethod research design. Throughout the research project, including the method iteration, the individual interdisciplinary fields of game studies, learning theory, and player studies informed and nuanced the research process. Resultantly, this dissertation delivers a perspective on transformative processes in single-player gameplay from a variety of viewpoints and introduces a method to gain such perspectives.

Chapter 2 presents theory and literature foundational to the research project as a whole in the focus on play and transformative processes. The overall research design, -operations, and -procedures are presented in Chapter 3, along with an introduction to the participants and how research data from a previous project was incorporated into this project at hand. Methodological considerations of the research method are presented in Chapter 4 and presents how the research design was iterated with inspiration from a variety of ethnographic methods. The empirical material and the methodological insights gained from the research method are presented in Chapter 5, leading into the final two Chapters 6 and 7 presenting the main analysis, theorisation, and discussions.

The Research Procedures and Outcome

A central output from this research is a model of the interdependent constructs and structures of transformative processes in single-player gameplay, which can lead to both in-game and out-of-game transformations based on the interrelation between the player and the gameworlds they interact with. This model (**Figure 29.** Transformational Processes in Solitary Gameplay, page 183) is a collected output of the analysis, which represents the synthesis of theory and the research data. As mentioned, the transformations in the everyday lifeworld of a player are not something that can be conclusively determined from this research alone. Yet the individual as an out-of-game physical world entity must be recognised within the state of play, as the player and the game cannot be seen as completely separable entities. Rather they are complimentary in the single-player gameplay situation, where there is a running exchange of meaning which

is ultimately in the hand of the player to extrapolate and internalise, or ultimately deny. This leads towards the conclusion that solitary gameplay with single-player games is highly complex and individual in terms of transformational processes, yet also that the theorisation presents a new perspective which raises many new questions. In simplified terms, in-game transformation happens on a continuous basis as a development of functionality, sensitivity, and sociality within the gameworld, which creates an intersection between the player as a person, and the gameworld as a congruent reality. The model I propose to understand these transformational processes is based on this complimentary interrelation, yet it is also situational and not indicative of a universal truth in terms of games' transformational potential. It is a tool to both understand and question how transformations can happen and what they are constituted by, within a playful engagement with single-player games. Resultantly, the model focuses on processes of play and transformation and thereby leads the attention towards how transformations transpire, rather than if they happen or what they ultimately result in. While I of course hope that this model of transformative processes in solitary gameplay will be used in a variety of ways, it is equally interesting in the ways that it might be questioned. As the research here has been exploratory it is expected that many questions arise, which must also be seen as one of the main outcomes of the research.

The findings nuance the experiential functions of the players and show how the many facets and dimensions of transformative processes are based on deeply personal and individual factors. The investment of selfhood in solitary gameplay shows how the processes of play are intricately connected to the player's autobiographical references. Further, a substantial amount of constructs are activated even in what could be considered mundane play events. What this leads to is the identification of a playful self, which is a self-perceptive instance of the player's self in the gameworld. This playful self is essentially comprised of the lifeworld self and the experienced sense of self within the gameworld as a relational reality. Personal and game-based biographies, as well as personal and playful identity, are merged into this playful self, creating an instance of the self that is based on, and allows for, transformations. The playful self is the intersection of personal identity as a lived concept and a playful identity as an emerging concept in connection to specific gameplay, making the playful self a unified instance drawing on personal and game biographies and conceptions of gameworld and lifeworld. As will be shown, the playful self is a determining factor in what transformations are allowed to transpire and how these transformations form the player's interaction with the game. Internal evaluation and the resulting expressions of self through the playful self are based on the player's building functionality and sensitivity towards the gameworld. That is, that there is a constant stream of understanding and meaning-making, and emotional and volitional evaluation in the player's experience of gameplay. These structures form into enactments of sociality within the gameworld, which is the basis for transformative processes in the playful self. The playful self is therefore not a stable instance that can be predetermined without the actuality of experiences, which are the basis for transformation.

Gaining access to original experiences of solitary gameplay is not easily done and requires extensive methodological consideration as to how the participants' activities can be approached with minimal disturbance of the activities themselves. Resultantly, a four-stage research design

was iterated to accommodate the sensitive nature of solitary habitual activities and practises of play with digital games. I call the combined method in this research design the DisPlay method, which consists of the four sequential stages: streaming gameplay, video analysis, video-elicited interview, and differentiation analysis. I have named the method 'DisPlay' because of the discreet nature of play (the infinite possibilities in the playful engagement), and the discreetness of the activities and practises the method can access (the private and personal solitary play in everyday life). With the video-elicited interviews displaying gameplay video to the individual participant, the naming of the method hopefully makes sense in that this part of the method is central to the qualitative research process.

In practice, participants were individually observed in their play activity via video streaming platforms. Only the gameplay was recorded, and the observation and video analysis happened asynchronously from the actual play events. This was done in order to respect the privacy of the participants' play situations and contexts, while also approaching their habitual practises as non-intrusively as possible. The gameplay video from the participants was continuously probed for potential content for a video-elicited interview. Once there was enough material to conduct an interview the participants were invited to such, and a video analysis was undertaken to find moments and situations in the video data of particular interest. Across a combined 12 participants, the video material amounts to 184.5 hours of original gameplay and 13 video-elicited interviews (one participant was interviewed twice). The video-elicited interviews (see for example: Henry & Fetters, 2012) drew inspiration from micro-ethnography (Giddings, 2009) and the Mindtape method (Nielsen & Christiansen, 2000). In using a modified form of these two methods, the participants were able to articulate internal processes that had occurred in the specific gameplay situations when viewing the video, and could further elaborate on the constituent factors of the gameplay situation and their original experience in this (see Chapter 5). Finally, the differentiation analysis aimed to sort and organise the interview data through triangulation of the materials, revealing processes rooted in the original experiences and secondary interview-based reflections on said processes. The differentiation analysis is an investigation into the constitutions of the combined data, revealing the interdependencies of the interview statements, the video material, and the video analysis. As such, the combined method contextualised the research data with the individual participants' play activities and was able to situate the data within (and outside) of habitual practices and activities.

The method gave access to *what* the players do and grounds statements about *why* in relation to the original experiences. This resulted in solid implications as to *how* internalisation processes function in gameplay, grounded in the individual players' re-experience and situated memories of original play experiences. The research design and the methods proved challenging in both technological setups and research ethics, yet they also supported a successful path to investigate the finer details of solitary gameplay activities. Importantly, the participants did not find the method overly intrusive, and in general, they stated that they played as they usually would. The method in itself shows how there is potential to get very close to original solitary experiences. The benefits of this being the undisturbed processes of play, which open up for understandings of what players experience in their habitual solitary activities, and

why these are both important and meaningful on their own terms. The method itself has a variety of potential uses with digital media in general, yet as will be presented, also requires ethical considerations as to what private spheres the researcher is entering.

The main analysis (Chapter 6) presents how solitary play with single-player games is highly complex in terms of mental activation and embodied experiences. In terms of transformative processes, expenditures of mental and bodily energy are subject to many variations, which also substantiates the significant amount of energy spent within the activity. Transformation, being the most complex learning and internalisation process, would be expected to require this energy. In this also lies a distinction between in-game transformation, and out-of-game transformational potential, as the research here cannot define how transformative processes in gameplay influence the individual player in their lifeworld even if there are indications of this in the research materials (presented in Chapter 7).

Situating the Research

The problem-centred approach ties closely into the methodological issues, which means that the research needed to innovate by combining methods and theory and incorporating this into the research design. Going hand in hand with this was the iterative implementation of theoretical concepts beyond initial theoretical baselines within game studies and transformative learning theory. The result of these iterative movements is the monograph as presented here, delivering both empirically grounded results and theorisation of constitutional and contextually defined transformative processes possible within the single-player play activity. The participants and the games they have played have been varied in order to explore the possibility of generalisable theorisation, yet the games fall into an overall genre of games with roleplaying elements. The inclusion of role-playing games as a basis for the research was a pragmatic choice, in that potential transformations were considered best seen in this genre of interaction (see Apperley, 2006), thereby lending the research a fruitful basis for theorisation toward other game genres. I do however not engage extensively with role-play as a specific form of play in this dissertation. That is not to say that role-play has no transformative potential, but rather that the inclusion of a specific play form would nullify the explorative intention of the research. I have therefore not been looking for performances of certain identities or structures of the self, or pretend play (mimicry) for that matter. Yet I do discuss the implications of role-play in connection with the findings of the research in Chapter 6.

The strength of choosing a learning theory approach is that processes are at the centre of the understanding of meaning-making and development. This stands in contrast to focusing on the outcome of processes which is a more prevalent measure of learning in research, especially within Game-based Learning paradigms focussing on educational outcomes. The focus on outcomes usually relegates processes to a black box which means that it is the results of an activity that become indicative of learning, rather than the learning processes themselves. This can lead to binary conclusions on success or failure (and often with a portion of confirmation bias), foregoing *how* learning happens in favour of *if* learning happens. As Nicola

Whitton (2014) concludes in her interdisciplinary work on digital games and learning, she hopes for a shift from "games for learning" to an appreciation of the value of "playfulness in learning". This view of internalisation and transformation through playful engagement has been prevalent throughout this project, to which end both the theoretical frames and the methods employed in the research seek to adhere to the principle of play and learning as simultaneous, parallel, and mutually informative.

To understand *how* learning transpires the main theories of transformational learning that I rely on are those of Knud Illeris' (2017a) *comprehensive learning theory*, Peter Jarvis' (2006) *comprehensive theory of human learning*, and Jack Mezirow's (1991) *transformative dimensions of adult learning*. Mezirow is generally acknowledged as the founder of transformative learning, and his theories touch on some of the actionable events that have been observed in the data of this project. The inclusion of this theory leads to a discussion about transformations in relation to the development of abilities to engage in critical dialectical discourse. Jarvis' theory has a specific focus on an existential understanding of transformation in incorporating the biography of the individual as a basis of the self. In this, Jarvis' theory explores the self and identity, how they are formed, changed, and nuanced in the experiential sense through an individual's activities and perception. And finally, Illeris has a focus on processes of internalisation and transformation in a psychosocial view, which has been the main inspiration for a structured investigation of internalisation processes leading to transformation. Both the theories of Jarvis and Illeris are presented in the next chapter on a more general level in connection to games and transformative learning theory. The finer details of Jarvis' and Illeris' theories are presented and synthesised within the analysis in Chapter 6 where Mezirow's theory is also utilised, although to a lesser extent.

The focus on a deeper understanding of digital games in terms of transformational potential within playful interaction is not completely new within game studies. Notably, Sherry Turkle found solid connectivity between players' lifeworlds and the roles they inhabit and explore in games (Turkle, 2005). Referencing Eric Erikson's psychosocial moratorium (for overview of the theory see Côté, 2020) as a frame for the transformational potential of playing digital games, Turkle found these activities to be both substantial and important to the players' everyday life and asked how these activities supplement and form our identity and lifeworlds (Turkle, 2005). In relation, work on identity and identification has had another angle, focussing on representational aspects of play, player characters, and gameworlds from a variety of perspectives. Adrienne Shaw's substantial work with identification and representation (Shaw, 2014a) highlights how a cultural analysis can make way for new and more nuanced understandings of the role of gameplay in terms of identities. Specifically, Shaw's attention to marginalised players and the incorporated representational analysis widened the discourse around gamer culture in relation to both production and consumption of digital games. And in a perhaps wider perspective, Joost Raessens shows how games and play are increasingly becoming a part of the more general media culture and beyond, and argues for the importance of viewing play as an inherent part of media consumption practises (Raessens, 2014).

In Game-based learning (a substantial field of games research), the questions about *how* learning happens in an educational sense started to arise in the 2010's with systematic reviews

finding that games do teach, but that the processes of how they do so are still ill-understood (Clark et al., 2016; Connolly et al., 2012). More recently, Krath et al.'s review of the theoretical perspectives taken on learning in games highlights where the field has been moving towards in terms of learning theory (2021). The study finds self-determination theory, flow theory, experiential learning theory, and constructivist learning theory to be the most popular in research. The former two (Self-determination theory and Flow theory) being problematic from this project's perspective in the sense that they are mainly motivational theories. Self-Determination Theory (see for example Ryan et al., 2006; Uysal & Yildirim, 2016), while highly popular in both Game-based learning and HCI games research, has been criticised not only for its lack of connection to games and play, but also for being used at a shallow level within games research (Tyack & Mekler, 2020). And while Flow theory and its later iterations (see Csikszentmihalyi, 1990; Nakamura & Csikszentmihalyi, 2002) are often used as an indicator of learning through play, it is most often not on the basis of engagement in the research with actual learning processes, to which I add to the ongoing criticism of Flow theory in connection to games (and learning) (see for example Soderman, 2021). In terms of constructivist and experiential learning theories, these are discussed in Chapter 2.

In 2020 the Transformative Play Initiative was established, which has since delivered several publications in terms of a design-oriented understanding of transformations in play and games. Notably (although by no means an extensive list), Doris Rusch and Andrew Phelps have explored transformations from an existential point of view, incorporating existential psychotherapy, myth, and ritual into a design framework (Phelps & Rusch, 2020; Rusch & Phelps, 2020). Josephine Baird has explored transgender experiences with games (Baird, 2021, 2022), and has with Sara Lynn Bowman examined roleplay, identity, and transformations (Bowman & Baird, 2022). In these explorations of transformation lies some issues in terms of the research of this dissertation however, in that this has not been concerned with game design specifically and has a focus on solitary single-player play. In this, LARP (live-action role-play) does not quite fit with the intricacies of the private practises of single-player games, and designing for transformational experiences does not quite explain the transformative potential of the different practises that players have with commercial entertainment games in the privacy of their habitual environments.

A both public and academic discourse which should be addressed in terms of transformation is that of games and violent content. I will not go into details on the debates and literature about games' potential to make people violent, or how they may be contributing to negative psychological and/or social developments. Indeed this debate in terms of Game Studies has been ongoing, quite well exemplified by Rune Klevjer's somewhat critical review (2018) of Gareth Schott's book *Violent Games* (2016) in which Klevjer ask for greater nuance in the research and explanation of violence in games. Suffice it to say, that I hope that specific discoursal research paradigms, often found within quantitative psychology and games (see Ballou, 2023), can also benefit from a more nuanced understanding of transformational processes in play with digital games. In this, I will also underline that I ascribe my data neither positive nor negative value in terms of the potential outcomes of transformations, to the extent that they happen. This means following Miguel Sicart's argument in his book *The Ethics of*

Computer Games (2009) in forgoing judgements, logics, and norms of the physical- and sociocultural world at large in favour of logics and morals as acted in the interplay between the player and the game. In this, I try to have a neutral view on the processes of play where the inter-relational logics and norms of the gameworld are the main interest, despite how they may clash with contemporary discourses. As I have attempted to be transparent in my approach to the research data, this is hopefully also apparent throughout the dissertation.

These combined movements, especially from the past five years, show how there is quite clearly an interest, if not even a need, to understand learning and transformation in digital games in new and more detailed ways. Proposing a process-oriented way of understanding transformation, this thesis will hopefully contribute to these mentioned initiatives and movements, not to mention more humanistic-centred research on single-player games which I refer to throughout the dissertation both in terms of the results of the research, and a methodological frame that has gameplay and transformation as core terms of its iteration. In this, this project hopefully allows and encourages new questions to be asked and fosters new epistemological grounds for further research. The next section is dedicated to the disciplinary matrix (or rather lack of same) that the project has been iterated within.

A Transdisciplinary Approach

An essential part of the research of this dissertation is that it has continuously sought to eliminate a laboratory setup and to lessen the synthetic situation of observational science. In this, the research design and the theory mutually informed one another in an iterative research process seeking to establish how transformations can transpire in solitary play. While attempting to remove social influence and bias from the participants' mindsets in the play activities observed, this research could expectedly not wholly do so (presented in detail in Chapter 5). Still, this dissertation presents how novel methods can elaborate on understandings of highly complex processes within activities that are not naturally visible or naturally available for observation. With the focus on transformative processes, the research needed to rely on both a very open and iterative work process anchored in a specific issue. While the mere notion of transformative processes in single-player game-play practises was enough to elicit a range of research questions, the main aim of the research remained clear: To explore and describe details of transformative processes occurring within the everyday lifeworld of actual players, rooted in original playful and habitual experiences with single-player digital games.

This proposes some serious issues in terms of research. One being that transformative processes are highly sensitive to observation, and another is that original experiences with single-player games played in a habitual setting are inapproachable without dismantling the habitual and often solitary nature of the practice itself. In the combination of the two issues lies a significant challenge, which also defines a solution. Both habitual practises of play and transformative processes are subject to inevitable changes if the environment in which they happen is disturbed, indicating that innovations in methods had to be made in order for the empirical investigation to succeed in exploring and uncovering something that is inherently

hidden and private. These methodological considerations along with the two inherently interdisciplinary fields of game studies and learning theory meant that the project quickly showed itself as transient of disciplinary boundaries (and thereby became transdisciplinary) in the constant movements between and beyond the initial theoretical and methodological iteration.

As Patricia Leavy's (2016) presentation of transdisciplinary research implies, problems both in the world and within the research of the world lend themselves to innovation by individuals transcending disciplinary boundaries. Yet as can be imagined, this also creates (albeit necessary) issues and challenges that demand time and attention, potentially limiting the scope of the research due to the experimental nature. The amount of procedurally incorporated theory and viewpoints based on the results from collecting and analysing the data made for a constant wondering and investigation as to what could be described. Yet also, these research processes created a very broad field of scientific views, within which it is inevitable that any one field or area has more literature that could elaborate the findings. Traditional disciplinary areas and fields are therefore likely to be unfulfilled, as is not uncommon with transdisciplinary research. This is why I frame this research method (DisPlay) and the accompanying theoretical model in the view of processual play. It presents an otherness of thought towards the activity of play and the way to investigate it, and therefore needed a frame in order to be used both in this and in other research contexts. In addition, the challenges of researching hidden practices and activities that this research has explored also imply an opportunity. To this end, this dissertation presents a specific research frame utilising contemporary technology to research otherwise inaccessible human behaviours and habits with digital games (and digital media at large).

While I attempt to situate and elaborate on the majority of the details involved in the research, it is not realistically possible to appease all the different potential viewpoints of the many different fields and traditions I touch upon. As Hans Dieleman describes, the processes of transdisciplinary research present a vertical movement of iteration and investigation, which should not be bound by the horizontal or circular movements of interdisciplinary or monodisciplinary research respectively (2013). In this project, the transdisciplinary research process has been about reconfiguration of mind, thought, and argument toward investigation of potentials in order to explore new insights. It is a risk-filled business, which requires innovation and patience, and within which results are not guaranteed due to the untried nature of the disintegration and re-assembly of theory and methods towards potentials, rather than expectations through well-described research operations.

Chapter 2: The Foundations of the Thesis

The research of this dissertation focuses on the players' internal processes as exploration and verification of transformation (rather than the results of transformations themselves). In this, the project adheres to Dilthey's principle of research, stating that it is the process of verification to a claim that makes it true, rather than the verified claim itself (see Ramberg & Gjesdal, 2009). This chapter explains and argues for my overall goal of uncovering the details of the processes of internalisation and transformation in play with single-player games and presents theory in relation to this. It thereby shows how I am situated in terms of the philosophy of learning, and how this stance intersects with game studies and learning theory throughout this dissertation. The main aim of this chapter is to convey the holistic foundation from which theory, methods and later analysis can conform attention to the details of play activities through empirical research. As this chapter also represents a critical literature review, it is important to state that I adhere to broader notions of applicability and criticism of literature in relation to the research. That is, it is quite impossible to include and evaluate all literature that concerns games, digital games, learning, learning, transformation, and play. There is simply an abundance of research with such different foci that creating an overview is a full project (if not several) on its own without even considering transformative learning theory. So, while I present relevant literature in this chapter, it will hopefully also be apparent how this both hits and misses the mark in terms of the research question of this project focussing on transformation of the self and identity in the particular practice of playing single-player games.

The investigation into established literature surrounding transformational learning and games (and play) yields very broad results pertaining to differing aspects of both the research aim and theoretical framework. This holds some importance, as Games and Learning as an interdisciplinary field is extensive and difficult to navigate, as finer details in the original fields are used, implemented, and discussed in varying degrees. In addition to this, the theoretical terms that are used as well as more general explanations of the focus of both theory and research are highly varied. This means that both established literature and research studies are difficult to compare and integrate in a theoretical frame before it is sufficiently utilised. In this, I am echoing Espen Aarseth and Pawel Grabarczyk who problematise the overwhelming amount of theoretical terms and methodological lenses used in game studies due to its inherent interdisciplinary nature (Aarseth & Grabarczyk, 2018). In light of this issue of terminological inconsistencies, I took a hermeneutic literature review approach to the literature searches and inclusions of specific texts (see Boell & Cecez-Kecmanovic, 2014). In this, the initial review granted a baseline for potential inclusion of specific literature, which could later be implemented as the research presents opportunity for connection. As such, the overall scholarly work of reviewing literature with this approach is an iterative process, emphasising the development of understanding and insights during the research process. The literature presentation throughout this chapter takes a mainly critical stance (see for example Grant & Booth, 2009), representing the earlier stages of the literature review establishing the overall

approach to the research. This approach was a necessity as transformative learning theory, transformative learning, and internalisation in terms of transformation in relation to games and play yielded limited results relevant for the research question. Outside of educational paradigms that is, which is a part of the critical take on some of the presented literature.

In general, the vast majority of established literature and contemporary research on games and learning centres on the functionalistic focus of *what* play and learning can do instead of being interested in the pedagogical and existential *how* that is the focus of this research. Learning is indeed context-dependent but situating learning processes in play according to the contemporary depiction of benefit within the societally defined ascription of value is somewhat problematic. It misconstrues learning and play into educationally designed structures, which often negates the learning processes in favour of the desired results of investing interests or stakeholders. This often leads learning, play and games towards functionalistic questions of *what can be learned*, delving then even further into an opportunistic valuation of *how much*. The antithesis of this is the notion that learning is quite simply learning, which can happen in a variety of different forms and contexts, formal or otherwise. This holds importance in underlining that learning processes themselves are anything but simple, which will be further examined in terms of internalisation and transformation in play in this chapter.

Situating Transformative Learning and Play

Bridging into the understanding of the self as a part of transformational learning, Dilthey's concept of experience as embedded in a temporal social continuum becomes relevant in the events of self-understanding as self-referential in relation to others (see Ramberg & Gjesdal, 2009). The "others" in this case being the mediated consequences of deliberate interaction in a game world of suspended disbelief, which, in terms of Dilthey, is not only an inner experience but a lived experience. While this may seem trivial, it is a shift from measurable data and foundations thinking towards John Dewey's radical empiricism (see Capps, 2019) stating that the world cannot be reduced to sense data, as there is both meaning and value in sense and perception. As such, play with digital games is a both valuable and sensible activity, which warrants research into the finer details of transformative processes within the activity. So, while play in itself can take many forms, the processes of play and processes of internalisation must be seen in conjunction if transformations in gameplay are to be understood. That is, while play can be subversive, carnivalesque, appropriative and more (Sicart, 2014), it can also shift between these varying forms or indeed turn into something else entirely. What is important is then how processes of transformation happen within the player in connection to play and the shifting forms that play may take. If indeed play changes in the same play instance, there must be perceptions, emotions and shifting contexts which are based on internalised meanings, based on the interaction. Sense and perception and the values of these must be based on playful interaction with these internalised meanings, which are in turn utilized in transforming the play situation in a continuous stream.

Transformative learning theory has the potential to shed light on these processes of transformation through play. Yet learning theory is not inherently geared towards the activity of play itself, and as such needs a certain amount of reframing to account for the complexities that play instigates in learning processes. I therefore argue for "play as processes" to frame and inform the potential transformative processes in playful interaction through the lens of transformative learning theory. This means translating and synthesising theory from the fields of learning theory, game studies, play theory, player studies, philosophical and post-phenomenological research, and the more classical (yet also diverse) disciplines of sociology and psychology. Thankfully, many of the mentioned fields have already taken highly interdisciplinary approaches to the study of games and players, and as such bring about their own philosophical positionings and intersectional viewpoints. What I would like to make clear already in this is that single-player play activities and practices should not be understood through axiomatical logic drawn purely from a reductive perspective of interhuman relations and interaction. That is, that the single-player play activity and the practices that are formed from this cannot be seen as either mundane events, simplified instances the multiplayer play, or even events with particular functionalistic outcomes. Quite the contrary.

Suffice it to say that transformational learning theory is the basis for claiming that learning processes in single-player gameplay may lead to transformation in taking the form of identity formation, self-development, or other forms of competency and capacity increases. As Jack Mezirow states in terms of transformational learning "We transform our frames of reference through *critical reflection on the assumptions* upon which our interpretations, beliefs, and habits of mind or points of view are based." (Mezirow, 1997, p. 7 original emphasis). As such, transformational learning transpires in the reflective processes that are instigated through interaction with the world on a general level. Mezirow's theory of transformational learning was inspired by Jurgen Habermas' ideas of language as communicative action, Paolo Freire's ideas of critical transitivity, and Thomas Kuhn's paradigmatic transformations (see C. Calleja, 2014 for an overview). The theory rests on Critical Theory (also indicated by the inspiration of Habermas and Freire), as it encourages the analysis of the processes of social change through reflective judgements. These may then collectively empower and emancipate a social group towards recognition, and ultimately move towards social change. In contrast to Habermas and Freire however, the theory also managed to sufficiently disturb the disciplinary matrix (according to Bird, 2018) specifically regarding the understanding of learning as an unstable and life-long endeavour in relation to societal change. Mezirow thereby created a differing discourse on the concepts of emancipation via learning for the time. Viewing games and transformation in this learning theory perspective focuses the attention on the player as a subject of transformation through learning, and games as interactive pedagogical agents supporting the learning processes themselves.

However, as indicated by Mezirow's inspiration from Critical Theory, processes of transformation in the environment of solitary practices (such as play with single-player games) are difficult to distinguish and define on a purely individual level. Emancipation and empowerment become too broad and therefore questionable to use as guidelines for processes of transformation in relation to the extremely varied group of players of single-player games.

On a more granular level, the activity of play, a theoretical frame of self and identity, and the pedagogical relation of gameplay all lead to notable questions about the scientific endeavour of researching such topics from a transformational learning perspective. It thereby seems problematic to examine these processes (being the transformation of "our frames of reference" and "critical reflection on assumptions") which, in terms of Mezirow's theory, lead to collective change. Conclusively, frames of reference and critical reflection on assumptions are results of processes when on a collective level, and do not necessarily explain the transformative processes in themselves within singular activities. I have previously discussed some of the issues of researching identity formation and development in a publication aiming to problematize the pedagogical relation between player and game (Graham, 2021). In relation to this work, I would argue that such research should rely on contextualisation of the individual's processes of play through the practices they engage with on a granular scale in terms of the individual's play activity.

This leads to the important aspect that transformative learning has no specific and/or uniform temporal moment in which it happens. It is a continuum of processes wherein states of being (the intentionality of the player in the reciprocal relationships with game objects) may or may not influence one another, at any given time throughout the co-authored experience. Underlining this, Kurt Squire states that learning theory should be seen as an integral part of understanding the complex nature of play as a cultural and developing learning practice. As Squire argues:

> Learning is conceptualized not as a function of the game itself - or even a simple coupling of the player and game; rather, learning is seen as transformations that occur through the dynamic relations between subjects, artifacts, and mediating social structures." (2002, p. 10)

The quote refers to terms of Activity Theory within sociocultural psychology, yet it shows how learning theory and game studies are closely interconnected once we think of play as both a social and cultural practice. So, while broader strokes of learning, personal development, and games may generally be seen as interesting on a larger sociocultural scale, the main focus in terms of transformations should rely on the players' processes in relation to themselves and their own sociocultural, spatial, and internal contexts of reference within the playful engagement. In much research on learning and games, it is the results of learning that are often at the centre of investigation through positivistic- or functionalistic-inspired methods. This evaluation of learning through results stems from a functionalistic viewpoint which will often only ill inform the processes undergone to achieve the result itself. While likely a result of procedural rhetorics/proceduralism in game studies (see Bogost, 2007 for the theory on the matter), there is a deterministic turn to prove that interaction is based on computational facts in the design of rules, wherein "the rules" of the game becomes the meaning (making-process) of the game itself. Miguel Sicart, in contrast, argues for the play-centric approach, which sees the player and the play activity as central to the meaning-making process. In this contradiction to proceduralism, Sicart argues that play defines the meaning of the activity and the experience, rather than the rule-based system that is being played with (Sicart, 2011). In this sense, the

activity of play and learning falls in line with Olli Leino's argument of gameworlds as affordances of suspension of disbelief (Leino, 2015), in which the player's intentionality guides and decides the perception of the experience, in contrast to, and to some extent despite, the game's rules, systems, and computation.

A functionalist approach to games and learning research would see the artefact with which learning happens as the centre of the scientific exploration, while the human agency and development is often considered the indicative result of the artefact's efficacy towards intended outcomes. In contrast to this, I would argue that the scientific endeavour of identifying and formulating the processes of play towards internalisation and transformation holds more importance. Results of learning must be seen as indicative of the processes rather than the goal of them, which is more rational (if not more empirically sound), than the induction of probability and inference that hold both positive and negative learning results as centrepiece based on design. I rather see the artefact (the game) as the means to interaction and interrelation, and thereby the epistemological positioning of this research on transformation in play becomes experiential. Yet in itself, this exploration leads towards foundational thinking in the sheer magnitude of variable components that single-player play with digital games present. While I cannot excuse this research from foundational inclinations, it is perhaps important to state that the novelty of both theoretical and methodological synthesis lends itself to early foundations of future research.

In this synthesis lies a simultaneous acknowledgement of the procedures that games present within the sphere of computation and mechanics. That is, that there is indeed a message within the medium which transcends the physical constitution of the medium itself (to semi-quote McLuhan (2001)). Yet it is more complicated than simply addressing the medium as a messenger of its own situatedness, function, and inter-reliabilities in a historical or even contemporary sense. At best, to say that digital games (specifically single-player digital games) mediate certain perceptions would be a reductivist mindset towards digital games as both historically and contemporarily situated cultural artefacts. Indeed, this mindset means that the perception of digital games could be reduced to axiomatical logics of "messages" drawn purely from the representational, procedural, or historical constitutions, thereby diminishing the very essence of the digital game as an inter-actionable and inter-relational environment of embodied existence and experience. There is quite simply a difference between procedure and process, where procedure (even if rhetorical as implied by Bogost (2007)) implies the dependencies and sequences of things, and processes imply the actuality of the lived experience. The former reducing the game and the player to simplified instances of computation in closed feedback loops, and the latter accepting (and perhaps over-complicating) both individual, context and interaction as defining the instance of play. With little surprise perhaps, the research of this thesis ascribes to living and lived playful experiences in investigating transformative processes in play.

(Game)Play: Solo, Solitary, and Single-Player

The research aims to uncover processes that are hypothesised as unique to the interactive and playful engagement of play activities and play practices with single-player digital games. Stenros & Waern argue that play with single-player games must be seen as an interactive activity between game and player and as this playful engagement is negotiated directly in this interrelation, it should be researched accordingly (Stenros & Waern, 2011). Yet this also poses an interesting question about play and playfulness, which also warrants a distinction. As Leland Masek and Jaakko Stenros find, playfulness comes with connotative values which predispose certain parameters of engagement (2021). This leads the authors to a rather fruitful synthesis, in that the broader understanding of playfulness indicates *how* play functions through engagement, rather than *what* happens or *why*. In this sense, viewing play as continuous processes in a learning perspective would indicate playful engagement, yet this predisposition also leads to a somewhat self-referential circular movement. Masek and Stenros's conclusion suggests 'engagement and playful organization' as a frame of reference in examining playfulness (2021), which leads the theorisation towards the broader notion of 'play as situated' with a more granular idea of processes of play creating a situation. In this sense it is important, especially for this empirical research, to acknowledge that (almost) anything can be engaged with in a playful manner. Yet also, that there are limits both to the playful engagement and play itself, constituted by contexts that are unique to individual lifeworlds and circumstances. Miguel Sicart generally presents that play is a way of experiencing the world, and that play itself is a way of making sense of the world (Sicart, 2014). To put it simply, as play experiences become a part of how the world makes sense, they also become a part of ourselves. In this manner, play and the activity of play must be internalised in some way through processes unique to the individual, and processes general to human functioning. But also processes that are unique to the contexts in which play takes place, both on a larger sociocultural scale and on a spatial and temporal scale which combined create an environment in which the activity unfolds.

What this implies is that the activity of play with single-player games is delicate, not lending researchers easy access without substantial influence on the inter-activity itself by creating another kind of experience in the negotiations of play. That of a socially biased experience, altering the interactions in the activity towards the player's inter-relational social affordances in the scientific setting. Whereas online, multiplayer, or co-operational games may afford researchers engagement with players somewhat naturally within the activity itself (see for example Boellstorff et al., 2012), the implied solitary and private practises with single-player games means the researchers are likely disruptive of the practice if it is to be observed in situ. Understanding what single-player play is as a concept is thereby of some importance in order to situate the research of it. Establishing what the single-player play activity with digital games affords, Olli Leino argues:

> Single-player games are those which we perceive and with which we interact, while multi-player games are those through which we perceive and interact. Hence, we can describe single-player computer games as appearing in alterity relations and multi-player games in relations of mediation. (Leino, 2013, p. 10)

The main point of this distinction is that the two different forms of play should be considered very different by the fact of the different relational aspects. And while this is not a matter of black-and-white distinctions, the differentiation of these two relational forms grants a certain analytical lens to understand the possibility spaces players must navigate in single-player play. What this *alterity relation* implies, is that the activity of play with single-player games is based on perceptions and internalisations that create experiences of interaction and interconnection. This particular term is quite substantial to this research, and one that I return to on multiple occasions. The differences in relations also underline the activities and practices that are investigated in this research, which may be described in a variety of words and forms. Single-player play- or single-player gameplay, solo play, solitary play, and possibly more are possible nominators for the activity and may describe a variety of situations around the play sessions. So, while Leino utilises post-phenomenological lenses inspired by Don Ihde to explain the key relational phenomenon of relation, the empirical nature of the habitual activities and practises investigated in this dissertation calls for an explanation of contextual and relational limits.

I choose to call the activity researched single-player play and single-player gameplay. These two forms represent the uniquely internal workings of the player. That is, the player's perception of the game and the gameworld from the player's perspective, and the player's meaning-making processes within a state of play. Single-play play takes the perspective of the player in the activity of playing a game alone. In this, the alterity relation is seen from the player's perspective with an emphasis on the affective, emotional, and cognitive processes that create and afford impetus and action. Whether it is oppositional play, role-play, carnivalesque or even dark play, the game's affordances do not so much matter as it is mainly the player's fantasies, desires, and modes of being in play that are the centre of attention. Single-player gameplay on the other hand represents the interrelational aspects of play which correlates the game as a designed digital space along with the organic player. While both single-player play and single-player gameplay rely on a certain measure of co-authored experience between the player and the game, the gameplay aspect adheres more to the game as a computational system with specific affordances and representations, and also specific limitations. A simple example would be giving a gift to an NPC, where the game mechanics might reward you in some manner. The reward mechanic enhances the game's prominence in the situation, meaning that the player does indeed make the decision to act, but it can be based on a large variety of reasons. This makes the game a larger part of the play situation, leading to gameplay. Should there be no rewards or outcome of the gifting, and the player knows that there are no mechanisms of rewards in this action, it can be said to be purely for playful reasons where the player is the only driving force. As such, when looking at internalisation processes in the state of play, the relevance and prevalence of the digital game as a system of rules, mechanics, and representations can hold different meanings.

While distinguishing between these two terms may seem redundant, there is some importance in the reporting of how activities and practices of play form from these different perspectives. That is, where the inspiration and impetus for specific transformative processes reside, and how they develop in the alterity relation. Play as in a playful engagement with a game, versus gameplay as a playful activity with a game, where the former focuses on the

player's experience and the latter on the game's designed features in creating an experience. In this distinction lies an interpretation I draw from Torill Mortensen and Kristine Jørgensen arguing for the player-response perspective (Mortensen & Jørgensen, 2020). Namely, that the relationship between the procedurality and flexibility of games necessitates that the players are the point of access to understand both games and players respectively as (and within) an intersectional experience. Single-player play as player experience, and single-player gameplay as player experience specified by the specific game and the specifics of the game's systems and representations. As such, I use the terms single-player play and single-player gameplay to describe the socially and culturally embedded individual playing a game, whereas the following terms of solo-play and solitary-play describe the social contextuality of the activities within and outside of the digital space.

The reason for this further engagement with terms is that private play practises and activities may have a variety of constituent factors, which have a certain influence in terms of the intrusiveness of observation. Solitary play leads to the assumption that the player is alone in their immediate environment. This was not quite the case for all the participants in this research project (nor can it be considered the general form of single-player play), which is why this could be considered a misnomer for the data collected in a general sense. Yet, what was uniform was that all the participants played the games alone in their relation to the gameworld, meaning that they alone were the active participants in the play and the actions taken as seen in the video materials. This is a notable point, as none were specifically instructed to do so. As such, this lends a fleeting thought that single-player games are perhaps usually played as such, and not quite as much in the otherwise implicated social manner (see for example Consalvo et al., 2018; Stenros et al., 2009). Solitary play could however be considered as the most difficult play context to approach, which is also why it was the baseline activity that the method iteration revolved around, and the main term I use in describing the play setting.

Solo-play indicates both play with single-player games, and play with multiplayer games in which the player does not engage with the social aspects of the "relations of mediation" as Leino calls it (2013). Solo-play could potentially describe the context of the participants' play activities well, as it assumes the individual player engages with a game without interference from other people in the physical context and without notable interference from other players in the digital context. While there are strong notions and explanations about solo-play as a multiplayer play-form in the data through the participants' descriptions, it is not something I elaborate extensively upon aside from underlining certain points and arguments in terms of the activities and practices that I wish to investigate. Nonetheless, solo-play is a play form that has been considered in terms of games for some time (Klastrup, 2008; Simon, 2006), and which two participants engaged in during this project when playing multiplayer games. It would be highly interesting to examine this solo-play-practice with the methods used in this project to a larger extent considering that this is yet another play form that is quite hidden, even though it can reside in multiplayer games. As solo-play is discursively mostly tied to multiplayer games, I do however stay clear of this term unless it is appropriate towards that specific activity.

With these distinctions in mind, I refer to the participants' play generally as single-player play, single-player gameplay, and solitary gameplay. I generally refer to solitary play and

solitary gameplay when speaking of the activities and contexts in which the participants of this research played, as the near social context of the individual play sessions recorded is largely unknown, but also seemingly without substantial importance in the participants' recounts of their gameplay situations. Further, I also refer to solitary play at a more conceptual level of privacy standard for the iteration of methods and the sensitivity of the activities. Many participants did play in a solitary setting, but this can also be discussed ad hoc as it can be questioned if it is truly solitary play if there is a partner or roommate in a room nearby, for example. This is not something that this project engages with specifically, as I did not ask the participants about the social context in each play situation shown in the interviews. To the extent that a social setting was important to the situation, I would expect the participants to reveal that information when talking about a particular situation. This was never the case specifically, although a few situations led to some information about the social setting as a context in which the participants engaged in solitary play.

Learning and Play: From Results to Processes

Throughout the literature review, it became apparent how games and learning in the merger of differing disciplinary fields is most often concerned with game design and results in terms of educational value. As touched upon in the introduction, the issue that arises from this is that the focus then becomes centred on design and cognition, often forgoing the emotional and sociocultural realities of learning and reflection in play, or centring on these constructs in the pursuit of educational goals. This prominent focus on formal content learning may very well be a product of discourse within national/regional paradigms on learning in general. As Valerie Shute & Fengfeng Ke note, the manner in which games and learning are viewed in educational discourse is perhaps a core issue with our understanding of games and learning (2012). Play with and within games and gameworlds fade in importance, as traditional disciplinary constructions of pedagogics, didactics, and learning theory are operationalised towards educational discourse, most often subjugating the very essence of the activity of play. The problem that arises from this is that the educational values of learning overshine the learnings made through play on a general level.

As mentioned in the introduction, the two most preferred theories in Game-based Learning, being Self Determination Theory and Flow theory (Krath et al., 2021), are not exactly learning theories but rather motivation theories. As such they are not applicable to learning, play, and games in relation to this research in either their base or expanded theoretical forms. Other theories, such as the theory of multiple intelligences (Gardner, 1999) (specifically intra-, interpersonal intelligence) may also have been used to understand transformation. Yet this would skew the focus towards psychological constructs with the risk of individual participant psychoanalyses focussing on patterns, more so than individual participant interviews focussing on processes. This theory falls somewhat into the same category as Self Determination Theory and Flow Theory in that it takes learning for granted within the theoretical construct of

motivation (or in this case, specific skills and abilities) to engage with "something", which will lead to change or development.

Searching for relevant literature and research within transformative learning theory and games and/or play yields results mostly pertaining to educational attempts at inducing specific transformations of professional, academic or educational identities in educational environments (see for example: Mishra et al., 2011; Podleschny, 2012; Shute et al., 2011). Additionally, in terms of transformative learning theory as a developing research area, studies such as these are also somewhat regionally dependent as Kokkos & Koulaouzides (2011) find. This means that research in this subfield of transformative learning theory is influenced by paradigms and discourses on education in general, leading to both subtle and distinct differences in the definitions of learning and its function based on the origin of the research. To put it briefly, more traditional deductive approaches towards transformational learning and games focus on resulting grades and tests within particular formal structures, while the more inductive paradigms often seek more general notions of problem-solving and competence. What this implies is that the finer details and constructs of learning processes are subject to differing viewpoints of value in games and learning research if such details are at all mentioned.

Outside of transformational learning theory specifically and more in the realm of games and learning theory, James Paul Gee does focus on the notion of how successful games are designed around "good learning principles" (2003, 2005), thereby shifting the focus somewhat to the designed context of the game as a sphere of learning, development and literacy. Granted, Gee does have a focus on the educational value of games, although also explaining that learning must happen for any given game to be played successfully, let alone be received positively. And this is perhaps an important point, as Gee states that learning does indeed happen from good game design, but that it is not necessarily of formal educational value (Gee, 2007a). Gee & Hayes (2012) state how people continuously need to learn in order to become literate in new semiotic domains, with games being a very current and relevant domain with its own situated meaning. The internal processes within the learner are still not completely evident in this argument, however Gee & Hayes do argue for some of the frame of the learning process as used in this project. Namely, that learning processes take place in a context, in which both the game, the interactions with the game, and the sociocultural setting within which it is played serve as important aspects of learning. In this however, Gee also focuses mainly on the social and human-to-human interrelational aspects of ascribing situated meaning (Gee, 2007b). In terms of this project, this is problematic due to the implied reliance on interhuman communication within or outside of gameplay in order to substantiate meaning. Much in the same manner, the constructivist learning theory of Etienne Wenger, Communities of Practice (Wenger, 2008), also focuses on the social constructions of human relations to substantiate learning. While this theory is beneficial in terms of analysing the social positioning of players playing single-player games (as experienced or at large), it forces the view outwards from the activity itself onto identity creation within social spaces outside of the alterity relation. Wenger's learning theory is then approaching and focussing on the affinity spaces as Gee and Hayes, more so than the relational aspect of play itself as complex interaction holding and creating both meaning and value in and of itself.

In terms of literacy and meaning-making, Jeroen Bourgonjon (2014) proposes that literacy be more integrated with the games themselves and argues for this literacy as a form of competency. Yet still structured around operational, cultural, and critical literacy, Bourgonjon situates the focus on the player as an actor in the light of Critical Theory, which is difficult to assess outside of larger sociocultural- and temporal contexts. Perhaps more easily assessed yet without the necessary details for empirical research, Jonas Linderoth (2012) proposes an Ecological approach to learning and games. In this, Linderoth distinguishes affordances into exploratory and performatory challenges that may lead to learning. The issue that arises from this view is that the focus lies on the game affordances more than on the actual player as a learner. As such, the processes of both internalisation and potential transformation risks becoming undefined. Rather, looking at exploration and performance leads to attention too centred on the space of interaction rather than the internalisation processes that are instigated and experienced within the interaction itself. In further dismantling this notion of the general idea of performance as indicative of learning, and at the same time both supporting and dismantling (without mention) Linderoth's theory, Greipel et al. conclude in their research on the limits of Game-based Learning:

> From a scientific perspective, the theoretical aspects above all strongly recommend the use of games for learning, while practical evidence provides promising, but occasionally mixed results. Due to a lack of rigorous long-term investigations, we are still waiting for more compelling evidence regarding the effectiveness and usefulness of game-based learning. (Greipl et al., 2020, p. 34)

This rather substantial quote capitalises a large part of the issues of the contemporary research and developments of learning and games. That is, as Sjöblom et al. (2022) propose, a lack of understanding of what constitutes the "correct" learnings of a particular activity and a lack of understanding of how games due to their interactive (affordance, performatory, experimental) based nature cannot ensure stable outcomes. We are, for a lack of better explanation, in a continuous state where it is acknowledged that games teach something, but that this something is caught on the linear scale between "the educational goal" and "play" as exemplified in a historical context by Simon Egenfeldt-Nielsen (2006). In terms of serious games and entertainment, Egenfeldt-Nielsen, Smith, and Tosca state that: "[…] it is evident that edutainment is a dead end where the formula remain unchanged. We therefore have to look to the use of commercial computer games and research-based educational computer games to find new ways for the area." (Egenfeldt-Nielsen et al., 2020, p. 221) As their chapter title implies "Serious Games- When entertainment is not enough" (from which the above quote is taken), there is a dead space between education and entertainment which does not quite work neither theoretically nor empirically, or which is at least unexplored to the extent that it can become operational.

In this already problematic state of theory and research, transformative learning theory (as opposed to opportunistic ideals of educational transformation) has played but a minute, if even noticeable, part. In contrast, the non-game and non-play part of transformational learning

theory has experienced a contemporarily based development in parallel (but rarely intersecting) with (non-educational) games throughout the past decades. As Chad Hoggan and Fergal Finnegan introduce in their summary of 45 years of transformative learning theory:

> […] our sense of the importance of the inner life, and its depth and complexity, is of course only one shift among a very wide range of social, economic, cultural, demographic, political, and technological transformations which created the modern world system (Braudel, 1986). Modern capitalism is characterized by a high level of dynamism, and social transformation has gathered pace and intensity. The experience of constant transformation means, as Berman (1983) points out, that volatility, unpredictability, and fluidity are integral parts of the modern condition, giving rise to the feeling that, per Marx, "all that is solid melts into air." Cycles of social, economic, and cultural transformation, and the development of new powers and capacities, including in our ability to envisage the social world as a totality gave rise to new political ideals of emancipation. The desire to effect a conscious and progressive transformation of society, and the gains and failures that followed the efforts to realize these desires, profoundly shaped 20th-century politics and culture (Traverso, 2021). (Hoggan & Finnegan, 2023, p. 7. Original references can be found in the reference list)

What the above quote implies, is that the societal changes (even if left unfulfilled in terms of Critical Theory) have been ongoing, and that they have established a condition for the individual in which transformation is a given circumstance to everyday functioning. That is, that transformation is a sociocultural condition, not an educational one. What role or function play has in this condition, specifically play with single-player games and how transformation in gameplay functions, seems yet to be fully realised. While many of these subjects have been touched by game studies in various forms, few have engaged with the transformative processes of the individual player as they transform within the activity of solitary gameplay with single-player games.

A rare, yet substantial nuance towards this comes from Sasha A. Barab et al., stating that: "[…] games have the potential to liberate children from the stigma of assessment and to encourage a disposition for innovation and a desire to challenge oneself as a natural part of the learning process" (Barab et al., 2010, p. 534). In this argument, the authors exemplify a rare scientific sensitivity to learning, transformative learning, and the emancipatory elements of the non-institutionalised learning process, even if still within educational paradigms. It is worth mentioning that this project has not engaged with child or adolescent learning in terms of digital games and play, as this theoretical field is focused on the broader aspect of learning towards natural lifecycle events and individual social development. Yet it is also a field in and of itself, and in terms of transformative learning theory it stands mostly as a subsection of research. Arguably, these groups are also somewhat far from the core of game studies, both historically and contemporary. However, the sentiment of Barab et al. is still an interesting one in terms of its application to adults, young and old. Indeed, 'children' need only be replaced with 'people', and the sentence would make sense in terms of understanding single-player games as a potential for transformation in ever-developing local, global, and individual conditions.

Other prominent learning theories outside the realm of the transformational learning paradigm could potentially be used to study games, play and transformation. Experiential learning, originally conceived by David Kolb is a prominent learning theory with transformational aspects (Kolb et al., 2001). Yet this theory is highly centred on systematic and sequential processes of experience and abstractions towards cognitive and content-specific problem-solving in an educational manner. Presenting a circular movement of thought and cognition through the four stages of Concrete Experience, Reflective Observation, Abstract Conceptualisation, and Active Experimentation, the theory lends itself best to the designed learning experience, rather than the emergent. Historically holding a prominent place in Game-based learning design paradigms (see for example Tang et al., 2009), the theory and its subsequent iterations are the third most preferred in relation to gamification and Game-based learning research (according to Krath et al. (2021)). While not being a central point of interest, literature searches for experiential learning theory in connection to games and play did not yield results of note in terms of transformations outside of educational paradigms.

A central component of understanding learning processes in this dissertation is Illeris' Comprehensive Learning Theory (Illeris, 2017a). The theory has a strength in its division of both internal and external factors into three specific dimensions (content, incentive, and interaction), as well as an integrated typology of the learning process (cumulation, assimilation, accommodation, transformation) in conjunction with these dimensions. These four different forms of internalisation processes (while metaphysical) hold somewhat different weight in terms of the project. Cumulation is mostly associated with child learning, in that it is rare for adults to learn something completely new outside of already established contexts. An argument can of course be made in terms of meeting new technology for the first time, yet outside of the elderly generations holding a controller or using a computer for the first time, it must be considered rather rare in terms of digital games. Likewise, literacy (seen here in light of Bourgonjon's notion of literacy as competency (2014)) towards digital games most often means that control schemes, genre, visuals, mechanics and more will likely be interpreted with already established knowledge structures, making the most basic realistic form of internalisation process assimilative. Accommodation may be equally frequent to assimilation though, as it stands as a reorganisation of something that is already learnt. While requiring mobilisation of more mental energy than assimilation, this process is not inherently a conscious one. Indeed, both assimilation and accommodation may function on conscious as well as unconscious levels, and the same can be said for transformational processes which indicate substantial reorganisation of mental structures. Importantly then, these internalisation processes are indeed internal to the learner/player, and as such are not necessarily visible through mere observation. While the research done in this project does focus on singular instances in which the potential for transformative learning processes seemed likely, the affirmation of this needed to rest on the qualities of the situations and moments of interesting actions (or lack of same). As such, any internalisation process, if it is to be analysed, must be explored on the basis of the experienced process through a more in-depth investigation. In this, Illeris' learning theory allows the opportunity for an analysis of processes with potential for internalisation towards

transformation with a substantive vocabulary for the interdependent variables influencing the process itself.

Illeris' comprehensive learning theory (2017a) has been used in Game Studies to some extent, although nearly exclusively within the sphere of "serious" and educational games (see for example Van Staalduinen (2012) for an interesting take on "expert gamers" and learning). The theory is seemingly most often used to substantiate an argument of social learning without quite engaging in the intricacies of the theory itself. For example, Sørensen & Meyer (2007) use the theory to distinguish between formal and informal learning in the space of content and social interaction in language learning with "serious" games, and Hromek & Roffey (2009) use it to investigate socio-emotional learning in game-based classroom activities. Sørensen & Meyer (2007) do recognise that formal and informal learning is context dependent in referencing a literature review on informal learning with technology outside of school contexts (see Sefton-Green, 2004). Yet, I do not subscribe to this terminology, as I see learning processes as embodied experiences, be they conscious or unconscious. In this view, it makes little sense to describe a learning process as an informal embodied experience, or even a formal embodied experience.

Importantly, the "dualistic" approach of formality and informality, and educational versus non-educational, explicit or otherwise, diminishes the processes of learning to current institutional paradigms of benefit. We need to look no further than Foucault, who warns about this form of institutionalisation where discourse becomes subjugating to the nature of human existence and activity (Foucault, 1971, 1997). In questioning the self-empowering functionalism of games and learning as an educationally-based paradigm, the result seems clear in that it devalues the very nature and potential of the playful activities individual players worldwide engage with. Contemporary research within games and learning seems to steer into the conglomerate positioning of educational foci, which ultimately leads the intersection of games and learning into functionalism through assumptions of accrued learning. As such, there seems to be a need for acknowledgement of learning as much more substantial, if not essential, to human existence than the subsection of learning that is education. Much of what has been presented here adheres to this discussion, where educational paradigms, in the nature of either the research or the fundamental view of learning in varying forms, have been challenged. In light of this, it is noteworthy to consider how individuals use single-player games, what they do for an individual, and no less what learning they facilitate in normal, habitual, day-to-day activities. I would argue that for the most part, this rarely has anything to do with education explicitly. With this in mind, I dare some statistics on the activity in question in this next segment.

The Scope of Single-Player Play

While there is little doubt that playing single-player games as a particular form of activity is widely practised, there is still the question of what kinds of games are played, or rather, what forms of play players prefer. To indicate this, Statista (Clement, 2021) finds that 59 percent of

their 1.607-person survey of U.S players preferred "playing alone, with the game or computer as the only opponent". This stands in stark difference to the 12, 8, and 19 percent in the other categories indicating play forms of human company or human opponents (friends and strangers). In another survey, Statista finds that 52% of PC/laptop and console players (N=1108) spend 100-75% of their playtime playing alone. In contrast only 3% play with others in the same room (100-75% of the time) and only 4% play with others over the internet (100-75% of the time) (Clement, 2023). While not being a generalisable source due both to obscurity in data gathering and respondents from a fairly undisclosed basis (save U.S.-based and 18+ years old), it does show an interesting tendency of players steering towards the single-player format in contrast to play with others. Underlining this tendency towards single-player play, MIDia finds that 57% of players (n=8,800) prefer single-player games, 22% prefer multiplayer, and 20% have no preference. Further, MIDia finds that this preference for single-player games is more prominent with increased age (Severin, 2022). Noted however, that the Entertainment Software Association's report from 2020 (*Essential Facts about the Video Game Industry*, 2020) presents numbers that are at least confounding in relation to the above numbers on preferences, as this report emphasises multiplayer-, cooperative-, and social play, and thereby seems to diminish the aforementioned prominence of single-player play.

A survey from the national Danish statistics institute from 2020 (*Danmarks Statistik*, 2020) shows that 54 per cent of people aged 16 to 75 or above have played digital games within a year, with further data about the hardware (e.g. mobile, PC, console etc.). The form of play, be it multiplayer or single-player, or even genres of games is not disclosed. Yet the numbers indicate that the practice of play with digital games is well rooted at least in the Danish population. In relation, a Finnish barometer finds somewhat the same tendency (Kinnunen et al., 2022), yet it is difficult to fully compare the two statistical surveys as they incorporate different forms of play, platforms, and game forms. Suffice it to say, that play with digital games is both relevant and prevalent in both the Danish and Finnish populations, and expectedly also in other digital/digitized societies. With an estimated 2.95 billion active players of digital games worldwide according to FinancesOnline (Gilbert, 2020), the activity of play regardless of game or form must be considered quite substantial. With the combined many numbers presented here encompassing a vast range of nations and associated peoples, the picture is however opaque. But while metrics may be inconclusive, the activity of playing single-player games must be seen as both prevalent and relevant on a general level, if not global scale. Using MIDia's numbers on preference and FinanceOnline's number of players, one could estimate 1,68 billion players of single-player games worldwide. While it would be highly over-conclusive to state this as fact, the significance of single-player play is quite obvious however, and this research project situates itself in this widely practised activity. An activity that perhaps seems somewhat under-researched empirically with attention to the activities' transformative potential, considering its prominence.

Transformative Potential of Play

Despite this conceptually large amount of people playing single-player games, empirical research concerning the transformative processes of the single-player play practice in itself is somewhat sparse. Gary Young (2013) problematizes that there, to some extent, must be issues with play with digital games when bestiality can happen quite naturally in this activity, yet would be quite upsetting to an audience not familiar with the scaffolding and norms of the play activity itself. This specific argument, while used by Young to exemplify innate knowledge structures of gameplay, unveils how normative thinking about the ethical prospects and pitfalls of games and play become arguments for the otherness or even alienness between people. Yes, killing a prostitute in *Grand Theft Auto: Vice City* (Rockstar North, 2002) may seem and sound quite different from giving a gift to an NPC in *Animal Crossing: New Horizons* (Nintendo EPD, 2020). Yet the processes of actions and decisions in these two cases are still on a fairly unnuanced basis in terms of cognitive, mental, affective, or emotional engagement. A physical world interpersonal logic would see these two actions as very different, one being terrible, and the other commendable. But what if these two situations are similar in the players' internal processes leading to decision-making? Granted, the violent constructs of the *Grand Theft Auto* games series are suspected to decrease empathy in some contexts (Gabbiadini et al., 2016), and some research suggests that *Animal Crossing* fosters feelings of genuine friendship with NPCs (Tong et al., 2021). Indeed, very different outcomes, which have different weights in terms of both academic and public discourses. Yet even the most benign or malign actions in play are subject to both the emotional complexities and aesthetic values of the player, meaning that both malign (or evil) and compassionate actions are situated in socioemotional complexes (see for example Mortensen, 2015). Yet to understand the development of both personal and interrelational aspects of these single-player play activities (in relation to the main research question), neither "good" nor "evil" actions can be seen as either beneficial or negative. Rather, the very construction of the decision to take such actions must be understood. Gifting (to one NPC over another) or killing an otherwise unimpactful NPC begs us to ask what the individual perceives and experiences through these actions. What if a player is forced to kill an NPC in the form of a child to save an entire village of NPCs? What is then the bestial construct if not the game itself for putting the player in such a moral dilemma? In line with this, Sicart (2009) presents how actions in games carry an ethical judgement based on the game as a site of its own ethical complex, where the player's ethical reflection must be considered as situated within gameworld logics and form. What this means is that actions should not be judged without understanding the ethical basis from which they emerge, implying not only a questioning of the gameworld, but also the ability and willingness of a player to engage with it on the game's terms of interaction.

The two references in the previous segment (Gabbiadini et al. and Tong et al.) would imply that for better or worse, the player evolves by simply playing. These two simple examples show how normative result-oriented thinking can guide the academic and public perception of action within play with digital games, and specifically those games which are not easily understood by simple observation. That is, that I will not here dispute the findings of either

Gabbiadini et al. (2016) or Tong et. al (2021), yet I do wonder about the internal processes that lead to actions within the individual players within the state of play, which in turn lead to these results indicating transformations. Observed in the data of this project, one participant (Dan (he/him) playing *Dragon Age: Origins* (BioWare, 2009)) showed aggression in dialogues with NPCs in the gameworld, yet never truly committed to violence except when unavoidable. Another (Parker (he/him) playing *Nier: Automata* (PlatinumGames, 2017)) never killed animals in the game until it became apparent that it was needed for the game's crafting system. Two ways of playful engagement, yet without any conclusive indications towards transformation simply from the outside view of normativity or ethics, not to mention a lack of meaning as to how these ways of engaging were processed by the players themselves.

On a broader scale then, one might ask how processes of play might be transforming us as both players in the instance of play, and as humans outside of the spheres of play. Describing the term Virtual Subjectivity, Vella and Gualeni state:

> […] the suggestion that the existential value of virtual world experience lies in its allowing for the exploration of (virtual) possibilities of being beyond those actualized (or actualizable) in the individual's being-in-the-world, as well as the expression of will unconstrained by the irrevocable character that choices have in our actual existence. (Vella & Gualeni, 2019, p. 130)

This view on self and selfhood from anthropological philosophy sees the projectuality (the continuous human existential development) as a possibility space for transformation through the possibility spaces of virtual worlds. In this, Vella and Gualeni describe how the activity of play with and within virtual environments brings the possibility of experiences that are based on a "[…] existential relationship with the actual world and—at the same time—are capable of experientially disclosing ways of being, perceiving, and operating that significantly deviate from it" (Vella & Gualeni, 2019, p. 130). In this, Vella and Gualeni substantiate the transformational, self-transformational, and even therapeutic potential in the broader sense of playing digital games and engaging in gameworlds. Yet the processes of the subject exploring, experiencing, and potentially transforming remain somewhat conceptual.

To understand these actions within a playful engagement, the very constructs of the player's 'being in' in the situation must be understood on a more granular level. How actions, from even seemingly mundane to ethically questionable, are formed by the player's alterity relation with the gameworld including the entities within it. To what extent is gameworld logic tied to the player as a thinking, feeling, and ethical person, untied from the irrevocable consequences of physical world existence, yet at the same time bound by virtual subjective presence? As Daniel Vella explains in terms of the *embodied ludic subject position*, a player is both existing within the gameworld and the physical world at the same time (Vella, 2015). There is a subjective embodiment that transcends the ontic divide of physical and non-physical presence within the states of play. This subject position is one of the theoretical (if not philosophical) positions that this project explores and substantiates with empirical data. Yet this Embodied Ludic Subject Position must be expanded with other views of the self as is needed

to operationalise the investigation towards internalisation and transformation. The embodied ludic subject position poses a state of being in experience with a digital game, yet it also poses confounding questions about development and transformation of the individual through experiential processes of play.

A main vantage point throughout this research project is therefore that there are processes that constitute an existential form of being, and that these processes must both be based on 'something' and lead to 'something', which is arguably the basic premise of Peter Jarvis' existential learning theory (Jarvis, 2006, 2007). This means that the processes in play are inherently learning processes with the potential for transformations for the individual player in gameplay experiences. As Vella states/concludes: "The 'I-in-the-gameworld,' then, is already revealed as a complex entity, containing within it poles of identity and difference, selfhood and otherness, all while being taken up by the player in the first-person, as 'I'." (Vella, 2015, pp. 415–416). The movements of this "I", as this research project reveals through the later analysis, are highly complex processes that encompass continuous oscillations between the sociocultural realities of the individual player, the player's in-game and out-of-game biography, and the player's playful engagements with the gameworld as a (con-) temporary lifeworld reality. Within these lenses of existential and anthropological philosophy towards transformational potential lies the opportunity to examine the processes that are needed in order to perceive, operate, elaborate, and conclude for action to be taken within a game. On learning, Jarvis states:

> Our experience occurs at the intersection of the inner self and the outer world and so learning always occurs at this point of interaction, usually when the two are in some tension, even dissonance, which I have always called 'disjuncture'. In fact, the desire to overcome this sense of dissonance and to return to a state of harmony might be seen as a fundamental motivating force in learning and the disjunctural state may be said to be one in which a need has to be satisfied. (Jarvis, 2006, p. 7)

It is the experience of disjuncture, a dissonance/disharmony, between the self and the environment, in the running current of experiences which throws the learner off the track. According to Jarvis, it is this process that can create fundamental transformations in the person, and in the way the individual may engage in future experiences. This then begs questions about how play and experiences operate in terms of transformational learning. In the state of play, what is the background of the player that is brought into the experience leading to actualisation and internalisation? How does the player's own perception and activation guide and control the flow and sequence of actions and thereby the potential transformation? With complicated biographies, lifeworlds, and gameworlds, the processes of "simply" being within virtual subjectivity must be rooted in specific perceptions of oneself (conscious or unconscious) in the specific activity of play. As such, processes of 'becoming' and potentially 'transforming' must rest on these current states of being, and the effects of this state both inside and outside of the gameplay through the ludic embodiment. To understand transformation, it is then imperative to understand the state of the player in interaction with the game as an intersection of self and

other within the alterity relation, and the processes of learning that are central to gameplay experiences in creating this relation.

Transformative Learning Processes: Identity and Self in Play

By regarding the play activity as processes of play and internalisation of experiences, learning theory (specifically the work of Knud Illeris (2017a, 2017b) and the just mentioned Peter Jarvis (2006)) offers a significant analytical basis of cognitive and emotional processing within the interactive qualities between player and game. As addition to the above presentation, Peter Jarvis's learning theory (2006) states that experiences are the determining factor to who we are, how we change over time, and how we engage with the world through emergent memories and emotional complexes. I return to Jarvis in more detail in chapter 6 in connection with the data from the research, but for now, the players' experiences of the intersection between self and "outer world" may be seen as the backbone towards uncovering the details of play processes. On a more granular scale, Knud Illeris' learning theory (2017a) describes how interaction can lead to internalisation, and describes how learning is dependent on three equally important dimensions: Content to be learned (knowledge, skills, and understanding), incentive to learn (emotions, motivations, and volition), and interaction with an environment which makes learning possible through action, communication, and cooperation. In learning, Illeris states, the individual develops over time through continuous processes in interaction with the environment, meaning that content learned becomes *functionality* within the environment, and incentives are honed to become *sensitivity* towards the environment. Importantly, functionality and sensitivity become visible in the interaction with an environment as *sociality*. According to Illeris, these processes are contextualised by socio-cultural realities, echoing who we are, and how we situate ourselves (consciously or unconsciously), from the nearby environment to the globalised society.

In terms of transformative processes, it is important to note that this particular process is centred on concepts of personality, identities, and the self. On a general level, transformation is a natural process essential to human functioning. With adults, both localised and globalised social constructions of- and within society forces us to constantly re-evaluate our own positioning, and in this, we may transform our frames of references in our ability to enter *critical dialectical discourses* (to use Mezirow's terms (2003)). Transformations are however not always positive or beneficial as can be evident in radicalisations such as joining a violent social grouping, internalising and acting on extremist political views, and much more. They can also take form in traumatic events on both societal and near-personal scales. Divorce, the passing of loved ones, severe illness, and more are often events that force upon us a transformation of which we might have little control. What these different forms of transformation do have in common, beneficial or otherwise, is that the transformational process has to happen through some form of acquisition or internalisation of new mental structures, adding to or replacing

previous structures. In other words, learning processes must transpire if transformation is to happen, beneficial or otherwise.

The use of Illeris' transformative learning theory (2017a) in this project focuses on the player's internal functioning between sensitivity and functionality, as these are both integral in any interaction with the immediate environment. Through video recordings showing forms of sociality within the game environment, questions can emerge about the functionality and sensitivity in the alterity relation that led to action. As a game functions as an environment for learning processes, it holds the possibility of action and reflection through interaction to and from the individual player. Any learning process based on this interactivity must in some way encompass all three dimensions of learning and result in varying forms of capacity change in relation to functionality, sensitivity, and sociality. As such, actions show sociality as it is acted out through the visible part of the interaction. Sociality as action is thereby the visible result of the internal structures of functionality and sensitivity as these are integrated into the game environment. These processes of learning and play within the play activity can range from complex social and interactional events to even the most mundane, such as complex ethical dilemmas, to the way players learn basic and advanced controls and mechanics. As the entirety of such processes is encapsulated by the contemporary social and cultural context of the individual, the activity of play with a digital game must also serve as a means of internal identification with the representational aspects of self-reflection in both belonging to, acting in, and potentially challenging the game environment. More simply put, the visible part of gameplay consists of actions, which are based on internal evaluations that are allowed expression through the gameworld as an external setting. In this sense, synthesising Illeris' theory (2017a) into single-player play activities can create a holistic view of the play activity with a baseline for understanding how processes of transformation function through internalisation.

As there is not a formal distinction between acquisition and internalisation that I am aware of, I choose to define the two quite differently in terms of clarity when it comes to digital games and play. Learning that 'X' or Spacebar makes your character jump I would call acquisition, as this is a formal structure that holds little transformational value outside of game mechanics and a basis of skill needed for interaction. Learning that the game uses a dice system and understanding this as a part of the success or failure states of the game systems would equally be acquisition. Internalisation on the other hand indicates that a certain amount of acceptance towards the process must precede the learning, and that there is a certain fundamental change in the perception of the gameworld and how the player interacts with it. As such, manipulating and optimising the dice system to the player's advantage indicates an internalisation process concerning the meaning of the system, and not only knowledge and use of it. On more complex levels, a player experiencing and internalising that they are the "hero" of the story is not only a matter of acquiring this knowledge structure about the narrative of the game, but it also constitutes a lasting shift in perception of the player's subjective position which fundamentally changes the way that the narrative is experienced. This means that in order for something to be internalised towards a transformation, it must adhere to some form of identity or structure of the self, and not merely be a knowledge structure that is presented, understood, and utilised at

a basic level. This does not mean that internalisation is inherently a conscious process, but merely that there is a socioemotional complex that accepts and affords the investment of mental energy into a set of neural patterns, and which are accepted as a lasting change within the playful engagement and play experience. A baseline of transformation is then experiences of being within the alterity relation between the player and the gameworld. In this synthesis of learning theory and play activity, play must be seen as a continuum of processes wherein the players' states of being emerge and retract through intentionality in the reciprocal relationships with the gameworld and the game objects.

A basic assumption in much games and learning literature is that digital games inherently function as both teacher of content, and content to be taught. As Gee notes, "Good games […] find ways to put information inside the worlds the players move through, and make clear the meaning of such information and how it applies to that world." (Gee, 2003, p. 2). While arguably not Gee's intention, this often-used viewpoint seems to marginalise internalisation processes, and instead present a focus on the acquisition of formal structures consistent only with the gameworld. Illeris' learning definition, on the merit of being very broad, can however encompass the internalisation that happens through digital games and play from a player perspective. He defines learning as: "[…] *any process that in living organisms leads to permanent capacity change and which is not solely due to biological maturation or ageing*" (Illeris, 2017a, p. 3 original emphasis). In this definition, there is a subtle yet important indication of lifelong learning and the term competency. This means that learning should not only be seen in light of actionable results but as processes that can and do happen in all aspects of life in a continuum of events. These processes do not need to adhere to formal societal or political evaluation (as would be the case with educational evaluation), as they are a part of the increasing capacity of the individual regardless of the sociocultural ascription of value. Regarding games with a purely educational and result-oriented view refers potential transformation to Paolo Freire in his warning against hegemonical structures of educational perspectives:

> Education thus becomes an act of depositing, in which the students are the depositories and the teacher is the depositor. […] This is the "banking" concept of education, in which the scope of action allowed to the students extends only as far as receiving, filing, and storing the deposits. (Freire, 2000, p. 72).

Only within the space of a single-player game, the player would be the depository, uncritically subject to the game as depositor of truths. More pressing perhaps, within the sphere of research, the "game as designed" becomes the teacher, and the player the inevitable "the product" of said design. While the above are terms that are substantial to the overall paradigm of learning as processes in all instances of life, my attention is on the instances of single-player play activities and practises. Importantly, Illeris' clever use of capacity change allows space and opportunity for Vella and Gualeni's (2019) argument of transformations in play (as previously presented). In truth, it allows for learning to be a neutral term, within which adoption of both positive and negative capacities are allowed and to some extent expected in terms of applicability towards

everyday life. The transformational aspect of reorganisation of mental structures in learning through play can in this way be seen qualitatively in terms of the gameplay situation and play experience, without having to rely on connections to societal, physical world, or everyday competencies in terms of capital. This important feature lets the analysis of processes focus on the process on a micro-level, instead of steering towards results of processes with certain valuations in mind.

With the focus turned onto the individual and their internalisation processes in the immediate interaction with a gameworld, the question of the "self" and identity in play with digital games poses interesting if not also very intricate questions when it comes to potential transformation. Namely how internalisation processes unfold within the alterity relation to the gameworld, and how identity or the self are interconnected with the perceived gameworld through interactions. This does not exclude the acquisition of formal game structures and mechanics, nor the concepts of competency, but it does centre the attention towards the lived experience and the perceived reality of the player. The notion of the self, while constituting a contended term within multiple disciplines, areas, and fields of research, is seen in this project as a mutually forming entity alongside identity and personality. I refer here to Roy Baumeister's presentation of the self in the view of social psychology, which adheres to a constructivist frame: "It keeps track of information about itself, works to improve how it is regarded by others, identifies itself with important relationships and roles, and makes choices (most of which are social)." (Baumeister & Finkel, 2010, p. 140). What this explanation makes clear, is that the self is self-referential, reflected in context, affords value in action and reaction, and is socially oriented. Should the self then be realised in internalisation processes in play with single-player games, it would be in connection to the individual's incentive to do so in relation to the playful interaction. Identity on the other hand can be said to represent a psychosocial entity that informs the individual and their surroundings about who they are in this context (Erikson, 1994). That is, that identity is something that is context-specific, and which can take on a multitude of forms depending on these contexts. As such, being a mother is one identity that is mobilised in some instances, while the same person may in other instances mobilise a professional, sexual, or other identity depending on the context and the appropriate behaviour. In the course of a single day, there may thereby be multiple identities that are activated in differing instances, down to the minute transition of work to lunch with colleagues and back again. Illeris proposes that a core-identity is present, which guides and evaluates the differing identity structures, and defines this as the combination of the self, identity, and to some extent personality (2014a). This concept does however stem from Illeris' adherence to the social aspects of constructivism, which places a high value on the inter-human aspects of learning and transformation. It is worth noting that personality is very seldomly used in learning theory, and seems to be mostly tied to work environments, human resource tests, and psychopathology (see Illeris, 2014a), which is why I omit this term from the transformative potential of play in this dissertation.

What makes play with single-player games potentially unique in the aspect of transformations, is that there is no immediate need for appropriate or specific identity mobilisation, and likewise, there is no social backlash for inappropriate behaviour in terms of the self, bar its own self-reflective nature. In relation to the self, identity and games, Kelly

Boudreau summarises from sociology, social psychology, cyber- and "videogame" theories of the self:

> […] we can see several common factors in regards to the process of identity construction; it requires some degree of reflective internalization of influencing factors by the individual. Identity is then projected through external means such as behaviour, language, fashion, and social affiliations whether in the individual's physical world or their digitally mediated interactions. (Boudreau, 2012, pp. 36–37)

Identity (or the Self) is then both developed by and a product of self-reflective internalisation processes in which identity structures and emotions towards the sociocultural contextual frame are evaluated in the interaction. While not a critique per se, the focus on reflective internalisation seems somewhat natural in the autoethnographic and analytical close-reading approach Boudreau utilised in the project. The unconscious (or non-conscious) and non-reflective mobilisations of self and identity in internalisation processes remain naturally quite hidden in these approaches, or risk becoming reflective processes in themselves in the advent of discovering them post-play. The conclusion of Boudreau's research is that 'hybrid identities' form in the complexities between player and game design, with game design understood as the game's designed affordances of interaction towards identity play. While it may indeed be the case that designed features afford play with identity structures, the notion of the hybrid identity forming leads to questions about what constitutes the transformational processes leading to the formation of this. As in, if a hybrid identity emerges, what contexts might it be dependent on in the internalisation of the gameworld as reality, and what internal processes, conscious or unconscious, might lead to formations of alternative or hybrid identities. And finally, is it truly a hybrid identity, or is it rather the self (that is) forming an identity that is appropriate in terms of the gameworld's constitution.

Throughout the remainder of this dissertation, I primarily reference the self in terms of transformation. The self is something that is self-referential, self-reflective, and makes us both consciously and unconsciously aware of our own existence. While still a socially oriented entity, the self as a concept does not need labels in order to be identified, which lets me see transformational aspects of play in a way that opens up for existential viewpoints. Identity on the other hand I see and use as a socioculturally defined construct which mirrors some form of expected behaviour or linguistically based connection to others. As such, identity is socially defined in action and language and can be self-referential, but in contrast to the self, this referential quality is in reference to others in communicative aspects. A person has a central being, the self, but may need to label this self in terms of contemporary discourse or as a means of social identification. In short, the self is the more essential part of transformative processes in play with single-player games as it presents a stable baseline from which perceptions and actions make sense. Yet as the data of this project also reveals, a playful identity also emerges which allows the player some freedoms to explore themselves on experiential and existential levels. While this chapter has presented and explored some of the central theoretical aspects of this dissertation, it should be noted that further theoretical perspectives will be introduced

throughout the remaining chapters. The next chapter presents the methods of this research and the many research processes and procedures that were needed in order to research these intricate phenomena of transformational learning processes in single-player play.

Chapter 3. Research Design & Methods

The research design connects the research question to the activities needed to be observed and analysed, and the theoretical implications of transformative learning in play. It respects the sensitivity of the activities and practises in relation to the phenomenon it needs to give access to (internalisation and transformation), while also respecting the participants' need for solitary environments and control of their own research material production. The solitary play environment and control of video production are important factors due to solitary play activity being private by nature. In this chapter, I will focus on the overall research design which gives access to these highly individual experiences, and present how participants and materials are interconnected through this design. While I also present the four main stages of the combined multimethod approach (see Anguera et al. (2018) for a distinction between multi- and mixed-methods), I leave the finer details and methodological considerations of the individual stages to the next chapter. The chapter here is therefore dedicated to insights into the overall research procedures, and to deliver an overview of the methods utilized towards the resulting data. This is to create both transparency towards the research processes and procedures and to underline the applicability of the mixed methods approach towards the complicated nature of internalisation and transformative processes in play.

Secondary Analysis and Inclusion of Previous Qualitative Data

It is important to note that a part (5 out of the 13 interviews) of the material is from my own master's thesis, which is included in this project because of similarities in data collection and usefulness of the materials in terms of this project's research aim. Focusing on reflection and identity in *Dragon Age: Origins* (Graham, 2020) through the lens of transformational learning as presented by Knud Illeris (2017a), the MSc. project generally found connections between reflective moments in gameplay and learning as understood in a constructivist sense. That is, that in moments of reflection, many of the constituents of the specific transformative learning theory are present. The MSc. project utilized somewhat the same research design as presented in this present study, yet I did not at the time realize the intricacies of the research design and how it integrated methods and theory into a novel methodological frame. It is quite fair to say though that the project was a first iteration of this PhD thesis as it presented the initial building blocks of methods and theory of this dissertation. While the five participants at the time streamed gameplay which was analysed and used in a video-elicited interview, the differentiation analysis was un-iterated and the details of both methods and theories remained unfulfilled. With the focus on reflection, the game *Dragon Age: Origins* (BioWare, 2009) also offered a simpler video analysis than what I present here, as the dialogue in the game often poses ethical dilemmas quite clearly which led the participants into reflective moments of

ethical processing. In terms of fully integrating the data from the MSc. project, this happened as I did the differentiation analysis where I could view the data from new angles and with much broader theoretical understandings, leading to a novel understanding of what the data could show.

As to how this previous project served the work of this present research, it came two-fold. In the first period of this PhD project, a follow-up analysis of the data from the MSc. project paved way to understanding new forms of interpreting the data and honing the methods, which I questioned on a broader level in a conference paper in 2021 (Graham, 2021). This further led specifically to questions about "sociality" and what that might entail in complex contextualised situations of personal dilemmas for the player(s). I have formed and questioned this (to some extent) in my short publication (Graham, 2023) both as a backdrop of the earlier times of my PhD iteration while doing the follow-up analysis, and as a part of my theorisation leading to my later analysis of sociality and its role in transformative play processes. As such, this data from the MSc. project functioned to hone the research question of this PhD research through a *secondary analysis* (see Heaton, 2008 for an overview of secondary analysis of qualitative data). The actual inclusion of the five participants into this PhD project came in the differentiation analysis of the MSc. data where it became clear that while the project had had a different angle, the methods had led to comparable data with the PhD participants. In this, the procedures of inclusion and analysis follow the guidelines of Melissa Johnston's presentation of evaluating the relevance, limits, and benefits of secondary analysis of data (Johnston, 2014). I have chosen to include the data from this previous project in the combined data for this PhD project as to increase the epistemological foundation of this research, while also respecting the process of a PhD study as a unique possibility to hone my research skills (see Panchenko & Samovilova (2020) for the learning outcomes of secondary analyses). As Pasquetto et al. (2017) discuss; use, reuse, and integration are complex terms when it comes to research data, and, as Boté and Térmens argue (2019), pose ethical challenges in reporting and clarifying the reuse of data. In the following chapter and beyond I generally present the data from these five previous participants as a part of this PhD project, but in this chapter specifically I differentiate tables to make clear their role in the larger research. When applicable, I state notable differences between the projects' methods in this chapter and beyond, and as such believe that (self-) plagiarism and/or data misuse is removed from account.

Research Design

While the research design in general can be used to examine a wide variety of play activities and practices, the focus of this research has been on an exploration of the transformative nature of single-player play with digital games. The research design was iterated with the aim of unveiling the discreteness of playful activity with digital media, in this case, single-player games specifically. As with numbers, there are infinite discrete possibilities in any given action. Any single action taken within a game is set and factual once done, but the nature of the action, that is, the reason for this particular action over others, is neither predetermined nor subject to

predetermined factuality. When it comes to play, factuality and rationality cannot be said to govern the actions taken, or the result of the action. The impetus, execution, and result might be visible on a surface level, but the player's experiences of these three conceptual stages are undoubtedly incomprehensibly varied. No two players will think, feel, or conclude the same in any moment of play, even given the exact same game-based circumstances. To gain access to transformative processes therefore necessitated that the methods utilised afforded participants original and individual experiences.

The basic premise is that the research design, via its connectivity between experienced events and theory, can present a methodological standpoint. This standpoint should in turn also present an alternative way of creating meaning of complexities, rather than simplifications of segmented realities in terms of play. As the previous chapter both explored and argued, internalisation and transformative processes are highly complex and sensitive to contextual influence. To give a sensible answer to the research question therefore necessitated a transdisciplinary approach in the iteration of novel methods. I call this attempt a gaining a holistic view of processes of play "the DisPlay method", which is a sequence of four highly interconnected steps leading into a final analysis. While the method can undoubtedly be used to research activities with a variety of media, I focus quite exclusively on the basis from which it has been iterated and designed. That is, the solitary setting which contextualises the single-player play activities in terms of habituality.

A large body of research has conducted interviews and used varying forms of elicitation to explore and explain the intricate nature of the interrelation between players and the games they play. Yet to my knowledge, none have made use of the complicated nature of video-elicited interviews in the manner I present here in order to uncover the cognitive, mental and experiential components of the processes of play with single-player digital games. The cost of this endeavour lies in the insecurities of using networked technological platforms for video data gathering, and the heavy time consumption of viewing and analysing video data. These challenges of the approach are explained in this chapter, where each step of the research methods is presented and discussed. The details of the methodological iteration and the implications of the research as it was conducted is primarily reserved for the following two chapters. There, both successes and failures are accounted for, as both give indications of the efficacy and applicability of the entirety of the method and the results.

The Four Stages of the DisPlay Method

The DisPlay method was iterated as a means to engage with single-player play practices in order to answer the research question. It is not a simple task to open the black box of private and sensitive play practices without changing the very nature of the activities themselves. To accommodate this, the Display method was designed via combinations of methods leading to a specific methodology, designed and iterated as an ethnographical approach to solitary play with the use of technology. As Tom Boellstorff states (in reference to Malinowski), the strength of the ethnographical observation in research is that it: "allows the researcher to study the gap

between what people say they do…and what they actually do…" (Boellstorff, 2006, p. 32). In this, the research design aimed to draw on this strength of ethnographic research, while at the same time needing to diverge from more traditional ethnographic approaches to accommodate the activity in question. The research design is in this manner situated within the potentials of ethnographically inspired methods and games and player studies (Boellstorff, 2006) in researching the solitary activity of playing single-player games and the context-sensitive internalisation processes within this.

The sequence of the four main stages of the DisPlay method is highly sequential. Participants deliver gameplay video via a streaming platform (stage 1), which is analysed for moments of interest (stage 2), which are used in an interview (stage 3), making way for a differentiation analysis (stage 4) that triangulates the materials with the aim to organise and evaluate the findings. From here, analysis of the combined empirical material can be conducted. Figure 1 shows the sequence of gathering research materials and data. Utilising streaming platforms in combination with asynchronous observation, individual participants can engage in play activities in their habitual settings, and at their leisure. Through the observation and video analysis, relevant parts of gameplay video can be shown to the participants in video-elicited interviews. This leads to interview data which is grounded in original experiences of habitual single-player play practises, which is otherwise very difficult (if not nearly impossible) to come by. The method in this sense gives a glimpse into the hidden world of single-player play cultures, as it takes the activities on their own terms and uncovers the actions and meanings of play from within the activity itself through video-elicitation. What perspectives of transformation and internalisation processes that are possible to observe and analyse in each of the different Stages will mainly be explored in the coming chapters.

Figure 1. The 4 Stages of the DisPlay Method

Stage 1	Stage 2	Stage 3	Stage 4
Participant Streaming gameplay video	Researcher doing video analysis	Video-Elicited interview	Differentiation Analysis

The need for this multi-stage research design stems from the fact that playing single-player games most often means being alone, both within and in varying degrees outside of the game. Solitary and private practices are therefore problematic to approach with the more traditional ethnographic methods, as embedded observation of these practises and activities risk changing the possibility space of participants. The observation of private and solitary activities quite simply changes "what they actually do" (quote above from Boellstorff) into something else, where the originality and freedom of play risks morphing into a social setting of self-restraint or social accommodation. The DisPlay method presents a way to gain more immediate and unfiltered understandings of play and playful internalisation processes in solitary settings

by minimising social interference within the specific activity of play with digital games. While it is unlikely that it will ever be possible to get complete access to single-player play activities and practises without any interference, this structured and highly methodological approach was deemed the best possible solution.

This lends itself to an explanation of what activity, practises, and also habituality means in this context. As a basic premise, activity of play is meant as the specific set of sessions that make up the temporal situation in which play takes place. As Annika Waern and Jaakko Stenros explain in terms of gameplay as enacted experiences, play sessions do not exist unless a player creates them, and this creation is based on expectations of the experience and voluntary engagement (Stenros & Waern, 2011). This basis of the activity of play is on the more general level but can be subdivided into individual sessions. Sessions are more specific in a sense as they denote the time, place, game, and state of mind of the player. In this sense, a play session with a single-player game indicates a time, a place and context (space), a specific game- and play-form, and finally a certain drive from within the player to engage with this opportunity. Within these sessions making up an activity, certain practises may start to take place. That is, when activities become contextualised in a manner in which they become embedded in everyday life to the extent that the content and form are recognisable to the individual. Practises, in other words, are made up of activities that are personal and individual, and within which the individual has expectations of the outcome of their patterns of engagement. In line with this, Milan Jaćević argues for the term *ludic habitus* in the understanding of individual internal modes of engagement with games based on perception, evaluation, and performative patterns (Jaćević, 2022). Situating this ludic habitus in Bourdiesian practise theory, Jaćević offers a holistic view of practices with digital games where the habituality of play activities is seen not as simple habits, but as complex internal operationalisations natural to the individual. While I will stay clear of the term ludic habitus due to its standpoint of a specific way for an individual of engaging with games on a larger scale (forgoing the processual aspect of transformations in gameplay, which this project is interested in), the idea of habitual practises and habitual play is of some importance. Not only does the inclusion of habituality indicate that the activities in question happen in a context that is natural to the individual, but it also indicates that the activities are of certain recognisable internal value. Habitual practises are then the naturally occurring play sessions within personal lifeworlds, indicating the non-disturbed processes and procedures of everyday life activity. In terms of single-player games, this is what the research design was meant to afford, and which it largely did for most of the participants.

What is also notable in terms of these constructs of habitual activity and practice is that they to some extent aid in understanding how the participants in this project play. Some of them played a game for the first time, meaning that they were entering into a specific form of play activity that arguably has elements of a specific practice. They were exploring a new game and learning the basics of controls, along with internalisations of the narrative components and formation of a sense of gameworld. As such, journeying into something unknown (a new game and play experience), but indeed with a certain set of expectations as to what the activity entails (based on the genre of roleplaying games). Others played games they were well familiar with, which makes the play more based on knowledge forms already constructed, and in this way

engaging another practice that holds different expectations. The aspect of habituality in these activities and practises is however up for debate. While the participants were instructed to play as they usually would both in terms of time, place, and the way they play, it is unlikely that they have been completely unaffected by the scientific setting. As such, the context of habituality is somewhat compromised, but in a low degree and in somewhat unexpected ways as is elaborated in Chapter 5.

With the research designed to focus on and accommodate the intricate and discreet processes of play towards transformation of identities and self, further information about the contexts of the individual participants' play history and current practises was needed. To collect this, I sent a questionnaire asking for demographic information and four open-ended questions about individual play practises to the participants after the video-elicited interview. The open-ended questions asked them to briefly describe how many years they had been playing single-player games, if there were times when playing single-player games had been important to their well-being, and what role-playing single-player games had in their life currently. Based on the qualitative statement of this questionnaire in combination with the interview data, I invited three participants to a follow-up interview. This interview focussed on the contexts of play with single-player games in the larger frame of everyday life for these three individuals, allowing insights into what the original interview had captured in terms of habituality and practises of play. The data from these open questions and follow-up interviews is presented in Chapter 7 in connection with the main research findings, showing how single-player games are situated in everyday practices. As such this research material gathered functioned mainly as supplementary material that contextualised the main research interest. Note that the five participants from the previous project only responded to demographic questions without any additional qualitative statements.

Methods(s) and Empirical Material Overviews

Overall, 12 participants have contributed to this research delivering the main gameplay video of 10 different games. Of these 12, five were a part of the previous MSc. thesis project where they all played the same game (*Dragon Age: Origins*) assigned and supplied to them by me. The remaining seven were recruited into two groups, one with an assigned game supplied by me, and one where they were free to play what they wanted. With one participant joining the project twice (Paul, once with an assigned game and once within the free-play group), a total of 13 video-elicited interviews contribute to the data. As a quick overview, **Table 1** shows the main materials collected through the research. More elaborate tables are available in Chapter 5, presenting more details about the size of the materials across the different participants.

Table 1. Main research material overview

Material	MSc. Materials	PhD. Materials	In total
Gameplay Video (HH:MM:SS)	71:20:03	113:28:25	184:48:28
Journalisation of Video Analysis (Standard Pages)	51.79	49.31	101 Pages
Video Elicited interviews (HH:MM:SS)	6:14:32	9:07:01	15:21:33
Transcriptions (Standard Pages)	70.75	146.91	217.66 Pages
Qualitative questionnaire responses (Standard Pages)	-	4.5	4.5 Pages
Follow-up interviews (HH:MM:SS)	-	2:10:58	2:10:58
Follow-up interview transcriptions (Standard Pages)	-	47.2	47.2 pages

Note: A Standard Page is equal to 2,400 characters

As is visible in the table, the journalisation of the video analysis in the MSc. project of five participants was comparatively large compared to the eight video analyses done during the PhD project period. There are two reasons for this, the main one being the more explorative nature of the project in which it was difficult to know what amount of documentation would be needed. The other being the structure of the game, *Dragon Age: Origins*, which presents an intricate gameworld with many interconnected systems and mechanics. Importantly, the game presents a high frequency of long dialogue situations that I at the time did not know the relevance of, which made for a measure of overdocumentation. The research procedures and the data-gathering methods should serve to clarify the research and the material gathering in a practical light, which is the focus of the rest of this chapter.

After initial recruitment procedures, the streaming process was tested to see if it was possible for participants to join the project considering potential technological barriers. When successful they would formally be in the project and were asked to stream their gameplay and importantly, to play as they normally would (stage 1). Seven participants played a specific game for the first time, prescribed and delivered by me, while the rest (six with Paul entering a second time) played games of their own choosing (elaborated later in this chapter). After estimating the video recordings to hold sufficient material and events for an interview, the participant was invited to such. At this point, the gameplay videos were analysed and journalised leading up to the video-elicited interview (stage 2). Each interview held between 4 and 9 gameplay video sequences and lasted 1 hour and 11 minutes on average (stage 3). From the differentiation

analysis (stage 4) and onward the participants were no longer an active part of the research (save for answering the questionnaire, and the three invited for a follow-up interview).

The video elicited interviews and the three follow-up interviews were all conducted via Zoom in either Danish or English. There were several reasons for using Zoom as an interview platform, both practical and necessary. With the project being conducted during Covid-19, it was deemed sensible risk management to plan all interviews as online. Aside from this, the online nature also opened the recruitment scope for international participants, and generally made participation in the project much more accessible, even for Danish nationals. A final point that made online interviews sensible was the actual video elicitation and the ease of recording. Having all video segments prepared before the interview, it was simple to share my screen and play the video while still recording the necessary details in the interview. Such as the exact moment the video would start and end, along with the participants' expressions and immediate statements as they saw the video. Two participants did not turn on their cameras for a "face-to-face" interview, yet I had not made this a requirement for the interview either. While practical on these accounts, it is worth noting that there seems to be little difference between online/networked video interviews and traditional face-to-face interviews in terms of the research method's efficacy (see Deakin & Wakefield, 2014).

In terms of data security, the university had a data processing agreement with Zoom, meaning that these recordings are within the scope of the General Data Protection Regulation (GDPR). The resulting interview recordings were kept safe in the university's internal storage as per the university's GDPR compliance procedures. Questionnaires were sent via email due to the nature of the questions and the potential sensitivity of the responses, again according to the university's guidelines and procedures in compliance with GDPR and data security. With the many different stages of the research the participants went through during the research processes, a central document was used to track all the different procedures of both data security measures, communication, and progression. **Figure 2** shows an overview of all the different materials created and used in the different stages of the research process. The figure illustrates how the different stages are interconnected through the sequentially informing material gathering, along with the pre-activities and activities that I had to perform for the research and activities to be conducted sensibly. While the figure does not show the time expenditure or complexity of each activity, it does give an indication as to how the combined multimethod relies on sequential research procedures.

Figure 2. Overview of the research material generation

General Activity	Pre-activity materials	Researcher activity	Research Materials
Stage 1			
Introduction to the study	First conversation guide Consent forms	Setting up streaming platform	Informed Consent forms
Technological setup	Streaming setup guide(s)	Technological support	
Participants playing and streaming gameplay		Probing and monitoring progression	Gameplay videos
		Game familiarisation if necessary	
Stage 2			
Video Analysis	Participant Gameplay videos	Video Analysis	Video analysis journal
Stage 3			
Video Elicited interview	General interview guide	Specific Interview guide Transcription	Transcriptions
Stage 4			
Differentiation Analysis	Gameplay videos Video analysis Journal Interview Transcription	Triangulation and reflexive articulation	Qualitative dataset for further analysis
Post-Stage			
Demographic and qualitative information gathering	Questionnaire iteration	Analysis of qualitative dataset and qualitative questionnaire responses	Questionnaire responses
Follow-up interviews	General follow-up interview guide	Specific interview guide in connection to responses Transcription	Transcriptions

Note: I do not consider "post-stage" an integral part of the DisPlay method. For this project, these post-stage initiatives were necessary in terms of further elaboration of specific methodological questions.

Based on the qualitative responses in the post-stage and the video-elicited interview, three participants were invited to the follow-up interview. Three interviews were at the time the maximum number in terms of time management, and the three participants all accepted the invitation to join. Also note that the five participants from the previous project did not receive the qualitative questions, and were not considered for this follow-up. While it would have been highly interesting from many angles to have interviews with these five participants, no less to test the efficacy of video elicitation with up to 1 to 2 years old video data, it was not feasible in terms of time management.

Participants and Recruitment

Seven participants were successfully recruited into this PhD project. Four other potential participants reached out to me but ultimately did not join. Two because of a lack of time to play in the designated period, one because of a lack of "compensation", and one never replied after they were sent the streaming setup guide and the consent form after an initial conversation both over email and phone. As a general note, communication and interviews were conducted in either Danish or English according to participant preference. Guides and Consent forms were in English. Including the five from the previous project, 12 participants overall have contributed to the research. The recruitment of the five participants from the previous project was made through friends and my supervisor at the time and was in this way not overly different from the presentation here, where the recruitment process was handled by word of mouth. This turned out to be somewhat inefficient in terms of time, but it was deemed necessary in order to keep the base of participants varied and to some extent representational of everyday average players. I reached out to two large groups of students and some of my colleagues at my university, as well as my friends and family. I asked them to spread the word that I was looking for people who play single-player games and gave them a short introduction to the research format. A short text describing the research was also distributed among students and some co-workers. Since all the different parts of the methods were networked (streaming gameplay and using Zoom for interviews) international participants were encouraged.

Generally, the hope was for variation in the participants through exclusion of certain factors that the recruitment process might otherwise have led to. That is, posting on a specific Facebook page or a specific sub-Reddit for example would likely lead to participants already associated with certain affinity spaces (as presented in Chapter 2), and thereby create a demographical subset that could lead to specific practises around single-player gameplay. While this in itself does not indicate problematic research, I decided to forego this in favour of non-definable players. As Adrienne Shaw concludes in terms of gaming culture: "Defining gaming culture as something distinct and separate from a constructed mainstream culture encourages

us to only study those who identify as gamers, rather than more dispersed gaming. That is, we should look at video games in culture rather than games as culture." (Shaw, 2010, p. 14). In this, the recruitment process was an attempt to situate the project as a depiction of individuals' use of games, and steering clear of the more established "gamer" identity that might be associated with engagement on social media or specific gamer subcultures (see for example Grooten & Kowert, 2015). The overall goal of the project was never to deliver conclusions towards game- and gaming culture on either a specific or a general level. Rather, the aim was to deliver detailed accounts from varied perspectives about transformative processes within a very specific play practice.

Table 2 is an overview of all 12 participants, sorted by their time of entry into the two different projects. Note, that not all of the information in the table was known to me until after the video-elicited interview, where the participants were sent a follow-up questionnaire asking for this specific information along with gender identity, romantic orientation, and relationship status. The reasoning behind this delayed information being that I did not want to risk being biased towards this information in my video analysis or the interview. Likewise, I preferred that the participants mention this information in the interview on their own accord, should it have been relevant in the explanation of a specific play or gameplay event. I thereby attempted to keep my own frame of interpretation as open as possible, instead of predisposing myself and the participant within this mutual knowledge structure. All names are pseudonyms generated through a random name generator.

Table 2. Participant Overview

Name	Age	Nationality	Occupation/ Education
From MSc. Project period (2020)			
Dan (he/him)	35	Danish	*Pedagogical work
Amy (they/them)	22	Danish	*Student "IT"
Emma (she/them)	22	Danish	*Student "IT"
Sara (she/her)	25	Danish	Student "Chemistry"
Tim (he/him)	27	Danish	Service Industry
From this PhD project period (2020-2023)			
Adam (he/him)	23	Danish	*Student "IT"
Josh (he/him)	23	Danish	*Student "IT"
Paul (he/him)	35	Danish	*Healthcare professional
Matt (he/him)	25	Danish	Student "Engineering"
Fran (she/her)	26	Italian	*Student "IT"
Tory (she/them)	25	Danish	Film Production
Parker (he/him)	30	Brazilian	Engineering

Note: a * indicates information known to me at the time of inclusion in the project, whereas all other information was not known until the interview situation or questionnaire response.

While it can be questioned if the word-of-mouth method of recruitment is the best to access participants of varied backgrounds, the activity of playing single-player games as a determinant seemed to create a basis from which a varied group came into contact with me. Although there is a weight of students, the focus of the project being on transformative learning processes made even this grouping highly diverse once the qualitative components of transformative processes were analysed. Not to mention that the different games and ways to play them varied vastly beyond what this demographic quality could potentially have predicted, making it an open question if everyday life as a student notably changes transformational processes in gameplay. While the project was never intended to be focused on gender and/or more private identities, it was important to know how the collective group of participants represented the very varied potential of players. Aside from a small segment of in-game romantic situations, the data analysis did not reveal any specific impact of these identity structures in terms of the constitutions of transformative processes. For the sake of transparency, the segment of men is primarily dominated by straight identities with only one participant identifying as gay. The segment of women presents more varied identities and identification

with two identifying as women/queer and only one identifying as straight. In terms of respecting pronouns, I mark these in parenthesis in each chapter when appropriate in terms of presentation (although in this chapter I would refer to the table above). There is a heavy weight of Danish participants despite the otherwise open possibility for international participation. Parker was the only participant not living in Denmark but instead situated in another EU country.

Participant Involvement and Communications

The timeline of participant and researcher intersections through the participation period is visualised in **Figure 3**. This figure shows the asynchronistic relation between the original play events and the researcher's (or rather, my own) engagement with these events and the participant, from the participant's perspective. That is, what the participants delivered by themselves, what they knew that I as a researcher would be doing, and finally where we intersected in communication and interaction. The Questionnaire and open-ended qualitative questions were sent via email approximately 1 month after the interview.

Figure 3. Simplified Timeline for participants and their interaction with the researcher

Participant →							
		Playing and streaming gameplay				Demographic questionnaire and qualitative information	
Participant & Researcher →	Introduction to the study and technological setup		Interview invitation		Video-elicited interview		Potential follow-up interview
		Probing videos and monitoring progression		Video analysis			
Researcher →							

The initial communication I had with the participants often took different directions. While some were informed through a small piece of text describing the project, some did not have this or needed a bit of further explanation as to what participation would ask of them. The initial conversation, regardless of email or phone call format, was used for me to gauge the interest in games with forms of roleplay-like elements which were deemed the best overall basis for this exploratory research (as mentioned in the introduction). In case of them playing a new game (potentially provided by me) their game literacy within the roleplaying game genre was also assessed. The reason being that I did not want an individual participant playing a game that they

might inherently not enjoy. By joining the project there was a general risk that the participants would feel forced to play, and even more so when they received a game from me. As such, being forced to play a game that the participant did not like or enjoy playing would lead to data quite far from the intended habitual activities and practices. Likewise, since games bought for the participants came out of my personal funds, certain financial considerations also needed to be accounted for. Whether it was written or verbal communication, I asked the potential participant for a brief history of the games that they had enjoyed playing in the past, and what they were currently playing if anything. Aside from gauging their interest in games with roleplaying elements, it also gave me an indication of what game they might enjoy if they were in the group that was supplied a game.

Regardless of this initial communication point (via email or phone call), the next step after the participant agreed to join the project was sending the participants the consent form and a guide to setting up the streaming. Both the consent form and the streaming setup guide differed according to the different streaming platforms that were used. The consent forms in terms of streaming platforms used in the research are explained in more detail in the 'Streaming Gameplay Video' section of this chapter due to the complexities in terms of research ethics and consent. Common for all versions of the consent form was that it underlined the basic premise of participating in the project and informed of the ever-present freedom and possibility to exit the project without having to give a reason, and without any repercussions or costs. It also explained how the participant's personal data would be handled in adherence to the General Data Protection Regulation (GDPR) in the EU and sensitive data in accordance with the Danish Data Protection Law.

The guide to setting up the streaming was sent as a PDF file with a step-by-step procedure according to the platform in question. Once the participants had set up the streaming functionality they were asked (in the guide) to do a small 5-minute test with any game, and to contact me when they had done so. Consequently, five of the participants turned out to need help with the technological setup. Two because of software issues in relation to older hardware, and three because of other issues, mainly in relation to the encoder setup (the program that sends the video to a platform). After the technological setup was in order and the participant was given the freedom to play and stream, the next point of correspondence happened when I invited the individual participant to the actual interview after a sufficient amount of gameplay video was gathered. It was important to ensure that I would have time to do the actual video analysis up to the interview and that the participants could choose a time that fit them and their everyday activities the best. The interviews being conducted via Zoom meant that it was quite uneventful to find a suitable timeslot for the 1-1.5h interviews, and most of them took place in the evening. The actual video analysis did not start before I knew when the interview would take place (see "Proximity and Observational Ethnography" in the next chapter for the reasoning behind this procedure).

As mentioned, about 1-2 months after the interview the participants were sent an email with eight demographical questions, and four free-form questions where they could write more about their current and past experiences with games and their experience with the interview. The participants were informed that their reply would be stored securely and that the email

would be deleted from my email system, and they were encouraged to do the same to not have sensitive data stored in this fashion. Five of the eight questions are visible in the previously presented 'Table 2. Participant Overview' where occupation and education have been merged, and the remaining three questions of gender, romantic orientation, and partnership status are intentionally left out. As mentioned, the four more qualitative and open-ended questions are presented and discussed in Chapter 7. The emails containing this information were downloaded and deleted immediately from the email platform. The participants received a final email, thanking them for their participation and once again encouraging them to follow the deletion procedures. Based on the analysis of the qualitative feedback in the written form along with the preliminary results from the interview, three of the participants were invited to a follow-up interview. All three agreed to this more traditional semi-structured interview, which aimed at contextualizing some of the findings and open questions that the combined data gathering had produced.

In every verbal and written communication with participants they were encouraged to contact me if they had any questions, felt any discomfort with their participation, or if they wanted to reach out to me for any other reason. This openness to communication was important in order to make the participants feel safe in the situation and to continuously underline that they always had the possibility to ask questions. This was doubly important in underlining that if they accidentally streamed something that they did not wish for me to see, they could contact me to have the video deleted. This never happened however, and none of the videos across all participants contained personal, private, or sensitive data in terms of GDPR and the Danish Data Protection Law.

Games and Play Activities

Overall, the participants were recruited into two separate groups. One in which I supplied them with a game they had not played before, and another where they were free to play what they wished. With the aim of exploring player transformation through internalisation processes, having the player play a game for the first time would (theoretically) lend me as observing researcher a better chance at noticing both subtle and distinct changes in the players' behaviours throughout and across their play sessions. Quite simply put, the co-authored experience and thereby the gameworld as a basis for internalisation processes would be on the same level between the player and myself as observer. As the previous chapter explored, there is of course much more to the players' processes of internalisation than can be immediately observed. Yet the idea of sequences of events not being disturbed by previous experiences with the gameworld, and by that how the players invested themselves in these new gameworld experiences, led me to hypothesise that potential transformational processes would be most obvious in a first-play situation. Eight participants played a game that I supplied and were playing the game for the first time, whereas five played in the free-play format. In the free-play format, the participants were aware that I was looking mostly for games with role-play like elements, but they were encouraged to record all that they were playing.

The games that I would supply the participants were defined to certain parameters in the gameplay which would allow internalisation processes toward transformations to be reasonably visible. With the broad aim to uncover potential play with identities or the self in a transformational learning theory perspective, the focus of the investigation should to some extent be within the sphere of internalisation through reflections towards the self or identity in the interaction with the gameplay. This parameter meant that the games should be narratively driven in a form where the player's actions should be perceived as important to the narrative development to create a co-authored experience. Another parameter was that there should be some form of playable figure that the player would engage the gameworld with to align the visible game experience in the video data with player intentionality.

This led to a list of potential games in the general roleplaying games genre. While Thomas Apperley argues to view game genres through the lens of genres of interactivity (2006) the popular nomination of "roleplaying games" in communication with potential participants playing (playing either assigned or free-play games) would indicate the activity and practices that they should be familiar with. While it may then seem constructed, it is important to acknowledge that the games listed hold interactive elements that are often a part of the appeal of certain games, if not even the idea of role-playing games as a game genre. Yet exactly in this (non-) definition of "game genre" is also the acknowledgement of games which may not entice processes of internalization, transformation, or even self-reflection in such a direct manner. The list was the following in terms of simplified relevance to the project's interests (and with approximate price at the time):

- *Divinity: Original Sin* (Larian Studios, 2014) for its fairly unique function of having two player-created characters that can and will interact, often with disagreement between the two. (40€)
- *Dragon Age 2* (BioWare, 2011a) for its appropriation of *Dragon Age: Origins* while adding voice, mannerisms and other forms of "fidelity" enhancers in the dialogue system, arguably reducing the congruence between the player and the player character (see K. Jørgensen, 2010). (20€)
- *Baldur's Gate: Enhanced Edition* (Overhaul Games, 2012) for its opaque dialogue system and fairly free-form play potential. (16€) Note that this Enhanced Edition is a remaster of the original *Baldur's Gate* from 1998 (BioWare, 1998).
- *Planescape: Torment: Enhanced Edition* (Beamdog, 2017) for the same reasons as *Baldur's Gate*, but set in a universe and style that might have a different appeal. Also here a remaster of the original game from 1999. (16€)
- *Dragon Age: Origins* (BioWare, 2009) for its ability to situate players in ethical dilemmas (see Jong, 2012), along with being both tried and tested in terms of research, including my own. For this exact reason however, it was deemed a secondary option. (20€)

Having this list of slightly older games to choose from came from two necessities. The price of the games, and the hardware demands. As mentioned, the price point turned out to be of some

importance. While there were funds in the project to make minor purchases, it turned out that Danish legislation prevented the "gifting" of games with university funds. This is of course problematic in terms of this research, as playing a new game would to some extent imply that the participants did not own the game beforehand. While there were grey zones in terms of the possibilities for funding the games, the time spent unravelling the legislation and potentially arguing against established procedures meant that I decided to simply pay out of my own personal funds. In this, *Divinity: Original Sin* was removed from the list of potential game purchases. The lower hardware demands on older titles also meant that I did not extensively have to check the participants' computers in terms of the games' requirements, and as such eliminated an otherwise potentially problematic communication point with less tech-savvy participants.

Combined with the hypothesis of certain games being easier to observe for internalisation processes, the further exploration of the method's efficacy was also something that I deemed necessary to explore. For that reason, the participants who joined the free play group engaged in a variety of play forms, with some playing a game for the first time, and some playing games they were well familiar with. Even in this free-form play however, the participants would for the most part ask me if a certain title was ok in terms of the project, to which I always agreed. Seemingly the participants entering the free play form used the project as an impetus to start playing specific titles, such as Parker using the project as an opportunity to start playing *Nier: Automata* (PlatinumGames, 2017). Paul and Fran doing the same in terms of replaying *StarCraft 2: Wings of Liberty* (Blizzard Entertainment, 2010) and *The Elder Scrolls V: Skyrim* (Bethesda Game Studios, 2011) respectively. Tory was the only one in the free-play form who simply streamed what she was playing regardless of title, and who did not seem overly concerned with the project's focus on single-player games or role-play elements.

Table 3 is an overview of the participants and the games they played while being a part of this project and the previous MSc. project. "Assigned" meaning they were in the group with a game supplied by me, and "Free" indicating that they were free to play whatever they wanted and encouraged to stream all gameplay activities. Secondary games are the games that participants recorded gameplay video of, but which were not analysed for the video-elicited interview. Note that I have not included a general game description of each game in this dissertation. Instead, I describe each situation that is used from the individual games on the premises of what is important in the situation at hand in terms of the participant's experience. The reason for this is that most examples focus on relatively unique details of gameplay that cannot be described on the general level of the game and are therefore best described in immediate relation to the individual participant's experience.

Table 3. Participants, Primary and Secondary Games

Participant	Game(s)	Secondary Game(s)
Dan (assigned)	*Dragon Age: Origins* (BioWare, 2009)	
Amy (assigned)	*Dragon Age: Origins* (BioWare, 2009)	
Emma (assigned)	*Dragon Age: Origins* (BioWare, 2009)	
Sara (assigned)	*Dragon Age: Origins* (BioWare, 2009)	
Tim (assigned)	*Dragon Age: Origins* (BioWare, 2009)	
Josh (assigned)	*Divinity: Original Sin* (Larian Studios, 2014)	
Matt (assigned)	*Baldur's Gate: Enhanced Edition* (Overhaul Games, 2012)	
Paul (assigned)	*Planescape: Torment: Enhanced Edition* (Beamdog, 2017)	
Paul (free)	*StarCraft 2: Wings of Liberty* (Blizzard Entertainment, 2010) *StarCraft 2: Heart of the Swarm* (Blizzard Entertainment, 2013)	*Magic: The Gathering Arena* (Wizards Digital Games Studio, 2019)
Adam (free)	*Star Wars: The Old Republic* (BioWare, 2011b)	
Fran (free)	*The Elder Scrolls V: Skyrim* (Bethesda Game Studios, 2011)	
Tory (free)	*Disney Dreamlight Valley* (Gameloft Montreal, 2023) *Cult of the Lamb* (Massive Monster, 2022)	*Dead by Daylight* (Behaviour Interactive, 2016) *Shatterline* (Frag Lab LLC, 2022) *Before We Leave* (Balancing Monkey Games, 2020) *Phasmophobia* (Kinetic Games, 2020)
Parker (free)	*Nier: Automata* (PlatinumGames, 2017)	*Descenders* (RageSquid, 2020) *Horizon Chase Turbo* (Aquiris Game Studio, 2018)

Note: Paul figures twice as he entered the project two times on different terms.

Adam and Tory both played other games than the ones listed in the table. Adam had in the project period played *League of Legends* (Riot Games, 2009), but did not record this for me since I was interested in single-player games. Tory had been playing *HuniePop* (HuniePot, 2015), a single-player puzzle game, but did not provide gameplay recordings of this due to its highly sexualised content. I address this issue of sexual content, play, and the method in Chapter 7.

Streaming Gameplay Video

The DisPlay method approximates habitual play activities and processes of play within it without active participation by the researcher or unnecessary intrusion. Utilizing streaming accommodates issues that surround the massive amounts of computational data that digital video recordings produce. Streaming (utilizing a platform such as YouTube) not only removes the need to transfer the data once a recording is made but also changes the research participants' need to engage with the data unnecessarily. Setting up the technological side of the streaming can be time intensive with testing of the various settings to make it work as best possible. Ideally however, the participants need only open the encoder (the program that sends the stream to a server) and start streaming the play session just before they start playing. The requirements for disk space, long upload times, or external drives are removed in this setup. However other challenges are introduced, such as the need for a stable internet connection and a platform to store the video data, leading to discussions about research ethics in terms of data gathering, data integrity, and especially participant safety in terms of privacy and anonymity. Theoretically, participants can be included from anywhere due to this networked way of gathering data, yet there are of course circumstances (most prominently the need for a stable internet connection) limiting individuals and larger groups of people from inclusion on the basis of digital infrastructure and stability.

There are of course different possibilities of gathering recordings of gameplay which were considered. The participants could record the gameplay to their local hard drive, and then later upload the video files to a platform for sharing with the researcher. The issue that arises in this is twofold. The basic problem is that video files are usually very large (usually ranging from 500MB to 2.5GB), and as such take a very long time to upload. This leads to the next issue, which is that there is a basic interest in not having the participants engage unnecessarily with the video files and the data. Having to upload large video files (which usually takes about 50% of the time of the actual recording) must be seen as a disturbance to the otherwise habitual practises of play and specifically the contextual determinants of play. As such, removing this obligation from the participants was deemed highly necessary, as the playful activities should not be negatively influenced by a time-intensive yet mundane obligation. So, while the streaming of gameplay has many dependencies, it was by far the best solution towards minimising the participants' need to handle data and my need as a researcher to be somewhat in control of the amount of video data production. Doubly so, as the amount of data produced becomes difficult asses when there is a potential asynchronous relation between production and viewability. As can be imagined, some participants will play quite extensively over the course of a few days, such as Tim did in delivering 13.5H of gameplay video over just three consecutive days. In this, I was very attentive to Tim's production, making sure to monitor his gameplay video production so that I could stop him and move on to the interview before he delivered "too much" video.

Tim's example is not the best, as he stopped playing the game on his own accord (see Chapter 6 'The Playful Self in Critical Self-perception') and did not deliver more video than the 13.5 hours despite having the possibility to do so. Yet it speaks into another issue of having

the participants in control of the production of video material. Namely, that not too many participants should be active at the same time. The reason for this is that my proximity to the sequences and consequences of the participant's play experience was considered a vital part towards the successful interview. This meant that to create and secure a constructive discussion in the interview situation, the vast majority if not all of the delivered gameplay video material had to be viewed and analysed in sequence. Moments of interest and processes of transformation being difficult to spot unless I was intimately familiar with the player's playful engagement as embedded in the gameplay as a whole. Additionally, due to the untried nature of the combined methods less structured approaches were not considered feasible. I elaborate on the importance of this in the video analysis section of this chapter, and in the next chapter with a focus on proximity. With approximately a 1:1 timeframe for video analysis, plus one day to further process the experience and prepare for the interview, Tim's 13.5 hours translate into at least 3 working days. During these three days, other participants will continue their habitual activities, potentially delivering many hours of video and in that, potentially many additional days of video analysis. The video material production and video analysis requirement can thereby quickly get out of hand. And of course, it did on several occasions during this project, as for example Parker who delivered 26+ hours of gameplay video while I was occupied with other participants and academic conferences.

Streaming Platforms

With the interest of observing habitual play activities, the possibilities of technological solutions to gain access to these activities and practises had to be considered, tested, and ultimately contested in terms of participant safety and data integrity. No one platform, commercial or otherwise could deliver the perfect solution. The technological setup, data management, and data security measures were all highly complex activities that needed to be undertaken and tested before any streaming could begin. Operating within the European Union means complying with the General Data Protection Regulation, which can be problematic in terms of commercial platforms such as YouTube, Vimeo, and Twitch platforms. Alternatives may be cost-intensive or difficult to set up, but nonetheless, the protection and safety of the participants' rights must be the centre of attention.

The original plan was to use OBS (a so-called encoder) to stream the gameplay video to closed video channels on YouTube. In this YouTube would function as a storage platform for research data, and not so much as its intended function of sharing and promoting video material. OBS Studio, being an intermediate software did not turn out to be problematic in terms of neither GDPR nor an ethical standpoint in terms of the research. This combination worked quite well with the five MSc. project participants in 2020, as at that time, all that was needed was a specific streaming key from YouTube which was put into the encoder (OBS). Once the streaming key (a 20-digit/letter code unique to the YouTube channel) was entered and saved into OBS Studio, any streaming would automatically be sent and saved to that channel via the specific live stream session that was set up. This meant that I could set up a live-stream channel for each individual participant, which I could also predefine as private. Private in this sense meaning that it would not show up or be accessible to anyone but me (live or otherwise), and

that the saved videos would also automatically be set to "private" and not be visible to anyone but me. Each participant had a channel for themselves designated only for that individual, and on the specific YouTube channel videos were automatically saved individually for each play session. Procedures for setting up a channel were documented and followed for creating and maintaining these private channels, and designated weekly probes of security were conducted throughout this research period. From a participant's perspective, all they needed to do was to open OBS, press "start streaming" and then open the game. When their play session ended, they simply needed to press "stop streaming", making for a fairly simple procedure in terms of recording their gameplay.

However, upon submitting the Privacy Impact Assessment (PIA) in compliance with GDPR to the legal department of the university in December 2020, it was questioned whether YouTube could be GDPR compliant in terms of this project. Broadly speaking, it is difficult to assess how personal and private gameplay video is, and what the implications of a data leak in terms of such video material would be. This rested on the production of the video data being in the hands of the participants. It is quite simply highly difficult to control what participants stream and thereby record, which means that there was a potential for recordings of whatever people might use a computer for. A lot of which would be considered private, or leak of private or sensitive information. Even if I could make the participants set up the streaming to accommodate privacy via OBS, the potential for errors and mistakes was prevalent. This never happened with the first five participants (nor any of the later participants), yet it was considered important to engage with privacy issues of the platform used to have a good combination of function and safety via the platform for video data.

In the somewhat same line, it is very difficult to distinguish ownership of the video data when third parties are involved. In the case of YouTube, the videos are in essence Google's to use if they wish. And while this is highly unlikely, as the videos are not particularly interesting to a general audience, the fact that Google can still use them however they want (be it for showing or to run some form of analytics) is problematic. Basically, it makes my ethical obligation to protect both participants and the research data strenuous, as I am removed from direct influence both in the production and the background handling of the videos. Deleting the video data is also a somewhat obscure process, in that it is not clear if Google will have made copies for their own storage and potential use. When deleting a video on YouTube, it clearly states that it is irreversible and that all video material will be lost. Yet the user agreement indicates that this may not be the entire truth, as Google may have stored data for their own use. Twitch could have been another possibility of platform but may also remove videos if they are not "active". This seems based on some form of algorithm, which means that I could potentially lose video data without notice. For this reason, Twitch was never considered an option in the project (GDPR aside).

The university's internal video recording system was therefore considered to be the best option, as the data would go directly to the University's data storage on trusted systems. With this realisation, it made little sense to start to test the ITU video platform at the time, as that was to be replaced in the summer of 2021. Simply put, VidGrid, the university's video platform supplier at the time, retracted themselves from the EU market supposedly (or perhaps ironically

in this case) because of issues with GDPR compliance. Other options were investigated, including Vimeo (not GDPR compliant) and having an IT company set up the function (costing 60.000-80.000 DKK). While investigating these matters the university's necessary investment in a new video platform slowly became the most promising option. I was allowed to be a part of the testing of the new video platform (an integration of Kaltura) in May 2021, which I utilised to full potential in terms of the platform's streaming functions. The platform came online officially on June 1st, 2021, but was at this point still quite unstable in terms of the streaming aspect, although there was time for identifying and reporting bugs in the live-streaming. So, while the first five participants streamed with YouTube, the next three used this system internal to the university. Yet this system turned out to be problematic in terms of data integrity (see "Assessing Video Production" in this chapter) which is why the project needed to rely on YouTube once again for the final five participants, incorporating the security procedures as they had been iterated earlier.

The participants had varying degrees of access to their video material, even though none of them asked for access to it at any point during the project or after. The initial research design was quite deliberate in them not having access to the videos. Simply put, a participant who had already seen video of his/her/their own gameplay would already have made the first reflections about what happened during the gameplay and implicitly also reflect upon themselves. In this, the video-elicited interview would not be able to uncover the process as it happened, but rather uncover the participant's thoughts about the process as they would have seen the first time leading to a sequence of meta-reflections rather than access to the original playful events. This was inherent in the first setup with YouTube, and while flawed in other ways the internal university video recording system also accommodated this. Yet this was not technologically possible with YouTube after 2021, as the platform now required that YouTube Studio (the "creator" part of the platform) had to be open and active while streaming. This meant that each participant had to be invited into the channel itself as an editor, although only with the ability to stream directly to the channel and not having the option to delete anything or change the channel's properties. They could see the videos however, which wasn't considered optimal. Table 4 shows who engaged with which platforms, and if they had access to their own videos. The participants who did have access to their own gameplay videos did not view them however. Only Tory commented that she thought it was interesting to see how much time she had spent in the individual play sessions, as this automatically showed up when she ended the stream. The question I posed her was if streaming had had any influence on her play, to which Tory stated:

> I thought it was a little fun every time I ended a stream because I could see how long I had played for. Sometimes I thought I had played a lot longer, but it was only 25 minutes. And then sometimes with Dreamlight Valley; woah ok, so that was 5 hours, ok, good to know. But starting OBS and streaming didn't affect anything, no. (Tory, Interview)

I would not have expected any participant to watch through their many hours of gameplay, yet it was a plausible concern that they might view situations which I would also label in the video analysis. Amy, while not having access to their video, had some ideas about which situations I

might have presented them in the interview. At the same time, so did Matt, yet he did not view his videos despite having the possibility to do so. In this sense, it remains an open question if access to videos is important to the overall research, yet I of course asked the participants with access to their own videos to not view them prior to the interview.

Table 4. Participant and platform distribution.

Participants	Encoder	Platform	Access to video data*
Dan, Amy, Emma, Sara, and Tim	OBS Studio	YouTube	No
Adam, Josh, Paul	OBS Studio	Kaltura (university integration)	No
Paul, Matt, Fran, Tory, and Parker	OBS Studio	YouTube	Yes

Note: Yes/no in the third column indicates access to the video production through the platform itself through the procedures necessary to stream the gameplay video.

Consent

In the setup of this research, the participants are given a large amount of agency in the streaming activity and might not be aware of the implication of forgetting to turn the streaming off or simply shifting to other activities mid-stream (such as browsing social media or the internet at large). Even though most encoders (such as OBS Studio) can limit the occurrence of alternative activities being streamed, this was not always feasible with the participants' hardware. The potential of both personal and private data being included in the video material meant that testing security measures was imperative, and that informed consent included the considerations of data security, making the participants aware of what they were a part of, and what I as researcher was constantly aware of. They were made very clear in both consent forms and in written/verbal communication that any video material that was not gameplay would not be used in the research. Likewise, if the video material contained anything that was considered private or sensitive, this segment of video would be deleted. Finally, if there was a specific video recording on a specific date they did not want me to see, they could contact me and I would delete the video without watching it. This never happened, which also speaks into the fact that they were aware that they were streaming and being recorded, and as such were also aware that they should not be engaging in activities of a potentially sensitive nature while recording. The reader of this I suspect being well aware of the many possible activities available in both offline and online environments on a computer. While OBS does offer a solution in only capturing game video, this was sadly not feasible with all participants' hardware, which also speaks to the general difficulties of standardising technological setups for streaming.

None of the participants seemed overly concerned with the use of the different platforms to record their gameplay. While the university system presented some innate data security,

YouTube was in a slightly different category which warranted additional information. Still, none of the participants took special heed of this, which might be ascribed to the general knowledge of the participants in terms of the platform. As Tory stated:" Because it was just for you and on a private YouTube channel, I didn't think much about it. And because you didn't need any sounds from me, just the sounds from the game, I thought it was fine." In this statement, there is something to be said about the knowledge and literacy of the technology used in combination with the changing tendencies of less concern about privacy and data (see for example Adorjan & Ricciardelli, 2019). While none of the participants were in their teens (which is the basis of Adorjan & Riccardelli's investigation), Tory and the other participants who were asked to use YouTube quite simply were not concerned about the platform. Neither did they ever ask for any elaboration in terms of the security procedures. Still, I assured them that I was monitoring their video production for potential issues and had tested the procedures for privacy. And as mentioned before, I informed them that I did not watch them while they were streaming live. It seems that their literacy and experiences with the platform along with my procedures for their safety was enough for them to feel safe in joining the research. This does of course not exclude research ethical considerations, nor dilute my own vigilance towards safety procedures along with a focus on the participants' well-being while being a part of the project.

While I did not probe the participants about the specific platform's influence on their willingness to stream their gameplay, it would seem that using commercial platforms, such as YouTube, did not influence the participants negatively in any significant way. Being the only one of the participants who tried both the internal university streaming system and YouTube, Paul delivered an interesting account. As using YouTube was his second time in the project, I asked him if it was different from the first time where he used the university system. To this Paul stated: "Not at all. As I said, it was just about going live with the link you gave me. It was perfectly fine". While not without influence as previously explained, the platform itself did not seem to have a specific impact on the willingness to engage with the streaming aspect of recording video data. Though this must be seen as an amalgamation of consent forms, communications (written and verbal), and the literacy and experiences of the participants with the platforms involved. The internal university system obviously seems quite safe in comparison to more commercial platforms. But using YouTube, the participants seemingly trust in the platform as a working station, more than a site for potential leaking of information. The trust in the ability to be private on this inherently non-private platform does make sense, as YouTube is mainly a platform of pre-produced videos, and very rarely being a site of pre-disclosed videos from creators themselves.

Assessing Video Production

With the technological setup in order, and participants having given informed consent, streaming gameplay could begin for each individual. As participants should play as they usually would and when they wanted, this posed new challenges. It can be difficult to assess when they have played enough for the video analysis and the subsequent interview to be meaningful. While constant probing into the play activities through the videos gives indication of this, other

benchmarks were considered. These included playing up until a certain point in a game or playing for a certain amount of hours. Ultimately it became a matter of a case-by-case evaluation. There can of course be differences in the requirements based on the research intention (case studies, longitudinal studies etc.), but in terms of my research as presented here, hours played was rarely indicative of the material's quality, let alone completeness. The participants were in full control of their play activity, as it should be embedded into their habitual practices. This meant that they could potentially play 30 minutes in a single session or up to as much as 10 hours or more. The most usual timespan was between 30 minutes and 3 hours. Rigorous monitoring was essential in this part of the research, and based on hard-earned experience it is inadvisable to have too many participants active at once.

Missing video, and/or video overload can be troublesome for both the video analysis and the later interview, which quickly became apparent as Josh and Paul had been streaming their gameplay over 2 and 3 weeks respectively. The university's internal video system could not create individual videos of each play session consistently, but instead compiled all the streaming into one large continuous video. This seemingly uneventful difference in the platform functionality became a serious issue to the research, exemplified with Josh (he/him) who played *Divinity: Original Sin*. For unknown reasons, an estimated 7 hours of Josh's gameplay was missing between the first video (1 hour) and the last (4 hours) collected in one combined video. Upon video analysis of the recorded 5 hours, it became apparent how important the continuity of the gameplay is to gain an understanding of the participant's movement and focus within the game. For Paul's video, there was even more missing video data. In both cases, probing videos of this size, even regularly, did not reveal the many missing hours of recording immediately. The moment it became apparent that they had played vastly beyond what the recordings could show, they were invited to the video-elicited interview as to not further have them produce data that was potentially not useful. As it turned out, the broken sequence of play made it difficult to assess moments of interest in the video analysis of the later parts of Josh and Paul's gameplay, indicating that the ethnographical basis (as presented in the next chapter) was compromised.

While making use of the video available in the interview with Josh, and with high detail about the processes in these, the foundations for the more interesting and relevant parts of Josh's play experiences were out of reach. He identified a non-recorded situation as seminal to his way of interacting and identifying with the two player-created characters in the game, but the moment was lost. He could somewhat remember the situation, but his statements and explanations became a mix of memory, estimation, and some form of conception of how he would act with the information he remembered. This situation underlines that the DisPlay method is sensitive to technological failures and that these should be mitigated as best possible. Yet this situation with Josh also showed as significantly different from the other participants, which indicates that the method does give access to experiences of play in a novel way when it succeeds (which I present in Chapter 5). Nonetheless, since this platform also failed in terms of Paul's video data, it was no longer considered a viable solution. Not only did it produce unsatisfactory data, but the participants also spent time and energy in producing these recordings, even if the added procedures to their habitual play practises were minimal. This engagement must also be respected, and the loss of video data was in this sense not acceptable

since it was avoidable with more stable platforms. The difficult yet necessary decision to return to YouTube was therefore inevitable, and the consent forms were reiterated and updated to underline more clearly what the potential risks of using this platform were.

The route of minimal intrusion and an unobtrusive approach is obviously not without troubles. On the contrary, it presented very heavy time commitments in terms of finding the appropriate platform, testing the security, and finally setting up and tweaking the technological solution for each participant. Yet it is probably the closest we can get to the original experiences of play in habitual solitary environments. With the insecurities of using a commercial platform to gather video data, informed consent was of the highest priority. As researchers we can never quite fully know what the large commercial platforms store, and/or will use in their many corporate activities. Yet it is, for now, a necessary trade-off in terms of being able to gain consistent and usable video material. Informed consent from participants which includes the unknown practises of the platform was therefore a necessity so that participants knew what their participation meant in terms of their actions and activities while streaming. While I am confident that I have done what I could in terms of the participants' safety, there is much that is quite simply out of my control and influence when it comes to the different platforms (especially YouTube) and the participants' streaming activities. I do believe, that with the amount of control I had over the videos post-production, that any potential for sensitive information could be kept undisclosed and within my power to delete from potential publication. Thankfully, none of the participants streamed anything that could be considered sensitive or private data from a legislative standpoint. As also presented, the participants were generally aware that they should be careful about what they recorded outside of gameplay, which leads me to believe that the informed consent forms were explicit and understandable.

Video Analysis

The video analysis and documentation made use of journalisation (field notes) and analytical memos. As Johnny Saldaña notes on doing video analysis in his book *The Coding Manual for Qualitative Researchers*: "[…] the researcher's careful scrutiny of and reflection on images, documented through field notes and analytic memos, generate language-based data that *accompany* the visual data." (Saldaña, 2016, p. 57, original emphasis) In this way, and as Saldaña proposes, the video analysis complies the video data into a comprehensible format which can mirror the factuality of the video sequences. Practically, this meant documenting the individual player's movement and actions with timestamps, and writing analytical memos whenever I experienced something that could indicate transformative processes within the player. This analytical process was based on observational criteria, which were used to identify moments of interest and colour-code the analytical memos in the video analysis journal in terms of their connection to the research question. The previous MSc. project had also made use of these criteria, although they were more specific to the single game in question for those five participants. With a focus on reflection, the analysis there mainly focused on criteria 3 as it is presented in the following segment.

Observational Criteria

Observational Criteria were formed in conjunction with the overall aim of the research. These criteria functioned as a structure that guided the video analysis in identifying moments of interest with the potential to be used in the later interview, and as a self-reflexive tool to establish contexts of importance to the research in relation to the game and the player. As a baseline in the work with creating the DisPlay method, four basic observational criteria emerged. On a general note, these both can and should be expanded, simplified, or discarded in relation to the interest of the research, and turned out to be of varying importance in the video analysis of the somewhat varied games in the project at hand.

The four basic criteria are based on the notion of play with digital games as dependent on action (see Frasca, 2003). Both action and non-action are indicative of the activation of internal processes of varying forms. Gordon Calleja's presentation of player involvement as processes of internalisation (G. Calleja, 2007) explicates quite well what observational criteria are formed around. As Calleja presents, there are two modes of involvement with digital games: the macro-involvement and the micro-involvement. Macro-involvement being all of the player's processes that take place outside of the play activity with a specific game (pre- and post-play), while micro-involvement indicates the processes happening within the actual play activity. Perhaps obvious via the micro-ethnographical inspiration, the observational criteria are formed around the micro-involvement processes as these are the ones that are visible in the video data. While Calleja presents a relational model where neither segment is wholly siloed (G. Calleja, 2011), some constructs of the involvement are more important than others when looking at transformational processes specifically via video analysis. Namely the ludic, affective, narrative, and shared involvement are at the centre of attention as an amalgamation of experience, leaving the kinaesthetic and spatial involvement categories to be further explored in the later video-elicited interview, if necessary. The spatial- and kinaesthetic involvement are not immediately visible in the video data. The kinaesthetic involvement concerns the bodily interaction requirements of in-game controls and the spatial involvement is the sense of inhabiting the gameworld space. Granted that learning the controls of the game(s) was somewhat visible with the participants playing a game for the first time, it was not a focus point of this project. The sense of inhabiting a gameworld space is an important part of any transformational process, but the construct in itself is very difficult to identify based on visual data alone.

The affective, narrative, and shared involvements were guiding in terms of the identification of processes of transformation usually as an expression in the ludic involvement. Importantly though, the ludic involvement only revealed itself clearly in the later video-elicited interviews. Shared involvement is the embeddedness with the gameworld actors. That is, the NPCs and other entities that represent some form of co-existence within the gameworld, and which contribute to the sense of worldness. In a larger sense, one could say that the shared involvement is what makes the narrative believable and important, contributing doubly to the affective involvement of play as different forms of emotional engagement. In conjunction then the three terms (shared, narrative, and affective) create the basis for transformational

internalisation processes through internalisation of a multitude of multifaceted involvements. It is important to note that the video analysis cannot predispose specific game systems or mechanics (or even the desire to play with these) as reasoning for transformational internalisation processes. Rather, the ludic involvement as Calleja proposes expresses the player's engagement with choices and actions, and the repercussions of these, which is a general indication of transformative processes.

While Calleja's work is based on qualitative research on multiplayer games, the dimensions of involvement and internalisations that Calleja proposes are well argued towards the player's perspective in single-player gameworlds. As Calleja theorises, the more the player internalises, the less energy the player has to use in the interaction with the game. And it is exactly this movement that makes transformation especially interesting, as it requires non-trivial energy and involvement. The aforementioned proximity to the player's navigation and journey into the gameworld is therefore the basis of seeing when something happens, which is not a part of previously internalised structures. The "normal" learning processes are thereby not the centre of attention but rather serve to indicate exactly when something out of the ordinary happens. On this basis, the observational criteria are crafted around what is visible in the video data as non-trivial events. The four criteria are as follows with short examples:

1. Movement indicating attention and intention. This is often cursor movements, but can also be opening/closing of menus, character/avatar movement, and/or subtle changes in movement patterns which indicate changes in the intent towards actions. This is often most noticeable in dialogue situations, where players will indicate with the cursor what they are reading, and often will cycle between the possibilities as they contemplate which to choose. With Parker playing *Nier: Automata* on a Nintendo Switch (no cursor) this criterion was a little more subtle, yet still noticeable, as the character movements become indicative of intention. As such, repeatedly moving to a closed door, or repeatedly talking to the same NPC gives indications about thought processes and attention. A notable example is that Parker stayed clear of a specific area in the game very deliberately, as a quest would have him kill two NPCs which he really did not want to do.

2. Pauses in movement and temporal delays, which indicate cognitive processes or emotional processing of the situation at hand. Fran playing *The Elder Scrolls V: Skyrim* spent close to 30 minutes in the character creator, moving back and forth between the available races and moulding the characters' faces. When she was just about to finish and name the character, she paused for 3 seconds without any movement of the cursor. She then went back to the beginning of the creation process, looked through the different races, and then re-chose the character she had just created. This small pause indicated an evaluative process, where this new character (a wood elf) and the imagined role and personality of this was weighted against what she usually played (a dark elf). As such, this stands as a form of biographical transformation process early in the gameplay in connection to Fran's (re-)play activity with the game.

3. Opportunity for radical action, or more subtle decision-making. The logical and/or rational steps of the game are the focus of this criterion, where deviations (and the lack of same) are of interest. Tory played *Disney Dreamlight Valley*, and in this also engaged in dialogue with well-known characters from the Disney franchise. In a dialogue with Donald Duck, Tory had the option to scold him or to be nice to him. While there was a small pause as per the previous criterion, the most interesting in this situation was the rather unusual option to be rude towards Donald Duck in a fashion that did not seem very close to the Disney universe or the sentiment of the game. The possibility space in this decision indicated an emotional processing of Tory's relation to the gameworld, and along with other similar situations early in her gameplay with the game, this solidified Tory's playful engagement with the game in that she enrolled into the gameworld as herself, rather than as an imagined character.

4. Expected behaviour and action as it pertains to the patterns of the individual player's way of playing. These would be the logical steps of the player, as the researcher becomes intimate with the playstyle and attains a certain feeling of what would be natural for them to do in most of the game situations. In this, the main criterion is when the player breaks these expectations by making unexpected choices. An example of this was Tim playing *Dragon Age: Origins*, where he after a long dialogue with an NPC ends up killing it. This NPC was not a companion but had been a friend of Tim's character since the beginning of the game. While the NPC in question had indeed done something unfortunate, this decision to kill him was somewhat extreme for Tim's play, and as such warranted attention in the video-elicited interview. The NPC would not do what Tim wanted him to do, and after 15 minutes of trying the dialogue (including a reload to retry the dialogue situation), Tim killed the NPC again. About 25 minutes after this situation, Tim quit the game and did not play it again, indicating that this frustrating moment had a negative impact on Tim's playful engagement.

Observing these four criteria in different combinations is what creates a basis for selecting the video segments for the video-elicited interview. A general rule of thumb was that three or all four criteria present in a situation would be a moment of interest and would warrant a deeper investigation in the video-elicited interview. While the four criteria and their use may seem somewhat generic or general, they also have different weights in terms of the game that is played, and the way the participants play them. When Paul entered the project a second time, he played *StarCraft 2: Wings of Liberty* (Blizzard Entertainment, 2010). As he explained in the interview, he had played the game five or six times before, with the last time being just under a year ago. *StarCraft 2* being a real-time strategy game and Paul being quite adept at playing it, there were very few situations in the actual missions where any of the observational criteria were in effect. As such, the moments of interest were mainly identified in the segments in between the missions, where the narrative progression, choices of upgrades for his units, and choices on which missions to choose to do next gave Paul reason to pause and evaluate. Mostly

criteria one and two were in effect (attention, intention, and pauses). Radical action (criterion three) is a rare possibility in this game, and criterion four (expected behaviour) was quite streamlined with the many playthroughs he had had before. I did not know the extent of Paul's previous play with the game before the video analysis, although it was very clear that this was not the first time he played it. Doubly evident through in-game achievements, which had been completed before. As it turned out, most of the pauses were evaluations of optimisation versus novelty, which in itself presented interesting processes of both emotional and cognitive dimensions of internalisation.

Most obvious moments of interest appeared with the participants playing more narratively driven games for the first time. These being the five participants playing *Dragon Age: Origins*, Adam playing *Star Wars: The Old Republic*, Paul when he played *Planescape: Torment*, and Matt playing *Baldur's Gate*. In these games and the participants' play, nearly all moments of interest were connected to dialogue situations. In these, it was often very apparent when internal processes of intense evaluation were present, as mouse movements, pauses, radical action potential, and expected behaviours or actions stood out as singular instances, most often in a stream of rather non-problematic dialogue choices. These non-problematic choices indicating non-problematic internalisation processes (in terms of Calleja's theory) and the break from these, the potential transformational processes of internal evaluation and reconstruction. I would have expected the same from Josh playing *Divinity: Original Sin,* yet not many of these dialogue situations were present due to the missing video. On the other hand, Tory (*Disney Dreamlight Valley*), Fran (*The Elder Scrolls V: Skyrim*), Parker (*Nier: Automata*), and Paul (*StarCraft 2)* presented games and playstyles within which the criteria had differing (and less obvious) values across their individual gameplay. This was in connection to the games' affordances, gameworld spaces, the progression of the games themselves, and the participants' agency in the sequences of the gameworld narratives. Tory and Parker playing games which are quite streamlined in the narrative, while *The Elder Scrolls V: Skyrim* which Fran played is a more open free-form gameworld experience. Especially since Fran had installed many mods which completely changed the game's narrative progression from the original, amongst other changes.

Video Selection

Each individual participant presented vastly different experiences for me as an observer and also presented highly individual ways of playing and navigating the different (or same) games. In this reality, that means that even a singular game like *Dragon Age: Origins* cannot be simplified in terms of the experience of play or simplified to particular seminal moments for each player outside of major story moments. The five players playing this game all took on the role of the hero that the story presents them with, yet they did so in vastly different ways. Across the combined participants, identified moments of interest were very varied in terms of the situations they occurred in and turned out to have very different outcomes in terms of their transformational contexts. Identifying what video segments to use for the video-elicited interviews was based on the analytical memos and their colour-coding, and the overall sentiment of the individual participant's play. I used a green colour code to indicate situations

and moments which had strong connections to the observational criteria, and yellow to indicate moments which were interesting to me but had a weaker connection to the criteria (presented in more depth in Chapter 5).

Since there were most often more moments of interest than what could be presented reasonably in the interview, I needed to go through a selection process. This entailed reading through the journal and re-watching the moments of interest. Some were then found to be of lesser value than I had originally conceived, as the identified criteria lessened in value with the entirety of the gameplay in mind. Other situations increased in significance on the same basis. Overall, 4-6 main moments of interest were selected based on this process, and another 5 were kept in reserve in case one or more of the main moments turned out to not give much content in the interview. In one particular instance, Emma gave an account of one moment of interest, which explained the following one I had prepared for her. I therefore skipped that and was able to include one of the reserve moments instead. For Tory, some of the situations she clarified quite quickly, which meant that there was space in the timeframe of the interview to include a few more situations.

Video Elicited Interviews

Accessing Processes through Video and Memory

In the interviews, the selected video sequences were shown to the participants. Important in the video elicitation as it is implemented in DisPlay, is that the video sequences are played out before any vocalisation of the situation begins. In this sense, it is substantially different from concurrent and retrospective think-aloud methods (see for example: Alshammari et al., 2015) as it avoids the double cognitive load think-aloud imposes on the participant (Nielsen et al., 2002). It is from this video elicitation that the main research data is produced as the individual participant gives access to internal processes through the mnemonic quality of the recorded video. Internalisation processes are vocalised as the result of the video data, merging the visible and factual actions with the cognitive, emotional, affective, and social evaluations of the situation at hand. The player's actions in the gameplay video gains the quality of the play and gameplay of the recorded moment. Quite often the actions are also rooted in the play and gameplay that both preceded and followed the moment, situating it in the larger journey the player has experienced throughout a larger portion of play with the game.

The interview guide was created with the intent of letting the participants speak as freely as possible about their experiences in conjunction with the video elicitation. The general introduction to the interview and the format of video elicitation was followed by a more general question about what they thought of the game they had played in the case that I had supplied it, or what their relationship was with the game if they had played it before. The function of this question was to gain an insight into the play experiences' meaning for the individual and to gauge if they had been playing solely to appease the project. Barring Matt who had had some issues while streaming, the collective group had been quite happy with the games. I also asked them in this initial segment of the interview if there were any specific moments of play that

they remembered. The function of this question was mainly to focus their attention on their experience with the game(s) in preparation for the video elicitation. Only a few had something specific to say in terms of this question, with Adam presenting an interesting account in terms of the combined methods' efficacy (see Chapter 5, Reflexive Video Analysis).

The most substantial part of the interviews was the video elicitation. The videos shown in the interview were generally sequential, meaning the videos shown most often followed the chronological order of the original experiences. This holds importance toward the building narrative within the interview situation, as the participants, when they explain the processes, also tend to situate these in the chronology of the experience of the play as a journey. I always gave a short introduction to where the situation occurred in the larger sequence of their gameplay before the participants saw the video, as I explained some of the main situations that came immediately before. Using prompts instead of direct questions was deliberate as to give the participants the freedom to express the experience (see for example Jiménez & Orozco, 2021). Prompts such as "What happened in this situation?" or if I was interested in a specific action "It took a while to make that decision?" generally led to quite extensive vocalisation of the situation at hand. Being interested in the processes of the experience, this was favourable in letting the participants recount how they felt, and to let them express what reasoning they employed in taking specific actions. It was also important to create an environment in which the participants were aware of their expertise of their own play, while at the same time merging our experiences of their journey through the gameworlds and the gameplay. The first video shown in the interviews was mainly about letting the participant feel how the video elicitation let them access, re-experience, and recount the details of their play experience. As such, the first video segment did not need to have a strong tie to the observation criteria but still had to be of some interest as to prime the participant to the coming sequences and the mental energy required to watch and articulate them. The first situation was usually not one of the strongest in terms of the video analysis but was mainly used to let the participants get a feel for the elicitation and how I would prompt them to talk about their experiences.

The last part of the interview concerned their experiences with being a part of the project, and how the streaming of gameplay specifically might have influenced their activities, practises, and play with the game(s). As such, the latter part of the interview concerned the methods and the participants' experiences with them to gain insights into the effect that streaming gameplay had had on their habitual activities. Concerning this, it was considered important to save questions about the method's influence on the participant's play activities and practises for the end of the interview, as to not create a precedence of argumentation towards the actions in the gameplay as they transpired. If the participants were under some form of social bias or other non-gameplay influence in the situations shown, they would usually say so in their recount and articulation of the situation and the processes unfolding in it. If not, then saving these questions towards the end of the interview would inform about potential bias more generally in terms of the participant's experiences of the play practice with the added layer of asynchronous observation.

While the power to control the interview was clearly mine through my selection of videos and questions (see Kvale, 2006), the video elicitation, general prompting, and open questioning

meant that the participants were both very vocal and invested. With interviews being done over Zoom, it is clear from the recordings how the participants (barring two who did not turn on their camera) were highly attentive to the video segments and often had noticeable reactions in conjunction with the videos. The general statement across the participants was that it had been fun and interesting to be a part of the interview. And in some cases, they expressed it as exciting to see the videos and to be allowed and able to talk about the finer details of their gameplay.

Differentiation Analysis

Transcriptions of the interviews is an obvious necessary task with the complexity of the analysis of this fourth stage. An initial analysis of the data is also somewhat inevitable in the transcription process, which to some extent serves to strengthen the resulting dataset. As Caitlin McMullin notes, transcription is an interpretive process in itself, within which production of knowledge must be seen as part of an epistemological endeavour, and not a positivistic representation (McMullin, 2021). In my research, however verbatim I attempted, the meaning of expressions quite simply cannot be gathered from the transcribed written words themselves and must be rooted in the entirety of the expressive medium, situation, and assisting technology. In the case of transcribing these individual experiences as a part of a mutual experience of factual video, this becomes doubly important as participants flow between reflections, memory, and long and short sequences of narratives. No less, the inherent mental gymnastics of being interviewed about their inner thoughts, emotions, and resulting choices results in statements that can seem quite erratic in verbatim transcription.

After the transcription processes, this final step of the combined DisPlay method involved identifying and differentiating the components of the statements from the interviews. The task involved detailing the original experiences and identifying interview-based meta-reflections in order to find connections and dissonances. This triangulation process is a strength of the combined DisPlay method, as it allows for an analysis that can validate the origins of thought and action via a processually grounded exploration of a "self" as embodied and enacted in play. In terms of integration of the previous data from the five participants playing *Dragon Age: Origins* the secondary analysis showed that the data collection had produced comparable and usable results in terms of transformative processes, and the data was therefore integrated and reevaluated in this differentiation analysis. In this manner, the project situates itself in the growing paradigm of qualitative data reuse (see Bishop & Kuula-Luumi, 2017) on the basis of opportunity for increased epistemological foundation (Johnston, 2014).

My attempts at isolating and describing transformative processes in play necessitated a critical look at all the materials of the individual participant in combination. This was a needed procedure in order to differentiate the origin and meaning of statements and evaluate the statements' coherence with visible processes, narrative reasoning, and the larger chronological sequence of gameplay. The many abbreviations and unusual terms that the games provide and the large amount of mental processing in recounting and expressing the processes and thoughts they had gone through in the gameplay situation meant that completely verbatim transcriptions

made little sense. Rather, I had to review each segment of the interview several times and write it as close to the inherent meaning of the statements as possible. The differentiation analysis is thereby a complex systematisation of the data with inherent interpretations. Although this triangulation is time-consuming, statements can ultimately be labelled into semi-stable micro-units. In this sense, the differentiation analysis takes form as a preliminary microanalysis of relational interdependencies of the statements of the individual interview. In this process, it was clear that the secondary analysis of the MSc. data (as presented at the beginning of this chapter) had been fruitful not only in identifying the issues of researching identity through gameplay processes, but also in identifying some of the constitutional factors of transformative processes. The game at hand also offered these processes in often more exemplifiable formats than available in the following 8 interviews of the PhD project period, due to the dialogue system and embedded ethical dilemmas in this. It was therefore (at this point) decided to include the data on equal terms creating the combined dataset for this differentiation analysis and the further analysis, discussion, and theorisation of transformative processes.

Matthias Herrle's presentation of ethnographic microanalysis advocates for an initial segmentation analysis identifying the communicative entities and their interrelation (Herrle, 2020). In terms of the differentiation analysis (Stage 4), this means that the interview data needed to be viewed in a general triangulation procedure. That is, an analysis focusing on the extent of which the combined data represented the factuality of the video data in terms of the actions both visible and taken. As Herrle underlines, this form of granular sequential analysis is about discerning the production of meaning in the data itself. In terms of the differentiation analysis here in stage 4 of the research method, that means an evaluation and analysis of transcribed segments of statements, and how they can be attributed in terms of the original play experience (the video data) and the re-experience (the interview data). Ultimately, the differentiation analysis found statements of Process, Process-elaboration, and Meta-reflection in relation to the research aim of describing transformational processes in play. The process and process-elaboration are highly connected to the gameplay and the experience of play, whereas the meta-reflection represents a form of macro-involvement (to use Calleja's terms (2007) as used in the video analysis). These meta-reflections stand in the intersection between gameplay and interview, outside of the processes at hand (the micro-involvement), but within an overall contextualisation of the play situation. For good measure, very little of the data from the four stages or the post-stages produced anything outside of relevance to play and games, save the static categories of demographic information.

Statements about *Process* would to a large extent show as trails of thought, emotion, and/or affect in connection to the factual video at hand. These statements were highly valuable in terms of the research question focussing on processes, where the actuality of the experience is vocalised in terms of importance, impetus, and tacit inference, and often elaborated with reflective and comparative internal evaluations. As such, the value here was not about participants' explanations about the meaning of certain phenomena, but rather the re-experience vocalised as close to the original experience as possible. *Process elaboration* was slightly distanced from this in that meaning expressions were more centred on causal events and experiences close to the process itself. These statements explain the emotional, affective, and

cognitive contexts of the experience as they pertained to the original experience. However, they were not necessarily directly connected to the original experience and process in the manner they were expressed in the interview. And finally, *Meta-reflection* in this context being self-referential reflections in a large sense, meaning that the statements were largely explanatory outside of the actuality of the process as it was originally experienced. Meta-reflection then being closer to extra-processual explanations of the re-experienced event taking place in the interview, often showing general enjoyment of the narrative, game mechanics, and/or a general sense of embeddedness into the larger sense of worldness. Although rare from this analysis, meta-reflections also take the form of justification of certain actions or processes as experienced, meaning that these statements became targeted at me as interviewer and could in some cases be considered para-reflections. Para-reflection understood here as a privational phenomenon, where the reflection consists of the lacking connection to the situation at hand (the original experience), and instead focuses on the context (the interview relation) where the experience is explored (see Roy Sorensen (2003) for a take on the term para-reflection in terms of philosophy of science).

The differentiation analysis stage of the research is arguably never truly completed, as the participants' statements will mostly present themselves as ubiquitous, and quite rarely fall into the above categories completely logically. Gaining access to messy processes quite simply means having to work with messy data. The next chapter is dedicated to the methodological iteration of the DisPlay method, as to give an overview of what the method focuses on and can potentially produce. The chapter after that presents the empirical material of this project and a more direct evaluation of the method's efficacy throughout the different stages of research.

Chapter 4. The DisPlay Method: Exploring Ethnography for Solitary Play

Overall, the method(s) used in this project was developed to specifically target the practice of solitary play with single-player games while attending to the delicate nature of private play activities and practices. Aiming to uncover players' internalisation processes in the intricate interaction between the player and a single-player game, I here use the term solitary play deliberately as it is the most sensitive of the previously described forms of the single-player play activity in relation to observation. In order then to gain the epistemological grounds of this intricate phenomenon of transformations of identity or the self in play, a novel approach was necessary. Not only in terms of methods but also in terms of the focus on processes of play rather than procedures of the games or their immediate representational values. Many options were considered, but I deemed an ethnographic inspiration in the iteration of the methods the most sensible as a basis to gain access to the lived culture, which in this case means to access and create understandings of an inherently hidden practice of potentially private and intimate experiences. A cultural practice where play with digital games as a habitual activity of everyday life has coherent meaning on its own terms. This focus on processes within the activity of play is quite deliberate in terms of framing the method. Attempts at game ontology have proven that any stable ontic definition of a game, let alone digital games, is quite problematic (Debus, 2019). Firstly because of the rapidly developing technology that pushes unknown boundaries of possible game and play activities, and second because the creative practice of developing games means that granular approaches to definitions can lead to categorizations that are artifact specific. The overall frame of solitary gameplay can forego the intricacies of game categorisation and instead focus on the player experience within the interactive qualities of game genre (see Apperley, 2006).

The transdisciplinary approach (as explained in Chapter 1) underlines the focus on problems and issues with understanding transformation and play as processes (as elaborated in Chapter 2). With inspiration from ethnographical methods, the DisPlay method veers towards ethnographical research practises. By taking several steps to bridge gaps between sequences of events and qualitative statements (see Boellstorff, 2006), the method gives me as a researcher both a sequential and a processual understanding of the individual's play activities (see Chapter 3). In line with this, this chapter introduces the ethnographical inspirations, dispositions, and the resulting methodology of the DisPlay method by situating the individual methods' focal points and discussing potential alternatives. Below is a short recap of the four stages of the DisPlay method before I move on to the phenomenon in question, and further how the method accommodates its prerequisites. Note that I make use of examples from the data in referencing individual participants who were introduced in Chapter 3.

In Stage 1 where players record their gameplay through streaming platforms, the aim is to gain access to habitual practises and activities with single-player games. The observation

through these recordings asynchronously differentiates the method of data collection from the more traditional embedded ethnographic observation, necessitated by the frame of habitual solitary play. Yet the observational part of the multi-method in Stage 2, being the video analysis, is to some extent covered by ethnographical research in the form of video-ethnography/micro-ethnography being an established field of research method(s). The video-elicited interviews in Stage 3 overlap with the traditional ethnographic interviews by intersecting observations and "field notes" (analytical memos) from the video analysis into the interview situation. While the interview method has been used in connection with microethnographic research on games and play (as I present later in this chapter), it does not seem widely used in game and player studies considering the visual nature of the activity. It is however quite well established in practitioner learning research (see for example Henry & Fetters, 2012). The focus of the interview method is on the exploration of the inner workings of the participants' actions and reactions in relation to the implicit and explicit assumptions made by the researcher through observation. Finally, Stage 4 presents a structured analysis in which triangulation of research materials and data is combined with reflexive research practice, which organises the data in terms of the research question in preparation for the subsequent main analysis. The combined DisPlay method is in this structure a sequential research procedure that is designed specifically to research player experiences when playing digital games in solitude.

The Phenomenon of Single-player Play with Digital Games

The experiences afforded in the single-player play activity have been subject to post-phenomenological investigation from a variety of perspectives. Olli Leino (2013, 2015) has challenged the notion of spatiality in the single-player practice with the goal of uncovering the perceptible realities and the emotional engagement in order to highlight the "realness" of the interactively mediated narratives. Playable worlds and gameworlds as Leino calls them (2013), are the notion that regardless of the spatial representations a digital game may offer, it is the terminus of experience in that the gameworld the player perceives holds no specific mediational qualities that suggest it alien to perceptible reality. Multiplayer games in this sense being a medium through which people may play together, and therefore the game stands as alterity to the practice of play. This stands in contrast to the single-player game, where the player plays -with- the game, rather than through it, thereby creating an *alterity relation* mediated by play itself. Building on this, Leino (2015) touches on the notion of virtual or fictional worlds in which he criticizes that relations in the engagement with the game is often seen reductively as a simplification of affect towards the artefact's representations.

Rather, as Leino concludes, it is the intricacies of the player's emotional lifeworlds within these gameworlds that let them form a perceptible reality that is neither fictional nor virtual. Leino calls this phenomenon of emotional engagement "in bad faith"-emotions in inspiration from Sartre, as the player still holds potential awareness of the intentionality behind the engagement and interaction. The suspense of disbelief is fundamentally decided by the

intentionality of the player, meaning that emotions that a player may feel in the interaction with a game are as equally real as the notion of non-digital reality. Only that there is also a layer, not of mediation, but of suspension of realities where none is more real than the other from the perspective of the (Merleau-Ponty inspired) embodied perception. While focusing on "love" as the emotion in question, Leino (2015) identifies three differing forms of intention towards the understanding of this phenomenon. Namely the fictional emotion leaving the player to subjectively and through imagination engage with game objects (usually characters) in a willingness to fill representational gaps (much like with traditional media like books or movies). Vicarious emotion on the other hand creating moments of dissonance where the player's emotions may be disturbed by the in-game representation of the player's agency (being the playable figure or avatar). And finally, when the player is faced with the ontic divide where the reciprocity of the digital (world) mediation no longer serves the intent of affection or emotion, intentionality towards either pretence or "in bad faith" must be decided.

In light of this post-phenomenological account of the phenomenon of emotional and affectionate engagement with digital games, the intentionality and interaction with a game would still seem both difficult to define and research empirically. While the movements of perception Leino utilizes grant insights into the phenomenon in question, there is still the open question of the actual practice itself and how it influences the intentionality that guides the perceptible reality of actions and reactions. This is also where the researcher as researched subject becomes an issue in terms of internalisation and transformation. The theoretical and philosophical disposition of the researcher has to be put into question, as phenomena such as affect and emotion in themselves predispose a self-reflective process identifying the emotion or affect, upon which it is intentionally analysed for its properties in relation to the experience. Yet how to research such intricate phenomena empirically outside of post-phenomenological or autoethnographic research is equally questionable, as the phenomena of the alterity relation would, by indication of the human practise, reside within a state of personal solitude and to a large degree rest on internal processes unique to the individual.

Disturbing this solitude by an intrusive approach or obtrusive observation fundamentally changes the situation to an intrapersonal experience (see for example Bernard, 2006 for more explication on intrusive and obtrusive observation). Asking for participants' accounts post-activity risks the interpretation and selection of subjective experiences to be decided by the participants, often guided by the interest of the researcher and thereby risking disproportionate emphasis on specific subjective or theoretical constructions. The solution to this being a completely unobtrusive approach, would indicate quite serious ethical issues as this would most likely involve unsanctioned/illegal observation of people in their private space without consent. To pose it somewhat simply, the phenomenon of transformative processes as they occur in everyday play activity with single-player games does not lend itself well to one singular established method. As such, methods and methodological considerations had to be examined in depth in the iteration of the DisPlay method in order to approximate a disputed (if not unobtainable) idea of an undisturbed sequence of events along with situated qualitative statements.

The Ethnographic Site

The research design of the DisPlay method does not fully conform to the more traditional ethnographic research methods within game studies. Notably stands the fairly large body of ethnographic and autoethnographic research done in game and player studies, in which the researchers find nuances of self, identity, and social interconnectivity in the complex relations of play with and within gameworlds (see the classical Boellstorff, 2008; Nardi, 2010; T. L. Taylor, 2006). In relation to transformative processes, these ethnographic approaches pose some limitations in regard to learning theory and habitual solitary play activities. Namely in terms of autoethnography, that the processes themselves are disturbed by the high amount of reflexivity that the autoethnographic researcher positioning requires. Jenny Sundén points this out to an extent in discussing the ethnographic epistemology of sensing and sense-making in the autoethnographic account: "To recognize the critical potential of sensation demands a different understanding of the critical and the sensuous, as not in opposition, but rather deeply entangled with one another" (Sundén, 2012, p. 179). In this lies the more classical ethnographic idea of embodied sensing and sensemaking in the field, in which the researcher to some extent embodies both the researcher and the researched through embeddedness. In relation, Poppy Wilde points out, that the "I" of the researcher must encompass the recognition of entanglement between the researcher's biographical references and the emergence of self in the relation to the other (Wilde, 2020). I recognise this in my own researcher position in the engagement with the research materials and the participants. But the project's focus on habitual activities and practises of the everyday player in terms of internalisation processes makes these more traditional ethnographic positions within the environment somewhat problematic in terms of understanding habitual transformational processes. With the aim to study hidden practises of solitary activities in which the self and identities are played with and transform, my own self should be as removed as possible from the original experiences in which transformations may happen. Additionally, these more traditional ethnographic methods of co-participation and observation derived from anthropology would skew the transformational processes of the participants to a state in which it would be difficult to argue for the originality of the research. If the self and identities are put into play in single-player play activities, the research should aim to accommodate the privacy of the activity within which these specific modes of being, sensing, and understanding oneself are afforded. In other words, it should seek to respect and allow original embodied experiences to occur, take form, and flow in a greater sequence of uninterrupted play.

Although in the sphere of social media research, Annette Markham argues for the expansion of the idea of the ethnographic site as she summarises one of her own previous publications:

> Although many researchers will continue to describe or explain situations through more or less traditional ethnographic notions of emplacement, for example, where the field is a place within which people organize culturally, an anthropology of the contemporary calls for attention on movement, flow, and process and an intentional effort to move away from

thinking about the field as an object, place, or whole (Markham, 2013, p. 438). In this way, ethnography is being flexibly adapted to what it means to live in informational as well as physical ecosystems. (Markham, 2018, p. 5).

In this, the activity of play with single-player games transforms the field to that of the player and game relationship, the alterity relation, rather than the researcher's direct embeddedness in the field itself. Translated then into the closed sphere of single-player games and play, the movement, flow and process that Markham advocates attention to would mean to investigate the sense of *worldness* as described by Lisbeth Klastrup and Susanna Tosca (Klastrup & Tosca, 2004). Worldness as the authors state, is the ability and willingness to engage with the fictional world on deeper levels of emotion, based on the internalisation of the fiction and the ascription of value. Worldness is the combination of a player's experience of the story, the aesthetics of play within this world, ethics, morality, and the characters that are central to this world (Tosca & Klastrup, 2019).

This conglomerate of being and sense-making resides in the original embodied experiences, yet it is re-visitable through the visual presentation of the original events. In this sense, the video-elicited interview allows the player to re-experience their internal processes by seeing the sequence of actions and reactions in the gameplay video. They are, for the lack of a better word, there, and able to give detailed accounts of both their trails of thought and emotion as they articulate their navigation through the movements and dialogues of the gameplay video. Details and discussions about this re-embodiment are elaborated in the next chapter in connection to the empirical data. For now, it is worth mentioning that the longest between an original event (the participant playing through a specific situation) and the situation being used in the video-elicited interview was 7 weeks. The participant (Dan (he/him) remembered the situation quite well (in his own words) and was able to voice detailed accounts of the events both before and after the 2 minute 30 second video sequence. The video-elicited interview can create an experiential transition between past and present, and an oscillation between the observed (factual expression of video) and the internal reasoning (memory activation and subjective experience). In this, the individual video segments give access to how the sense of worldness and the immediacy of actions are intertwined in complex processes of evaluation, and through this show the potentials for internalisation and transformation. The field is in other words re-established as it was when it was recorded, and the movements, flows, and processes can be investigated in close proximity to their original meaning as worldness is re-experienced and re-embodied.

Me as Situated Researcher

My background as a trained physical therapist has undoubtedly formed some of the research in this PhD project. While this particular profession has a strong focus on the physical body, the underlying view is always holistic. The body and the mind are simply not something that can be separated in the therapeutic practice. While the "mechanical" aspects of the anatomical body are often the main focus, successful therapy rests on understandings of, and active work with,

both physical, psychological, and social aspects of the given individual's lifeworld. Activities and practises are always embodied, creating the view of an inseparable connection between mind, body, and psychosocial realities of the individual. In much the same way, phenomenological research into how the empirical player and a gameworld connect has established forms of this embodiment in Game Studies. Gerald Farca presents this turn in game studies in referencing the dissertations of Rune Klevjer (2006), Daniel Vella (2015), and Brendon Keogh (2015), as these works represent different aspects of involvement and relationships as embodiments in play (Farca, 2018, pp. 162–163). Focussing on different aspects of the complicated nature of the player's relationship with the gameplay, the overarching theme of these works is the relation between the player and the player character, or figure, as embedded in the gameworld.

In my own work in this PhD project, I take a slightly different approach to the role of the empirical player. The players I research are not theoretical or conceptual, but persons with complicated life histories and identities. Each singular individual is a full person playing single-player digital games as they usually do, even outside of this research. In this sense, the overall research takes a heuristic approach, rather than a phenomenological one. Situated within Leino's presentation of alterity relation (Leino, 2013, 2015) as presented previously, embodiment is not only an omnipresent phenomenon in games and play, but it is also the very basis of individual human functioning and development in all aspects of our development. The representation of the game lies not in the game's presentation but in the player's navigation of the gameworld and the meaning that this navigation in itself produces within the player. It is about the complexities of the relation from the perspective of the player, and the processes that the player goes through in order to both make sense and embed themselves into the relation. As such, it becomes a matter of congruence between the player's sense of self and how they invest this self into the game as a space of (social) interaction, based on who they are in the moment of play and how the playful engagement lets them perceive the world.

Yet how I see this embodiment and the embodied experiences when not looking at the player directly is a slightly different matter. Put somewhat bluntly, I look at and analyse the individual player indirectly through their actions and reactions in the gameplay itself. With the eyes of a physical therapist, it is clear that the body learns as it goes through life and even the "healthy" body will show tell-tale signs of a lived life. No physical body can ever be perfectly in line with what would be seen as anatomically and mechanically perfect. The visual analysis of the body and bodily movements indicate minute things, such as left- or right-handed, a previous ankle injury, or even a challenged mental state to name but a few possibilities. The tiniest differences in the movements of the shoulder blades can give rise to questions. Questions not only about the current state of things for the individual (the problem or issue and hand), but also about the near past, distant past, and desired possibilities of everyday life, should they be challenged. As such I am, as a physical therapist and a games and play(er) researcher, inclined to look for the minute details and changes in movement. Not only in a strictly physical sense but in the empathetic sense of individuals' state of mind and embodied presence in situations of both non-habitual and habitual activity. While I can in no way lay a solitary claim to such eyes of detail, I suspect that the skillset needed to do visual analysis is at least quite well developed

with my background in mind. Doing video analysis of gameplay only with no direct visual indication of the physical states and reactions of the player rests on this form of attention to detail. Patterns emerge in how the player moves the mouse cursor, how they move their character(s), how they engage in dialogue situations, and how they become challenged in different situations.

Visual analysis alone rarely gives answers in itself, but functions as both initial and continuous identification of further questions. In terms of physical therapeutic practice, tests are needed to understand the underlying causes of difficulties or change. Not only of the mechanical parts (range of motion, strength, etc.), but also of the more "mundane" movements. Reaching for a coffee cup, while it may seem simple, involves an extraordinary amount of neurological, muscular, and articular activation, all of which may be an underlying cause of issues in the activities of everyday life. It is detective work which must rest on the culminating information gathered through the visual analysis and the physical and qualitative communication. In therapeutic work, this approach is colloquially called "clinical reasoning" (see for example Yazdani & Hoseini Abardeh, 2019), a practice not far from the general notions of empirical research in terms of the observation and testing of hypotheses. On a basic level, the clinical reasoning process means that an observation must lead to a questioning of the muscle, joint, practises, and/or the state of mind and mentality towards the movement or the required action. It is about diving deeper into the actuality of "things" in order to understand the interdependencies (historical and present) of forms, states, articulations, and meanings of "things". So, while the physical body of the participants as players is not at the centre of attention of the research in this dissertation, the actuality of their perception, investment, and ability to move and actualise themselves are. In this, I have a salutogenetic mindset imprinted, meaning that I do not look for the origins of disease or unwellness, but rather focus my attention and approach on the promoting factors in well-being and health. In this sense, the skills and mindset needed for this research revert back to the research question, asking how players form themselves in gameplay through investment into action and movement, and how such formations can be understood as processes of transformation.

Accessing Habitual Play Activities

In the initial iteration of DisPlay, notable decisions had to be made in terms of the possibilities that streaming affords. The overall aim was to minimise the method's influence on the participants' playful engagements. The method chosen was to only have gameplay footage and sound from the game itself and nothing more, as all additional layers of information in the play activity hold significant drawbacks. To put it simply in terms of the DisPlay method's intended function of approaching internalisation processes in habitual play: the more monitored the participants are, the more the playful internalisation processes are disturbed and veer away from the actual practises of solitary play. Attempts at understanding transformation would thereby be mired in methodological doubts rooted in the research design, rather than the resulting data. Yet

many different directions were considered in the construction of the research design with regard to gaining access to the participants' experiences during their original play events.

Maximizing information in the material, the participants could have recorded their face and/or voice as they played along with the gameplay video and sound. Not everyone had the devices to do so, and Parker (he/him) playing on a Nintendo Switch would have required an extensive setup beyond what was already required. Going even further, the participants could have been instructed in a "think aloud" method (see for example Boren & Ramey, 2000). Think-aloud methods have however been criticized for removing the participant's focus from the actual activity and creating double cognitive loads (Nielsen et al., 2002). This would alienate the activity from the habitual practice, as any processes that might naturally be forming in the activity would be hampered by the need to verbally express it. As such, the verbal expression in itself becomes the main process, where the potential for originality in the experience and actions becomes limited by language expression and vocalisation. Arguably then, this would steer the data collection away from what the method seeks to record and ultimately accomplish.

A laboratory setup could likely have decreased the time consumption of the data collection, but has many questionable aspects in terms of experiences and play in general. As Spokes and Denham find in their multiple methods approach of "interactive elicitation" (2019), the presence of a researcher in the activity of play leads 8 out of their 15 participants re-playing *Grand Theft Auto V* (Rockstar North, 2013) to explicitly mention social desirability bias themes in subsequent interviews. The three themes the authors identified were "behaviour altering impact on in-game skill", "(chosen) violence", and "(chosen) pathways". The research setup, in this case, being " […] in a soundproofed space specifically set up for data collection; for want of a better a term, a gaming lab with space for the participant, two researchers and the necessary gaming equipment, television and recording devices." (Spokes & Denham, 2019, p. 783). In this environment, the participants had 30 minutes to reacquaint themselves with the game controls, 30 minutes of play with the researchers observing and taking "field notes", and then finally 30 minutes of semi-structured interviews. The findings from this research are somewhat indicative of the issues with doing laboratory research on play. In the laboratory, the subject does not so much mind being recorded and viewed insofar that there is a consensual agreement in the participation. The laboratory setup is not private or by any means solitary however and attempts at evaluating habitual practises in this environment must be seen as inherently incoherent with the contextual determinants of the practice itself. The participants being observed in a constructed laboratory environment, while present both bodily and mentally within this constructed environment, can never in this setting act as they would in their everyday lives. Bringing the laboratory research mindset into the private spaces and spheres of participants, even with consent, should be regarded as an infringement of possibilities of personal expression, not to mention an invasion of the privacy of otherwise private contexts. As such, apprehending the notion of the laboratory was (and is) a primary concern that must be carefully considered with respect to the interest of habitual practices and activities. Arguably, any research concerning interactivity with a focus on processes of play (and especially learning/internalisation processes) should focus on the methodological implications of the research setup. While play does have an appropriative nature (Sicart, 2014), the question in

such constructed setups arises about what the appropriation consists of, if not distorts, in relation to the interest of research. Does play appropriate the research situation, or does it appropriate the interrelation of the observed player and the observers? Or something in between, if at all?

Action research or media go-along methods (K. M. Jørgensen, 2016) are in a different category somewhat far from laboratory setups, yet still within a disturbance of the habitual private space. Here the researcher can be a part of the private setting and the private practice by invitation, but the documentation made is situated in a mutual social experience based on both informed and empowered consent. In this sense, this form of ethnography gains access to meanings that are reflected by the immediate experience, but not the immediate and emerging experience itself. As such, these methods give access to generalised meanings on the basis of living experience, rather than meanings created in the process of experience. As Margarete Kusenbach highlights in terms of "street phenomenology" as an ethnographic and anthropological method: "Settings that ethnographers cannot or should not physically access, for example very dangerous or private activities, also limit the applicability and practicability of go alongs" (Kusenbach, 2003, p. 478). While I would not consider playing single-player games a dangerous activity, it is indeed a private practice. The privacy of the alterity relation and the non-human-to-human social context must be respected and acknowledged as something unique to each individual. Single-player play activities are indeed practices of privacy and intimacy in the inherent alterity relation as a context, which allows for novel exploration of self and identities. In this sense, the phenomenological approach of the (media) go-along misses the mark on the originality of experience. Either by the needed explication of the known phenomenon or by the reflective nature of the phenomenological examination of the experienced phenomenon as presented. I will not argue that this form of research does not have its merits. Quite the contrary, it explicates vastly complex meaning-making processes in relation to experience as exemplified by Kristian Jørgensen's research on digital "dating" platforms (K. M. Jørgensen, 2016). Yet it does so by proxy of mutual experience guided by the interrelation of researcher and researched, looking at a mutual research object. In this interrelation, the participant must reflect on the meaning of potential processes instead of experiencing them in the (original) moment. The following sequences of events must be inherently guided by either the coherence or contrast to where the reflection started, meaning that originality is potentially lost in a stream of phenomenological inquiry.

Indeed, there are many ways for researchers to get access to unique experiences. Yet for the purpose of this research to examine processes of play and internalisation in habitual contexts, it was clear that the less invasive option was the most sensible. Other sources of habitual practices could include the use of streaming services (such as YouTube and Twitch) in which the streamers freely offer gameplay video often along with video and audio of themselves. This is however also a practice of the few, and with a very specific form of production as a baseline in the play practice. Ethnographical research of this practice becomes more akin to Kozinets' netnography (Kozinets, 2015), in that the players here are both forming, and a part of, a technocultural phenomenon. Explained perhaps best by T.L. Taylor, the players streaming (the streamers) are situating themselves in a circular movement between play and production, in which play is the content that is to be delivered to an expecting audience, in an

authentic manner (T. L. Taylor, 2019). And while there are many interesting notions on this particular play form, it is contextualized socially by the interrelational aspect of producer and consumer. What this means is that the practice is the (situated) activity of a player and an audience, who through their interactions are (and have been) creating expected behaviours towards the play. In this, the practice of the player is as a producer in continuous interrelational interaction. While the play in this case can be considered to be habitual in some cases, it is far from the workings of private practices and activities, and the questions that this encompasses.

In accessing habitual play activities through novel approaches, technology gives way to new ideas when it comes to digital media, but also many considerations. Pink et al. (2016) reference Michael Herzfeld (1997) to describe the implication of working with digital media and the intimacy that such media represents for individuals. Herzfeld implies that cultural intimacy is a place of recognition and common sociality, but also that the individual's cultural identity in these places can be a source of embarrassment outside of the intimate social sphere. Implied in this in terms of single-player games is that the alterity relation creates meaning in itself, and that this meaning is so individual that outsiders might not understand the significance of the activity of play with such artifacts. As such, the research on this activity must account for the intimacy and cultural identity of the individual, which may not adhere to the larger societal discourse connected to the activity and practices of playing digital games. While seemingly innocent on many levels, researching private activities means to accept and respect the meaning and sensitivity of habitual practices and how these are often private and conducted in solitude for a reason. Using technology to mediate the use of technology is in this sense a risk, as each layer of technology presents an ethical consideration and necessary risk mitigation in itself. Another layer of ethical research practice in this form of research involves the researcher respecting the intimate relation between the player and the gameworld. No single player/participant giving access to their intimate expressions of self in play should feel or experience repercussions of their generosity. The actions that players both can and do take must not be considered on a normative scale, as they hold meaning and importance in their own right. Transgressive behaviour is, as Mortensen and Jørgensen present (2020), a paradox that does not lend itself well to normative judgments but must instead be seen and acknowledged for its playful qualities. Emerging as a parallel conclusion to this segment on access and sensitivity is that the researcher(s) gaining access to habitual play activities also need to be close to, or at least highly familiar with the realities of the activities and practices themselves, as to not draw false and/or judgmental conclusions towards a culture primarily based on privacy and intimacy.

Asynchronous Observation

The initial phase of players streaming their gameplay and a subsequent video analysis is perhaps best described as microethnography, which is a subset of ethnography relying on video data for the scientific analysis. Defining this form of ethnography Streeck and Mehus (2004) argue that it is not a discipline in and of itself: "Rather, the word describes the work of humanist researchers who study how human realities are produced, activities are conducted, and sense is

made by inspecting video recording of actual events frame by frame." (Streeck & Mehus, 2004, p. 382). The use of this method is quite varied, although it is divergent from traditional ethnography in its focus on specific settings or activities with moment-by-moment interactive qualities captured on video. The concern of these specific settings and events is not on recurrence or generalisation, but rather with phenomena that are indicative of the setting's social constitution through visible processes (Garcez, 1997).

While born mainly from inquiries into the inequalities within educational efficacy (see for example Baker et al., 2008), microethnography has also seen some use in games studies. Helen Kennedy and Seth Giddings used video recordings of themselves playing together (Kennedy & Giddings, 2008) creating a microethnographic study to reveal an inverse relationship in the dynamics between learning and mastery of a game (in this case *Lego Star Wars: The Video Game* (Traveller's Tales, 2005)). Kennedy and Giddings find novel insights on aesthetics and agency which is revealed in their recordings of their cooperative gameplay. Shortly thereafter, Giddings specifically addresses microethnography and play with digital games as a technocultural phenomenon consisting of the collusion of technology and human agencies (Giddings, 2009). What can be drawn from Giddings' presentation of microethnography of play is that play with a digital game implies a relationship more complicated than a human player interacting with a digital game. Play, according to Giddings, must be seen as a collusion of all agents in the play event, from computational, material, and physical entities to the bodies and embodied experiences that occur. Giddings' take on microethnography and his conclusion of a microethology also implies a benefit to recording as many agents as possible in the play event. This microethology sees the combined establishment of a microworld in which all actors and agents hold equal stakes in the becoming of the playful experiences, removing (or at least diminishing) the anthropocentric practices of ethnography.

However, using DisPlay means only having gameplay video available to indicate the player's internal processes in (and of) play. In terms of a purely microethnographic or microethological approach to play this could be deemed problematic as the video data is void of the bodily actions and reactions in the play situation. Yet, even with only gameplay video to indicate the processes of play and transformation, the video data is very rich in information. So much so, that it is difficult to assume that one can easily deduce situations of interest without first being aware of the potential processes and implications of the play activity with a particular game. As Schnettler & Raab (2009) problematise, video data is so complex that without certain predefined criteria to focus the researcher's attention, the risk of data overload and subsequent lack of rigour can lead to inconsistent findings. While a certain amount of theoretical sensitivity towards the potential processes can mitigate this, it is also a matter of experimenting with the video data itself. In this, I found that the video analysis in the DisPlay method is both dependent on and comprised of the researcher's own *proximity* to the specific play activity, and Observational Criteria to identify and assess moments of interest in the vastness of video data (as was presented in the previous chapter). Proximity is explained in this next segment with an emphasis on my experiences from the research with general and participant-specific examples.

Proximity and Observational Ethnography

Proximity to the specific play activity means to be aware of the game's affordances and limitations to identify how the participants navigate these. Espen Aarseth (2003) argues that the personal experience of play is usually the best, yet also that it is dependent on the nature of the game and the research intended. With participants playing such a variety of different games, it was simply not feasible for me to play all the games in the same manner as they did. Of the games listed in the previous chapter, I had personally played half of them before. In the cases of *Dragon Age: Origins*, *Star Wars: The Old Republic*, *Divinity: Original Sin*, and *Baldur's Gate*, my knowledge of the games served to ease my access into the participants' play. Practically, this meant that I could speed up the videos in segments with more generic gameplay sequences, and slow it down to normal speeds in segments where I knew there might be potentials of situations which could be interesting from the view of transformation. In this way of doing it, I admittedly had to rewind on several occasions as movements and situations occurred in segments of the gameplay that I had not expected. I only sped up video recordings after at least a few hours of gameplay, where I started to feel confident in my predictions about how the individual participant would handle and navigate the more mundane gameplay situations. Matt (he/him) for example explored every new area he entered fully while playing *Baldur's Gate*. A time-consuming activity without much immediate interest to the research, which was apparent once he had done this several times. A moment of interest did however arrive when he stopped this activity mid-exploration, as one of his companion NPCs expressed discontent over not moving on (with the main quest at the time), thus breaking his pattern of play. A situation I was waiting for, as I knew this would likely happen from my own play with the game several years ago. I of course had little idea about how Matt would handle this, but as it turned out, it completely changed his pattern of play (map exploration) from then on. However, this proximity to the game as played and the player as the active part of the play experience was not uniform. While I had played *The Elder Scrolls V: Skyrim* before, Fran (she/her) played this game with a multitude of modifications (mods), which made it near impossible for me to predict what was possible for her to do in the game, and which game mechanics new and old might be present.

As mentioned, most of Josh's (he/him) gameplay video playing *Divinity: Original Sin* was lost due to technological failures. Having played the game myself some years ago, I was aware of some of the more interesting moments in this particular game. Especially, moments where the two player-created characters would have differing opinions on how to handle precarious situations. None of these situations were a part of the available recordings, yet in the conversation about other interesting moments, Josh himself referenced these. Because of this, and my own previous experiences with the situations, we were able to talk about the experience of having two self-made characters interact and disagree. For the merit of this, it did not produce data that was well rooted in the actual gameplay. Josh's ability to express the components of these experiences and processes within them stood in stark contrast to the other participants, where the video was available and seen in the interview. In this sense, Josh's interview did not reveal as much about internalisation processes and transformation as many of the others did, even though we were able to centre on seminal moments of in-game transformation due to our

mutual yet different experiences and understandings of certain situations in the game. Paul (he/him) on the other hand played *Planescape: Torment* (Beamdog, 2017), which was not a game I was familiar with. As also explained earlier, Paul's video data suffered the same issue as Josh's. At the moment of realising this error, I did my best to familiarise myself with the game in terms of what I had not been able to view from Paul's gameplay. This was a daunting task however, since Paul had played more than 30 hours presumably, and "only" 17 hours of this was recorded (including 7 hours of corrupt video). Watching YouTube playthroughs would be too time-consuming and would potentially postpone the interview by several days, while also potentially giving me the wrong impressions about what Paul had experienced. I therefore turned to more general knowledge of the game by studying wiki entries, reviews, and walkthroughs, giving me a general sense of Paul's journey through the game. Even so, the first few hours and about 4 hours somewhere in the middle of Paul's playthrough were the primary sources of videos for the video-elicited interview. The last 6-8 hours also presented interesting situations, but it was difficult to evaluate Paul's navigation in the in-game conversations/dialogues and the multitude of other choices he made. To put it somewhat simply, my proximity to Paul's play was compromised by a substantial lack of gameplay video and his way of playing the game, exacerbated my lack of sensitivity towards the game.

What can be drawn from this is that missing a significant part, or the entirety of play sessions means that the researcher must be able to conceptualize the gaps, or risk losing the understanding of the individual participant's experiential engagement. In this, technological failures in the streaming aspect of the method present a constant risk to the method's overall efficacy. Interactive components of a given game may vary in significance to the overall experience of it, and I as a researcher should be able to engage in discussions around potential non-recorded experiences. This underlines the importance of the researcher's proximity to the game: how it can be played, what situations are likely to occur, and what affordances are given during the journey. This proximity to the experience, along with a theoretical frame of reference and the individual participant's style and form of play is the baseline for evaluations of moments of interest. Emma (she/her) playing *Dragon Age: Origins* suddenly choosing to be highly aggressive in a dialogue situation was interesting because she had never been so before, even given ample opportunity to do so. Emma was resolving a potentially violent situation where an NPC was asking her to use her combat prowess to get rid of another NPC. As Emma explained upon watching the video segment:

> I think he provoked something in me (laughs). I really didn't like the way he was, and that he thought he could just buy me as a bouncer. I wanted to feel more powerful than him, so I choose to intimidate him rather than persuade him. (Emma, Interview)

At this point in the game, Emma had only once before chosen to be aggressive in the dialogue situations of the game, of which there at this point had been plenty of opportunities. The first time only mildly so. Emma's choice here stood out, as the in-game text also presented "persuasion" or "intimidation" in her available answers. Persuasion usually being the rather non-confrontative option to resolve situations, whereas intimidation usually denotes that the

player character threatens with violence in some form. Knowing Emma's style of play as can probably best be described as adhering to care ethics, this situation was immediately interesting for me to explore with Emma in the interview. And as it turned out, it was indicative of her transformation of self-perception within the gameworld from the beginning of the game up to this point. She was no longer the suppressed elf mage apprentice captured in a tower. She now felt as the strong hero of the story, who was supposed to resolve the impending doom scenario as was at this point explicit in the narrative. She no longer had time for these silly or stupid conflicts, indicating her transformation on several levels throughout her gameplay.

This dependency on proximity may seem to lead towards confirmation bias, yet it does not provide objective, absolute criteria that precede the video analysis and interview processes. As Sarah Pink et al. note: "One of the challenges of studying experiences is that experience is often difficult to articulate, and so attempts to understand and interpret its meaning and significance rely on the ethnographer's immersion in sites of other people's experiences." (Pink et al., 2016, p. 21) The dependencies of the video analysis are thereby connected to the researcher's skill and ability to notice interactive components in the interplay between the player and the game as a computational and representational system. Proximity to the activity, to the practice, and to the gameworld and the player within it is however still so complex that further delimitation is needed. To aid and structure this research activity further, the observational criteria had to be formed. These were necessary iterations in terms of creating an overall guide for the analysis of the complexities of video data towards both the research question and reflexive ethnographic practice. The video analysis is in this sense micro-ethnographical in nature as seeing actions, reactions, and decisions unfold gives indications towards the implied internal evaluations needed for transformative processes through a form of intimacy with the player and the gameworld. In this, the implied inquiry needs a level of reflexive practice in order to be coherent with the scientific basis of ethnography and micro-ethnography. Further, with only five to ten situations shown in the video elicited interviews representing only a very small fraction of the combined many hours of video data, each situation should have merits on its own.

On my own account from the video analysis, the moments of interest were interesting on the basis of the participants' potentially transformed way of thinking, perceiving, or understanding the gameworld and themselves in relation to this. Yet, for all the merits and challenges of approaching the habitual practice and the play-event based processes, the first two stages (streaming gameplay and video analysis) of the research cannot in themselves entail an epistemic endeavour in the form of knowledge creation or validation. As Schnettler & Raab (2009) argue in terms of mimetic properties and constructedness of video data, viewing video data as a positivistic truth can lead to distortions of the actuality of the original situation. Rather, the gathering and analysis of video data should be seen as generation of epistemic grounds from which a later epistemological discussion can occur. Within the DisPlay method as I used it, the video data does not show the inter-relation and alterity relation between player and gameworld, but rather what transpired as a sequence of interaction. It is a historical documentation and visual representation of the sequences of play. This does not mean that the data is not complex. Throughout every action and action-sequence subtle nuances in the player's movement and

intent indicate both attention and thought processes (and sometimes the lack of same). As the players only stream the gameplay, the recordings themselves are missing the immediate embodied experience and expression of the players. The gameplay footage thereby being a string of factual sequences, which leads to questions about the player's internal processes. Gameplay video by itself cannot give definitive answers, but observation and building proximity to the player and the game can ground the investigation of playful processes in actual experiences. Stages three and four (Video-elicited interviews and Differentiation analysis) are therefore necessary in order to gain access to these original experiences.

Re-experiencing through Video-Elicitation

While there are quite a few projects that have made use of video elicitation in interviews to make sense of varying factors in the interplay between players and games, none (as far as I have been able to find) has engaged specifically in the same way the DisPlay method prescribes. As previously mentioned, Giddings (2009) has focussed on the interpretation and analysis of the audio-visual gameplay and the setting in which the activity occurs. Others have later combined this with further exploratory elements (typically interviews). Bell, Taylor and Kampe used microethnography to draw a critical attention towards performances of hyper-masculinities through gameplay (Bell et al., 2015), and further to explore moment-to-moment dynamic engagement centred on identification (N. Taylor et al., 2015). Their research designs and developed insights show how microethnography along with video elicitation can, to some extent, challenge theoretical and discoursal constructions, and contemporary conceptions. The video elicitation in this case giving access to many more layers of findings than more traditional interviews would have been able to uncover. The research however focuses on reflective and human-to-human co-constructed aspects of gameplay interactions, rather than the interactive processes themselves as suggested by the DisPlay method. It is therefore difficult to say from Bell, Taylor and Kampe's two studies how the topics of inquiry manifest in the players' habitual practises with single-player games.

Several studies have involved forms of video elicitation in relation to games, yet they have largely been conducted in laboratory settings with extensive biometric setups (see for example: Mirza-Babaei, 2011; Mirza-Babaei et al., 2014) or other forms of non-habitual situations (for example Kirschner & Williams (2014) or the previously mentioned Bell et al. (2015) and Taylor et al. (2015)). These studies provide highly relevant findings within their respective inquiries. However as the data is produced outside of the players' habitual activities and practises, the processes investigated are mainly indicative rather than descriptive of habitual play processes. The social context within which the processes occur is constructed by both the physical and mental setting of the scientific experiment, which is why the DisPlay method is needed as an alternative to mitigate this.

With stages one and two delivering visual data directly from the activity as it was (historically) actualised, the video-elicited interview can elaborate and substantiate the dataset to give insight into the otherwise hidden world of solitary play, and importantly in terms of this research, the transformative processes within it. The video elicitation resembles Mindtape

which is a method originally developed towards better understanding (human-to-human) interactions and to clarify or reject theoretical interpretations of communication (Nielsen & Christiansen, 2000). This method uses video recordings of social spaces with the focus of implicit knowledge in communication made explicit in later interviews. Thereby the focus of this method as originally conceived is not necessarily on the interpretation and internalisation of the individual, but rather centred on collective communicative practises. Most importantly is that, as Nielsen and Christiansen point out, the method (recording, selection, and showing video in an interview) ensures that it is not the participant's memories at the centre of investigation, but the actual events that unfolded:

> The users seem to recall, in extremely detailed [sic], what they did, why, what they expected to happen, what they thought when a visual image appeared on the screen, why they juxtapose another image etc. They seem capable of making internal thought processes explicit, and it is almost as if a "Mindtape" of their tacit inferences is being replayed. (Nielsen & Christiansen, 2000, p. 309)

This quote resonates with my own experiences in interviews using DisPlay, where even the participants expressed surprise at the level of detail they remembered from each video segment. In their own words, they felt like they were 'there' and actively 'reliving' the situation. In this sense, the participant, through vocalisation of the processes, gives the interviewer access to the original experience. Vocalising this towards an interviewer is slower than the original processes, but the details are inherently coherent as the sequences of thought are organised (and sometimes disorganised) coherently with the video sequence at hand.

The importance of proximity as explained previously becomes evident in the video elicited interview situation. The interviewer having seen, analysed, and being intimately familiar with the participant's journey into and within the gameworld affords not only understanding of the situation at hand, but also affords sensitivity to the experience. Statements about ethics, self-reflections, and personal experience in relation to the game-biography (a term I present in detail in Chapter 6) become more present and complex as the interview progresses through the gameplay videos. After being shown a video segment roughly eleven hours into the gameplay, Amy (they/them) playing *Dragon Age: Origins* neatly described how a particular choice of action in an in-game dialogue situation was based on a reflection of another situation that happened six hours earlier (game time). In terms of real-time, there was about six days between these two events, and the first event had not been showed in the interview. Yet because of my familiarity with Amy's journey, I needn't ask for further explanation which would otherwise steer the interview away from the actual situation I was interested in. In this reflection Amy also referenced the expectations about their choice of action in terms of future events in the game, laughing about how these expectations later turned out to be quite wrong. Conclusively, this one "Mindtape" from Amy informed about the processes relating to functionality and action potential in a specific point in time; how narratives and knowledge of the gameworld are incorporated into play as a social space, and how these structures are based on in-game experiences and an expected future situated self.

While this interview form can be considered in the space of phenomenology, it is importantly not micro-phenomenological interviews. Micro-phenomenological inquiry as a fairly new and building field of interview method digs into singular phenomena in very high detail, and as such also requires a very stringent focus on single occurrences or experiences (see Depraz et al., 2020; Gaete, 2019; Heimann et al., 2022). The consequence of this in terms of the DisPlay method would be an over-interest in singular events, where probing the experience from many angles would likely lead to meta-reflective statements about the experience rather than the processes of the experience itself. It would risk leading to a deconstruction of processes and the meaning of them, which ultimately hides the nature of the processes themselves behind interview-based constructions. While it may seem unusual to not want to have pieces of a process explained and evaluated in the greatest detail, the video elicitation in itself is enough to present viable and coherent statements in the interview. Follow-up questions can situate parts of the processes, but going much further in the inquiry risks forced constructions and claims that are based on the relation of the interview (see Kvale, 2006) more so than the playful experience as it was.

With varying emphasis on different constitutions of transformational processes, most moments of interest shown in the interviews yielded insights and nuances into the complex nature of playful processes towards transformative internalisation. Video elicitation has the potential to give access to complex internal processing much closer to the original events and experiences than regular interviews happening post-factual. This does not mean that regular interviews about experiences do not have merits on their own, yet if internal processes are the main unit of analysis, video elicitation methods let the participant re-experience and articulate parts of these processes rather than relying on memory alone. The mnemonic assistance of the video sequences is thereby a matter of accessing not only important internal processes, but also the mundane perceptions and internal evaluations that comprise experiences, seminal or otherwise. The next chapter showing the empirical material should hopefully make this quite clear.

Analysing Experiences and Statements

While the locus of interest may be quite different from project to project, the differentiation implied in the DisPlay method as I have used it is the foundation of any subsequent analysis. The differentiation analysis is a pre-analytical activity which grounds the project epistemologically by differentiating components of the original experiences separated from interview-based reasoning. It does this by sorting the interview data in relation to temporal and spatial components of the video data along with the sensibility of the researcher's knowledge and expertise of the journey the player has been through. It is, in other words, the final step that triangulates the different materials (video, video analysis, and interview transcriptions) into a sensible and credible dataset (see Patton, 1999). A dataset that can be both argued for and questioned in terms of the many temporalities that are present in each situation, observation, and qualitative statement. With the focus on the continuum of processes of play as a

transformational phenomenon, it is necessary to dig into the materials with a focus on who the players were in the process, and who they were at the same time becoming as a result. With this frame of reference, processes and the differing levels of reflection in the informants' statements in interviews emerge, within which the varying levels of internal processes can be discerned. This leads to several distinctions between processes, reflections, and meta-reflections uncovering the causal nature of the original interaction, where sequences of thoughts, emotions, and actions are intertwined into decisions with in-game actions as a result. In other words, it attempts to make sense of the volatile experiences of play by isolating the playful moment and uncovering the constitutions and complexities of playful meaning-making processes.

From this, it is important to state that the data is so intense in information, that going into the connective and dissonant properties of each statement in connection to the video sequences is necessary. If one wants to say something about a specific property of the experience of play within this method, play and how it forms as internal processes of thought, emotion, affect and cognition must be structured in a way that lets the researcher pin the micro-movements of these internal structures along with the experience of the game as a situated reality with its own meaning and importance structures. This may indeed seem like a very structuralist approach, yet it is an important part of validating data that is highly volatile and therefore also interpretable in a myriad of ways. While interpretation will most often have a theoretical backdrop as a guideline, the transparency of this is pivotal in situating the research in the lived experience. This does however not indicate a positivistic mindset towards the data or the subsequent analysis. As Edward Tolhurst implies in his critique of grounded theory, the pursuit of positivist ideals in qualitative research implies not only a misunderstanding of the value, novelty, and importance of qualitative research, but also a valuation which gives weight to scientific ideals that are inherently at odds with the research practise itself (Tolhurst, 2012).

The ethnographic positioning of the method is based on the video-based materials, the rich descriptive value of the data, and the building indexical sensitivity of the researcher position. With this basis, the DisPlay method allows for an investigation of play and playful processes as a culturally situated phenomenon of habitual practises. The microethnographic position then emerges and forms through the many hours of observations and accompanying journalisation, which contextualizes play events in larger sequences of actions, events, and embodied experiences. As researcher, I am not embodied in this original experience, and as such, cannot be said to have fully experienced it. Purposefully so, as to not disturb the sense of solitude of the playing participant. I experience it in my own setting, spatially and temporally distant from the original events, and with a large amount of missing information. Yet I am also embodied in this experience, mirroring the original play events in my experience of them as a sequential narrative of a player's journey through a gameworld. Bringing this knowledge into the video-elicited interview substantiates a form of re-embodiment and meeting of embodied experiences. In this, my own and the participant's experiences merge through my selection of video, and the participant's recount of their internal processes in the original event. They are subject to my experience with the play, as I were theirs, and in the merger of these perspectives, we create a new embodied and mutually informative experience centred on the participant's original playful engagement and the processes that occurred within it.

Transformative internalisation processes and their potential outcomes in the situation of solitary play with a single-player digital game present complexities that make it difficult to rest on a single "general" scientific position. The intricacies of habitual practices and the processes within these involve a multitude of questions in regard to researching any individual player. On a micro-level, this indicates that the investigation and pursuit of insights into internal processes of play need to be founded on a multitude of positions in relation to the complexity of each instance of observed agency and action. To what degree the method should be considered ethnographic, microethnographic, microethological or even ethnomethodological (see for example Emirbayer & Maynard, 2011) is to some extent an open question as the DisPlay method touches on parts of all of them. With this point of departure however, the combined method must be considered hermeneutic as there is a constant movement from parts and wholes in the interpretive practice of the research. The multiple data sets and their interconnectedness are central to the interpretation, as neither one can sufficiently stand alone in describing the processes that transpire as learning in the intricate interplay between the digital object and the player-as-learner. A basis of this is that the player's perception and their decoding of game representations rest on contemporary and historical cultural and societal discourse, activated by the individual player when a structure of self-perception is activated as a reflective identity. The reflective identity in this sense being the self as it is reflected in harmony or disharmony by immediate sociocultural representations. The individual cannot be generalised or topologized in this (most often unconscious) identification process. Yet the structural properties of processes of internalisation through this identification can be thematically argued with a basis in the alterity relation as a continuous embodied experience.

Chapter 5. Empirical Material

This chapter presents the empirical material collected and shows the constitutions of the data. Throughout this chapter, I elaborate on the four stages of the DisPlay method by adding the key component that the data reveals in terms of the further analysis of transformative processes. **Table 5** shows the accumulated materials from which the analyses and discussions are formed, and the scope of the materials across the participants. Note that this and other tables in this chapter present the combined material integrating the data from the previous MSc. project and the PhD project (see Chapter 3 for details on this inclusion).

Table 5. Overview of the accumulated research materials

Material	Range across participants (HH:MM:SS) / (Standard Pages)	In total (HH:MM:SS) / (Standard Pages)
Main Gameplay Video	2:47:20 – 28:39:06	184:48:28
Secondary Gameplay Video	1:01:43 – 12:33:32	20:50:13
Video analysis and Journalisation of main games	4.8 pages - 18.27 pages	101 Pages
Video Elicited interviews	0:46:16 – 1:40:00	15:21:33
Transcriptions	7.3 pages – 30.7 pages	217.66 Pages
Qualitative questionnaire responses		4.5 Pages
Follow-up interviews	00:34:04 – 01:02:05	2:10:58
Follow-up interview transcriptions	10.4 pages – 23.5 pages	47.2 pages

Note: "Main Gameplay video" was analysed, while "Secondary Gameplay Video" indicates recorded gameplay footage of other games that was not analysed, and where gameplay footage was not used in the video elicited interviews. "Qualitative Questionnaire Responses" were not a part of the questionnaire for Dan, Amy, Emma, Sara, and Tim.

The average playtime across the participants was 14 hours and 12 minutes. The fairly low playtime of 2:47:20 as visible in **Table 5** is a little deceiving, as the platform used for streaming gameplay failed for this participant (Josh). As it stands, it is however very difficult to assess how many hours Josh played outside of the visible gameplay videos. The "secondary gameplay

video" was delivered by three participants (Paul, Tory, and Parker) and was mainly a mix of racing games and online competitive games. Due to the focus on single-player games and the amount of main gameplay video data, this video data was not incorporated in the initial video analysis. This secondary game video was however used to question and discuss the video analysis method, which I present in connection to the video analysis in this chapter.

In terms of presenting the results using the participants' statements from the interviews, it has been necessary for me to employ a measure of interpretation. As Anette Markham presents, ethical fabrication of statements can be necessary in order to convey the meaning of the words spoken and should be used as to not present the participants in a bad manner (Markham, 2012). The interpretation of the transcriptions in terms of citing the participants did not need ethical fabrication in order to ensure the participants' privacy, which is otherwise the primary function of ethical fabrication. But they did in many cases need to be re-written in order to convey the actual meaning. Not only are the statements from the interviews often difficult to understand as the participants often make use of half and unfinished sentences, they also often represent the processes that the participant went through in the original experiences. This means that the statements sometimes gain the direct quality internal processing, which is naturally quite messy. The statements as I present them here are therefore, in some cases, cleaned up text from the interview transcriptions which would otherwise only make sense to me. Likewise, the translation from Danish to English in some of the interview cases meant that a processing of the interview text was necessary. Importantly though, none of the statements are processed in a manner that is not in coherence with the interview recordings or the original transcriptions.

Video Material

Margarethe Kusenbach argues that the application of purely observational or purely interview-based investigation of everyday activity can lead to very limited results, as the everyday activities of people are usually uncommented in a person's lifeworld (2003). In this Kusenbach suggests the go-along in order to gain a phenomenological sensibility to the ethnographical investigation of spaces, places, and the meaning they have. Yet as has been argued, the original experience must be left to itself as much as possible, which is why stage 1 of the research design relies on recorded videos of only the gameplay of each participant. As such. gaining access to the phenomena that transpire in these original events and experiences must rest on an asynchronous reintroduction of this space and the events that transpire within it. It is important to re-state that this principle of minimal viable intrusion was essential to the research in order to let the original events and the embodied experiences of the activity unfold as naturally as possible. Stage 1 in the research design was dedicated to these original events and embodied experiences, as can be seen in **Figure 4**.

Figure 4. The 4 Stages of the DisPlay Method, Stage 1

Stage 1	Stage 2	Stage 3	Stage 4
Participant Streaming gameplay video	Researcher doing video analysis	Video-Elicited interview	Differentiation Analysis
Original Events Embodied Experiences	-	-	-

In **Table 6**, the "Number of videos" give an indication of how often each participant played during the "Timespan". The timespan being the approximate amount of time over which the video gathering took place from the first video recording to the last. Note that the five players playing *Dragon Age: Origins* (BioWare, 2009) represent data gathered in a previous project, but which are included here in the combined dataset (see Chapter 3 for the inclusion process). "Assigned" and "Free" indicate if I had supplied a specific game to them, or if they were asked to stream freely what they played (see Chapter 3 for details).

Table 6. Participant and Video Data Overview

Participant and Platform	First play	Repeat play	Time played (HH:MM:SS)	Number of videos	Timespan (approximate)
Dan (Assigned) YouTube	*Dragon Age: Origins*		16:58:47	17	7 weeks
Amy (Assigned) YouTube	*Dragon Age: Origins*		26:11:45	50***	6 weeks
Emma (Assigned) YouTube	*Dragon Age: Origins*		09:37:30	5	2 weeks
Sara (Assigned) YouTube	*Dragon Age: Origins*		04:53:09	5	4 weeks
Tim (Assigned) YouTube	*Dragon Age: Origins*		13:38:52	8	3 days
Josh (Assigned) Kaltura	*Divinity: Original Sin*		02:47:20**	3**	4 weeks
Matt (Assigned) YouTube	*Baldur's Gate: Enhanced edition*		11:29:30	6	1 week
Paul (Assigned) Kaltura	*Planescape: Torment*		17:44:45**	3**	3 weeks
Paul (free) YouTube		*StarCraft 2: Wings of Liberty*	28:39:06	26	5 weeks
Adam (free) Kaltura	*Star Wars: The Old Republic**		07:07:42	3**	3 weeks
Fran (free) YouTube		*The Elder Scrolls V: Skyrim*	06:37:35	3	5 weeks
Tory (free) YouTube	*Disney Dreamlight Valley*	*Cult of the Lamb*	12:41:52****	7	5 weeks
Parker (free) YouTube	*Nier: Automata*		26:20:35	21	4 weeks

Note: Kaltura was the video platform integrated into the university's teaching platform at the time.

* *Star Wars: The Old Republic* (BioWare, 2011b) which Adam (he/him) played was acceptable for its likeness to a single-player game role-playing game, while still being an online multiplayer-game (MMO). While originally planned to be playing *Divinity: Original Sin*

(Larian Studios, 2014), this was not possible at the time due to the funding situation unravelling itself as unsustainable. As such, *Star Wars: The Old Republic* was agreeable due to the unforeseen circumstances of the financial situation of the project, and was chosen by Adam himself as free play. Being a "free to play" game, it was opportune to include at this point in time as the participant (Adam) was available and willing to join the project. He only did solo play during his time playing the game, and never visibly interacted with any other players.

**Adam, Josh, and Paul (in his first entry) all used a streaming platform internal to the IT University of Copenhagen. Its design (at least at the time) meant that it compiled the different play sessions into larger multi-session videos, leading to the "low number" of videos. With no apparent cause, three separate videos appeared for each of the participants, but with occasional overlap in the actual video between them. This platform turned out to be non-feasible, as in the case of Josh and Paul it led to much video material being lost. The implications of this were explained in Chapter 3, yet I expand on the meaning in terms of the data later in this chapter in connection to video elicitation. Note that for unknown reasons, Adam's play sessions did not suffer from this issue of loss of video data. Common for all three however is that there is no meta-data about the play sessions lengths or which days they played, which is otherwise present with the rest of the participants using the YouTube platform.

***Amy's very high number of videos is mainly due to connectivity issues, leading to several videos of short duration in the same play sessions. Some gameplay video (estimated 30 minutes) was lost due to this issue.

****Aside from Josh, Amy, and Paul's missing video data, Tory (she/her) was the only participant who did not stream every play session. She is the only participant where the gameplay videos were not in full sequence outside of technological issues, meaning that there are play sessions visibly missing in the sequence of her videos.

As can be seen in **Table 6.** Participant and Video Data Overview, Josh (he/him) played *Divinity: Original Sin* even though it was out of financial scope. Josh already owned the game but had not played it before which made the inclusion a good opportunity. He had played the sequel *Divinity: Original Sin 2* (Larian Studios, 2017) however, which had implications as to the processes visible, if not to say possible, in the analysis of his gameplay (presented in more detail in connection to the video elicited interviews in this chapter).

Paul, Fran, Tory, Adam, and Parker all playing the free-play format were encouraged to stream gameplay from all their play activities. Paul, Tory, and Parker therefore all streamed gameplay from games other than the ones listed in the table. Fran did not have the opportunity to play other games due to various circumstances. Paul played *Magic: The Gathering Arena* (Wizards Digital Games Studio, 2019) in almost equal cadence to *StarCraft 2: Wings of Liberty* (Blizzard Entertainment, 2010) and the expansion *StarCraft 2: Heart of the Swarm* (Blizzard Entertainment, 2013). However, only about 30% of his combined playtime was dedicated to this competitive game. Parker (he/him) played a few racing games, although only on two occasions during his entire streaming period. Tory also played a variety of games outside of the

single-player format, mainly multiplayer survival games, and some first-person shooter and cooperative games.

With only Paul, Fran, and Tory doing repeat play of specific games (and Tory only for about 45 minutes when playing *Cult of the Lamb*), the collective data is mostly indicative of play with a new game. These three repeat play data sets do however show very important aspects of play and internalisation processes different from the first-playthrough data, yet also mirroring some of the core constitutions of transformation. In this sense, much of the data is representative of this particular practice of engaging with a new gameworld and establishing a sense of worldness unique to the game and the experience one might have of it. The original experiences are in these cases generally geared towards this first play experience, where the building of understandings and meaning-making within the alterity relation are based on novel perceptions of a specific gameworld. This alterity relation of course also being subject to transmedial worlds (Tosca & Klastrup, 2019), where a game such as *Star Wars: The Old Republic* presents its own storytelling within a larger transmedial fiction. In this sense, Matt (he/him) playing *Baldur's Gate* also expressed a form of transmedial influence in his play as he had played pen and paper Dungeons and Dragons, where the game he played in the project, *Baldur's Gate*, is based on some of the same rulesets and conventions. With these experiences in mind, Matt made certain choices in his gameplay that were based on other knowledge structures than what the game had presented him with, such as allocating his skill points quite deliberately because of his literacy of the game mechanics. This came to light in the video-elicited interview, and as such was not something I was aware of during the video analysis or before.

Efficacy of the Method: Grey Zones of Reactivity

As became evident, none of the participants were interested in delivering video or audio of themselves in this part of the research (Stage 1). The importance of minimizing intrusion (and thereby reactivity) was unveiled in the initial conversation I had with them. All 12 participants asked actively (through text or verbal communication) if they had to record themselves. This happened even though they were explicitly informed that the video material they would deliver was "gameplay only" recordings. All, in varying manner, expressed relief upon elaboration and assurance of gameplay video as the only required material.

In the interest of the habituality of their activities, they were initially told to "play as they usually would, and when they felt like playing". Their statements indicate that recordings of their private space (face, voice, physical surroundings) would be experienced as an invasion of their personal and/or private sphere. They did not wish to establish a reactive research environment (or laboratory) around their own private play activities. Only one participant (Dan (he/him)) mentioned that voice recording would be ok, but not face recording. The participants' initial apprehension, followed by their statements and uniform agreement to participate underlines the merit of lessening the obtrusive and potentially intrusive nature of observational research of private activities. As H. Russel Bernard presents (2006), obtrusive research means the researcher is present, watching and in the physical space, whereas unobtrusive means that

the researcher is observing, but out of sight. Intrusive finally meaning that the researcher is present, and actively engaging the participants throughout the situation the research takes place. The importance of these terms is the measure of reactivity that the research imposes on the participant in relation to the researcher, the activity, and/or the context in which the research takes place. Streaming only the digitally visible activity to a closed platform or streaming channel as the method in this research advocates is a one-way glass into the private activities with gameworlds that only fully becomes transparent in the video elicited interview. As such, streaming only the digital gameplay holds elements of anonymity in that the person streaming is (preferably) never revealed in the data produced, and is best described as unobtrusive. Yet it is not wholly unreactive.

With the additional important communication point that they were not being observed live when they played, the route of minimal viable intrusion meant that all twelve stated that they either forgot they were streaming when they played, or that streaming did not influence how they played. When asked if streaming somehow changed his experience with the game, Adam (he/him) stated: "It was completely normal practise and experiences that I had. If no one was watching, I would have done exactly the same as I did." Paul (he/him) stated somewhat the same in connection with his first video-elicited interview: "When I was in the game, it wasn't something I thought about. I mean, there I was just playing. So no, absolutely not." While these two statements generally cover all 12 participants indicating a general measure of the success of the method, it is perhaps equally if not more interesting when they did in fact become aware of the streaming while playing. This was seemingly somewhat rare in the play sessions, but frequent enough that there are certain themes that indicate how play functions with single-player games.

In the exploration of how the streaming, recording, and observational aspects of the research, the above statements were usually the first. Generally, once they started playing the participants forgot that they were streaming and were part of a research project. However, upon probing into this, it became more nuanced. As Tory elaborated:

> It would only be technical stuff, like if the game lagged or lost connection or stuff like that. Then I would check if the stream was still running. But no, I wasn't constantly conscious that you would be seeing this, or what you would think about it at all. (Tory, Interview)

In this, it seems clear how Tory is aware that there is something different going on in the background even though it is not present in her playful engagement unless there is a technological issue. Advocating the method to some extent Tory elaborated that: "Because it was only for you on a private YouTube channel and you didn't need sound from me, but just from the game, I didn't consider it much". Fran (she/her) delivered a slightly different account on this in saying:

> When I was doing something that I thought I might want to keep private… I don't remember which now, but while I was doing it, I thought: I don't care. So, I didn't change my gameplay for that… Oh now I know! I mean like stealing from poor people in their houses, for me that is questionable. For me personally. (Fran, Interview)

The situation that Fran refers to happened about 2 hours and 15 minutes in her playthrough of *Skyrim*, which she had played many times before. Yet this statement came after the initial answer to the question about the influence of streaming and recording, in which Fran answered on a more general level: "I honestly forgot about it when I was playing.". As Fran indicates it wasn't something that she thought much of, which is interesting because she specifically had an issue with an orange outline on her screen when she was streaming. As she said, she was quite often aware of the streaming and that it was being recorded, but the actual thoughts and evaluation of her in-game actions were based on play regardless. For others there were an acceptance stage when recording this private play. Dan for example explained that for him he felt that he was streaming in the first 30 minutes, and then forgot about it. Whereas for Fran here, it was only this first time when she did something in the game which she thought ethically questionable. Overall, the participants' statements on the influence of streaming gameplay were mostly centred on early gameplay, which is perhaps to be expected when disturbing habitual activities and practises with foreign elements. But the influence was otherwise presented by the participants as miniscule and somewhat insignificant. In the video analysis and triangulation of the materials, it also seemed sporadic and rare for the participants to actively communicate through the videos, the many hours of gameplay considered.

In truth, it seems that the streaming of only gameplay in this initial part of the method creates a much-needed distance that generally allows the participants to engage with the games on their own terms. With this conceptual distance, streaming only the digitally visible activity to a closed platform or streaming channel as the DisPlay method advocates is not a mutual experience between participant and researcher. And it is not a non-reactive setting either. Video data like this, due to the asynchronous relationship, is to some extent co-authored. Not only in the authorship between the player and the game, but also in the participant's potential experience of co-authorship with the future viewer in the recording situation. While the participants stream, they know that someone will be watching at some point in the future and noticing specific actions (in a broad sense) on the screen, however deliberate or not these actions may be. In this, I as a researcher become a co-existing entity in the play situation. I am (or rather was), at any given time in the participants' experience of play within the research, non-existent and never co-participating, yet constantly co-existing as a viewer due to the nature of video recording's factuality. Whatever the participants did in the gameplay would be, and still is, a factual sequence that they could not remove (unless they asked me to) or redo. In this, the method creates an interesting construct of an implied observer, in that the participants produce something, for someone else. Yet they do not fully know what the viewer will do with or think of their produced material, which creates a situation of wondering and questioning of themselves unless they release this sensation.

Matt (he/him) was unique in this sense, as he was the only one who stated that he was often reflective about his choices while playing *Baldur's Gate* (Overhaul Games, 2012) because of the streaming aspect. As he put it: "Every time I was able to ask the question of why I was doing this specific thing, I thought that someone would be looking at this and ask the same." In this, it is a bit unclear if this attention towards the streaming aspect ever made any difference in his choices and actions, as he stated that he played as he normally would as that was the point

of the research. In the later differentiation analysis of Matt's statements in the interview, the general notion seemed to be that Matt was reflective after he had made certain choices, and not during. Interestingly, this became somewhat thematic in terms of the participants' descriptions of awareness about the recording. I was not able to identify instances in the shown video where the participants articulated influence in their processes of play. Rather, from the participants' statements, the general notion is that thinking about streaming, recording, or that someone else would watch the video only happened after certain actions or situations had already unfolded.

While this part of the overall method sought to mitigate the reactive nature of observation by removing the immediate reactive and communicative aspect of physical presence, the data is not consistently without reactive components. Some explicit forms of communication were apparent in the participants' actions within the gameplay videos, some noticeable but most quite discreet. In some cases, participants would do minor things in their gameplay which embedded messages. Amy (they/them) was creative with naming the save files, which they later explained was for my enjoyment. Tim (he/him) used the mouse cursor in an unusual way to indicate a particular situation he found hilarious and did the same in a separate instance in a situation which was highly frustrating to him. These two instances of communication from Tim were subtle but were revealed in the video-elicited interview. And finally, Matt (he/him) used his mouse curser as well, but in his case to indicate what his attention/intention was when he opened various character sheets continuously while playing *Baldur's Gate* (Overhaul Games, 2012). Matt in this case was trying to figure out how the experience points from defeating monsters and enemies worked/were distributed in his group of characters, and wanted to indicate this to me. Matt also stated in the interview that he sometimes used his cursor in dialogue situations to indicate to me what he was reading and considering. This was not evident in the video analysis but was also not flagged as moments of interest, likely because the mouse movement lining up with reading is not an unusual expression of attention. Aside from these cases, no other direct communication was visible in the video data, or later expressed in the interview.

Social Desirability Bias and sub-themes of this in terms of the video data production must be considered present in the video material and in the experiences that the participants described. Even in this attempt to remove them as much as possible and to stay clear of the laboratory setting and obtrusive research. While these instances of asynchronous social interaction and altered play experiences are comparatively rare in the video material collected in the project, it does indicate moments where the data is influenced by observation in the explicit actions the participants took to communicate. So, while all twelve participants stated that they forgot they were streaming (most as soon as they started playing), these situations of deliberate communication in the video material confirm that reactive components of observation are somewhat inevitable. Utilizing the DisPlay method therefore means accepting that the interplay of agents in play also includes the observing researcher in the video material production. Although seemingly to a lesser degree than other forms of (consensual) observational research on private and solitary practices. Most of the accounts of deliberate or unconscious communication are only segmental and rare in the many hours of gameplay of each individual participant.

The contexts in which the participants played the games did not change because of the project and the streaming aspect of the data gathering. Except for Matt, the participants uniformly stated that they did not play more or less than they would have, had they not been a part of the project. Matt had some issues with the sound settings of the game, where he would otherwise listen to podcasts while playing. For this reason, he played a bit less than he otherwise would, as this technical issue was disturbing his usual practice. They all sat in their usual surroundings and expressed that they played when they would normally. Dan explained how one specific day of the week was his day off, where he would enjoy playing for many hours. Paul saying how he sat aside a specific time to play so that he wouldn't lose the entire day. With Paul this is to some extent visible in the length of his videos usually being around one or two hours long, and a lot more uniform in length than any of the other participants.

The only explicit changes from habitual play that two participants actively voiced in the interview was a sense of impetus to "move on". As Emma (she/her) explained:

> I think I am playing a little bit quicker. It might not look like it, but I felt like I needed to progress the story. I think there are some things that I don't do, which I otherwise would. Like talking to everyone, but I don't know, maybe I did that anyway. (Emma, Interview)

Emma also stated that there were some side-quests that she didn't finish because of this feeling of needing to progress, and that she did not re-load as often as she normally would. Echoing Emma, Josh stated that he felt like the gameplay should be more flowing:

> If one of those probabilities just roll wrong from the start, I would normally be fine just reloading a quick save, but I did that less here. I'm pretty sure that I made a point of only reloading when I have actually lost the fight, like definitively. Or if I actually wanted to go back to something previous. But in terms of the actual moment-to-moment gameplay, even into fights, I didn't do anything different no. (Josh, Interview)

These statements are of course problematic in terms of the methods intention of capturing naturally occurring processes of play. As Josh and Emma changed the way they engaged with the gameworld, it is difficult to pinpoint what exactly the consequences of this form of social desirability bias might be. The video data being factual sequences of events, the underlying investigation of the processes behind the actions taken is in this case compromised. This sensation of a need to progress and not break the flow of the gameplay video is inherently invisible, and therefore not something that the video can capture. That is, unless it is a state that changes throughout the gameplay, where it might be visible through fluctuations of faster decision making or longer moments of contemplation. Yet with the intention of exploring the internal processes of evaluation and internalisation, the video-elicited interview should naturally make such underlying emotions explicit if they were a part of the specific moment investigated. This was never the case with neither Josh nor Emma, with the video segments that were selected for the interviews. Their statements on this feeling of needing to progress was revealed when I asked them if something had changed in the way they played, because they were streaming.

In summary, this initial part of the combined method worked quite well towards its aim of capturing gameplay video rooted in habitual play practises. For the most part, the participants played on their own accord, and in their natural settings indicating that they were not influenced in their activities of daily living. Yet the two, Emma and Josh, were influenced in their gameplay with an impetus to move on and not linger too long in specific moments, and Matt explained a reflective mindset towards his actions in the game. The rest explained how streaming did not influence their in-game actions and decisions, yet also that they were aware of this added context in differing situations. The differentiation analysis (as presented later) supports this overall statement, in that the participants generally explained how processes and evaluations in their gameplay are alike and unlike the way they usually play similar games. They contextualise their playful engagement relevant to the gameplay situation at hand and actively voice influences on their thoughts, emotions, and actions.

General Video Data Implications

Generally, the play sessions (and recordings) were stopped at calm moments in the gameplay. What this means is that the story-driven games were saved and exited after the immediacy of the narrative was resolved, or a dungeon/level/mission was completed. In this sense, it seems that play with these single-player games means to not leave the current narrative or the immediate threat unresolved unless necessary by other obligations. Tangent to this, many participants said they were afraid that they had had a lot of pauses in their play sessions, yet this was not the case as the video analysis later showed. Paul was shown an extended pause, as there was room in the interview to incorporate a wondering I had about the extent of memory outside of the gameplay. Paul did not remember what he had been doing in this approximately 40-second pause, but suspected he was probably in the bathroom since the only other option was that he was going to get something to drink. But as Paul stated, that was unlikely, as he usually makes sure he has everything he needs (including all the beverages he could need) before starting to play. This 40-second pause was one of the longer pauses where the participant was visibly not interacting with the game. In general, pauses from play seemed much rarer than what the participants generally posed as a worry in the interviews. This speaks into how play with (digital) games, perhaps specifically single-play games, is autotelic and appropriative, and as Masek and Stenros also preset, prioritises engagement over other factors (2021). As I also presented in Chapter 3, Tory expressed her surprise at seeing the factual length of her videos when she had been playing sessions of *Disney Dreamlight Valley* (Gameloft Montreal, 2023). The playful engagement is by and large more intense and prioritised than what players might realise in the situation, only really visible or perceived post-play by the individual.

Outside of the video analysis, the gameplay video meta-data showed some interesting patterns of play. This meta-data was not present for the participants using the internal university streaming system and when available is generally limited to the specific day the recordings were made and of course the length of each streaming session. Notably, when possible, the play sessions in terms of time and day-to-day basis are overall quite sporadic for the participants who are students, and more regular for those who are not. Showing this regularity were Dan,

Paul, and Parker who all had certain patterns to their play sessions. As also stated earlier, Dan had a specific weekday where he had the day to himself and enjoyed playing longer sessions, with the rest of the week mostly being dedicated to work and sports (hence to rather long timespan of 7 weeks for the video data gathering in Dan's case as seen in **Table 6**). Paul limited his play sessions to a couple of hours as to not spend too much time on games. When Paul played *Magic: The Gathering Arena* (Wizards Digital Games Studio, 2019) it was usually one or two matches in this competitive player-versus-player digital card game meaning that the videos were quite consistently between 17 and 40 minutes long. Parker played almost consistently once a day, and seemingly had time to play more in a specific weekend during his time in the project. The weekend after he did not play, which he addressed in the interview as he explained he was visiting family where there had not been time or opportunity to play games. The participants who were students seemingly had a pattern where their play sessions were longer, but more sporadic in terms of the which day they played. This does make sense in the way that being a student can mean periods of intense work and present days with less pressure, yet the meta-data is far from conclusive on this matter.

In connection to the video material as it was presented above with details and statements from the participants, it seems that the method of gaining recordings from private play did adhere to habitual activities and practises in a convincing manner. The video data gathering method allowed access to something which seems unique within games and player research, in that the vast majority of the video data represents play rooted in voluntary and habitual activities, which opens the door for research focussing on exactly that. While there are moments of communication and instances of remembering the recording and streaming aspect in play, it must be considered fairly rare occurrences in the combined 184 hours of gameplay. To this extent, the method of gathering video data was quite successful in opening a pathway into the solitary and private play practises of the participants.

Video Analysis

The original events are visible through the video data in the form of the unbroken sequences of play as it were. In this sense, the video data is quite factual in its presentation of the events, yet it is at the same time only a mirroring of the internal processes of the actual player. The video analysis in stage 2 thereby gives access to the original events, but not the original embodied experiences as is visible in **Figure 5**. At the same time however, viewing these many hours of gameplay from one single player gives me as a researcher a certain insight into the playful engagement of the individual player. The factual choices made throughout the gameplay, the way the player navigates the gameworld and the game mechanics and systems, and the way that the player "moves" and pauses all serve to create a veil between me and the player's embodied experiences as opposed to a wall. In terms of ethnography and digital games, Tom Boellstorff argues how time and elicitation of a gameworld (and in this case also a player within this gameworld) serve to create a foundation from which the researcher can question the interaction (2021). Boellstorff highlights how the researcher's proximity to the indexical realities of certain

constructs of worldness in a specific game may constitute a form of ethnographical basis. That is, that knowing the meaning of certain constructs of a game can lead the researcher to ask questions about the reality of interacting with them. In the video analysis, this building indexicality is then based on a specific player and the way that they interact with the gameworld. It is about what the player does, and how the narrative experience unfolds in their unique gameplay activities. As such, these original events are not only factual sequences of player actions, but also factual sequences of player experience in the form of movement, pauses, reading, thinking, and feeling.

Figure 5. The 4 Stages of the DisPlay Method, Stage 2

Stage 1	Stage 2	Stage 3	Stage 4
Participant Streaming gameplay video	Researcher doing video analysis	Video-Elicited interview	Differentiation Analysis
Original Events Embodied Experiences	Original Events	-	-

Reflexive Video Analysis

Building indexical understanding of both the player and the game as played leads to predictions of actions and certain behavioural patterns, which become more and more recognisable in connection to increasing proximity. The more interesting moments of play in terms of transformation are when these predictions fail, leading to an immediate wondering about what transpired internally within the player in these moments. Yet identifying these interesting moments also needs to rely on reflexive practise. I had to ask myself if my understanding of the player and their playstyle was inherently wrong, or if this particular moment was indeed worth investigating in the limited space of the video-elicited interview. During the video analysis I journalised most of what the participant did in the gameplay with timestamps. I marked moments of interest with an analytical memo in the form of a short description of what I observed, and why this moment caught my attention. Only once all of the video was analysed could I gain an overview of the different situations that I had marked, and from this sequence enter a reflexive stance with my own dispositions of marking specific moments. In this, it became apparent that some situations seemed more connected to the observational criteria (see Chapter 3) than others, and as such the possibility of these moments to have transformational potential was greater.

The participants' individual play sessions took place over multiple days and in most cases over multiple weeks (as can be seen in the previous **Table 6.** Participant and Video Data Overview"). Somewhat surprisingly, the participants' general behaviour remained consistent

across these timespans. As I watched the entirety of a participant's gameplay videos over a few days, it became clear that the individual style of play did not change in any significant manner on the basis of time spent away from the game. Over the course of the streaming period at least, it would seem that there was a baseline from which the participants engaged the gameworlds, which also meant that the video analysis process formed quite naturally along with the participants' journey through the gameworld. There were no sudden, dramatic changes to the way the participants acted within the games which would otherwise have made me wonder about the state of the participant outside of the gameplay. That is barring one video from Fran, where it after a few minutes became apparent that she did not have a mouse/controller. She was therefore playing *Skyrim* using the keyboard and mousepad which is not an easy thing to do (especially when left-handed), but which initially had me worried about her state in the session.

The identified moments of interest primarily stood as singular instances seemingly breaking with normal internalisation processes in the micro-involvement with the game, to use Calleja's terms (2007). Additionally, these moments were usually with a relatively long playtime in between. The exceptions to this were Josh and Paul as mentioned earlier, due to the large amount of missing gameplay recording making it difficult to determine unusual decisions and actions in their later gameplay video. When shown the moments of interest in the video-elicited interview, the participants generally remembered the specific situations in great detail, which I elaborate upon in the next segment in relation to the video-elicited interview. Once the video-elicited part of the interview was over, they were asked if there were any situations that they would like to see. The general statement across the participants was that the moments we had watched were the most important ones, although Amy and Tory both mentioned a situation which they thought would have been great to watch. They were also asked at the beginning of the interview if there were any specific situations they remembered as important when thinking back on their experience with the game(s). To this, seven participants did not have anything specific in mind or referenced the game or their gameplay in a larger sense. This can probably best be accounted for by the fact that they had yet to experience how the video-elicited interview would function. Tim and Emma both expressed two situations which they remembered specifically. For Tim, I had already selected the two situations to be shown in the interview, and for Emma, I had selected one of them. The other situation Emma mentioned I had not included as it was a 10-minute situation, and there had been other more accessible moments of interest. Fran and Josh mentioned one situation each, which for these two participants were also already selected for the interview. Parker mentioned a situation that had occurred after he had stopped streaming his gameplay, which had occurred in between the interview invite and the actual interview. Interestingly, Paul in his second interview after he had re-played *StarCraft 2* said that it had been "just like the other times" he had played the game, so he didn't remember anything in particular. Excluding Parker's mentioned situation which I never saw, of the six particular situations that were expressed, all of them had been identified in the video analysis, and five of the six had already been selected for the interview. This indicated that the video analysis had been efficient in identifying specific moments of some importance to the play experience.

Adam however (playing *Star Wars: The Old Republic*) gave a particularly interesting answer to this. As he stated, the moment when he received his lightsabre was iconic and a

moment where he felt "Ok! Now we are on!". This particular moment had escaped my analysis, as it would seem that it was clearly a transformative moment in terms of Adam's relation to the gameworld. The reason that this moment was not caught by the video analysis is quite simple, in that it happened during a cutscene where Adam had no control of the situation or the cursor. Neither did he do anything out of the ordinary right after receiving the iconic Jedi weapon. Barring that my analysis of this particular play experience could have accounted for the transmedial significance of specific situations, the gameplay video itself quite simply did not reveal the processes Adam went through in this moment. As such, it must be seen as a weakness of the gameplay video and the video analysis, in that only active gameplay can reveal internalisation processes and transformation in earnest. As Rune Klevjer argues: "A cutscene does not cut off gameplay. It is an integral part of the configurative experience" (Klevjer, 2002, p. 195). Yet in the case of no immediate changes in behaviour before, during, or after said cutscene, gameplay video itself reveals nothing about the potential re-configuration of the player's relation to the gameworld. As such, transformations can be invisible in certain situations, even in the required interactivity of play with a digital game.

To what extent I have been able to capture all important moments in terms of transformative processes is difficult to evaluate and would likely require a separate research project on its own. Yet choosing what situations to use in the interviews was surprisingly uneventful in most cases. Having done the entirety of the video analysis it was most often clear that some identified situations of interest were seemingly more seminal than others in terms of how the individual participant chose to navigate through the game. The situations themselves ranged from a few seconds (which I often refer to as moments) to roughly two minutes in length depending on how many actions took place in the situation itself. In the later interview, it was important that the video sequences were not so long that the main point of interest was lost. Likewise, the importance of documentation and expertise in the player's journey showed itself in the interview. Gameplay video and experiences of many hours of play were compressed into intricate and detail-heavy statements based on these relatively short sequences. In a surprising amount of cases, the participants would say things like "Oh, I remember this" (Emma, Interview) or "yeah, this is after the boss. That was so cool" (Parker, Interview) as I was setting up the video sequence, indicating that their memory of the situation was quite readily available. In a few cases they had less precise memory of the situations and moments, but they were generally also open to stating that it wasn't something they remembered immediately. These situations and the accompanying statements from the participants were accounted for in the differentiation analysis.

Moments of Interest

Showing how the final part of the video analysis aided in reflexively forming the selection of specific moments, I have here included a short part of the video analysis journal connected to Tory's gameplay with *Disney Dreamlight Valley*. This is an example both of how the video analysis looked and how moments and situations of interest were evaluated during and after the entire sequence of gameplay was analysed. For reference, this situation is also presented in

Chapter 6 in connection with the main analysis of transformative processes. In the example below, **bold text** indicates a strong connection to the observational criteria, and <u>underlined text</u> indicates a good situation, but where the connection to the observational criteria is not as convincing.

Video analysis, Tory, Video 10/14. 3rd video of *Disney Dreamlight Vally*.

[…]

1:03:00 seems player kind of gave up a bit on making all that food.

1:04:40 Scrooge has a quest, but she doesn't take it.

1:08:30 new recipe needed again.

1:09:30 long break afk.

1:22:09 back again.

1:39:10 gives the wrong flower, and doesn't have the right one in the inventory. <u>Afterward finally takes the quest from Scrooge… why now?</u> Goes gathering.

1:51 level up.

1:52 30 level up Scrooge house (quest). Enter. Check out new floor with items for sale.

1:53:08. Goes down the stairs and notices dress. **Added post viewing: This is the moment? Spends a few seconds looking at it (by panning with the mouse camera.) This might be important for the next half hour gameplay.**

1:54:00 starts the gathering quest for Maui.

1:57:00 makes another chest… puts quest items in it.

Starts mining for some reason.

2:06:00 still mining and gathering fruits and berries.

2:11:11 sells fruits and some minerals. Goes back to mining.

2:16:00 might be mining for gems for gifting, actually.

2:17:00 sells almost all of the mined and gathered materials.

2:18:00 buys the dress (16K, most of her savings). From Scrooge. She looked at it earlier. Added post viewing: Connection to above.

2:18:30 dresses up in new dress and fancy gloves. Why did she wait and pick apples before doing this? What happened in these 30 seconds?

Immediately goes fishing.

2:23:00 goes back to questing. Craft for Ursula… missing aquamarine gems, back to mining.

[…]

This text represents the later parts of Tory's play with the game (6+ hours of the recorded play with *Disney Dreamlight Valley*), which is why there is quite a bit of generalisation in the documentation of what she does and with lapses in the very specific actions as they were normal to her gameplay at this point. In this segment of text, the first situation (the quest accepted from Scrooge that is underlined) was deemed to be interesting in that the quest was readily available earlier, but simply not taken up. Yet this had happened on other occasions before this point in the gameplay, and it was therefore considered interesting, but not specifically novel or unusual for Tory. As such, it was not chosen for the interview either, as it could quite possibly inform about some specific patterns of play and playful organisation, but it was not considered a seminal moment of transformation. Initially, the moment where Tory sees the dress for the first time was not considered particularly as a moment of interest either. It only took a few seconds, and there were no pauses or indications of internal processing. The second moment of interest was when she bought the dress, where she spent more time examining it, and then deciding to

spend most of her in-game currency on it. This was interesting in terms of the observational criteria, as this was the first time I saw her buy an outfit and also expending so much currency. Yet it was initially not marked as a strong situation. It was visible that she had (probably) bought such cosmetic outfits before, but I had no video of it since Tory did not stream all of her play sessions. What made these two situations stand out, and why all three were selected for showing in the interview was exactly the third situation of about 30 seconds between buying the dress and then putting it on her player character. Doing some rather random gathering before making the choice to change outfits triggered a very strong connection to the observational criteria in breaking my expectation of her way of playing. She had changed outfits before, but in those instances there seemed to be some logic to the time and place of her doing it. This was different however, due to the unusual movement patterns and the delay in making a change with the seemingly very random activity in between. Showing Tory these moments and situations led to very informative statements from Tory about her playful engagement, and what the situation had meant for her, primarily unconsciously, in the original event and embodied experience. All three situations were shown separately for Tory to let her express processes in each moment, and were of course shown sequentially. In terms of transformative constructs of this particular situation, it is presented as a part of the analysis in Chapter 6.

This example of how the video analysis formed throughout the journalisation of the videos exemplifies how the initial coding of moments of interest changes as the gameplay videos progress. In this instance, situations led back and gave significance to previous moments. In other instances, reading through the video analysis journal after having viewed all of the available video diminished the significance of earlier identified moments. In these cases, it became clear that the original coding of the situation was just the first time I saw something that was generic to the participant's way of playing. Throughout this final evaluation of the moments and situations of interest, I made sure not to diminish my initial wondering or questioning of the situation. It could, after all, have been a moment of transformation that had had important influence on the rest of the gameplay.

As mentioned before with the five participants from the previously conducted project, the video analysis had had a larger focus on potential reflective moments. This made that analysis slightly easier, as the game itself (*Dragon Age: Origins*) poses dilemmas quite directly through the dialogue system in the game, and normatively speaking, many potentially uncomfortable choices. Upon the secondary analysis of the video analysis journals, it was clear that I probably would have chosen many of the same moments, had the participants been an active part of this project period. Yet I would also have identified more situations in terms of potential transformative processes, instead of "simply" reflective ones. That reflective moments very often have a connection to transformative processes means that most of the situations are quite beneficial, and often offer more tangible statements from the participants in terms of internalisation and transformation (even if not the most central aspects at the time of those interviews).

The identified moments and situations of interest through the video analysis showed some overall themes in connection to the observational criteria. The re-evaluation as with Tory above in the video analysis are not registered per se in all situations, as the combined video analysis

incorporated this as an integrated step. Rather, I would simply remove my markings on situations that were no longer relevant in the grander sequence of the gameplay, and emphasise the ones that had increased in relevance. In the end, the video analysis produced an abundance of situations which could be shown in the interviews overall connected to five general themes on the basis of the situation's/moment's origin of interest that are more granular in connection to gameplay than the four observational criteria:

1. Building worldness and narrative embeddedness

Primarily connected to the early parts of the gameplay, even so far as the character creation process for the games that had this feature. In most cases, this category concerns the participants' probing and challenging the gameworld or themselves in connection to this. Such as visibly considering a rude option in a dialogue situation or deliberately choosing to lie. This entry (and in later gameplay- testing) of their own agency and limits in terms of their sense of worldness indicated contrasts to their perception of self in the larger scope of the digital game versus physical world realities. It is about testing themselves in what they dare to do and how the gameworld responds, resulting in a building sense of worldness and belonging which could indicate transformative processes.

2. Systems and mechanics, and other orientation with the interface (including menus and other extra-diegetic functions)

Connected to how the participant(s) both navigated and made meaning of these systems in relation to the overall experience of playing the game. Here, general investigations of what things mean was quite normal, as was a constant investigation of the same information screen. For example, Parker very often going through his inventory menu to optimise his equipment was not considered relevant to the research question. In terms of transformation, a sudden or unusual investigation or focus on this in relation to other game events was considered interesting, as that would indicate that a certain event had led to questions about a certain game system or mechanic, or something else entirely.

3. Ethical dilemmas/propositions

Primarily concerned with extended pauses in movements and decisions in situations that could be deemed ethically questionable on a variety of levels. As explained before, this is where *Dragon Age: Origins* had its merits in terms of the previous yet now-incorporated project. With games presenting their own ethical worlds according to Miguel Sicart (2009), these situations were interesting as they could present moments of conflict between the gameworld as an ethical structure, and the player's denial or acceptance of this through internal evaluation. In other words, these were moments of potential disjuncture between the sense of self, and the embodied playful engagement, creating a dilemma of identity or self with transformational potential.

4. Unexpected behaviours (choices and actions) and unexpected pauses.

Usually not connected to the initial gameplay, but more concerned with the later video production in that most narrative structures and mechanics had been introduced, and had been

visibly internalised as stable functions of the game's representational systems. Observably a certain flow in the gameplay starts to form, where my proximity to the participants' gameplay meant that I could start to predict their actions. Accounting this with Calleja's model of player involvement and stable internalisation (G. Calleja, 2007) meant that a participant breaking with this pattern of interaction could be considered a fundamental transformative moment of changed perception. Even if no transformation would turn out to be present, the rejection of this could still inform how transformation works through evaluative processes.

5. Reloading/redoing and the implications of this.

Reloading in many ways always presented something of value in terms of transformation. Not only did it indicate a failed situation (such as a game over state), but more importantly in terms of transformations it presented situations of non-acceptable outcomes for the individual participant. In terms of the learning theory perspective I utilise, these situations held potential as defence/avoidance mechanisms of the individual in terms of avoiding internalising unwanted constructions of the self, or simply discarding certain actions and subsequent results that turned out to be non-coherent with the self as a self-reflective entity. Reloading was not very common throughout the combined video material across the participants, but when it did happen outside of regularity or with no apparent causation, it was always a point of interest to me. Trivial situations would for example be Matt reloading quite often because of game over states, or Paul losing a specific mission on one occasion. More interesting situations would be Fran reloading because she apparently was not content with the outcome of a certain quest, and other participants reloading as certain dialogue situations did not pan out to their liking.

In the reality of the video data, many of the categories overlap and singular situations could often be put into two (or more) different categories. Yet the categorisation rested on what the central theme of my analytical memo was. Tory's example above illustrates how unexpected behaviour led me to write questions about why the participant did something, whereas ethical dilemmas would usually have a memo connected to pauses, to name just a few examples. **Table 7** presents the combined number of moments of interest for each participant, for each category. The first number in each cell is the number of moments of interest from the particular participant and category that was included in the video-elicited interview. The number in brackets is the total number of identified moments in the participant's combined gameplay according to the category.

Table 7. Moments of Interest Overview

Participant	1 Worldness	2 Systems / Mechanics	3 Ethics	4 Unexpected behaviour	5 Reloading/ redoing	In total
Dan	1 (4)	0 (0)	3 (6)	0 (1)	0 (0)	4 (11)
Amy	1 (5)	0 (1)	3 (7)	0 (4)	0 (0)	4 (17)
Emma	1 (3)	0 (0)	3 (3)	2 (5)	0 (0)	6 (11)
Sarah	0 (2)	0 (0)	3 (4)	1 (2)	0 (0)	4 (8)
Tim	1 (3)	0 (0)	5 (8)	0 (1)	1 (1)	7 (13)
Josh	0 (2)	2 (3)	1 (1)	2 (2)	0 (0)	5 (8)
Matt	2 (4)	2 (10)	1 (3)	3 (6)	1 (7)	9 (30)
Paul 1	2 (2)	1 (1)	2 (2)	2 (3)	0 (0)	7 (8)
Paul 2	0 (4)	3 (10)	2 (2)	1 (6)	2 (5)	8 (27)
Adam	1 (3)	0 (1)	2 (4)	2 (7)	0 (0)	5 (15)
Fran	1 (3)	2 (3)	1 (2)	2 (5)	3 (9)	9 (22)
Tory	2 (6)	0 (7)	1 (5)	4 (8)	1 (1)	8 (27)
Parker	2 (9)	2 (8)	2 (2)	3 (4)	0 (0)	9 (23)
In total	14 (50)	12 (44)	29 (49)	22 (54)	8 (23)	85 (220)

Note: Numbers in brackets include the number that came before it. The total is thereby 85 situations shown in the interview leaving 135 situations identified but not shown (for a combined 220).

As can be seen in the table, a total of 85 video segments have been shown across the 13 interviews. In all, 220 moments of interest were identified. The Reloading category is by far the smallest, indicating that this action is rarely something that stands out as unusual when it happens. For good measure, *Disney Dreamlight Valley* and *Star Wars: The Old Republic* are the only games that do not have a save game or reload feature (Tory and Adam playing these games). Tory transitioning from playing *Cult of the Lamb* to playing *Dead by Daylight* in a play session is a situation I categorised here as a form of reloading, which is why there is a moment of interest in this category for Tory (as can be discerned from the table). The overweight of situations in terms of ethics can largely be ascribed to the five participants playing *Dragon Age: Origins*, where the focus was on exactly this as described earlier. Other than that, there is a focus on unexpected behaviour which can be ascribed to me choosing these situations as they often indicated some form of transformation of intent or action, which I could not identify the

cause of. While this sparked my curiosity, I also considered these situations good for the explorative nature of the research towards internalisation and transformation in examining the processes from the player's perspective. In this sense, these moments were mostly unexplainable from the video alone, and could therefore only be explained by the participants themselves, and never really be understood otherwise.

Secondary Video Material

Three participants (Paul, Tory, and Parker) delivered gameplay video that was not in the scope of the project, which I labelled Secondary Gameplay video as presented in Chapter 3 (**Table 3**, page 66). *Magic: The Gathering Arena* (Wizards Digital Games Studio, 2019) which Paul played regularly was interesting to probe in terms of the video analysis method. The game is a player-versus-player card game mimicking the original card game of the same name (minus *Arena*), and presents highly complex gameplay which I am not personally familiar with outside of having played games with similar (yet also simpler) gameplay. The game presents an incredible number of cards with a large variety of functions, and Paul was clearly very adept in handling these complexities very quickly in the player-versus-player matches. Being unfamiliar with these complexities and the meaning of the different stages of the game, it was quite impossible for me to discern what was actually going on, on the screen. No less, it was near impossible for me to conjecture what was going on with Paul controlling the game. Being a multiplayer game it was not my immediate attention, but I did find it interesting that the gameplay footage was so clearly out of my reach to analyse immediately. Paul's actions and decision-making were incredibly quick, and even reading the cards he utilised would mean pausing the video constantly. Even then, it is difficult to say if the text and images on the cards would make any sense, as they rarely did for me with my lack of understanding of the game. My best guess in terms of analysing this form of gameplay video would be to play the game to the extent where such video would start to make sense, or to already be an expert player in some capacity.

Parker played some racing games, although as mentioned only on two occasions during his time in the project. These games were *Descenders* (RageSquid, 2020)*, Horizon Chase Turbo* (Aquiris Game Studio, 2018). Due to Parker delivering quite extensive video material of *Nier: Automata* along with the fact that this game was not quite as rich in moments of interest, I dedicated the entirety of the video analysis only to this game. Further, the racing games did not present themselves as easy to analyse for internalisation processes, no less transformative ones. Doing this would likely, as would also be the case with Paul's play of *Magic: The Gathering Arena,* involve iterating new observational criteria based on these different expressions of play. With Parker's comparatively sparse play sessions with these racing games, I expected that there might be some physical world contexts which made him play these games over *Nier: Automata*, which he was otherwise very fond of. As Parker said in the interview: "You know, it's the games that I casually play sometimes when I have little time. I just go there for a run. It's when I don't want to commit to the game playing thing." As Parker was not a part of the follow-up
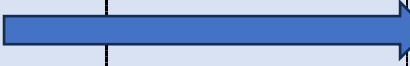
interviews, this phenomenon and the meaning of his practice with these specific single-player games remains unclear.

Tory playing a mix of first-person shooter and survival games (*Dead by Daylight* (Behaviour Interactive, 2016) *Shatterline* (Frag Lab LLC, 2022) *Before We Leave* (Balancing Monkey Games, 2020) *and Phasmophobia* (Kinetic Games, 2020)) were not viewed specifically, although Tory's combined play pattern was interesting. Aside from *Phasmophobia* which is a cooperative game that she played with some friends, Tory gave a very interesting account of her playful engagement with the other games which have differing elements of player versus player gameplay. As a result of both the video elicited interview and the later follow-up interview exploring Tory's play practises and activities further. I leave the details of this for a later discussion in Chapter 7 on what play with single-player games means for the participants.

Video Elicited Interviews

Identifying what moments are interesting and important to single out for the video elicited interview was presented in Chapter 3. **Figure 6** shows how stage 2 focuses on the original events, and how stage 3, being the video elicited interview, seeks to position the participant in a state of re-embodied experience of these original events. As has just been explained, it is not always the case that participants remember everything in a situation. Yet when they do, as is most often the case, they give highly detailed accounts of their thoughts and emotions at the particular moment in their play. To a large degree, they experience a form of re-embodied experience which lets them access the processes of their internal evaluation in the particular moments. As a point of attention, the following two examples of Paul and Emma I reuse when explaining the details of the Differentiation Analysis.

Figure 6. The 4 Stages of the DisPlay Method, Stage 3

Stage 1	Stage 2	Stage 3	Stage 4
Participant Streaming gameplay video	Researcher doing video analysis	Video-Elicited interview	Differentiation Analysis
Original Events ->	Original Events ->	Original Events ->	-
Embodied Experiences		Re-Embodied Experience	

Paul (playing *Planescape: Torment*) was shown a 20-second video, which attested to the efficacy of the method and the extent to which experiences are embedded in memory. For

reference, this is the one single situation of interest Paul had in terms of "Systems, Mechanics, and orientation" in his first entry in the project (see **Table 7.** Moments of Interest Overview). In the video (from the early parts of the gameplay), Paul defeats a monster which took some time to do. When the monster is defeated, Paul opens the character sheet, moves his mouse towards the experience, class, and level segment of the sheet as can be seen in **Figure 7**, and closes the sheet again. This combined movement took only about a second, but Paul remembered exactly what happened and why he did this in this particular moment. Having played similar titles before (e.g. *Baldur's Gate* (Overhaul Games, 2012)), he wondered what class his character was, as these titles usually lets you choose this early in the game. Since the encounter had been difficult, this thought had come to him, which shows how experiences from years past can emerge in the constant flow of processes of play. This short sequence had happened approximately 3 weeks prior to the interview and underlines the level of detail (of even simple actions) that is possible to investigate using video elicitation.

Figure 7. Paul investigating his character's class
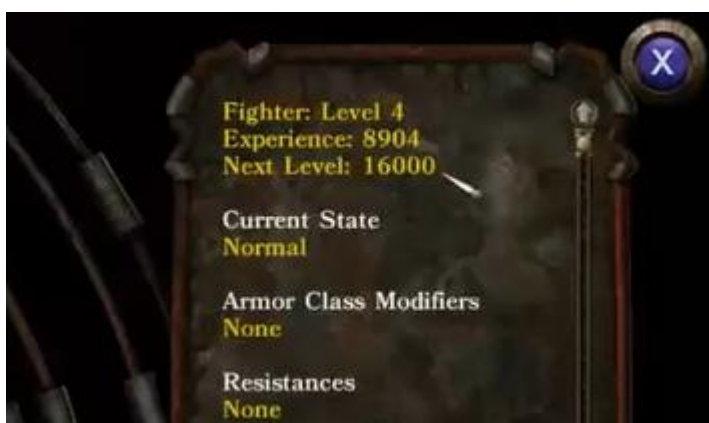
Source: Paul's gameplay. Playing *Planescape: Torment.*

Granted, this moment was rooted in an experience which was unusual in relation to Paul's previous experiences with encounters at this point in the gameplay. Yet so much time had passed since this moment (approximately 3 weeks), not to mention at least 17+ hours of gameplay since then, that the level of detail of Paul's thought processes were surprising. I show this example in more detail in the differentiation analysis part of this chapter to underline and exemplify the last stage of process analysis of the method and its results. The important part of this example is how the video elicitation gives access to more than memory, and how this is expressed through the participants' statements in conjunction with the observations from the video analysis, which I elaborate on in the next segments.

Re-experiencing Play and Internalisation Processes

The participants generally remembered the situations that were shown in the interviews with high levels of detail and depth. As Adam explained when I asked him how it was to watch his gameplay video:

> Well (laughs) it's quite weird because sometimes you have shown me a part of the game where I felt like "oh, now I remember this". And I also remember that doing the storyline makes you feel some emotions about what you are doing. And some of the bad emotions also came back […] it's just, when you show it, all the emotions I had back then flows back instantly right. So, it was also quite easy to explain what I was thinking and feeling at that point. (Adam, Interview)

As Adam explicates, viewing the videos can activate the emotional and cognitive constructs of the situation. In this sense, many of the gameplay situations shown to the participants constitute re-embodied experiences, where qualities of the playful engagement show themselves in spite of the temporal gap between the original events and the interview. In these re-embodied experiences, internalisation processes become visible as the original experience becomes manifest as it was embedded in memory, assisted by the direct visualisation of the sequence of actions. While the vocalisation of the experience cannot be said to be on a one-to-one scale with the original sequence of thought and emotion, the logics of how the experiences are remembered are generally very indicative of the visual processes and where the situation is embedded in the larger personal experience of the gameworld.

While the participants generally remembered the situations shown in video in detail, there was one situation in which Paul did not recall why he took certain actions, and where he had no immediate memory of it. This particular instance was when Paul was playing *StarCraft 2*, and within a mission chose to save the game. He had not done this before, and never did do it again, which is why I was wondering about his action in this moment. Paul remembered the mission, but not the specifics of his action in this moment. As he explained, it was probably because we wanted to save time if he accidentally failed the mission, but the actual cognitive or emotional process of the situation could not be revealed in the interview. This was however quite unusual, and in general, the participants expressed that the video segments sparked more than simply the memory of the situation, but also the feelings and thoughts that went through them.

While this moment with Paul and the previous one where he investigated his character's class were some of the shortest moments of interest, Emma presented one of the longest. Emma gave an interesting account when shown a particular situation of her gameplay, which showed how the mindtape can unfold in likeness, yet also in a processed manner in terms of the original experience. Emma played *Dragon Age: Origins*, and a situation occurs where Emma meets an NPC, a small boy, looking for his mother. This is an unavoidable dialogue situation, but its outcome has no consequence beyond the dialogue situation itself. This is however not clear from the dialogue, which otherwise indicates that the protagonist might go on a side quest with the little boy, which does not happen. By all indications at this point in the game, the boy's

mother has been killed by the Darkspawn. The Darkspawn presents the central threat in the game, which Emma is tasked to defeat, and which both Emma and all other nearby denizens of the small town are currently fleeing from. The boy is distraught, alone, and needs help. The conversation up until the point of interest is mainly about convincing the boy not to go into dangerous situations, which Emma does without much pause. That is until Emma is put on the spot when he asks "Then what should I do? I have nowhere to go and I'm hungry!". Her potential answers are shown in **Figure 8**. For reference, this situation was categorised as "worldness" as per the video analysis categorisation but was also considered as ethics (due to the nature of the options) and unexpected behaviour (due to the very long consideration period).

Figure 8. A dilemma of choice, Emma

Source: Emma's gameplay video, *Dragon Age: Origins*

It takes Emma 1 minute and 5 seconds to choose her answer, with very visible mouse movements during the entire situation. This was the longest decision process through all of the gathered gameplay video data. **Table 8** shows the visible focus of Emma's attention from the video data in four separate sections. Each individual numeral character represents approximately 0.5 seconds of the cursor on the specific choice option (1, 2, 3, or 4) as visible

in **Figure 8.** A dilemma of choice. Just to be explicit, 1-2-33 means 0.5 seconds on option one in **Figure 8**, 0.5 seconds on option two, and 1 second on option three.

Table 8. Emma's cursor movements

A. Initial reading phase
1 – 2 – 33 – 444

B. Immediate attention
33 – 4 – 3333333333 – 44444

C. Reconsidering options
22222222222 – 1 – 222222 – 3 – 4444 – 33 – 4 – 2 – 4 – 33333 – 444 – 22

D. Final decision making
4444444444 – 33333333 – 444444444444444444 – 333333333333 – 44444444444

Note: Each individual character (number) represents approximately 0.5 seconds of hovering over a numbered choice option as seen in **Figure 8**. The entirety of the situation took 1 minute and 5 seconds.

As might be visible in the table Emma chose option 4, giving the boy a silver to get something to eat. The initial reading phase (A) is quite straightforward and represents how the participants generally skim over text options, usually choosing an answer quite quickly after this. In this case however, Emma entered another phase since none of the answers were an obvious choice for her. As can be seen in B, her most immediate attention turned to option 3: "Go to the Chantry, child. Someone will look after you." and option 4: "Here. Take this silver. Get something to eat.". Neither of these options were great for Emma, which is why she started to reevaluate focussing on option 2, as is visible in C (Reconsidering options). In this evaluation, option 3 and 4 then showed better, and the final decision rested between these two. Emma's account for the situation was interestingly without any account of the first option, but as is also visible from the table her cursor only indicated attention to this in the initial reading, and very shortly once after that in C. Emma's account was as follows with my additions in parenthesis:

> Well, I do consider all three options (there were four, option 1 apparently pre-excluded from the considerations) because I'm trying to figure out what would help him the most. I have an idea about what happened to his mother (clearly dead as Emma's way of saying it also indicates). I don't want to take him back to his family farm (an option earlier in the conversation, reintroduced here as option 2), only for him to see his entire family dead. I

thought that might be traumatising (for him). Also, in terms of time (pressure to escape the coming horde of Darkspawn) I didn't think running around looking for people who I think are dead is a good idea. I have a feeling that we need to move on and hurry so we can outrun this army that is coming after us (option 2 excluded). And then I consider the Chantry because he needs someone to look after him, because I can't do that. I didn't want to send him there though. I might have some prejudice against them. Also, from my conversations with Alistair (companion NPC who grew up in Chantry care), it sounds like he has had his own experiences with them, and he really does not like them (option 3 excluded). I take the shortsighted solution perhaps, but hope he finds someone (to take care of him. Option 4 chosen). (Emma, Interview. Statements in parenthesis are my explanatory additions)

Emma's recount of the evaluative processes she went through is vastly more structured than the video material would indicate. Yet it still shows quite clearly how Emma thinks in the situation, even if it does not account for the many movements between the different options. In this sense, this situation could be considered a recount of the many processes that occurred in the situation, as the situation itself is simply too long for it to be embedded in memory as a multifaceted process. Instead, it is, as Emma presents, a sequential reasoning. The transformative aspect in this being how Emma activates the narrative as reasoning in conjunction with her own impetus for making a positive change for the boy. I asked Emma if she at any point thought that she might be able to gain something from the situation, to which she answered:

No, it was mostly about how I can solve the situation best for him, while at the same time I can't run around with kids following after me when I need to go out and save the world. So I tried to be realistic, while at the same time trying to help as much as possible. It is a lot of money I end up giving him. But I thought that I am not really using money for that much anyway, so he would have better use for it. (Emma, Interview)

Remembering such a lengthy thought process is generally beyond the scope of human memory, but Emma is able to quite concisely explain the overall reasoning along with some emotional constitution of her playful engagement with the gameworld. The fact that she considers the boy's wellbeing and actively avoids the answer that might traumatise him speaks to Emma's sense of worldness. It is not about gaining something of a particular ludic nature, but about doing what is best for the boy within Emma's understanding of the narrative situation. The boy is not an NPC in the situation Emma experiences, but rather an entity that must be protected. In terms of the transformational value of the situation, this shows a bit later in Emma's gameplay where the impetus for moving on and saving the world leads her to choose an aggressive answer in a dialogue situation, which was very unlike her. The situation solidifies some of the major experiences Emma has had up until this point, in that she is forced to make a critical decision, and within this is also forced to consider (cognitively and emotionally) her relation to in-game realities. Her critical view of "the Chanty", her own role as protagonist, and her desire to help and solve bad situations meet in this encounter with the realities of the gameworld. She is forced to reflect on her role, and in doing so, transforms her relation to the gameworld. Her experiences with the gameworld so far are merged with the present in the original experience, and the re-

embodied experience of the video elicitation let her access both as a mnemonic phenomenon of internalisation processes. The finer details of the internalisation and transformative processes I leave to the next chapter, but in this example it is hopefully clear how video elicitation opens for complex expressions and explanations of actions rooted in emotional memory.

Recalling Experiences versus Re-embodied Experiences

That video elicitation is a strong tool in terms of gaining access to experiences concerning internalisation and transformation was quite clear in the interviews. Not only did the participants remember most of the situations that they were shown in the interview, they also situated these moments in the larger sequence of their gameplay, and referenced other situations that had been important in the particular moment. Overall, the level of detail both in the situations at hand and in the broader explanations of these showed a degree of memory of play that is quite extraordinary, and vastly beyond what might have been expected.

Showing the efficacy of the video elicitation by contrast, Josh (with the fairly broken video material) gave an interesting account of a moment that had been important. This moment was not in the video material but came up as Josh mentioned it himself during the interview. The situation that I showed Josh was the only one available in the material of the two player-created characters having an argument about how to handle a specific dilemma. In the game, if the player chooses answers in which the two characters do not agree, a rock, paper, scissors minigame initiates which then ultimately decides which character gets to decide the course of action. In the situation shown Josh made the characters agree, which means that this minigame did not appear. Yet upon explaining the situation, Josh referenced more important moments that had happened in the earlier parts of his gameplay:

> Seeing it now, it is also why I'm sad that the previous one or two recordings are gone, because those… here I pretty quickly choose that they are both in agreement, but in the previous ones, when I myself couldn't actually decide, I used the character dialogue conflict to decide for me. (Josh, Interview)

I asked Josh if he could tell me more about what he had experienced, to which he mentioned a quite prominent situation in the game. One that I had hoped I would see, and one which he would also have liked to see in connection to what the video elicitation had made him think of (but which was not possible because of the missing video). In this situation Josh and I both would have liked to see, the player's party meets two guardsmen and a female Ork. Orks are at this point established as brutish, violent, and very much bad, even if mildly intelligent. One of the guards has used a questionable "love potion" on the Ork, and the Ork is very much in love with the guard, visible even though she cannot really speak. The guard is equally infatuated with the Ork and believes it is true love, yet the love potion "pamphlet" is written in a way that can best be described as questionable, if not false marketing. The player is in this situation tasked with deciding to leave them be in their questionable love situation, or to kill the Ork as

she represents a threat to the people of the town that they are in. With my explanations in brackets for the sake of clarity, Josh homed in on the situation by stating:

> I believe there is one where they… they had like enslaved some orc woman, and one of the guards is in love with her, and all the others want to kill her. I have one (character) taking his (the love-struck guard) side and then I had the other taking the side of all the others. And then I just saw how it played out with that, and got to the rock-paper-scissors mini-game. (Josh, Interview)

As mentioned, I was quite interested in this situation, and I asked Josh what he thought in this situation hoping that I could get information about potential transformative processes. To this, Josh gave a detailed answer, yet one that stands in contrast to most of the other participants' multitude of answers when it comes to expressing processes:

> I was leaning towards… like letting… letting the orc be killed because it was a safety hazard, and I had no clue about what spell that was used. Like I have no details about it. And you're not supposed to have any details about, so it really is to create the dilemma. But I was also leaning to the other direction, I was fine with seeing the other outcome that could happen if… At that point no actually. At that point I didn't know that it would actually prompt a mini game, this debate between them (the two-player characters). That was first later that I found out. So, at that dialogue I was just taking both sides to see what would happen, because I was also leaning to both sides. But I didn't know it would have me decide through that mini-game. I thought maybe it would give me a third option or something. But it didn't. (Josh, interview)

While this explanation in itself is good at highlighting some important aspects of Josh's experience of the moment in terms of understanding a specific game mechanic, it reveals strikingly little in comparison to situations that were identified in the video analysis, and shown directly in the interview. As is evident, Josh also indicates in the middle of the quote that he is remembering things out of order, meaning that the memory is to some extent being constructed as he talks about it. This is a singular instance across all the participants, which makes it quite telling of the efficacy of video elicitation. A different interview form (such as micro-phenomenological interview as presented earlier) might in this case have extracted more in terms of the situation's meaning in terms of transformation. But I was not sufficiently aware of this going into the interview, nor did I prepare it in this manner even if I suspected the interview (due to missing video and therefore questionable moments of interest) might not hold up to what I would have hoped for.

Presented here then is a contrast to this, which shows how successful video elicitation can be in its ability to reinvoke emotional complexes of play outside, but still in relation to, a specific and shown moment of interest. Adam (he/him) playing *Star Wars: The Old Republic* was in a situation, where the choice was between lying on behalf of another Padawan or telling the truth. In this choice, Adam is asked to decide whether to risk the fellow Padawan being thrown out of the Jedi Order, or to tell the truth about the Padawan's actions. Adam chose to lie

as is visible in **Figure 9**, which did not work, and he ended up receiving a harsh reprimand from a Jedi Master NPC.

Figure 9. Choosing to lie, Adam

Source: Adam's gameplay of *Star Wars: The Old Republic*

In the interview, Adam explained how the choice was based on an affective moment of conflict avoidance. He stated how the affect was similar to the dilemma of "ratting someone out" or rather to betray someone's trust in his childhood, which could have severe or very uncomfortable social implications:

> I guess I'm not supposed to lie at all actually. You are supposed to be very truthful (as a Jedi). But I guess the real-life situation, this part about not ratting someone out, I guess it is maybe from personal experience. I remember in my younger years having ratted someone out, and then that getting me in a lot of trouble in the years to come afterwards. At least ratting someone out is something that would make that specific person very angry with you. And I guess I played with my own conflict-shy personality, just choosing "oh I did something" to not have people become mad at me. Or at least not having this person become mad at me.

> But as I said, I do recall instinctively being like "this must be the correct choice", and then being shown completely wrong. (Adam, Interview)

Before this, Adam had already given a detailed account of the process he went through in the situation, stating how the choice was difficult, had sparked ethical questions in his mind, and also that it was the first time he had not been able to predict the "right" answer. Firstly, this shows how video elicitation (and the DisPlay method) can allow access to some of the inner workings of playful experiences, namely affective moments of play. While the interview situation necessitates that these affective moments are translated into emotion, the recount and recognition of feeling indicates the embodied presence in the original experience. Further, Adam's experience in this situation shows how play can evoke our personal biography. Not as a distinct memory, as it became clear in the later differentiation analysis, but as an evocation of a distinct feeling rooted in our past experiences. This example was not unusual across the interviews, where other similar significant experiences included romance, mercy, self-sacrifice, cultural judgements, and much more. In all, the participants' experiences were rooted in the gameplay and the narrative they had experienced up until the point of the moment, and in most, also forms of personal statements and self-perception outside of the immediate gameplay as it was presented. This duality is interesting, as it lends any further analysis the ability to both differentiate and combine specific aspects of the alterity relation and the interactive qualities of play towards transformative processes, which is what the differentiation analysis is for. While these two examples from Josh and Adam are not completely comparable, none of the statements were at this point of the research. But the connection to the original events and the re-experiencing showed different aspects of transformation in which Josh's example here was strikingly unlike the others.

Expansive Experiences

Outside of Josh's interview generally presenting somewhat questionable insights into transformative processes due to the mismatches between the video material, the video analysis, and the possibilities of the interview as it was conducted, most of the interviews all had strong statements towards internalisation and transformation. In this, the categories from the video analysis gained new meaning and new form, more centred on the participants' immediate statements in connection with what I had identified as potential moments of interest, and thereby transformation. In terms of the grouped moments of interest categories, attempts at further thematization of internalisation and transformation proved unviable at this point. In spite, in all honesty, my many attempts at doing so. While the categories of the video analysis were beneficial in creating an overview of what kinds of moments were investigated, the video elicited interview vastly expanded these on many levels. So much so, that it simply was not feasible to thematise or categorise without further steps. With my theoretical glasses and the explorative nature of this research, forcing this risked lessening the nuances and strengths of the data in favour of simplification. As explained in Chapter 2, internalisation and transformation are anything but simple, and when not knowing the core of the processes in play,

it became important to explore the data further. The differentiation analysis was therefore necessary in order to systematise and organise the data towards transformation and internalisation, as not one situation of interest turned out to be simple or easily defined in relation to another. As such, the video elicited interviews exploded the possible thematization to levels in which otherwise usual analysis practises risked removing a core strength of the data. What can be said for the overall content in relation to transformational processes of the video-elicited interviews is that the participants generally stay on the topic of their gameplay. Processes explicated, as with the example of Emma above, were present in differing forms. Yet other seminal moments and aspects of transformation also show themselves. Past moments, that were foundational for the way the player engages with the game show themselves as argumentation to the process at hand, showing how transformation is a running current of events that change and morph as the gameplay evolves. Other times, and very often, the process at hand is further explained with structures that were important to the moment, both in terms of the gameplay as viewed and also with more general descriptive components of the participant's habitual practise with the game form or genre. What this means is that the next stage of the combined research, the differentiation analysis, was not only beneficial in exploring the processes and how they connect to the gameplay, but it was quite necessary in order to make sense of the data for any further analysis.
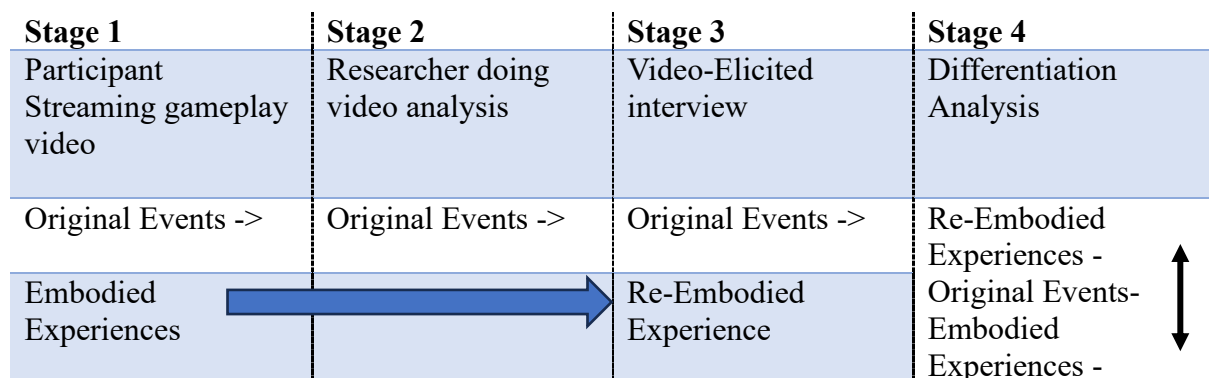
Differentiation Analysis

The final stage 4 of the combined DisPlay method of the research is the differentiation analysis. This analysis is needed in order to sort the data from the interview through a triangulation of the different research materials, and to engage in the reflexive practice of digital ethnography as a research practice. An analysis of the apparent presentation must be conducted for its connective and disconnective properties in relation to the combined research materials. In this, the differentiation analysis as a part of the DisPlay method is used to sort the statements in terms of their constitutional factors. That is, if a statement is a part of the original embodied experience or the re-embodiment of this that explicates the process(es) as they were, or if they are connected to an interpretation of the process. Finally, it is of importance to identify if statements are a part of the interview-based reflections upon the process(es), potentially giving insights into more general constitutional factors of processes in play, or more general information about the individual participant's lifeworld in connection to play. In this, it is not a matter of not respecting or acknowledging that the participants' statements are true. They are. But in terms of getting to the core of internalisation and transformational processes, it is important to not be distracted by para-reflective explications of the processes themselves, and to be aware of the constitutional factors of the processes that do present themselves. As such, it is a matter of familiarity and objectivity with the materials and a substantial organisation of the combined materials to gain the insights needed for the main analysis.

This triangulation process of the data was needed to validate the findings towards the processes in question, in this case being internalisation processes which deal with structures of

identity and the self. This research process is visualised finally in **Figure 10** with a circular movement within the differentiation analysis indicating the combination of the materials towards understanding processes as they were revealed in the combined data.

Figure 10. The 4 Stages of the DisPlay Method, Stage 4

| Stage 1	Stage 2	Stage 3	Stage 4
Participant Streaming gameplay video	Researcher doing video analysis	Video-Elicited interview	Differentiation Analysis
Original Events ->	Original Events ->	Original Events ->	Re-Embodied Experiences - Original Events- Embodied Experiences -
Embodied Experiences		Re-Embodied Experience	

The role of the researcher as guiding toward the statements must also be acknowledged in this stage, and the reflexive account in relation to the interview situation and the resulting text must be accounted for. As such, and as Pink et al. demonstrate as foundational to ethnographic research, this reflexive practise is a part of acknowledging the collaborative form of knowledge production between the participants and the researcher (Pink et al., 2016). The differentiation analysis must therefore outline the data by focusing on the relationship between the original event and the statements in the interview. That is, the re-embodied experience of the original event as it transpired, with a focus on the internal processing and evaluation as it was, yet also guided and produced in the interrelation between researcher, participant, and video data. In the following I use several examples, but for the sake of continuity there is a focus on Paul and Emma's examples which were presented in the previous section on Video Elicited Interviews.

Re-embodied Experiences as Statements

The differentiation analysis made clear how statements fall into three overlapping themes in connection to the video sequence as it was shown. Most statements fall into three overarching categories: as vocalisation of processes faithful to the situation of interest (the movements of the video), elaboration on the constitution of the processes in relation to the co-authored experience (previous gameplay, most often also visible in the video material), and meta-reflective statements elaborating on the practices of play of the individual in connection with the situation (often not part of the video material). The actualisation of the vocalisation of processes of play most often includes the impetus of processes, which become statements of mixed constitutions in the exploration of specific moments of gameplay. That is, that statements

are generally focussed on the process that transpired in the original event as shown in the video elicitation, yet also highly complex in terms of a running argumentation and explanation about the process' components of thought, emotion, mnemonic background, and situated premonitions of expected results. The overlapping themes of the statements are presented in **Figure *11***, where the Process is the central focus, and Process Elaboration and Meta-Reflection show as aiding in the explanation of the process.

Figure 11. Connections of Statements of Processes
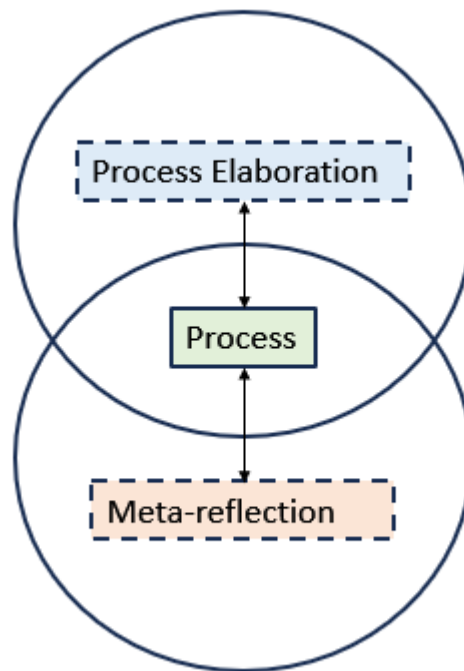
The example with Emma as explained earlier (**Figure 8.** *A dilemma of choice* and **Table 8.** *Emma's cursor movements* showed how the triangulation between video data and interview statements cohere and show a re-embodied experience in the interview. The example is one that was categorised mostly as process as it was both complete and coherent, even if the statement and recording of movement were not in absolute alignment. The categorisation comes from the consistency of Emma's statement in coherence with the movements, and the comparison of importance. To get such process sequences in all situations would have made the analysis quite a lot easier, yet this was not the case as was to be expected in terms of the complexity of internalisation processes in general. As the differentiation analysis was conducted, it became clear how articulation of "purely" process is rare in the combined many statements. As such, it can be said that the video is factual (as also argued earlier), and that the re-experience and re-embodiment is actual, lending the empirical data a verification process through the differentiation analysis in the combining of empirical material. When the sequence of the visible

gameplay (movement, pauses, actions, and choices/decisions) and the participant's statements of the situation fall in line, the articulation in the interview uncovers the player's internal processes of the original experience and can be said to constitute a re-embodied experience. While the previous example of Emma's very long decision-making process did not reveal all the evaluative micro-movements she had to go through, her explanation and the fairly obvious coherence with her playstyle made this a good example of a visible internalisation process made sensible by process explication. So, while the entirety of the process is simplified into a much shorter sequence of reasoning, the weight of the different constructs in the evaluation process can sensibly cohere with the visible movements and attention. It becomes clear what options are considered, and to a large extent why, as an internal evaluation process in itself is revealed in the statements of the participants.

Showing then a more complex, and in terms of the substantial data basis, more telling articulation of the categories of statements towards gameplay, I here use Paul's statement in connection to the example showed earlier (in **Figure 7.** *Paul investigating his character's class*). For reference, this was the situation where Paul spent but a few seconds opening his character screen and hovering his cursor over the character class for about a second before then closing the character sheet. The following is from the interview, where I mark Process, Process Elaboration, and Meta-Reflection as the visible systematisation of the differentiation analysis. In this example from the interview, the 20 second video had just been paused right after the closing of the character screen, after the one second movement and hovering over the "class" information:

Mike: Just this moment, when you are looking at the character screen, do you remember why you looked at it?
Paul:
(Process) Yes, it was partly because I was wondering; I wonder what Class I actually am. Because I hadn't at any point chosen a Class, like Fighter, Wizard or Rogue or anything like that. And then I thought; What am I actually able to do? And then I thought; Ok, I am a Fighter. And then my thought was; Ok, did I just not see that in the character creation, or are you just like this from the start.
(Process Elaboration) And what I have figured out is that that is what you start out with being, and then you can change later. But I wasn't aware of this at this point.
(Process) So, it was like, Ok; I knew Mort was a fighter, the skull there. And I thought; well I'm hitting about just as well as he was, and did about the same amount of damage as him. So am I Just a fighter? Also, I was using an axe and such stuff.
(Meta-Reflection) So it was actually just curiosity, and if I had a Class that was just "Non".

Mike: And this happened because it took a while to defeat this monster?
Paul:
(Process Elaboration) Yes, the other ones I had fought against hadn't been anything special. I mean you had hit them one, two, or three times and then that was over.
(Process) This was actually; Okay, was I supposed to have been a completely different class? Where I should have had some abilities? Or have I done this the wrong way? And I had a quick thought; should I save and then try starting a new character and see what the character creation looks like again; Have I missed a step? And then I had the

thought here; Oh well, I am a Fighter. Because I had come pretty far at this point anyway. So I thought; Ah well, then I'm just a Fighter.

(Meta-Reflection) But I always feel fighters are boring to play because it is just about hitting and "tanking".

(Process Elaboration) And you already had Mort, so there was a fighter, and so it would make sense; Ok you have the support here, so you can make another class. He can stand there and tank and you can be a spell caster or a priest, or whatever you want along side of that.

(Meta-Reflection) Also, in terms of my stat allocation in the beginning. I mean I choose intelligence, dexterity, and charisma. I mean two of those is because they say it gives better options with dialogues and the development of the game. And if I want to be a Wizard or Rogue, then dexterity is always good in rpg games.

Mike: Yeah, that is like a classic D&D thing

Paul:

(Meta-Reflection) Exactly. If you don't have a hammer, you need to be quick.

So, there were definitely some considerations with that little click there.

Mike: Yes, definitely something that had to be checked.

Paul: Yes

Mike: And you also registered quite quickly how things were.

Paul:

(Process Elaboration) Yes, yes because that was the only purpose there. (Paul talks further about other troubles and understandings of the class system of the game from here, focussing on what he experiences in the gameplay future from this temporally situated point of experience)

(Paul, First Interview. Paying *Planescape: Torment*)

Paul's statements here and the categorisation of them show the many different forms of statements in the differentiation analysis. In connection to processes of play and internalisation, it shows how a simple situation of a difficult opponent begets complicated yet categorizable statements in terms of Paul's line of thought, emotion, memory of past events, and literacy with the game genre. Game genre here exemplified as modes of interactivity as presented previously in terms of Tom Apperley (2006) in connection with a literacy of the game mechanics and the setting of the game. This situation and statement also shows the level of situatedness that the participants generally had in their descriptions and re-experience of original events Something that Josh had trouble doing in the non-elicited situation as was presented earlier. That is, as with Paul above, that he situates his processes of internalisation in relation to his original knowledge in the situation, his future knowledge, the influence of his literacy with like games, and most importantly, his emotional and cognitive realisations throughout the event as it transpired. Finally, this example with Paul shows how the materials when combined explicate the

uniqueness of play in terms of how it is internalised to memory at quite unusual levels. Something that was thankfully not unique to Paul in the slightest sense, which is also why the combined data is highly complex and multifaced. As presented in the example above, Paul further talked about the class system. But after this, he also mentioned a situation 5 minutes after the showed situation where he experiences that his character becomes "panicked" and where he cannot control it for this reason. He mentioned this, because this was another situation where the character screen had been important in his understanding of the game and the game's mechanics.

To put it simply, statements in connection to re-embodied experiences of original events and experiences in play are as messy, as experiences of any events might be. But perhaps more so in the case of gameplay, as the elicitation allows more constitutions to the experiences than simply what is visible and discernible from a moment's glance at either video, statements, and indeed both. As Paul's example shows, even the most minute of movements in gameplay can constitute thoughts questioning reasons, emotions rooted in memory, and questions about one's own previous understandings. Or rather, the video showing this minute and by all consideration minuscule movement gives access to the multiversal internal functioning, which functions on a different temporal scale than minutes and seconds, yet which is connected across minutes, seconds, and hours, weeks after the fact.

Understanding Processes

The explanations outside of the actual articulation of the process as it transpired showed to have important connections in the analysis of transformations, in that they inform how play and gameplay function in processes of internalisation and transformation. Furthermore, they showed how generalised play activity and engagement aided in the structuring of the participants' baseline assumptions of gameplay and their historical engagement with similar structures of play. As such, each of the themes generated a category of statement content, intersectional to the experience and content of the original experience, visible in **Figure 12** as an expansion to the previous **Figure *11***.

Figure 12. Differentiating Statements of Processes
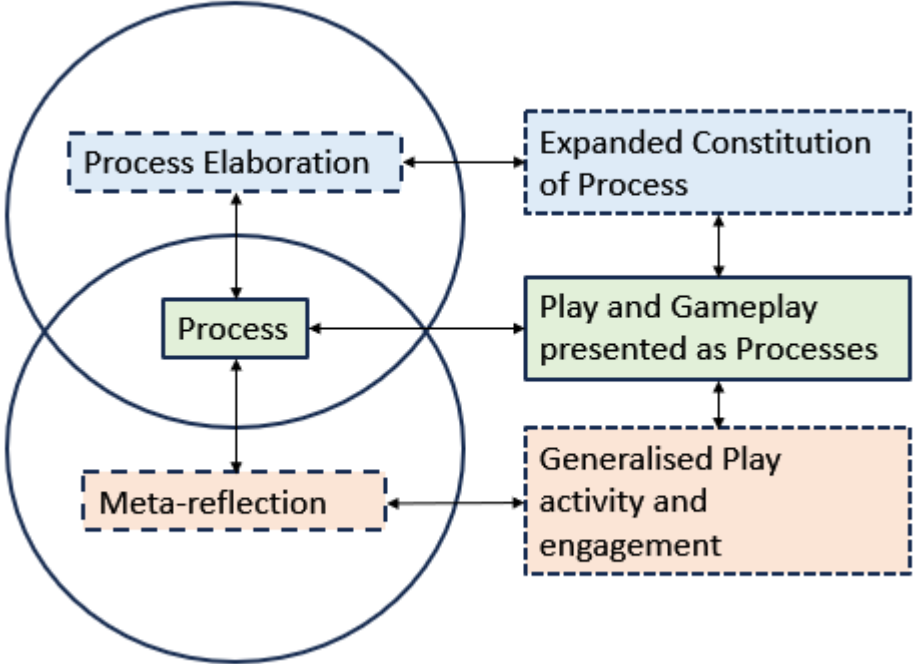
As is hopefully evident from the excerpt of Paul's interview transcription, Paul expresses many of his thoughts in sequences which indicate how his experience formed in his gameplay. That is, that his expressions and statements are directly connected to the re-embodied experience in viewing the short video segment. Yet some statements are more connected to the situation than others. The ones that were labelled Process were considered in connection to "Play and Gameplay presented as Processes" as can be seen in the above **Figure 12**.

In Emma's case as it was presented earlier in connection to **Figure 8.** A dilemma of choice', it is clear that her aversion to the Chantry (the religious institution in the game) is based on her own experiences earlier in the game and her relation to the companion Alistair who had also put the institution in a bad light. So, while Emma generally stays within the processes as they had happened, she elaborates on one of the options in saying "Also, from my conversations with Alistair, it sounds like he has had his own experiences with them, and he really does not like them." (Emma, interview). While this is in no doubt connected to Emma's view of the situation, it is also expressed as an elaboration to the process, and thereby an Expanded Constitution of the Process, where the process in itself was expressed in Emma saying: "And then I consider the Chantry because he needs someone to look after him, because I can't do that. I didn't want to send him there though." And Emma then adding: "I might have some prejudice against them" showing the emotion of aversion, more so than the consideration of prejudice as it was presented in Emma's way of talking about it. In referencing her conversations with Alistar (the companion NPC), Emma shows how the emotion or affect of aversion towards the "Chantry" was built through previous experience. Her statement thereby

adding a layer to the situation at hand and her formed and transformed view of the religious institution in the game.

Generalised Play activity and Engagement showed in the Meta-reflections in connection to Process (often leading to more generalised Play activity and play engagement elaborations): In contrast to statements rooted in the gameplay, yet no less important, these meta-reflective aspects will show as reflections on the process itself. This means that the participant ascribes certain values and causalities to the processes that are not in causal relation to the observed journey in the video material. These are statements, which are explanatory outside of the observed enactments in the gameworld. Looking at Paul's meta-reflective statements in the excerpt above, it is clear how they expand on the larger sequence of gameplay, indicate literacy with the interactions and systems/mechanics, and give forms of meaning as to what the player evaluates as meaningful and playful. The participant's recount and explanation of the process sequence of the experience can thereby also become a means to uncover extra-diegetic socio-cultural influences, or deeper identity structures important in the explanation of the visible processes (as will be evident in the next chapter with Tory's experience of nostalgia and belonging in a world of Disney characters). It is important to note that at no point did any of the participants state something which had no relation to what had happened in the gameplay video. If they mentioned something from another playthrough (for the group that had played the game(s) before, they explicitly said so, and also gameplay that they had enjoyed after I stopped viewing their video (which was around the time when we planned the interview).

The importance of this distinction was revealed in specific instances, where meta-reflective statements formed into para-reflective statements (a lacking connection to the gameplay and more focussed on the interview relation), which overtook the intent of exploring the original experience. The interview situation itself can become a disturbance which leads to self-reflection, leading to statements that explain actions beyond the scope of the original play experience. This can be fruitful, but it is also important that this is categorised as something else that functions outside of the play activity itself. Playing *Dragon Age: Origins* Amy (they/them) entered a romantic relationship with a companion NPC. This became problematic, as the companion's statements did not cohere with Amy's ethical codex. This led to interesting and complex processes in the situation, but also many meta-reflective and ultimately para-reflective statements. Simply put, romancing an assassin who on occasion accidentally kills children was a difficult premise for Amy, but one that they had to overcome on the basis of volition and desire. This led to a rather long explanation containing several arguments as to why this was agreeable (that is, not condemning the accidental murder of children), one such argument being about future motherhood and family. The transcription and video combined clearly indicated that the intent in the situation was simpler than what was expressed. Upon the differentiation analysis, it became clear that Amy's statements had little to do with the processes in the original experience, and more to do with explanations and justification of actions towards me as an interviewer, even if I never asked for such. The gameplay along with the interview situation had created a disjuncture (as explained in Chapter 2, a sensation of dissonance or disharmony), which led to statements about Amy's idea about their own future and self-perception, in this case rooted in a dilemma between ethics and desires. They knew that they

wanted to romance Zevran (the companion NPC), but apparently also felt something was not justified from the video alone. These statements helped in understanding Amy on a personal level but were ultimately not originally central to the play experience, and as such, disconnected from the actual processes of play in the original event. Explanations of meta-reflective character that are superfluous to the play processes were categorised separately and used accordingly as supplementary material if they turned out to be para-reflectional. It was never an intent on my part to put Amy on the spot for their choices in this dialogue, but as per the video analysis, this was a potential transformative situation that warranted further investigation. Amy did not seem to mind however and was generally very happy to talk about such situations that had been challenging for them.

Moving on from the Differentiation Analysis

In terms of the theories of internalisation and transformation, the question was how much of the articulation was based in process, and to what extent they could inform about learning processes. As it turned out, both I and the participants were dealing with both direct processes and the continuum of these, as results of previous transformations show themselves important in the processes within the situations of interest. Internalisation here became difficult to define in clarity, as the internalisation processes are naturally a running current of evaluation of different internal structures that are in relation to the game situation's proposition of actions and decisions. Easier are movements which are in direct connection to a system/mechanic, which begets more structured internalisation processes and evaluations, such as the one shown with Paul in the previous segment.

What could be defined from the differentiation analysis is that there are states of being which indicate the investment of the player's self within the play situation, and processes of becoming, which rest on the player's gameplay experience. As such, the next chapter explores and elaborates on this as a form of internalisation and transformation in play, focussing on the gameplay of each participant as they moved between being and becoming. The differentiation analysis thereby paved the way for a theorisation of these highly complex instances of play through the explication of what the data was showing. That is, that processes have a base and an actualisation. The base consists of the player's sense of self and identity in connection to the gameworld, where structures of self-perception and both previous and current self-reflective instances take form. The actualisation then insists on the incorporation of knowledge structures of the gameworld, the game form, and the self-conception into internal evaluations on the basis of the game's presentation of an impetus for action and the player's conception of consequence. I have formed my analysis and theorisation in the next chapters from these two overall themes in the differentiation analysis, allowing me to build on the larger scope of transformative and internalisation processes as the data presents nuances and possibilities for further structure. The final analysis as it is presented in the next chapter started with eclectic coding, as the empirical material at this point did not lend itself naturally to any particular coding method. It did however turn into descriptive and holistic coding, as the differences and nuances in the data were so intimately connected to each individual participant. From this point on, the analysis sought to incorporate the many facets of theory to describe and unfold the transformative processes, based

on these initial steps. Inspired by Castleberry and Nolen (2018), **Figure 13** is a thematic map showing how the data and several analyses fit together to form and inform the final analysis and theorisation.

Figure 13. Research Process Overview
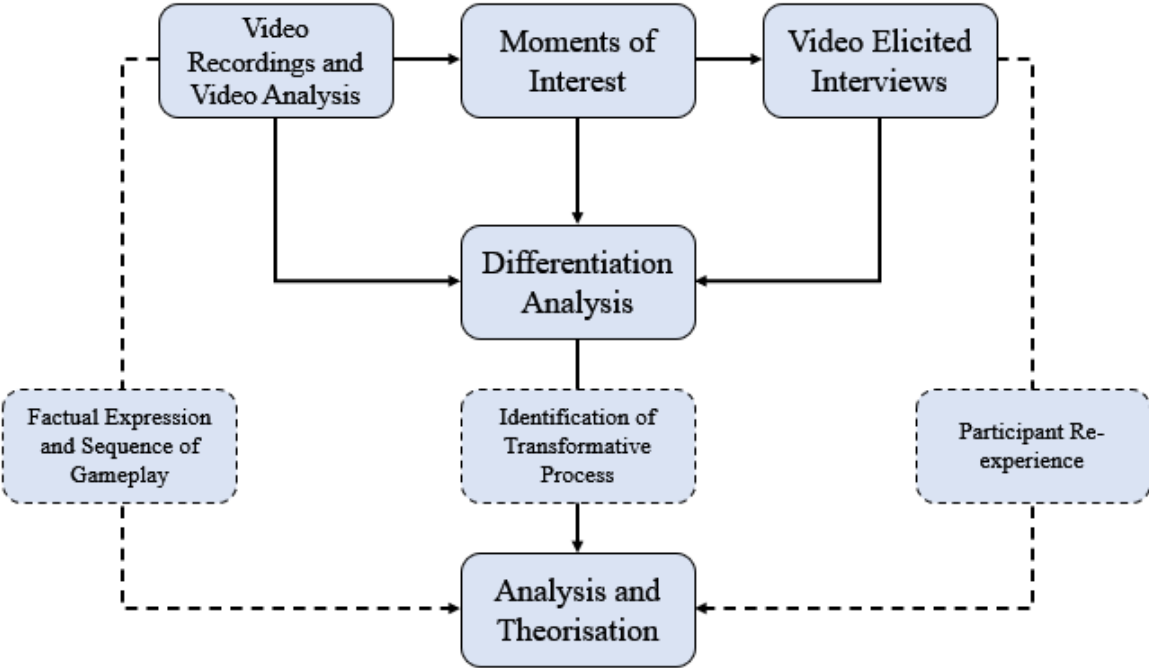
# Chapter 6. Internalisation and Transformation in Solitary Gameplay

As presented in Chapter 2, both the theory of Peter Jarvis and Knud Illeris (Illeris, 2017b; Jarvis, 2006) present comprehensive models of transformative learning (both of which I present in more detail in this chapter in connection to the data analysis). Following the Differentiation Analysis as it was presented in the previous chapter, it became clear that internalisation processes in gameplay offer complexities that necessarily add additional layers to these theories of transformative learning. The basis of play and playful engagements from the empirical perspective of players engaging in solitary play quite simply circumvent the logics of transformational learning on a theoretical level. Yet exactly the challenges of synthesising the theory with the empirical data pave the way to explain the complexities of play and digital games in a transformational learning perspective, as the original structures of these theories can be expanded and restructured towards the specific activity in question. In attempting to analyse and explain transformative processes in single-player play in relation to these theories, it therefore became apparent that a new model had to be attempted. This endeavour led to a novel and in-depth understanding of transformative processes in gameplay, rooted in a close analysis of the empirical data gathered within the several theoretical and methodological considerations in this project. Empirical data, which represents the everyday activities and practises of 12 individuals and their articulations of the processes they underwent in these in close relation to their original playful experiences (see chapter 5). The resulting model of transformation in play with single-player games hopefully sparks discussion amongst a wide variety of academic disciplines, areas, and fields via its focus on the processual nature of play in a transformational perspective. As a point of attention, this chapter of analysis, discussion, and theorisation highlights the constitutions of play as a transformational phenomenon made visible through the methodological lens of this research. This means that the chapter focuses on the research question and that the focus is guided by the methodological foundations from which the findings were made.

Before delving too far into the details of this chapter, I would like to reiterate the important distinction that learning processes and in particular transformative learning processes cannot be defined solely by results. As explained in Chapter 2, ascribing results of a playful activity as a conclusionary value in and of itself inevitably leads to functionalistic conclusions that obscure the value of both play and learning. And with both terms, those of play and learning, being diminished to structural value in coherence with paradigms often vastly outside of the terms of play and learning themselves. Conclusions may very well become misconstrued as universal truths and utilised as guidelines for further acceleration of an already saturated society of illness (physical and mental alike). This grim recap (inappropriate as it may be) situates my fears of what I may be contributing with this dissertation. But also serves as a documentation of what this dissertation, and this chapter, is about. Namely exploring the qualities of the important

activities and practises of play, which are not rooted in production of wealth, power, or other more established forms of capital (to touch on Bourdieu). Transformation can be for the better or worse for any individual and indeed for society as a whole, and single-player play should in this respect be considered and respected on its own merits and meaning.

With the above in mind, I present a very basic model of the general phenomenon of transformative learning processes in single-player gameplay with **Figure 14**. This model is very simple (and presumably logical), and in some regards gives a very preliminary answer to the initial research question in the form of a process overview. Circular as the model may be, there is a logic to it. The solitary play activity is based on transformation in the state of play rooted in learning, and play state is rooted in the potential and actuality of transformation. The sheer amount of irregularity within and between individual players' play (in this case my participants), means that a circular statement such as this gains traction in simplifying and explaining the phenomenon of transformation as a basic premise of functioning in solitary play. While I nuance the structures of the circular moment throughout this chapter, the premise of circular movement remains the same. That is, that transformations in play, when they happen, create a new basis from which further transformations take form. Conclusively, single-player games present worlds, and within these worlds, the self is allowed to transform through processes of substantial mental and bodily energy investment. Processes in which the self takes a playful form in a state of osmotic transformation between play with and within the gameworld, and the player's playful engagement represented as their personal self.

Figure 14. Simplified Structure of Transformative Processes in Play
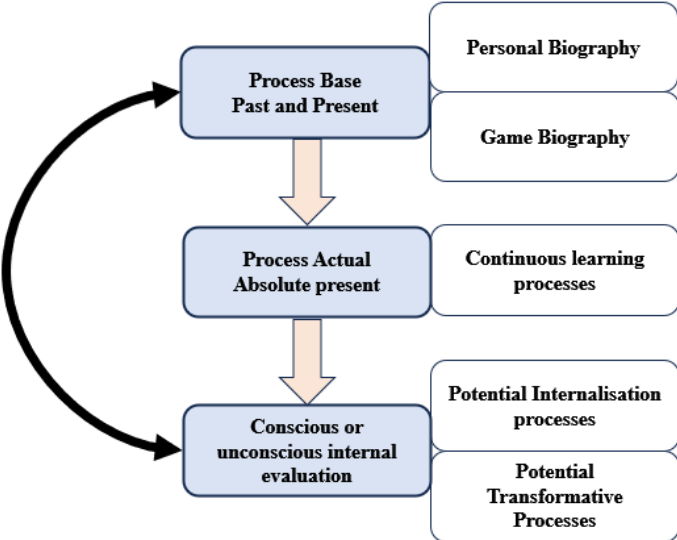
This simple model is what I expand on during this chapter, adding the qualitative experiences and statements of the participants to form a more comprehensive theory for processual play and transformation, which results in a more informative model. I structure the expansion of this based on the two overarching process themes. That is, firstly Existential Learning and Transformations in Gameplay (representing the Process Base in the above figure) examining the complex nature of the intersection between the biography of the self and the biography emerging through gameplay. The conclusion from this part is that there is a playful self that intersects the player and the game, which functions as the state of being and becoming in the playful experience. From here I delve into Structures of Transformative Processes in Gameplay (representing Process Actual and below in the above figure), showing how the immediate processes form in relation to the playful self as a form of self-perception as the structures of transformational learning are revealed. The entirety of the transformative experience I present with a final model (**Figure *29***, page 183), which explicates how internal evaluations form into decisions and actions, expressing both the player's internal functioning and their actions as a specific form of sociality afforded by the activity itself. In relation to this I present the osmotic relationships of the playful self as a site of transformation and present two observable cases where the playful self could not transform along with the gameworld, drawing on examples that nuance the transformative potential of single-player gameplay.

Examples that I utilise will most often touch on both of the overarching process categories of the model presented in **Figure 14**, as the model is a diffusion of a singular phenomenon. It is quite simply not feasible to present singular cases pertaining to past, present, and future states without incorporating aspects of all of them when working with a circular basis model. But I attempt to keep the lines between them as separated as possible in the theorisation for the sake of clarity, while incorporating axiomatical findings in terms of the structure of transformation at hand. As Coulton and Hook argue (in referencing Ian Bogost (2009) and John Law (2007)), games in the way that they are designed and the way that they are used will lead to research that is messy, but that it is important to embrace this mess to make nuanced and descriptive research that represents the many facets of games and play (Coulton & Hook, 2017). With this point of making sense within mess, some of the examples I utilise may seem quite unusual in terms of what is otherwise presented in games research. The reason for these examples lies in the nature of the research, looking at moments of significance for individual empirical players. The data and the resulting examples I bring in this analysis are based on habitual play with visible moments of interest based on the participants' movements and actions. Focussing on processes in this setting means that seemingly mundane instances of gameplay gain significance, which must be respected in terms of the origin of the data as representative of habitual play practises. And this is where it may become messy, as processes and statements span many hours of gameplay in connection to the individual participant's experiences. Conscious and unconscious experiences are not always coherent as expressed, and as such become articulations of experiences on a large and highly individual basis. With this in mind, the initial step in understanding play as transformative in solitary gameplay must rely on the existential sensation of being and becoming in the present, meaning the basis from which the process emerges, and the new reality that the process constitutes.

Existential Learning and Transformation in Gameplay

To paraphrase Jack Mezirow, human experience and transformation with objects, in human relations, or "simply" in the state of being is more complicated than deposits of interpretation and points of view (2003). For Mezirow, learning and transformation rests on "meaning perspectives" which in turn guide the way that experiences are interpreted towards transformation (1991). Peter Jarvis expands this view into a central point of "disjuncture" (2006), which expands the view of transformation in relying less on cognitive structures and collectives of meaning-making, which was otherwise the main focus of Mezirow's theory. According to Jarvis, it is an experienced disharmony or dissonance, conscious or unconscious, that leads to disjuncture, which then requires learning to overcome in the pursuit of stability. In this disjuncture also lies the motivating factor for mobilising own life-world experiences into new frames of interpretation. Learning, and especially transformation must therefore rest on the person's sense of self, as Jarvis states: "We cannot have another person's experiences. Experience is always subjective and, therefore, so must be our learning" (Jarvis, 2006, p. 85). In this project, this sentiment was abundantly clear with the five participants (Dan, Amy, Emma, Sara, and Tim) all playing the same game of *Dragon Age: Origins* (BioWare, 2009). There was not a single situation of interest that was the same across the five participants, and they presented vastly different foci in their recounts of these situations. Each situation presented components of understanding and feeling that were unique to the individual participant, with only this analysis identifying processual components of comparable thematic connection. In this sense, learning and transformation in interaction with digital games rests on more than the game structures themselves. Likewise, the efficacy of this play-based learning and transformation is not measurable in learning results or predictable outcomes as that would lead the research into nullifying the very essence of the learning experience itself. The essence of transformation, according to Jarvis (2006), being that of an existential backdrop of lifeworlds and lived-worlds (biographies), which are central to the individual's interpretation of the experience, if not the very presence and awareness of it. As such, the intermittent factors between experience and result are of interest as expression of transformational processes, but the biography of the individual and how this is expressed and mobilised in play is of equal importance.

Jarvis presents two models to explain these transformational processes. The first is that of "The transformation of sensations: initial and non-reflective learning" (Jarvis, 2006, p. 20) which shows the unconscious (or inherently non-reflective) transformation through experiences. That is, that the person takes the lifeworld for granted but then has a sensation or disjuncture. The person then gives meaning to this sensation or resolves it, and practises this resolution, leading to a new lifeworld that is once again taken for granted. In much gameplay, this non-reflective transformation must be considered to happen continuously. That is, from basic controls to more or less simple additions to the understanding of the gameworld, these processes must transpire in a sequential form for the game to make sense, and for the player to

meaningfully interact with it. Jarvis' more extensive model of transformation, "The Transformation of the person through learning" (Jarvis, 2006, p. 23), presents a more elaborate figuration of how reflective transformation should transpire. In addition to the previous model, the person has to take a reflective stance on the social construction of the episode that creates a disjuncture. In this, structures of thought, emotion, and action go together with the person "in the world (body/mind/self)" (Jarvis, 2006, p. 23) as changed and more experienced on the basis of memory of this event. A new lifeworld, as Jarvis poses, is constructed from this, indicating that the transformative process of experiences relegated to biography changes the person in relation to the world around them.

While general, Jarvis's models do not consistently conform with the processes that were identifiable in this project. Namely, the combination of a gameworld and a player's lifeworld presents complications that would require extensive mental gymnastics to make fit in terms of the beginning and end of each of Jarvis' temporal models. Worldness in itself is an experienced reality where the constituting factors offer other complexities than lifeworld events due to the interactive qualities of gameplay and play. Yet from these models and the theory, central existential components of transformation in play can be drawn in combination with the participant's experiences. For reference, a simplified analysis could state that the play experience is a part of the person's lifeworld, yet that would reduce the empirical material and the participants' experiences to a state in which it would be reminiscent of a mundane everyday activity, such as grocery shopping or going to the gym with or without disjunctures along the way. That is not the case in terms of play with single-player games, which is why expanded models of transformation within this particular activity are needed.

Jarvis (2006) states (as is somewhat evident from his models) that an individual is always 'being' something, while at the same time always 'becoming' something as well. As Jarvis points out, this movement is based on disjuncture between the person's biography and the perceived world. These disjunctions lead to a constant stream of experiences that make up who a person is, how they act, and ultimately how they learn. In this, Jarvis points to the centrality of identity, as learning is a continuous construction of the individual's biography and thereby transformation. It is this process that the research design and methods captured in most instances, as the participants were 'being' in the state of play, while at the same time 'becoming' something in the same moment. In this way, and has been argued previously, the gameworld and the sense of worldness constitute a simultaneous structure that the player is functioning within. Incidentally then, Jarvis's models no longer capture the full picture of learning or transformation through play in a comprehensive manner, and as such need reforms in order to accommodate this particular state of being. For now, **Figure 15** represents a simple process model, wherein the structures of being and becoming are loosely connected to lifeworld and gameworld as they intersect.

Figure 15. Simplified state transition through processes

State 1 ⟹	Process ⟹	State 2
Lifeworld	**Disjunction**	New Lifeworld
Being	**Becoming**	Being
Gameworld	**Playing**	New Gameworld

Lifeworld, Gameworld, and Biographies

A risk, as is also present with Jarvis's theory, is that all experiences become transformational. Exemplifying, yet also explicitly complicating the application of Jarvis' theory, Tory (she/her) presented a highly complex and lengthy transformational process (which was also presented in the video analysis in the previous Chapter). One that was based mainly on her own terms, and not forced by the game specifically. As mentioned before, Tory did not stream all of her play with *Disney Dreamlight Valley* (Gameloft Montreal, 2023). She only started streaming her play with this game after a seminal moment, which was sadly not recorded. As Tory explained, she did not expect that she would like the game as it resembled Animal Crossing (Nintendo EPD, 2020) and Stardew Valley (ConcernedApe, 2016). Both these games she had tried to play, but never really got into. This game had been proposed to Tory by a friend, yet she expected it to feel the same as the two other games due to the likeness of many of the game systems. In creating her character in *Disney Dreamlight Valley*, she therefore started out with just having fun with the visual appearance of the character instead of investing her own sense of self. As Tory said, and in reference to her player character's appearance now resembling her own features:

> I started out with a character where I just used whatever hairstyle that was there, and I played around with whatever was available […] In the beginning she had blue and pink hair I think, and I started out by thinking: it is just a character that I can make to look nice or fun. (Tory, Interview)

As Tory explains here, there was a sort of disconnection between her playful engagement and her adoption of the game. This would change however, as she explained as I presented her with a situation where she hesitated to change her current outfit (a white dress) to a new one (a dark blue dress) which she had just bought in the game (with in-game currency). The new dress was very costly. Now Tory had previously changed costumes, such as wearing a chef's outfit when engaging with the cooking minigame within the game, putting on a jacket, or switching to a light blue dress when night came in the game. What made me interested in the situation was, that after buying the new dress Tory left the shop and then started gathering a few resources in

a somewhat arbitrary manner for about 30 seconds, before suddenly deciding to change the outfit. For reference on the visual situation, Figure 16 shows the two dresses in the changing situation. I asked her what happened in this 30 second timespan leading into the dress change situation, to which she revealed the transformation she had undergone previously in her play resulting in a reluctance to change. The interview was in Danish, and the "inner child" that Tory speaks of is a translation from the Danish word "Barnehjerte" [child-heart], which is usually more concerned with positive emotions, childlike wonderment, and innocence.

> (Tory laughs) It is the insecurity of my inner child. The white dress was from Beauty and the Beast, just in a white version. It was the very first. It was the dress that made me surrender my heart. I don't normally wear dresses. I'm not a dress person. But my inner child can still do it. It loves princess dresses, and that is just the way it is! The white dress was when I surrendered to being my inner child in the game. So on my little run here, I have simply been thinking: Hmm, should I wear a new one? Nahh… yeah. Ok, I just need to see it on. Yes, I 100% had a little discussion in my head if I wanted to change to the new dress in favour of the white one, which I love very much. (Tory, interview)

Figure 16. *Disney Dreamlight Valley*. Side by side images of dress change. Tory.

Source: Tory's gameplay. Playing *Disney Dreamlight Vally*

Note: While it is not possible to state how many hours Tory had played up until this point due to missing video data, it is at the very least after 7 hours of game time. The two screenshots are taken roughly 3 seconds apart, starting with the white dress and changing to the dark blue.

What Tory explicated here was a transitional event which ultimately stands as a testament to an emotional mobilisation, rooted in what can best be described as a biographical reference. She surrendered to "being" her inner child in letting herself feel connected to the representation of her virtual character, which in turn became her virtual self. The biographical reference allowed for affection and emotion to re-emerge as lived and embodied experience. Yet this biographical reference is only mobilised in a transformational process due to the trigger of a specific emotion that emerged in play. The particular process is thereby connected to sensations of a conglomerate of experiences of both biographical events, and specific game-based events. These game-based events constitute a different kind of biography of experiences, which are importantly not merely nostalgic in nature, but re-embodied through time and space into the gameworld that affords fantasies lived through novel perception. In the alterity relation, a game biography is allowed to emerge which substantiates and influences transformative processes. In this situation of gaining the new dress, Tory is faced with a transformation that is based on her own curiosity and aesthetic involvement. The game does not force her to evaluate her playful engagement, and by all accounts, the game was never meant to entice this process. The dark blue dress was from Disney's Frozen franchise, thereby probably exclusive and expensive as a form of enticement to play "more" and "further" as many games do. But this was not Tory's focus. Quite the opposite, she expressed that she was not particularly interested in Frozen characters or "merchandise". She had seen the dress 30 minutes before buying it. I showed her this short situation of her looking at it for 2 seconds, which she did not remember specifically. That is until I showed her when she had bought it. Seeing her purchase, Tory explained her fascination with the new dress. How it was different than what she had initially seen at first, how it was pretty and formed in a way she liked, and how she just had to have it in that very moment.

This freedom of deciding for herself led Tory into a transformational moment based on her own desires and emotions, along with the freedoms and constraints that the game affords. She transformed in her own challenge of her alterity relation with the game, based on a deeply rooted emotion of personal belonging. That is, that a previous internalisation process had given a seminal meaning and relation to a specific representation in the game, which she now had to nuance through a transformative process. The process happens as a form of resistance to transform her connection to the gameworld, and as such, she activated her own personal identity as a reflection of her biography within the gameworld. It is not about a disjuncture as presented by an outside world, but as an internally created and substantiated disjuncture based on the affordance of the interactive gameworld that combines experience through multiple lifeworlds existing at the same time. All within the timespan of 30 seconds. With this example, the process base can be expanded with some of the constructs of Tory's experience. That is, that there is a lifeworld self (a past and present self that is unique to the person) and an experience of this lifeworld self through the gameworld. In this intersection of the person and the game, a reflection of the lifeworld becomes a reality, and self-perception emerges as interrelations of

the personal biography and the game biography are put in motion. **Figure 17** represents these connections.

Figure 17. Process Base

Process Base Past and Present	
Lifeworld **Personal Biography**	Lifeworld Self
Intersection	Self-perception through a Reflected self
Game Biography **Gameworld**	Experienced sense of self through gameworld

With Tory playing *Disney Dreamlight Valley*, her sense of worldness is tied to the familiar and recognisable setting of the gameworld. The narrative is quite simple, in that the player enters the world and needs to restore it, so that the many characters of the Disney universe can live and thrive there. This involves a main questline unlocking new areas in the game and new characters, and a host of side quests, mainly designed around the player gaining increasingly strong relationships with the individual characters (visualised as the individual figures (e.g. Merlin or Donald Duck) level up and give the player better skills in certain aspects of the game). In this gameworld, Tory thrives as her playful engagement lets her enjoy the setting through the sense of worldness that she experiences.

For Paul (he/him) playing *Planescape: Torment* (Beamdog, 2017), the entry into the game and how his sense of worldness formed was quite different. What Paul's example will show, is that there is a playful identity connected to the game biography, which further informs the intersection of biographies towards self-perception. The game is connected to the *Dungeons and Dragons* setting, uses this familiar ruleset for game mechanics, and takes place mostly in a large city that connects different planes (or worlds rather) ruled by a powerful being called "The Lady of Pain". The player is given the playable figure, "The Nameless One", who is an immortal man, yet when he does die, he loses all memories of his previous existence. The player moves forward in the story, which largely connects to figuring out who this nameless one that you play as actually is. Suffice it to say, that the gameworld is quite well connected to the title of torment, in that the world is dark, violent, and with many ill-fated entities. Showing Paul a situation early in his gameplay where he very obviously chooses to be aggressive, he revealed how he was struggling with finding his way of engaging with the gameworld. His aggressive answer means that he ends up killing two NPCs, who are otherwise beneficial to have around in the game. Below is our conversation from this situation in a highly compressed manner, as the original transcript of this is just above 1.5 pages. Note that Paul himself introduced the concept of "good" and "evil", and "good guy" and "bad guy".

Mike: Right here, with the options you had, do you remember what went through your head in that moment?

Paul: I was thinking if I should try to be the evil guy and just threaten them and see what happens. So, I was like; should I or shouldn't I. And so, this was one of them where it goes kind of wrong (laughs). […]

Mike: You say this thing, that you considered being the evil guy?

Paul: Yeah, it's because when I play RPGs, I primarily always play the good guy. With charisma scores and these games having a reputation system, you often just get through them easier and get more options when you are playing the friendly or good kind. This is where this game has been a little more ambiguous on the subject actually. You get a lot of options of being the bad guy, even when you are solving people's problems. […] Where in many other games, then you are just the good guy when you do that. I thought that was pretty nice.

Mike: What made you make these shifts between good guy and bad guy?

Paul: […] If I had plans about playing the game again right after I finished it, then I would choose to dedicate myself to evil here. And then the next time, then I would be good. But personality wise, I'm just more into doing something good for people, so that's what my playstyle also steers toward.

What Paul shows here, is that the intersection between biographies is not a given state from the very moment play with a new game starts. The gameworld can present the player with ambiguity about what is right and wrong in the particular setting, leading the player into a state of conflicting emotions that ultimately becomes an expression of self-perception. A self-perception that is vital in the building sense of worldness and belonging, and which becomes challenged by missing information about how the gameworld reacts to the player's input.

40 minutes later in his gameplay, Paul meets a bar patron named "Awaiting Death". The in-game conversation along with Paul's choices are visible in **Figure 18**. As a note of attention, the situation is quite violent.

Figure 18. *Planescape: Torment*. To kill "Awaiting Death". Paul.
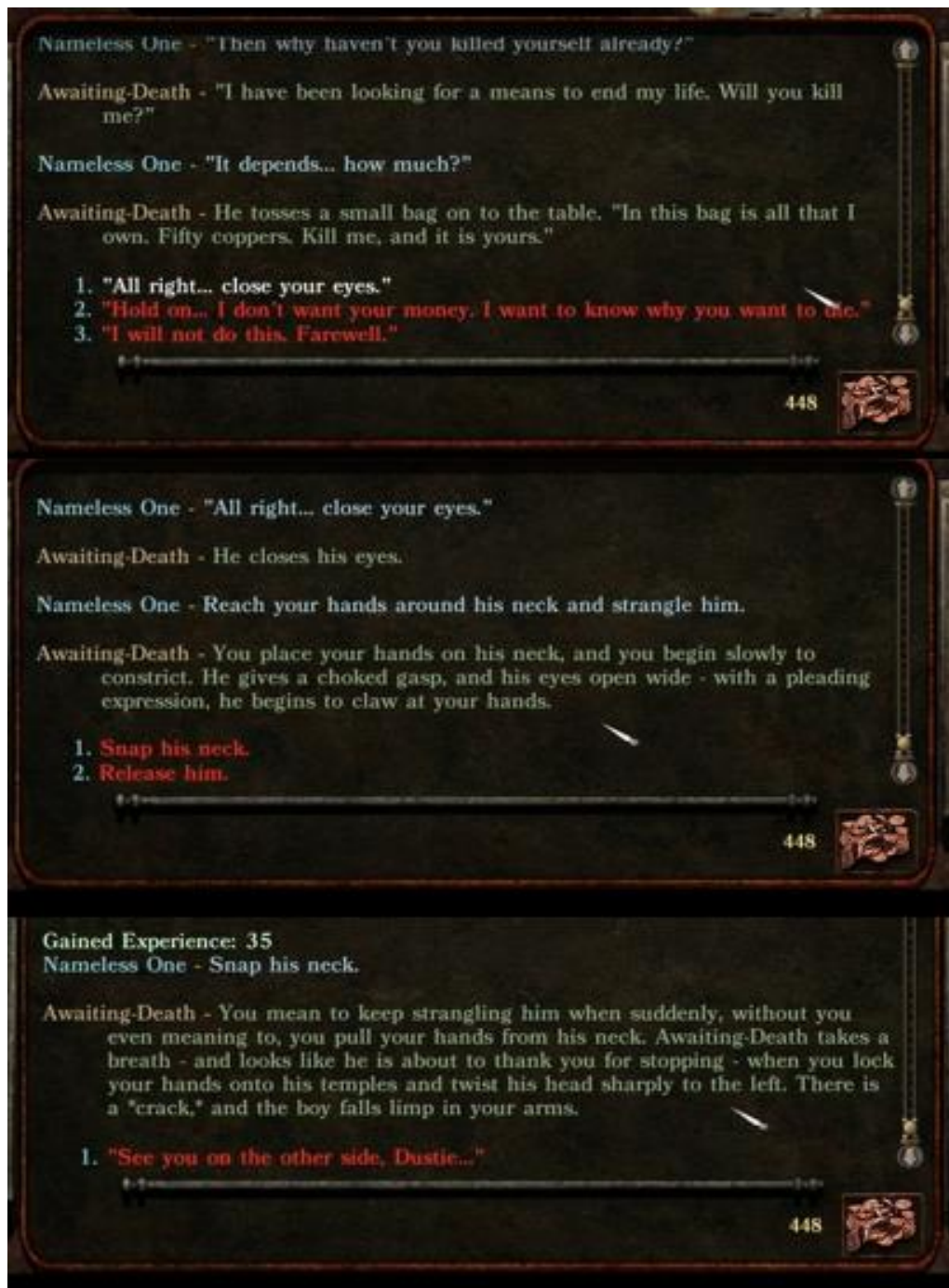
In this situation from Paul's gameplay, he ends up killing the NPC as is probably visible in the figure. Paul did this, because he thought he was doing Awaiting Death a favour on the basis of the gameworld presentation (so far), and the NPC's presentation of his own life as miserable, horrible, and only in death could it be better. The middle choice is where Paul visibly had

doubts, but as he expressed in the interview, he had already made the choice to do a mercy-killing and had already put his hand on the NPCs neck. Paul here solidified his decision of mercy-killing by also imagining that Awaiting Death would turn on him if he let go, making all the other NPCs hostile. But killing Awaiting Death is not exactly the right choice, as the entire room/bar becomes hostile towards the player in this scenario. The ensuing encounter can be won but is very difficult and will likely also hamper the rest of the playthrough by removing quest NPCs (as far as Paul and I were aware). Letting Awaiting Death live will yield a bigger reward, and also not turn to hostility, as Paul also became aware as he reloaded and re-did the dialogue situation. Paul could not quite place this situation in terms of his play as being a good guy or being a bad guy, indicating how he was still creating a sense of the gameworld and his place within it:

> Well, it is a mercy-killing, if you can say it like that, in a kind of extreme degree. I wouldn't say it is directly good guy or bad guy this one. But you still kill a random dude, so it is probably not a completely good-guy situation. (Paul, Interview)

In en-roling into the playful experience as explained by Vella and Gualeni (2019), the player must be subject to the inter-relational challenges and consistencies that the gameworld provides. At the same time, the player also needs to be both ready and receptible to the learnings of new narrational forms of being. Tory's reluctance to change was based on a resistance to emotional inconsistency. A love for the representational codes that the white dress encouraged, in contrast to the unknown sensation of the new dark blue one. Everything in the changing dress situation was reversible, except for Tory's potential transformation towards a lessened sensation of connection to the gameworld. In this sense, both disjunctions and playful transformations must exist in a parallel trajectory of experience within the embodied ludic subject position. Likewise, Paul's experience shows a same connection, yet with a different emphasis in terms of what constitutes his decision to strangle and then later "snap the neck" of the bar patron. In Paul's case, it is a matter of living and experiencing the gameworld, with conjecture mainly to the right and wrongs of his own lifeworld challenged by the gameworld setting as it presents him with ambiguity. There is in both these participants' instances of a self that is rooted both in the lifeworld of the individual, and a self that is related to the gameworld in the transformational processes that unfold through play. Yet as argued, these two "selves" are not separable as they are based on a conglomeration of biographic references in states of being and the processes of becoming. The intersection is thereby the main base from which the non-trivial engagement and transformation in relation to the game functions, which the experienced sense of self through the gameworld forms into a playful self. A playful self that is reflected by structures of personal identity and a gameplay identity that must be either built or adopted via the gameworld representations. Visualised here in **Figure 19**.

Figure 19. Process Base expanded

Process Base Past and Present	
Lifeworld **Personal Biography** **Personal Identity**	Lifeworld Self
Playful Self in the intersection of Self and Self-perception in Play	Self-perception through a Reflected self
Playful Identity **Game Biography** **Gameworld**	Experienced sense of Self through gameworld

The Playful Self

Showing how these intersections of personal and playful identity are merged into a playful self, Sara, Emma, Amy, and Matt exemplified how these structures generally start as mutually informing to the alterity relation, and then become merged in play (with *Dragon Age: Origins* and *Baldur's Gate* respectively). All four stated quite clearly how they conceived their character's qualities in relation to their self-perception. Sara (she/her) stating how she felt there should be a certain logical or rational quality to the character, with Emma (she/her) imagining the character to be a little more isolated and judging than herself. Likewise, Matt (he/him) thought of his character as more "to the point" than himself, and finally, Amy(they/them) was mostly concerned with what their character knew and didn't know, when making certain decisions about moving forward in the narrative. Fran (she/her) was a special case in terms of playful and personal identities, as she re-played a game she knew very well (*The Elder Scrolls V: Skyrim* (Bethesda Game Studios, 2011)). I elaborate later on Fran's overall experience due to the complexities of her playful self in a re-play situation.

An important aspect of the playful identity is however that it is not a socioculturally defined aspect of the person that is a player. The playful identity is that of an investment of the gameworld realities into the playful self. What that means is that it is the player's adaptation of representational structures within the game, such as gender and race, and how this affects how the gameworld reacts to the player's character or figure. As Deen et al. argue, a playful identity does not necessarily rely on consistency and conformity to the player's values (2015). Rather, it is dependant, as I pose it here, on the experiences in the gameplay, which poses certain identity structures that the player can adopt into the playful self as a means of perception of the gameworld reality in connection to their personal identity. What this means is that a person, by themselves or by others can be identified as playful, which is then a personal identity trait. But the playful identity which I refer to is a structure in itself within a gameplay situation, and is thereby not a direct part of the personal identity that functions outside of the actual gameplay with the specific game.

What the four participants (Sara, Emma, Amy, and Matt) showed, is that there is a playful self that functions as a baseline for the immediate engagement with the gameworld. A playful self that could probably be well described by each individual participant as generic statements of how they engage and identify with playable characters in games, had that been a specific focus of the interviews. More importantly in terms of transformational processes, the intersection showing as a formation of the playful self in the alterity relation could be found in multiple instances in the research data. That is, as instances of a personal identity, and a playful identity as formed by the gameworld as an identity structure natural to the gameplay.

Showing this initial formation, Sara chose to play the "Dalish Elf" storyline in *Dragon Age: Origins* (as both Sara and Amy did). After reading the history of the Dalish Elves in the character creation process, Sara is immediately put into a dialogue situation after having finished the character creation process. In this situation, the player is given the choice to kill or release two humans who have trespassed into your territory. When faced with this choice, Sara had paused, to which her internal evaluation was:

> I was sitting there and thinking what kind of character I wanted to be in the game. If this choice was to be something that I wanted to do, or… You know sometimes you decide your character, that you might want to be evil or vindictive or something. And here it was like; no, I want to do this like *I* want to do this. (Sara, Interview)

What Sara shows here is the initial stages of finding the intersection between her sense of self and how this is to be activated into the gameworld. She is not questioning the rather violent introduction to the game and her character, but adopting the situation into the initial formation of the playful self through the intersection of a new playful identity and her personal identity. As Sara did not play all that far in the storyline, most of the situations I showed her turned out to be centred on this phenomenon. In a situation approximately 5 hours later in her gameplay (the last situation identified in the video analysis) Sara summarises how she has been undergoing this iteration of self-perception as a playful self:

> I have experienced before that when you have the option to make the evil choice, then I really don't want to do it. And here, in terms of consequences, I thought that I could also just try to play such an evil character, because I have never tried that before. But then I agreed with myself; that I don't think I would find it quite as fun. I don't think I would be able to feel the same connection to the character and the game when I'm playing. Because then you can't quite imagine that it is yourself that you put into the role. So, I felt like it had to be like as if I myself was in that fantasy-world. That it was something that I could imagine me doing, because then I feel more invested in it. (Sara, Interview)

Solidifying here that her sense of worldness is based on a form of self-perception, Sara's example shows how the alterity relation is built by intersections of identity and belonging. She had previously stated how the character she imagined had a logical emotional thinking like she herself has, and how this became a basis for the choices she made in the game. A form of thinking that she was often challenged in, where each challenge further honed her way of

engaging herself into the gameworld. The playful self that Sara established was that of a personal one, where the potential for disjuncture was often present, but handled in a manner that generally adhered to her personal identity on an emotional level. Disjuncture in this sense does not have to be lived out in order to create a basis for transformative processes, as play is not only about the factual sequence of events, but also about the imagined and possible disjunctions. Disjunctions that, when avoided, solidify the alterity relation on the basis of an increased connection to self-perception.

Adam (he/him) did pre-invest connections of self in his character, but combined with missing data from the very first moments of this character creation process, his manner of identification was so connected to transmedial influence (the Star Wars franchise) that it only became apparent through the later transformative processes in his gameplay (see Recalling Experiences versus Re-embodied Experiences in chapter 5 for an example of Adam's playful identity and personal identity at odds). Parker and Paul (in his second entry into the project playing *StarCraft 2*) played games with predefined playable characters, and as such were barred from immediate conception of what they would invest in the character from the beginning. Playing and controlling 2B in *Nier: Automata*, Parker's (he/him) playful self in situations of gameplay showed interesting dualities between his personal identity and his translation of the predefined character into a playful identity. I reserve these moments for later, as they need further granular understanding in order to fully make sense as a combined playful self in the experience of play.

Contrary to this, Dan, Tim, Josh, Tory, and Paul (first entry) never engaged that much in initial conception of the player character in terms of their own identity in the character creation process. As was presented with Tory earlier, the formation of a playful self that she was invested in only happened later in the gameplay, when her personal biography was sufficiently activated. Dan (he/him) chose to be a Dwarf Rogue in *Dragon Age: Origins*, because he thought being small would help in being sneaky and stealthy. As such, Dan could be said to have primarily activated a playful identity before a personal identity in the formation of his playful self, based on his preconception of the player figure's abilities in the gameworld. While the examples could go on, the importance lies in the building of a sense of worldness as a prerequisite for the playful identity as it encapsulates the gameworld's representation of the playable figure, and how this figure is in turn reacted towards by gameworld entities. The playful identity is thereby the game's basis for a sociocultural construct, that lets the player identify with aspects of the gameworld itself. Being an elf in *Dragon Age: Origins* means that NPCs think you a lesser being than humans, being the protagonist in *Disney Dreamlight Valley* means that Disney characters look to you for help, and being The Nameless One in *Planescape: Torment* means that the gameworld presents you with ambiguous choices in an inherently dark and death centred world. At the centre of these perceptions and transformative engagements lies the playful self, and how it relates to these structures and continuous constructions of worlds, biographies, and identities both established and emerging in gameplay.

What stands clear is that the interrelation between player and game is a foundational factor in the understanding of transformations in play, as it represents the player's states of 'being and becoming' through playful experiences. Tory's example, which I started out with in

this segment, is a testament to the multifaceted and component rich internal evaluation leading into a transformative process. Paul's example with "Awaiting Death" shows the same, yet one in which the components of experience are centred more on the gameworld, and less so on personal biographical reference. In Paul's example, the gameworld is explored on the basis of his understanding of it, and the logics of his interpretation in the moment stand as testament to his own situational understanding of the game environment. His meaning making processes creating his sense of self in the game up until this point have created a space in which lifeworld and gameworld are reflective of each other in the processes of play, rather than completely complementary. What this shows is that the playful self in the alterity relation (i.e. the intersection) is composed by self-perception through a reflected self. This reflective self is available on the basis of the interrelational qualities of gameworld and lifeworld, formed and given valuation and prominence through personal- and game biographies. The alterity relation is built then by the merging of the personal identity and the gameplay identity into self-perception in play, meaning that these are the structures closest to the playful engagement as it is lived out as an instance of a playful self. A part of the final model is then revealed in **Figure 20** as the structures of both being and becoming something (transformation) in gameplay can be visualised in connection to the state of being within the alterity relation as a playful self.

Figure 20. The Playful Self as Transformational Focal Point.
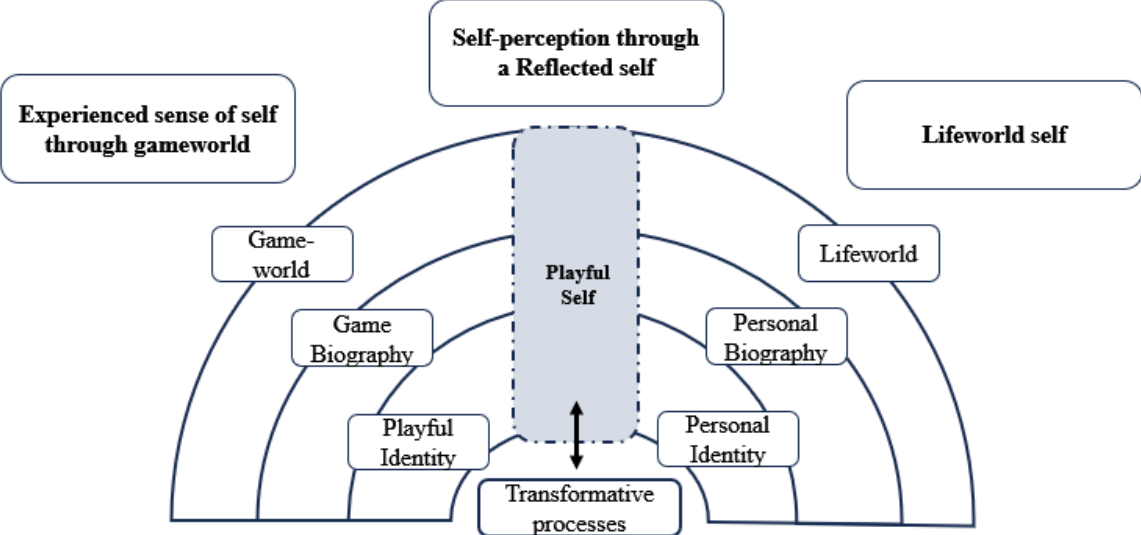
The playful self is about the intersection of personal identity as a lived concept and a playful identity as an emerging concept in connection to specific gameplay. In the playful self, both are reflected as a unified instance, drawing on personal and game biographies and conceptions of gameworld and lifeworld. The playful self is therefore not an instance that can be predefined as

an identity structure, as it is not a stable instance that can be predetermined without the actuality of experiences. It cannot be seen outside of specific experiences and processes, as it represents a possibility space that goes beyond the immediate affordances of the game and incorporates personal structures that go beyond what is offered as a baseline of interaction. While I have already touched upon its subjects in several ways in presenting situations from the participants' play, the next segment highlights the Structures of Transformative Processes in Gameplay. In this, I will be exploring the intersective movements as an internalisation of continuous learning processes concerning the player's sensitivity towards self and gameworld. From this point, I will move on to the player's basis of functionality in the activity of play, and then finally how these form into enactments of sociality. These next segments delve quite deep into the structures of Illeris' learning theory in order to understand the finer details of transformative processes. As such, there is some theory exposition needed for internal evaluations towards transforming the playful self.

Structures of Transformative Processes in Gameplay

In play with a single-player digital game the process of 'being and becoming' as a transformational process shows itself to be highly complex due to the emergence and experience of the alterity relation. This form of gameplay and transformation therefore necessitates further structures that incorporate the multiplicity of embodied play. The personal biography, the game biography, and the experiences that comprise them into a situated self means that playing single-player games is as much an opportunity for complex and transformational learning processes as any other activity. As Jos de Mul presents in terms of Narrative and Ludic Identity, the logical identity (physical and psychological coherence), anthropological identity (temporal and spatial awareness), and reflective identity (integration of the former two into the sociocultural context) all play a part in the reflective interaction with and within digital games (de Mul, 2015). In transformations in empirical gameplay, the logical identity must be seen as expanded in terms of the embodied telepresence in the play activity (see Klevjer, 2012). This means that both body and mind are present in the experience of play, and that the alterity relation consists of both the otherness of the situation, and the coherence of our entire being in a situational, but absolute presence. Based on this expanded presence, the conjecture would be that the anthropological identity and the reflective identity must also be activated in the actuality of transformative processes in gameplay. Yet this begs the question of what the processes of transformation in the actuality of the process itself are comprised of. In the actuality of transformation, where do the creative and spontaneous elements of play reside in terms of creating new formations of self-perception? And equally important, must these self-perceptions be consciously reflective in action?

To begin with, I turn to Illeris' transformative learning theory (2017a) to understand the incentive dimension of learning. For reference, the other two dimensions are those of content (that which is to be learned) and interaction (with the environment in which learning takes place based on incentive and content). Illeris presents these structures in a learning triangle (see

Illeris, 2017a, p. 27) showing how Content and Incentive function as internal evaluations, which through interaction as internally understood by the individual lead to said actual interaction with the environment leading to sociality. Functionality, Sensitivity, and Sociality are overall structures of self and self-perception that are activated, and changed, in learning processes, as argued by Illeris (Illeris, 2017a).

Sensitivity and Play

Within the incentive dimension of learning processes lie key terms such as *motivation*, *emotion,* and *volition*. Illeris describes these terms as different modes of mental energy invested by the individual towards the learning process. The connection to the content dimension lies in the interplay between the two as an internal dialogue in the sense that the content that is internalized is highly influenced by the state of incentive and thereby the amount of mental energy invested. Within this dimension, the learner will mobilise mental energy towards a *mental and bodily balance* in which an emotional equilibrium is the preferred state (Illeris, 2017a)*.*

As Illeris states, the learner's *sensitivity* towards his or her own emotional state and the surrounding context is based on the state and development of the incentive dimension, where the avoidance, motivation, or emotional engagement serve as defining factors toward the internalisation process (Illeris, 2017a). What this means is that the learner not only engages in a learning process towards the content with an incentive to do so, but also engages the context within which the process takes place with an incentive based on the self in the form of sensitivity. That emotional activation is a central part of both the sense of worldness and playful engagement with a game is well established (see Lankoski, 2012; Mortensen, 2018). Nuancing this in terms of learning theory, the previous example of Sara solidifying her placement in the gameworld and the general direction of her interaction shows how sensitivity is established by internal evaluation of incentives. The emotional equilibrium that Sara established in deciding to engage herself rather than a performance contrary to her sense of self, means that she could comfortably play without mental distress. Reiterating the final part of Sara's quote from above: "So, I felt like it had to be like as if I myself was in that fantasy-world. That it was something that I could imagine me doing, because then I feel more invested in it." (Sara, Interview) Sara's example of this transformative process establishing a basis for her continued play is quite clear. Yet it was also presented on the terms of a clear situation of processing, whereas other examples of how sensitivity is lived and developed are much more subtle, and also require an additional frame of analysis. In play, the structures of the incentive dimension and the sensitivity that is formed and constructed within this dimension are more often unconscious than conscious, meaning that clear and precise processes in specific moments of play are rare. Instead, they show themselves as forming over time, with constituencies that are based on unconscious experiential evaluations.

In substantiating his theory closer to the processes of experiences, Jarvis (2012) takes inspiration from George Herbert Mead's distinction between the 'I' and the 'Me'. In this philosophical position of the self and self-reflection, Mead (as presented by Aboulafia, 2020) sees the 'I' as the enacting and reacting subject in a conceptual absolute present. The 'I' is a

source of creativity and spontaneous action that perceives the world and acts upon it. The "I" is however inherently non-reflective in its temporal limitation, yet still stands as an embodied and dynamic layer of the person (and player) in action (Sutton, 2007). The 'Me' on the other hand, stands as both a past and present self, and also as the running commentary to the actions of the 'I'. The 'Me' is thereby not a static instance either as it transforms and evolves along with the potential for novelty that the 'I' presents (Aboulafia, 2020). What Jarvis (2012) takes from this, and what is also central to understanding transformation in play, is that there is a point in time in which the 'I' acts, and the 'Me' oversees this act. Jarvis finds that the processes of the absolute present are comprised of 'past-Me' in the form of a biographical self, and the concurrent 'I' as seen by the current 'Me' as a form of the self. In this continuous process of the self, there is, according to Jarvis, the potential for reflective processes following the realisation of disjuncture (self-reflection). Finally, there is the concurrent potential for the future 'I' and 'Me' in the form of a desire, prediction, or expectation from the current 'Me' for change (Jarvis, 2012).

Showing how these structures of spontaneous action and thinking can occur, Parker had a short moment in which he accidentally attacked an animal when Playing *Nier: Automata* (PlatinumGames, 2017). In the game, the player (initially) controls a playable character called 2B, who is followed by a drone of sorts (the Pod), and another character (9S). The main setting is that androids are fighting a battle on behalf of the human race, as robots have overtaken the earth. The only entities that move on Earth are either robots or animals. The player plays the game in a 3rd person perspective, where 9S and the Pod move autonomously with the player's movement but will only engage in battle and attack a target if the player presses a specific button continuously. **Figure 21** shows Parker's movements across approximately 5 seconds and is early in his gameplay (approximately 2 hours in). Parker is surprised when he turns the corner of a building and is faced with a moose. He immediately attacks it, but then gives pause. When it turns out that the moose is not aggressive even though he attacked it, he leaves it be, and moves on to fight robots nearby. As Parker correctly remembered, it was the first time he attacked an animal in the gameworld.

Figure 21. Parker accidentally attacks a Moose*, Nier: Automata*

Source: Parker's gameplay, *Playing Nier: Automata*. ~5 seconds of gameplay from left to right. *Note*: The 4 images: seeing, shocked, attacking, pausing. 1.9 hours into playing the game out of the combined 26.3 hours.

As Parker explained after viewing the video:

> […] you've been taught by the game that machines are evil, and you are androids and you fight them. So, at this point of the game, this is the whole idea that you have. But animals? It's an untouched topic at this point, so I wasn't sure; You know, they don't attack you like out of their free will. So, I accidentally attacked the animal; like I thought it was a machine, so I just started attacking with the with the pod. I accidentally attacked it, and the animal didn't react or attack me back or anything that would oblige me, in the game, to kill it. So, I just let it be because it didn't do anything. It didn't try to harm me back and I was just like; OK, let's leave the animal for now. So, that was the whole thing behind the situation. I just, I just didn't want to kill the animal. (Parker, Interview)

What Parker shows here is that the "I" is rooted in internalisations that go beyond the conscious reflective nature of identity and is more connected to inherent sensitivity and emotional equilibrium. The statement from Parker above shows how the "I" is connected to an immediate reaction of self. This reaction is connected to base structures of self that, when the possibility space of the game allows, are allowed to be reactive both in terms of surprises (leading to an attack command) and also to hesitance as the situation is understood on an immediate level (leading to pause). That is, this did not function as a reflection in the absolute moment, but as a natural reflex of the "I" within the gameworld as understood up until this point. But also further understood by the "I" through subsequent unconscious identification of the representational aspects of the animal, a Moose, as a historically defined non-threat. The "I" allows for a pause in an unconscious risk evaluation where the historical context of such an animal is evaluated. A pause in which the moose shows no sign of aggression, in spite of being shot by the pod. What Parker's example shows is that the "I" allows for immediate creative thinking in gameplay. And that such must be understood not just as a reaction, but as a creative action that is grounded, not in self-perception, but in the actual self of the person grounded in sensitivity towards the gameworld. In the immediacy of gameplay the player might be revealing more about their innermost self than what would be thought at a glance, or which could be deduced from more general theories of social identity (see for example Illeris, 2014b; Wenger-Trayner & Wenger-Trayner, 2020). In this case, it shows Parker as on a personal level where the immediate actions of Parker's "I" are both compassionate and contemplative, and risks a pause in the face of potential death, when faced with a living being instead of a robot. From this, Parker elaborated that quests and the game's crafting system (as also briefly mentioned previously) makes the gameworld animals opportune to kill. Showing then a later reconfiguration of sensitivity, where killing animals is no longer subject to potential imbalances due to the impetus of the game system making these a prime target for progression. In this, the game presents a new gameworld reality, which underlines Sicart's argument that the moral philosophy employed by the player can change according to the gameworld as a site of situated meaning and ethics (Sicart, 2009). But as Parker's example here also introduces, there is a present basis of meaning and immediate action from which such a change must take place.

Granted that on a more generalised level, one could call this situation a reflection of the person's "I" in combination with the workings of the, so far, established playful intersection of

self. Meaning that the playful self is a reflection of the player's (in this instance Parker's) intention of not harming innocent beings, unless necessary or in terms of his own survival in the moment. This can however once again risk leaving the process in the void between a basic understanding of the game, and a reactionary result. Parker here shows that something happens in the creative and spontaneous moments of play, which should not be undermined in the examination of processes. His moment of reaction shows an interesting connection to the theory of experiential processes (Jarvis, 2012), where the moment of experience constitutes the basis of experience, which further underlines the meaning of the experience in future creative actions in absolute present terms. Absolute presents, in which the "I" is living, and the "Me" is overseeing and registering, and no less learning about the environment and about itself as a situated instance of the self as a complex entity existing on the basis of personal and game-based experiences.

In terms of transformational processes in play, it is in this moment of an absolute present that interrelation is lived and developed as a social act in gameplay. Unveiling these moments in the video-elicited interviews, the participants re-experienced the running commentary of the 'Me' and could articulate processes by approximating the original play experience in which (in terms of Mead's philosophy):

> The running current of awareness […] is due to the running commentary of the "Me" on the actions of the "I". The "Me" follows the "I" so closely in time that it appears as if the "I" is the source of the "running current of awareness". (Aboulafia, 2020 section 4)

Showing how this running current of awareness feeds into transformative processes, Tory in a short conversation with Mickey Mouse established a movement of her sense of self in the gameworld. This situation was not the sole moment of her transformation of her playful engagement, yet it exemplifies how "I" and "Me" work in tandem in conceptualisation of a playful self, evolving the way that the player interacts. The images in **Figure 22** and **Figure 23** show dialogue choices which Tory spent a, for her, unusually long time to decide. Importantly though, the first one took longer than the second. For reference, she had just had a lengthy questline of gathering materials for Donald Duck, who had shown himself as his usual somewhat hysterical self in spite of Tory's help in building him a house.

Figure 22. *Disney Dreamlight Valley*. Dialogue with Mickey Mouse, part 1. Tory.

Source: Tory's gameplay video, *Disney Dreamlight Valley*.
Note: With insecurity about how much or rather how long Tory had played the game at this point, it was early relative to the available footage. An estimate is that this is probably around 3-5 hours into the game. Tory chose "There is Donald Duck".

Figure 23. *Disney Dreamlight Valley*. Dialogue with Mickey Mouse, part 2. Tory.

Source: Tory's gameplay video, *Disney Dreamlight Valley*.
Note: This choice is presented after the choice in **Figure 22**, with Mickey Mouse giving a few statements about the subject in between. Tory chose "Give them space".

As stated, the first choice took longer than the second one. To the first part of the situation (**Figure 22**), Tory explained via a process elaboration:

> It was still a very story-based part of the game. And I think I engaged in my answers fitting the story. I could probably just have chosen a random answer. I mean, it doesn't make a difference here. It is about my immersion, and my immersion being about me answering what I would answer myself. (Tory, Interview)

While the actual process Tory went through in her pause is not quite evident from her statement, it seems clear that referencing Donald Duck in the situation plays a part in the playful engagement by synchronising the co-authored narrative with the options at hand. The very meta-reflective statement that the choice probably didn't matter shows how the incentive to engage the self in internalisation processes overshadows the logical reality of the game's progression. In terms of this process of engaging the gameworld with sensitivity to the self and the game, the more interesting part came in Tory's quicker choice afterwards (**Figure 23**), which at the same time presented a much more process-oriented description:

> Well, I thought about what I would do, if I had a friend that was angry. And then it was; well I would give them space, because when I am angry, I myself want space. Then the thing about showing empathy. Well, that could be a lot of things, and then I start overthinking in a philosophical way. So, saying "give them space", I did that because that is what *I* would say. (Tory, interview)

As with other examples, it stands interesting that an option (in this case "I'm not sure") is filtered out of the process explanation. Yet the point of these two statements from Tory is that while the first choice took longer, the thought process of the "I" was seemingly translated into a much quicker decision-making process in the second choice. While elaborate, the "I" seems to have been through an evolution, and consequently, Tory's sense of self as incorporated into the gameworld became more constitutional, allowing more elaborate thought and emotional processes to occur at a quicker pace. The game biography and playful identity transform as the playful engagement forms as a baseline for evaluation of action potential, based on the internal activation of sensitivity as it is lived out through the potentials of specific interactive gameworld realities.

Showing how deeply rooted this sensitivity is in gameplay and how its emotional complex span beyond singular moments I return to Parker playing *Nier: Automata*. I showed Parker a moment well into his gameplay (just over 9 hours) where he changes from a white outfit to a dark outfit for the main character at his point, 2B. This moment had caught my attention because it was purely a cosmetic change, and Parker had had 2B wearing the white outfit for approximately 1 hour before changing. The change in appearance was, to me, quite arbitrary, and as such I wondered what went on in the situation. I marked the moment as "unexpected behaviour" as per the video analysis (see Chapter 5). As the differentiation analysis revealed, this situation had many constituencies. First of all, the specific situation revealed how transformative structures are connected to representational introspection. As Parker said, he didn't quite remember what happened that made him change the dress at that specific point, but

as I rewound the video about a minute, he remembered what had transpired. Visible as the first picture in **Figure 24**, there is a short sequence where the character is in an elevator, and where there is not much to do for the player other than wait. For reference, the second picture in **Figure 24** is the black dress which is the baseline for the character from the beginning of the game, and which Parker changed back to. We did not actually see the elevator sequence, but realising which part of the gameplay the situation was connected to (a specific quest to gather some stamps at an amusement park), Parker remembered that it was the elevator situation that had been the source of his action to change the outfit.

Figure 24. Parker changes 2B's outfit.

Source: Parker's gameplay, playing *Nier: Automata*.

As Parker stated:

> I was just like; when I came back to actual gameplay I was like; hmm, yeah, I really don't like it, so it just put me like, off. I just needed to be off of the game a bit, you know, like as a spectator not playing. When I came back, to controlling the game I realized I didn't like that outfit. So, well; this is the time to change it back. So maybe it was after the elevator. I just looked at the character closely and was like, yeah, that's definitely not it. [...] Yeah, it was there in the elevator that you actually look at the character closely. So maybe at this point it was just like, yeah, that's not the character.

The one hour of wearing the white outfit can be seen here as a form of dysmorphia, where Parker has been unconsciously unhappy with the visual look of the character. Being then in a moment, where there is no impetus to control the character, Parker realises this and shortly thereafter makes the decision to change. His sensitivity to the character represented as a connection to who the character is, and how the character should look, was compromised, but also amended. Interestingly though, not all in a specific moment, but over the course of a longer period of time, which then becomes an emotional reality in the moment he has the time to explore this sensation. Adding then to this complex of emotional connection, the pink headband had a different sensitivity attached to it. Realising the constitution of Parker's connection to the character 2B in the interview, I asked him about the headband, to which he stated:

> The pink headband because of the robot. It is just because the robot gave it to me. The only reason I wear it. Yeah, I mean it looks a bit ridiculous, but it's a bond with that machine. I decided to keep it. (Parker, Interview)

I did not pursue the situation further, as it only showed its significance in the differentiation analysis in which I was able to identify how the pink headband had been obtained, put on, and later removed. The situation with the Robot that Parker mentions was an escort quest that had happened about an hour and 20 minutes before the outfit change, and he had equipped the pink headband just after originally putting on the white outfit. This head accessory is purely a cosmetic change and does not impact the characters' abilities in any way. The situation with the robot can be seen in **Figure 25**, in which a "Little Sister Machine" has become lost and asked Parker to help it get home. The reward for doing this being the pink headband. At this point, it is quite clear that the machines are mimicking human behaviour and think (or at least pretend) to have family structures, villages, and more that often come off as quite humorous if not to some extent tragic. As can be seen in the figure, "Little Sister Machine" is one of the larger models of robots, yet it acts like a child even going so far as to ask how baby robots are made.

Figure 25. Parker receives a pink headband from "Little Sister Machine".

Little Sister Machine

Hey, I know this place! I can get home by myself now.

Source: Parker's gameplay. *Nier: Automata*. 8 hours and 25 minutes into the gameplay.

Comparing these situations of cosmetics showed an interesting duality, where the white outfit was not in line with Parker's sense of the character 2B, but the pink headband was. While looking "a bit ridiculous" the headband had a significant representational value for Parker's sense of connection with the gameworld. The pink headband stayed on 2B for the next 9 hours of gameplay, spanning 3 days and six gameplay sessions, until Parker changed it to another, less prominent accessory. It shows an aspect of play in which sensitivity is built in moments of emotional connection, and how this connection is allowed expression in spite of other structures of evaluation towards game representations. 2B needed to look like 2B, but the pink headband was Parker's connection to a lost "little sister" robot that he had helped, and which was more important than the fidelity of 2B's appearance. Complex as it may be, sensitivity as it is actualised in transformative processes is represented as emotional connection, and rests mainly on emotional memory with a substantial timespan, yet also centred on the gameworld as experienced through a playful self. To restate, when Parker attacked the moose as shown earlier in this segment he said: "you've been taught by the game that machines are evil, and you are androids and you fight them. So, at this point of the game, this is the whole idea that you have." The headband was an artifact to the contrary to this earlier understanding of the gameworld, and held importance as it was a way of connecting to the transformed sense of self within the gameworld. While there is potential for the "I" to be both creative, reactionary, and bold, the longer processes of sustaining emotional equilibrium rest on the commentary of the "Me". This

longer commentary is mainly an unconscious one, connecting emotions, emotional experiences, and emotional memory to the gameworld as it unfolds and morphs through continuous internalisations. The playful self is thereby a reflection of the player's capacity to evoke and respond to emotion and affect as it is lived- and played out through the forming and challenged personal sensitivity towards the gameworld.

Functionality and Internalisation

According to Illeris (2017a) the content dimension of learning encompasses the *knowledge, skills* or *understanding* that a learning process 'embeds' with the learner. The focus of this dimension would be typical of the cognitive paradigm within learning theory, where the learner acquires new specific thought- and problem-solving patterns based on the intended learning outcomes of a given activity. As Illeris notes however, the content of learning should not only be seen in the view of institutionalised learning practises or subject-specific ideals, but instead be broadened to the concepts of social and sociocultural understanding (2017a). The content dimension of learning is, even outside of formal educational practises, an important part of potential transformational processes as it defines a crucial part of the internal evaluation that is constructed in, and emerges through, learning as internalisation. Regardless of the typological quality of the learning process, the key terms of the learning dimension are integral parts of the trajectory and possibility space in motion in the potential for transformative processes. According to Illeris, it is in this dimension of learning that the learner is able to create *meaning* and/or gain *abilities* from the content as it is presented, which in turn establishes an increased *functionality* towards the social and cultural context the learner is in (Illeris, 2017a). Illeris bases this functionality on the following three terms, which I connect lightly to gameplay:

- Knowledge, which is in essence knowing or being aware of something as an existing premise in a situation of learning, such as learning a game's systems and mechanics.
- Skills and ability to do something or act, which is often substantiated by knowledge along with other constructs of both mental and/or bodily ability. Such as playing with a controller (embodied extension of action), or more subtle indications of qualification, such as choosing the right action at the right moment on the basis of systems or spatial perception.
- Understanding, which means being able to extract meaning or cognitively realising potential connective or dissonant dispositions of a perceptible reality in a given situation within the game as a structure with an inherent reality of affordance and action potential.

While the content dimension of learning leans mostly towards the realm of cognition, it also encompasses an essential part of internalisation processes, and subsequently an essential part of transformative processes in gameplay. Namely that in an internalisation process there should be a mobilisation of mental energy towards one, two or all three of the content dimension's key terms in relation to gameplay. That is, assimilation (accretion) or accommodation (synthesis) based on presented information, skill enactment or development based on affordances, or

meaning-making based on a perception of (gameworld) realities. In situating the role of the content dimension of transformation in gameplay, this means that functionality should function as the integration of previous learnings into the lived experience. Functionality is thereby an essential part of transformation, which is either established or elaborated in learning processes that give meaning to incentives and emotion, or is directly integrated in the interaction with the gameworld functioning as the learning environment. Note that while skills and abilities in the interaction would encompass the use and learning of controls/controllers which can be an important part of play (see for example Simon, 2009; Swalwell, 2008), the form of this research (and likely in part to the games played) did not find this as seminal to transformative processes. Instead, the controls needed to play the games were seen as stable internalisation processes early in most gameplay and were not marked as moments of interest.

Showing how content is internalised and expressed as action, Sara (playing *Dragon Age; Origins*) was in a situation where she encountered a group of bandits that were robbing refugees. Having just recently been through a narrative exposition defining and solidifying the player character as the "hero" of the story, Sara activated this knowledge structure in a solidification where the primary transformative structure was the internalisation of the narrative structure itself:

> I thought it was quite difficult to choose what I should do because I didn't know what the consequences would be. But then I had decided that I had become the Warden, and that was a little like being the police. So, I didn't feel like I could just leave them where they could just exploit people. (Sara, Interview)

From this decision, Sara had to fight the group of bandits, which is otherwise an avoidable situation as they can be convinced to stop their activities and leave, among other potential outcomes. What Sara shows here is how the narrative structure of 'the hero' has been internalised and is now actualised into a transformative moment in which the internalised knowledge structure of the hero story is adopted as a part of the playful self. The situation here does hold structures of sensitivity, but it also advocates how knowledge and understanding of narrative structures feed into transformative processes quite naturally in that a playful identity as a representational narrative structure feeds into the playful self.

While the varying games the participants played hold a variety of hero types (see Ford, 2022 for types and definitions), transformative aspects of the functionality that the playable figure presents, as Sara's example above showed, were the main interest in terms of processes. Functionality in Sara's case meant internalising a specific in-game identity presentation, which she evaluated with certain narrative properties that indicate the form and affordances of the playful identity construction. Still, due to the ludic subject position (Vella, 2015), it is not feasible to rely on the properties of the implied playful identity of the player figure as a stable form of functionality. Instead, the negotiation between the player and the narrative structure must be considered, in that the playful self relies on internalised narrative schemes that are mobilised in actionable conditions, creating a set of circumstances that form the basis of potential actions. These circumstances are not singularly reliant on the formal structures of the

game or the game's narrative, but rather on the perception of importance and connectivity of the situational dilemma, born from the open question of identity, and in turn creating an inwards movement of mobilisation that takes into account the playful identity and the personal identity. This mobilisation can lead to a number of things. One is the disjuncture between the two structures (playful and personal), which in turn creates situations of introspection where multiple potentials are mobilised in order to make sense of the disjuncture and come to a form of conclusion. Another is the harmony of structures, in which the actions taken lead to a strengthening of the intersection of identities, and thereby a strengthening of the playful self. In both cases, functionality is formed and reformed through knowledge of the gameworld and understandings of the playable figure's situatedness in this world. As the journey starts to take form, so does the internalisation of the narrative constructs of the playful self as a central role in the gameworld. Being a protagonist has implications as to "how to be a protagonist", which must be evaluated.

In terms of functionality, the video materials to a large extent showed how the participants learned and utilised game systems and mechanics. Throughout the video analysis, there are many instances where I noticed that they were capable of utilising different functions of the game, and in general how their abilities evolved in overcoming the game's more formal challenges (such as encounters with hostiles) and informal challenges (such as map navigation and equipment optimisation). For example, it was visible how knowledge of a mini-map in the top left corner of the screen led to the developing ability to use it to navigate, which for some could be a strenuous learning process. While such learnings are important for the overall functioning of the playful self, they did not quite stand out in terms of transformation. Rather, these aspects of functionality can be referred in terms of Calleja's internalisation model (2011), in which the player is on a somewhat linear route where they need to spend less and less energy to perform in certain categories of the game (see Chapter 3: Video Analysis). Similarly, the notion of the playable figure's abilities and skills and how they were perceived were also not identified as immediately transformative. Rune Klevjer argues that "[…] the actual learning process of the player maps onto the learning process of the avatar as this develops in relation to the challenges that the avatar needs to overcome." (Klevjer, 2006, p. 141). While stating that the playable figure (or avatar) and the player are in a prosthetic relationship, Klevjer here also alludes to the transformative aspect of perception of self in the gameworld. That is, that there is a translation of functionality (skills and abilities) between the player and the playable figure, which could be transformative in terms of the playful self, yet most often stands invisible in the video data.

However, transformative processes that are mainly centred on the content dimension of learning are more easily seen when the processes have failed to be internalised, or when there has been a situation of mislearning. Josh (he/him), playing *Divinity: Original Sin* (Larian Studios, 2014), had previously been playing the sequel, *Divinity: Original Sin 2* (Larian Studios, 2017). The consequence of this was evident in the gameplay video from the very beginning, where Josh in the character creation process moves through the different menus and options at a very high speed without taking otherwise natural pauses to read or further investigate the different possibilities. I showed roughly 20 seconds of the class selection process

to Josh as the first video in the video elicited interview, and asked him what it was like to see the video. The reason I used this prompt, and not one more centred on the processes of his gameplay was that this was the first video of the interview. It was therefore mostly about letting Josh experience the re-embodiment of video elicitation, but Josh still had an interesting answer in terms of his gameplay process in the moment. As Josh's statement indicates, the movements and decisions in this situation were mostly connected with the "I" as an immersive yet not reflective expression of self in the actuality of play:

Ehh… weird, because when I sit there and do the things, I'm not really registering how often I actually switch to the next class. Where, as a viewer it is very clear; Ok you could probably do this with fewer clicks if you wanted to. But this is also, I don't know, a side effect of me coming from the second game. I recognise a lot of the colour schemes and spell icons that they use, so I can sort of tell which schools of spells these are from, without needing to hover over them; so I can sort of make a decision based on the visuals and what I want, rather than needing to actually read all of them. This also means that I thought I knew the game better than I did, which is also why I make a pretty big mistake here in the first play through. (Josh, Interview)

The mistake that Josh refers to is that he chose a mage class based on his immediate interpretation of spell synergies, which was based on his knowledge of the second game (the sequel *Divinity: Original Sin 2*). As Josh explained, the spell combination turned out to not be effective in this game. The processes of this realisation were sadly not recorded, as there were issues with the technological setup in Josh's case. Yet the realisation of this mistake had been substantial enough for Josh to start the game over, creating new characters with better synergies in his second playthrough. In this case, a knowledge structure had to be reformed in the realisation that the expected understanding of the game's mechanics was not correct. The new understanding that arose from this misinterpretation is seemingly connected to a transformed playful self, in that the gameworld was reset to a state in which a new game biography and a reformed playful identity would be allowed to emerge. In a sense, Josh's functionality was restored and as such, he was allowed to engage the playful self through a new sensitivity to the gameworld which could thrive, rather than be at odds.

Mislearning can and does happen all the time (in life as well as in gameplay), and as Illeris states, it often leads to learning once realised, although often through more strenuous paths (Illeris, 2017a). Dan showed this in several instances while playing *Dragon Age: Origins*. Dan's playstyle can best be described as hard play, where the playful engagement emerges through the challenge of overcoming the game on its own terms (Lazzaro, 2004). Playing the game on the hard difficulty setting, Dan generally reloaded many times during his play due to game over states, as the game is quite unforgiving on this difficulty level unless the player fully utilises the game mechanics to maximum effect. Dan, while exhibiting high levels of strategic thinking quite simply wasn't able to make the choices necessary early in the game for this to be a fair difficulty level to play on. Yet that was not the only issue. Fighting the first major boss in the game, Dan kept on losing and having to reload. An important factor in this was that he had not

understood the "injury" mechanic of the game. That is, that when a character dies in battle, but the player still manages to win the encounter, the character will revive, but will have sustained injuries that hamper their ability to fight. This is easily amendable with an item (a recovery kit) if the player knows of this. **Figure 26** shows what Dan had as available information on the screen, but never noticed until sometime after the boss fight.

Figure 26. Not noticing injuries begets frustration.

Source: Dan's gameplay, approximately 5 hours in. *Playing Dragon Age: Origins*.
Note: The icons in the white boxes (added to the original pictures) are injuries (red) and buffs (green). A single injury can be enough to make a character ineffective in combat situations.

Dan won by changing the difficulty setting to 'easy' for the encounter, and then reverting the setting back to hard sometime after it as he realised this injury mechanic. Voicing his frustrations with the encounter and the situation, Dan stated:

> And then he just crushed me. He absolutely crushed me, and I did like one damage or something. And I hadn't learnt about the injury kit yet, so I put it down to easy. And then I just slaughtered him. I kept it at easy for a while because I thought that if I could fight my way through the entire level without major challenges; and then I come to a boss and I try 15 or 16 times and I didn't even get him to 75% health; well then there is no reason to have it on hard if you just get completely slaughtered. I thought I did pretty well until then, and if I had learnt the thing with the injury kits from the beginning, I probably would have managed. I don't want to play it all for the story. I have to get stimulated a bit on my thoughts and strategy. I like being challenged with these kinds of games. […] But it was only after that fight that I noticed my character had 7 or 8 injuries, and the next and the next, and then one character had 2. (Dan, interview)

Dan found it to be questionable game design, that you had to learn these things for yourself. There had of course been a pop-up tutorial message the very first time a character had received an injury, but Dan did not read this (which was a pattern across all participants playing this

game). In terms of transformative processes, the interesting notion lies in the mislearning, or rather lack of understanding of a specific game mechanic that so fundamentally influences the gameplay. As Dan also mentioned in the quote above, he had done quite well up until this point. That he does not investigate the details of this sudden transition of difficulty shows how content of gameplay mechanics can be elusive, and to some extent quite detrimental to the play experience. Yet as he then learns of this mechanic, he allows himself emotional equilibrium from the incentive dimension of learning, by placing the fault on the game's design. In this, Dan is unconsciously making sure that the playful self is allowed to be intact, as Dan's playful self is connected to overcoming challenges of a strategic nature, and not merely processing in the narrative. In this sense, Dan's way of playing the game rests on functionality more so than sensitivity, as his preferred playstyle is connected to mastery in the form of understanding and overcoming what the game can challenge him with. It is about creating meaning of the systems and mechanics and utilising this meaning to full effect. This does not exclude the sensitivity that is needed to play the game, as the emotional equilibrium is dependent on the successful integration of these meaning structures in the interaction with the gameworld. If this fails, the mental and bodily balance must be either kept intact or restored somehow in order for the playful self to continue its existence.

In terms of the use of guides, walkthroughs, and other information sources outside of the gameplay (see Consalvo, 2017), the participants generally only used these for very specific purposes. That is, that they looked for specific information that would increase their functionality with the game, yet very distinctly staying clear from information that would lessen the experience of the game. As Matt said, he looked at a guide to the many different classes he could choose from in *Baldur's Gate*, as he didn't want to play for many hours only to find out that he had made a bad choice. Likewise, after he had declined the help of a potential party member, who then disappeared, he looked the character up online to see if he had made a mistake or if he could rest within his choice. The inquiry that Matt had was the character's class, which was a sorcerer, which Matt did not want any more of. Emma was stuck on a side quest where she could not find the required item needed. Looking it up online, she learned the use of the "Alt" key to highlight interactable objects in the gameworld, helping her substantially in her further play. Unison for the use of online resources was, that none of the participants wanted "spoilers", indicating that the immediate experience of gameplay was most important, yet also that minor information and knowledge about certain aspects of the gameplay was not an issue to gather from other sources.

Functionality in gameplay must then be seen as the combined (and very varying) understandings that have been assimilated and accommodated through gameplay (and potentially online sources), which are mobilised in a process of action potential towards actual actions. Functionality within disjuncture and potential reflection presents the individual's potential for reasoning towards afforded actions, meaning that overall structures of function are activated in order to make sense of the situation at hand. Functionality and sensitivity must go hand in hand in gameplay if transformational processes are to occur. And arguably they have to, as new understandings and meanings of narratives, game mechanics, and controls of and within specific situations present themselves. Transformation in terms of functionality must

happen on the basis of understanding the connective or dissonant properties of the content in relation to lifeworld and gameworld biographies, thereby realising the potential meaning of an (inter)action based on this. At the same time, transforming functionality means accommodating the previously described emotional complexes of sensitivity into new possibility spaces of the playful self. As previously indicated, the content and the functionality are only a part of the internalisation process, where the incentive dimension being the other internal dimensions to internalise something new, and potentially transform the playful self. These two dimensions on their own, while intertwined, are truly put in motion in the interaction with the gameworld. An interaction that is, as Gonzalo Frasca argues, the essence of how games function, less they do not function at all (Frasca, 2003).

Enacted Sociality

According to Illeris (2017a), interaction represents the reciprocal dialogue with both the sociocultural- and the material context. It is through the interaction dimension, that the learner both values and evaluates the entirety of their internal dialogue and resulting internalisation towards the context the learner is within. Overall, the context encompasses the close social context, the societal context, and/or the cultural context, which in unison may be referenced as the sociocultural context. These contexts are not universal truths but must be seen as amenable and fluctuating as per the learner's own (conscious or unconscious) interpretations of them along with his/her ability to negotiate them. Exactly this interpretation and negotiation underlines the influential nature of play as a defining factor in transformative processes. In light of the appropriative and context-generative nature of play (Sicart, 2011, 2014), the integration of play into an analysis based on Illeris' learning theory leads attention to how play is realised in relation to potential transformative processes. Internalisation understood as an internalisation process of interaction, in conjunction with the internal evaluation of content and incentive in the form of functionality and sensitivity respectively. In moving attention towards interaction as experienced internally in relation to the environment, it follows that play can be found as a determining factor in all the dimensions of learning, and as such becomes a deciding factor in any given internalisation process in the play activity. This leads to the interaction dimension of learning in which play then defines, regulates, and appropriates the interaction with the game as an environment of playful processes. The game cannot be seen solely as a computational system delivering content, nor as a vehicle of incentive through simplistic notions of internal or external motivation. Quite the contrary, as is hopefully evident in the past two segments presenting these dimensions of sensitivity and functionality. The game must instead be seen as an environment of social acts and actions in which the playful self is allowed to explore the boundaries of both the game and the player's own dispositions.

Illeris states that the learner is always situated in a relational exchange with the environment in which *action*, *communication* and *cooperation* are important aspects of the learning process (Illeris, 2017a). In terms of how digital games function in this regard, Frasca argues that in games' and players' interdependent action potentials, there is neither game nor narrative, if it is not guided and decided by the actions of the player (Frasca, 2003). For this

reason, the interaction dimension of internalisation processes is pivotal not only to the process itself, but also to any attempt at an analysis of it. In light of this, this is also how the theoretical "learner" becomes "the player" and vice versa, as action, reaction, and actualisation of internal processes must be seen as core components of the play activity. In this sense, action and communication are a basis for any digital game to function, whereas cooperation must be seen as the reciprocal operations that combine the player and the game through a playful experience. If the game fails to deliver an operative environment for a given player, it must be considered as non-cooperative, and in that sense non-playable.

In Illeris' theory (2017a) the different forms of interaction are closely connected to the individual's possibilities and opportunities of *integration* with the social context, and interaction thereby functions as a means of developing *sociality* towards appropriate function in various situations of social interaction. Alexander Galloway (2004) argues for game realism to be viewed in terms of social critique and fidelity of context, which he translates into the "congruence requirement" as a means of determining the social realism of games. Galloway's argument is that realism and the player's experience of this in digital games is not determined by the fidelity of pixels and complete coherence with contemporary sociological or cultural themes. Rather the realism of games is determined by a reciprocal interaction between the player's sociocultural reality and the contexts the game provides in terms of afforded interpretations and actions. This substantiates that gameplay is a reality in which gameworlds and sociocultural realities are intertwined in the play activity, within which the player's perception, meaning-making capabilities, and emotional complex are activated and pave the way for the sense of worldness (as also argued by Klastrup, 2008; Mortensen, 2018; Tosca & Klastrup, 2019). In terms of transformative processes, this means that the gameworld and the lifeworld are inseparable constructs as they combine into a social, societal, and cultural frame of reference in the interaction potential of the game, and shape a part of the playful self in their intersection. This is also why I name the term *enacted sociality*, instead of sociality as it is originally proposed in Illeris' theory. Sociality would indicate expression of the person in the lived world based solely on lifeworld and personal biography, as to which it becomes an expression of the person's social functioning in the varying contexts of social life. The gameworld presents a different frame in which the person as a player, through the playful self, is asked to enact sociality within different sociocultural structures that are emergent within the activity itself. The sensitivity and functionality that are the basis for interaction with the environment differ from that of a purely lifeworld-based self, meaning that sociality must also be seen as a different expression of self.

Underlining how this enacted sociality is built and developed through transformational processes, Dan playing *Dragon Age: Origins* showed an interesting change of intent within a dialogue situation. As mentioned earlier, Dan's playful engagement was that of hard play in terms of challenging himself and the game, but within this frame, he also engaged with a playful self highly rooted in the gameworld when it came to dialogue situations. Briefly described, the situation Dan is in is that he is trying to save innocent people, who have been locked into a mage tower. The tower has been locked off, as some mages have turned to forbidden blood-magic leading to an infestation of demons. If Dan does not succeed in clearing the tower of

these bad mages and demons, everyone in the tower will be killed. After an encounter, a defeated "blood-mage" begs for her life. Dan is initially hostile in his dialogue choice, indicating that he will likely kill the blood-mage, yet while still choosing to let her speak before he does so. In **Figure 27**, this initial contemplation is visible as Dan was (visible by his cursor movements) mostly considering option 1 in the first dialogue box, yet choosing the less aggressive option 3. With the exposition the NPC gives about her situation, Dan changes his approach and starts to take longer in deciding his responses, but with less focus on options that meant killing the NPC. The second dialogue choice where Dan chose option 3, visible in **Figure 27** with the lower dialogue box, shows how he was now inquisitive to the situation. The first option he did not seem to consider based on his cursor movements.

Figure 27. Dan and the Blood-Mage

Source: Dan's gameplay, playing *Dragon Age: Origins*. Approximately 12 hours into the game.
Note: Dialogue choices are zoomed in for readability. Dan chooses option 3 as is visible in the first box, and option 3 in the second box: "But why turn to forbidden magic?"

The situation had 6 choices combined in the way that Dan chose to go through it, and in the end, he chose to let the blood-mage go. Explaining what had happened in the situation, Dan stated how he had misunderstood the situation, and how he then made sense of new information:

Here in the beginning, I have misunderstood the entire scenario leading up to this conversation. When I'm going around fighting these blood-mages and demons, I have the idea that they are intruders who are trying to kill the mages in the tower. And then after a while in this conversation, I figure out and understand that the blood-mages were already in here. So that's why I start out by thinking that she just needs to die, because they just intruded and started killing people for their own gain. [(Dan explains the plot, where one of the head-mages is an insurrectionist trying to break free from the tower, which also functions as a prison)] But she is just a henchman, and not the root to all the evil. […] She is a part of something bigger that has dictated her fate for her. If she hadn't done it, she probably just would have been killed, so she had to go along with it. It is a lot about the era that this is in, this do or die of medieval times. And I see that a lot in the game's story, this low-born or high-born, if you don't have your title, you are just a subject. (Dan, Interview)

While there is a lot to unpack from Dan's statement, there are fundamental themes to his actions. One is the functionality that he gains in the situation, where he understands the premise of the situation differently from when he started it. This understanding is seminal to his change in empathy toward the NPC, in that it lets him engage his sensitivity in a different form. This internal evaluation results in an expression of sociality, in that Dan's actions become rooted in a transformational process incorporating understanding of the gameworld based on a sensation of how the gameworld functions in terms of its setting. Importantly, Dan sees the NPC as a person, and conjectures how this person is situated in the world in terms of possibilities and a struggle to survive. In this way, the playful self becomes an expression of social action based in the fundamental structures of a social being. That is then, that as the playful self transforms, it does so through interaction with the game as a context of social meaning, leading to increased potential of enacting sociality in the playful engagement.

Looking then at the examples I have given so far it becomes clear that enacted sociality is an essential part of a transforming playful self. If sociality is an expression of what we both are and become in our integration with the environment, then both meaning-making and mental and bodily balance must be present in our actions, and no less how we make sense of these once they are integrated into the factuality of the game environment players are in. Parker giving pause when accidentally attacking a moose shows how he enacts sociality instantly, incorporating sensitivity and functionality into immediate action. Tory having an internal discussion about changing a dress shows how the representation of her playable figure is a matter of how she integrates her personal identity into her relation to the gameworld, and thereby is an enactment of sociality towards her own playful self. No less, Tory's conversations with several Disney characters and her investment into the franchise show a social acuity in not being rude or obnoxious, in spite of the very low possibility of negative consequences. Dan, being in a prolonged state of frustration because of missing information about an important game mechanic towards his play form shows as enacted sociality in the way that he is forced to un-integrate himself due to a lack of congruence, before re-introducing himself again into his playful self. In Dan's case a playful self which primarily enjoys a game environment that challenges his skills and abilities, but which also is surmountable given enough time and

practise (or rather reloads). Paul was struggling to find the playful self in integrating into the gameworld, as exemplified by his enacted sociality as he experimented with a mercy-killing. Finally, Parker exemplifies how enacted sociality is both lived and sustained through emotional mnemonic connection, as the pink headband represented a social action and a social connection to a specific temporal moment of relation and transformation.

The predisposition and actualisation of sociality are explained in Illeris' learning theory (2017a) with the use of mental schemes (as originally proposed by Piaget (1952)). The brain holds these metaphorical mental structures built from learning throughout a person's life, and as such resemble Jarvis' concept of biography on a more granular scale. These mental structures are dispositions, where the organization and the potential for mobilisation of these means that we "[…] in fractions of a second are able to recall what we subjectively and usually unconsciously define as relevant knowledge, understanding, attitudes, reactions and the like." (Illeris, 2018, p. 6). While schemes can function as a basis for understanding the relation and intercorrelation of what has previously been internalised in expressions of sociality, the term is also a simplification of something which is problematic in a systematisation. In terms of gameplay, the immediate stream of thoughts and emotions seems better understood with the existential components of "I" and "Me" in the instances of experience connected to an absolute present, as there is a greater room for creative and spontaneous integration of the playful self. Regardless, the ability to act and enact with a foundation of sociality functions as a frame of reference to both the mental organisation of something internalised through play, as well as a reference to the possible constructions of enacted sociality based in the player's playful self. As Dan presented in the situation with the blood-mage above, a form of understanding the setting (a neo-medieval fantasy world) was a part of his process elaboration. Most likely not as a conscious thought, but as a rooted sensation of the gameworld given form in a moment where the gameworld had challenged his overall conception of a specific situation. An overall notion then is that prior to an enactment of sociality there is a consideration involving the gameworld as a frame of reference, creating a form of subset to Jarvis' (2006) inclusion of lifeworld and biographies in the experiential component to learning and transformation. In gameplay, this means a consideration that in mere fractions of seconds, or over long periods of play time, incorporates gameworld and lifeworld, game biography and personal biography, and playful and personal identities into inseparable constructs of play. In this sense, enactments of sociality (be they beneficial or detrimental) are a matter of co-authored experiences that rest in the playful self regardless of their potential reflective qualities, as they are inherently reflective of an amalgamation of the player and the game in unison.

As a final sentiment as to how the structures of enacted sociality, functionality, and sensitivity feed into transformative processes, I return to Parker. Early in the game, Parker finds a dead combat android like himself as he is playing as the character 2B. The information he obtains from this dead android was that it/she had plans to desert the overall mission of the androids (defeating robots that have overtaken the earth). A quest is then issued "11B's Memento", which asks the player to hand over these details to another android model called 16D. When handing in this quest, 16D expresses an emotional attachment to the deceased 11B

android (or "unit" as they refer to themselves), and the player is tasked to keep the information about desertion to themselves, or to expose it, as can be seen in **Figure 28**.

Figure 28. To reveal plans to desert, or not to reveal.

Source: Parker's gameplay. Approximately 4 hours into the gameplay.
Note: Parker chose "Keep 11B's plans to yourself".

Parker took some time to decide between the two choices, before eventually deciding to keep the information to himself/"yourself". I asked him why this took time to decide to which he answered:

> Yeah, it was kind of tough. I didn't think; when I saw the plans, I was like, yeah, maybe this is just the storyline. I'll hand over the materials and then she (16D) will deal with the whole situation. But then when the game gave you the choice of handing the data over or not, then I had to think about it at that moment. Because before I was just like, yeah, I just found the quest I have to deliver the quest and that's it. Like; I'll get my rewards. But then you can see that the 16D has an admiration for the 11B and because of this, I didn't want to hand over the escape plans to her; that she would lose a little bit of this admiration she has, or see a weakness of the unit; the Android she admired. So, I just wanted to leave her with a good part. I just wanted her to be left with the best of the android she knew. That was the decision, yeah.[…] The way she talks about 11B, why spoil it? Why give her some information that may destroy all this relationship? You know, 11B is dead already, so let's just keep it as it is. (Parker, Interview)

What Parker is showing in his statement is the internal evaluation that leads him to enact socially in the gameplay situation. Like every other situation that was expressed by the

participants, there is no notion of these NPCs being anything other than fully functional entities that have history, personality, and a lifeworld of their own within the reality of the gameworld as experienced by the player. Parker here is showing how his sociality is engaged and expressed as enacted sociality within the realities of the gameworld: "I just wanted her to be left with the best of the android she knew" is a strong statement of how there is, in the moment of play, no distinction between coded computation and human lifeworld in the experience of the player. In this case, doubly so, as the human in question (16D) is an android. The gameworld is living, emotional, and socially congruent to Parker, and as such, compassion and empathy is allowed to be a central part of the playful self, expressed in enactments of sociality. As Parker said, it was "only two or three lines" that led him to this evaluation, which had otherwise simply been about completing the quest. What this situation did for Parker, as is evident in his longer statement, is that it created the basis for understanding the androids of the gameworld as living, being, and emotional entities, beyond his already established ideas of the main character 2B (and at this point side character 9S). The gameworld gained form and further meaning as he engaged it with the sociality that the playful identity afforded him, allowing him to enact sociality further in future game events and situations. The allowance, I reiterate, being on the basis of functionality within the gameworld and sensitivity to the gameworld as expressed by a transforming playful self. Enactment of sociality is, by and large, the base and impetus for transformative processes, which leads me to the presentation of the final model in the next segment.

Transformative Learning in Gameplay

Functionality, sensitivity, and enacted sociality can be seen as concepts of competence, all resulting from continuous learning processes. Yet they cannot be described as results per se, as they are a part of the ongoing experience of both being and becoming in the play activity. They are emergent and creative dispositions that are both established, honed, questioned, and indeed transformed throughout the entirety of the alterity relation as a continuum of processes within a digital playground of embodied experience. **Figure 29** is the final model of transformative processes in single-player play that this dissertation can allow. While there are indeed many aspects that are yet unspoken, and indeed many more questions as to how it all fits together, it shows transformation as an interplay between the self as an instance in a person's biography and the self as experienced in the activity of play with a digital game. In this sense, how digital games reflect our sense of self, and our relation to our sociocultural reality is both important and relevant, as the processes within play are both continuous and ever-changing in the face of our personal, and play-based, development, yet I leave this discussion to the next chapter. The model is an attempt at integrating the potential of playful transformative processes as part of the embodied existential self in the play activity and is thereby a reiteration of the initial **Figure 14** (Page 145) showing the circular movement transformation in play, and an expansion to the model of the playful self, seen in **Figure 20** (page 159).

Figure 29. Transformational Processes in Solitary Gameplay
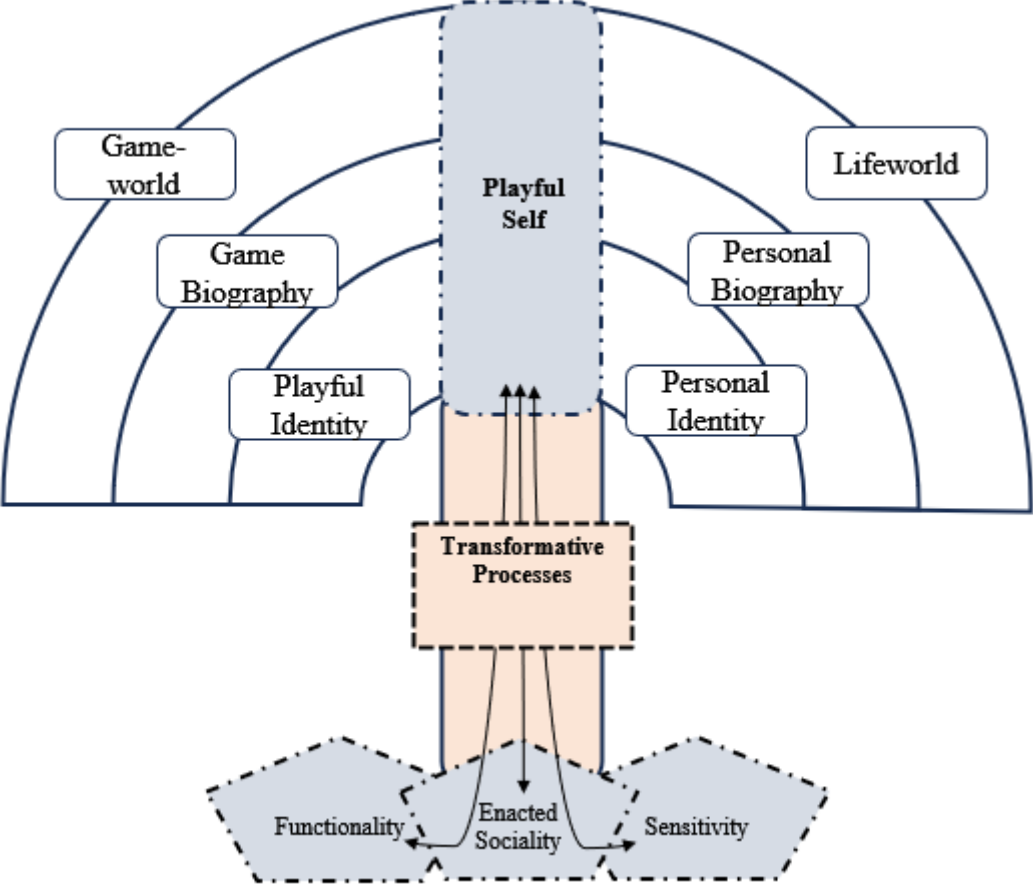
There is a logic to this "transformational mushroom", which is based on the earlier iterations of connections between the self and the different life/game states. The added lower part of the model, that of transformative processes in connection to enacted sociality, functionality, and sensitivity, represents the deeper structures of transformation. These are parts of the playful self that largely remain invisible to the player, even in the reflective nature of an interview exploring these structures. Yet they play a crucial, if not essential part in the creation, formation, maintenance, and transformation of the playful self. In this sense, they stand as emotional, cognitive, and socially oriented functioning outside of the player's immediate consciousness and can best be described as the creative dispositions of the "I" in the processing of information and emotion towards action. The playful self however, as was shown previously, consists of "self-perception through a reflected self". In light of the additional underlying layers of transformative processes, the "self-perception" and "the reflected self" gain additional meaning. That is, that these structures are closer related to the "Me", rather than the "I" in the actuality of a transformative playful experience. The immediate and creative movements of previous structures of experience (be they functional, emotional, or social) into an internal evaluation leading to action rest on the non-reflective, yet highly complicated and holistic immediate reaction. This reaction is not necessarily instant or short, as has been exemplified in

many instances here already. It is messy, and takes inspiration from the entirety of the, at the point, established playful self as a temporary and historical entity encompassing and sorting the relevance of previous and current experiences. Yet exactly the previous experiences must be seen in a different light, as these have to some extent been acknowledged and internalised by the concurrent "Me" at the time, and in this, have been given valuation as to the prominence of minute structures that influence functionality and sensitivity as available potentials.

In longer temporal processes, there is an internal evaluation often in the form of a dialogical introspection. That is, the "Me" is allowed some prominence in a form of a dialogical self. Such processes of evaluation are mostly evident in situations where there is no logical or good action. Emma's situation that I used in the previous chapter (see **Figure 8**, page 127) is one such example, where none of the game's propositions of action are considered particularly beneficial towards the player's intent. For reference, Emma met a small boy in need of help, and was ultimately faced with four options where she chose the option that potentially held the least harm to the child (underlining in her evaluation the enacted sociality that she employs). The internal dialogue that Emma shows is suggestive of a dialogical self. As Salgado & Hermans argue in terms of the dialogical self "[…] the self is always in the process of negotiating meaning with others." (2005, p. 11). In this statement, Salgado and Hermans refer to the multiplicity of the self as a means to describe the internal dialogical negotiation that a self can experience. While I will not go deeper into the details of the theory of the dialogical self (as that would be a project in and of itself), there is a subtle nuance to the term that brings forth the transformative potential of the player's internal evaluation process. That is, as the authors state, the self cannot be relegated to computation thinking, such as the notion of a "uniform dialogical self" might imply. Biographies can be argued as datasets that are activated, but it is simply not possible in the infinite possibilities of the human mind to establish what a particular activation consists of in terms of referencing. Neither should the self be considered as a performed self, solely interested in social indexation (Salgado & Hermans, 2005). In gameplay the playful self must be considered as a state of being, allowing for mnemonic elicitation in specific moments where the player's individual conception of interdependencies is put into a dialogical state. That is, that the game may present a monological situation where there is no room for the player's actual wants and needs in terms of a resolution, but that the player may (and most often do) via the playful self, drawn on a multiplicity of selves through the personal and game biographies. The evaluation of these biographical references then being the structures of sensitivity and functionality as they were present in those moments, making the dialogical exercise a matter of transforming the playful self via a valuation of biographical structures towards the situation at hand.

The question is then, if every situation in gameplay is transformation, if at any given point there is some form of movement in the "I" and "Me" experience or internal dialogical evaluation. Illeris typology (which I also introduced in Chapter 2) of four learning process types (2017a) can give an answer in this direction. Cumulation (learning something completely new without any previous reference) is generally not applicable to adult learning, and very rarely so with adults playing games. Learning something in gameplay without any form of pre-established notion of function or coherence is simply not something that could be considered

happening very often. Assimilation, which in Chapter 2 was defined mainly as "acquisition" does indeed happen a lot in gameplay. Assimilating knowledge about the game's narrative, about the function of certain game systems or mechanics happens all the time and is, as explained, central to the players functioning in the gameworld. In a sense, the co-authored journey that the player takes through the game could be constituted as a continuous assimilation process, as the player remembers and activates this accumulated knowledge in a variety of situations. Accommodation being the reorganisation of previous assimilations equally happen on a continuous scale, as even the player's own journey and choices can gain new meaning as new narrative structures reveal themselves, or past decisions are valuated against their outcome. The playable figure gaining a new skill, gaining a new party member, or even just a new weapon can result in accommodative learning as basic structures previously assimilated have to be reformed. Transformation then, being the reorganisation that fundamentally changes the way that the player interacts with the game, if one is to agree to the typology in terms of gameplay. Yet play creates a different basis from which learning processes happen in gameplay. Quite simply put, all of the internalised meanings of game systems, narrative, the player's own investment of self, and the hardships they go through are to some extent transformational. Acquiring knowledge about a game system is one thing, using it however indicates a fundamental shift in the player's interaction with the environment, and as such must be considered a transformative process starting from the moment of acquisition to the moment of enacting this knowledge into the gameworld. What is essential in terms of transformation in gameplay, as the model would argue, is that the playful self is the point of entry, and the point of departure for transformation to happen (indicated by the permeable outline of the term in the model in **Figure 29**). If the playful self is not learning something, then there is no transformation. And this does occur, as I will present with the introduction of the term osmosis.

The Playful Self and Osmosis in Transformational Processes

With the permeable "membrane" of the playful self in the model, there is the question of how understandings and emotional complexes are allowed to travel into, and out of this intersection of personal and game-based structures. I turn to osmosis, which generally represents a process of absorption or diffusion of a certain matter, with matter in this case being the many past constructions of perception, meaning, and importance that comprise an experience of the self. Yet this osmosis is never stable, and never leads to a completely stable balance between the different constructions of transformative processes. Unlike the physics experiment in which osmosis ultimately leads to stagnation, the living being, from the whole person in a global society to the singular living cell within this entity, must constantly be in flux. The living osmosis of both stable and emerging biographies and identities in play (both personal, playful and game-based) must be in constant movement. If not, then play can hardly be said to exist, and would in that case be unembodied and impersonal. Examples that I have used so far could be said to incorporate this terms of osmosis, as the gameworld creates a pressure on the playful self to change in order to both understand and operate within it. At the same time, personal biographies and personal identity also put varying pressure on the playful self to incorporate

these structures according to the needs of the self and the gameworld, guided by the playful engagement.

An interesting case in terms of osmosis as a form of transformational potential is Paul as he played *StarCraft 2*. As has been mentioned before, Paul had played this game many times before, and the video analysis of his gameplay was difficult as moments of interest were few and far between. In the beginning of his gameplay, Paul had a moment of contemplation when he was deciding between playing on the hard or normal difficulty setting. I showed this to Paul, to which he stated that it was a process of deciding on what he wanted from this playthrough. If he should go for the challenge, or play for the story and to feel "cosy". He chose the latter, which then became telling for most of the situations I showed him, and the processes he had went through in these. I showed Paul a situation where he was potentially contemplating what kind of "unit upgrade" he wanted to research. These upgrades are exclusive, in that choosing one will remove the other permanently in the playthrough. It turned out that most of the pause was due to Paul enjoying reading the "lore" of the upgrade, while the actual choice was often quite given, although with a slight contemplation. As Paul stated in terms of his choice of upgrade:

> It is based in the other playthroughs that I have had. I kind of know what units and upgrades I should prioritise, and what I can choose because I want to. […] often with a lot of the choices, I don't exactly remember what I chose the last time I played. But here in the beginning, it is often best to choose the basic unit upgrades, so I might as well choose the best upgrade. Then you have an easier time playing through the campaign. (Paul, second entry interview)

This statement is quite general to Paul's combined statements towards processes in his gameplay. That is, that there is a subtle infringement of potentially doing something novel, but that he ultimately chooses the easier and more effective option. There is a slight osmotic push to create a situation of a new playful self, but it is negated. Instead, the playful self is solidified on the basis of what it has historically been in play with this particular game, solidified in the very beginning by Paul's choice of playing the game to re-experience the story, and to feel cosy while doing so. At a point, Paul completed a mission, and the "mission successful" screen indicated that he was still missing an achievement asking him to play the mission on the hard difficulty. His cursor movement indicated that he contemplated doing this, and seeing it Paul stated: "yeah, that the consideration, if I should play it on hard to just get that achievement. But every time I think; No, I can't be bothered. I just want to move on.". The properties of transformation in Paul's gameplay is ruled by this lack of osmosis, where considerations of changing the playful interaction are denied. The playful self can, and will, be protective of the needs and basis of its own construction, if it is constructed in a way that primarily situates it in a lifeworld need. In Paul's case, a need for a cosy experience. Interestingly, the game itself is quite demanding on Paul's strategic thinking, and very quick both proactive and reactive movements and decisions need to be made when playing the specific missions. In this sense, a lack of osmotic properties in the playful self is not about not being active in the play situation,

but rather about letting the playful self be complete in its construction. What this afforded Paul is a sensation of calm, even within demanding gameplay situations. Transformative processes are available and all potential components are present, but the osmotic pressure is almost non-existent and so transformative processes do not seem to occur.

Echoing this phenomenon, Tory played *Cult of the Lamb* (Massive Monster, 2022), but had difficulty in remembering her specific processes as she had played this, and instead was able to give general elaborations as to the overall function of her actions. I showed Tory some small segments of video, visible in **Figure 30**, where Tory buries one of her followers, indoctrinates a new follower, and finally sacrifices a follower. Without going into too much detail on the game itself, it was clear that there were no transformational movements of Tory's playful self in the play session. As Tory stated, she had already finished the game. The reason she played it was because there was a timed event which introduced some specific "animals" that she could get in that timeframe. So, for Tory, playing it for these 45 minutes was reminiscent of crossing off a task on a to-do list.

Figure 30. Burial, Indoctrination, and Sacrifice

Source: Tory's gameplay. Playing *Cult of the Lamb*.
Note: From left to right; a burial, an indoctrination of a new follower, sacrificing a follower.

In the indoctrination process, the player can decide the visual appearance of the new follower. The specifics of Tory's choices here were quite well established: "If my rabbit has just died, then I need a new rabbit. I want them to be different species, but only the species that I think look cute." Sacrificing a follower: "I chose that my cult believes in sacrifice. So sometimes they ask if they can be sacrificed, which is usually quite violent. It does hurt a bit sometimes." In terms of a follower of Tory's cult dying and having to be buried, Tory stated that such was a fact of the game. It had been hard for her in the beginning, but now, it was just the way it is. I asked her how she felt about the game in terms of these features, to which she stated: "Well, it is an amazing mix of absolute cuteness and cute sounds, and then is also the cruellest evil ever. I think it is an amazing mix!" As seems quite obvious, Tory in this play session did not need to transform in any way. Transformations had already happened a long time ago, and these actions were simply things that had to be done. The playful self well-established through previous (probably quite strenuous) processes, there was no osmotic pressure to speak of in the play

session with the game. The playful self was immediately available as she started the game, and the intersections of gameworld and lifeworld needed no re-negotiation.

With these two examples from Paul and Tory's gameplay representing how replaying a game can fundamentally influence potentials for transformative processes, Fran showed a very different engagement in replaying *The Elder Scrolls V: Skyrim*. The video analysis of Fran's play had been an interesting experience for me. With the game being very free-form after the first 15 minutes, the player can travel and do pretty much all they want. Very quickly it became apparent that Fran was playing with a lot of modifications to the game, which gave a clear indication that this was far from the first time she had played it. The way Fran played was however a bit of a conundrum to me, as she seemed on the one hand to be very driven toward specific places and NPCs, while at the same time doing rather irrational things, such as running after a deer, but not harming it or otherwise doing anything with or to it. Entering a dungeon, she was clearly adept at combat and overcame most challenges despite playing on a harder difficulty setting. Sneaking around, lockpicking often very specific chests for loot, and talking to specific NPCs with quests all indicated a certain amount of functional play towards a specific goal. Then, at the end of Fran's second play session after approximately 3.5 hours of gameplay combined, a unique situation occurred which I had not expected. She entered an inn, bought a room, sat on a balcony, and bought and consumed very specific foods and drinks from the barmaid before saving and quitting the game. This unexpected behaviour gave meaning to the erratic gameplay I had seen so far, but not necessarily meaning. The meaning was only revealed in the video-elicited interview.

Spending a long time in the character creation process, Fran created something different than what she usually would, and built a background story that argued for the character's existence in the regular storyline of the game. As I briefly described in Chapter 3 in connection to observational criteria, Fran underwent a form of biographical transformation process through this character creation, as she chose something different (a wood elf) from what she would usually play. Fran imagined that she, as this wood elf, had been caught while exploring the woods, which fits with the rather blank slate that the game starts with in which the player has been captured and is being transported to their execution. Following but not hurting animals was a part of the backstory of the wood elf character, which also spoke to Fran's personal identity in not harming innocent creatures. The specific foods and drinks were a part of the character not enjoying "the cheap stuff" but treating herself to the good foods and wines. These situations all spoke into the solidification of the new playful identity that Fran was establishing, as new intersections of her personal and playful identity were created. 26 minutes into her third play session however, Fran decides to restart the game from the beginning, using the same character but also using a mod that allowed her to start in a different location. This happened right after she had very deliberately travelled to "Riften" (a far-away city), and had recruited a specific follower (an NPC, that follows the player figure around and fights alongside them) "Inigo". I showed Fran this transition to a new game, to which she stated:

It is just Inigo in general, because I was thinking; I have a character that I don't like, with a background that I don't like. And so I said: I want to play with Inigo before I even start with

the main quest, because I want to do it with him. And I want my character to be a little bit developed; I wanted my character to go to Riften with some reasons in game that were not just me going after Inigo. So I decided; no this is not it; I don't like this character and I will make a new one. (Fran, Interview)

The way that Fran engages with the playable figure is a matter of a playful identity that has to fit with Fran's personal wants and needs in the gameworld. In establishing a playful identity within a known gameworld, Fran's playful self was open for transformation, and as it turned out, needed a completely new game biography that would fit with the new playful identity. The character that Fran doesn't like is not the playable figure and her conception of it per se, but the story and motivation of the character as it moves through the gameworld, guided and continuously created by Fran's playful self. Like the previous example with Parker changing outfit for 2B, the realisation of disjunction comes once there is a moment of pause. In recruiting Inigo, something did not quite fit in the intersection between personal and playful identity, and this disturbance caused a "reset" of sorts. A new playful self was needed as the osmosis of personal and playful identities into the playful self were at odds with the game-biography. Knowing of, and using a mod, it was possible for Fran to reconfigure the gameworld to her emergent need (see Sihvonen (2021) for the use of mods to establish emergent playful engagements).

What Fran's playful engagement shows is that the playful self is an instance, which when given room and experimentation allows for transformations in play even in re-playing scenarios. Contrary to Paul and Tory, Fran engaged with elements of imagination and role-play of sorts. While I will not definitively define role-play in terms of the Transformational process model (**Figure 29**, page 183), it is important to state that it is likely tangent to role-playing with identities. From a sociological perspective on role-playing games, Williams et al. define identity in role-playing games as something the player attaches to (2018). The more structured notion of "role" in play then being the expected behaviour of the player and other agents in the gameworld in unison, based on constructed identities pertinent to the gameplay (Williams et al., 2018). In this sense, the playful identity would be the focal point of role-play in single-player games, yet with the construction of the role in close connection to the gameworld presentation of functionality towards a stable structure. As I have presented it, the role of the playable figure is usually more elaborate than what the gameworld can present on its own, and as such there is more to unpack in this direction, likely with a greater focus on game design as a vehicle of the playful identity.

Fran needed to redo the story of her play based on an experience of continuous disjunctures in her playful self. The internalisation of the game biography started to conflict with her self-perception as an expression of her imagination and the actuality of the game narrative. Importantly however, Fran constructing her own playful identity in the game by reconfiguring the gameworld to fit her emergent narrative led her to an increased sense of belonging and playful engagement. As Fran summarised this experience:

I didn't feel so engaged with the game because I didn't like the character. And it's not the character per se, it's just the back story I had in my head. So I started again, with the start in the boat. It was so nice and it gave me a lot of motivation to continue playing; and I was so sad when I had to stop. I wanted to play for at least two more days. But I had to do other things. (Fran, interview)

And Fran did have other things in life that were pressing, which is also why she did not play for many hours, and had several (about 14) days between the three play sessions. Yet that she had 14 days in between each play session also underlines the prominence of the playful self as both established and establishing. Not only did the playful self keep its constitution over the course of an entire month with only 3 play sessions and a combined 6.5 hours of gameplay, but it was also established enough to go through a transformative process in which fundamental structures of it were reconfigured to make it functional on a presumably longer scale. So, while the playful self can be an established and fixed form allowing no transformation, it can also, even after long periods of time, be reconfigured in insisting on new forms of intersection between the player as a person, and the game as a playground.

The Playful Self in Critical Self-Perception

As I described in Chapter 5, the participants generally played in accordance with their habitual practises. In this, most played a single game continuously, or a smaller selection of games yet still in fairly recognisable patterns. While it was not a prevalent phenomenon in the gameplay videos or the interviews, there were two situations in which it is somewhat clear that the playful self succumbs to pressure from the two sides of its existence. In these two examples, both participants experienced something in the game that is visibly not in coherence with their sense of personal identity and biography, and which is unsolvable on the terms of the gameworld (*Dragon Age: Origins* in both cases).

Emma was faced with a group of refugees who wanted to kill her due to a bounty on her head. The situation is not avoidable, and to some extent functions as a narrative exposition of the antagonist having a hold over the desperate people fleeing from the encroaching evil. Emma enters the situation and is clearly searching for a non-violent solution, which is not existent. She easily wins the fight with the refugees, but shortly thereafter loses another encounter and has to reload. She then tries to avoid this confrontation for 10 minutes, before saving and quitting the game. She did not play it since, even though there was about a week between this last play session and the interview and that she had been playing in a quite stable pattern. As Emma said in the interview:

At the end, when I stopped, it was because I was confused. Most times I could choose how I would handle things. But then these people approached me and started a conflict, and all that I could do was to kill them. And I couldn't figure out if that was really the only thing I could do. So I tried reloading to avoid the scene completely. It sort of stood out because I

was used to having options, and then all of the sudden there were none. Then I got confused. (Emma, Interview)

As mentioned before, Emma mainly played in a very caring fashion, opting out of violent solutions whenever possible. This experience however broke her illusion that she could solve situations in coherence with her non-violent nature. As such, the intersection of her personal identity and playful identity could no longer exist in the gameworld, and her play with the game came at an end. Now granted, she may have played the game after the interview, but there were not really any indications that she would.

Tim (he/him) had a similar experience, yet one that he did not express as clearly as Emma. After 13.5 hours of play in 7 play sessions over the course of three consecutive days, Tim meets the NPC "Jowan". Jowan and Tim were friends in the beginning of the game, where Jowan then turned out to be a blood-mage. This had caused Tim some troubles at the time, as Tim had effectively betrayed Jowan's friendship by reporting him to the authority at the time. As Tim meets Jowan here again, it becomes clear that Jowan has done something bad which has cost countless lives and which Tim is trying to fix. Tim spends 15 minutes trying to convince Jowan to join him in remedying the situation. This is not possible, and Tim ends up killing Jowan. Tim reloads the game shortly after this, and tried the conversation again, with the same outcome. Then 10 minutes of play pass by before Tim loses an encounter, whereafter he then quits the game and did not play again. Tim explained his experience:

[…] this is what the scene is about, for me at least. That in reality it is me that have failed, and not really him. That is also what has driven the entire situation, and then in the end I can handle that he won't deal with it. I feel it is annoying that he doesn't want to give me what I want. And then I just kill him because it seemed like that was the only way it could be. (Tim, Interview)

Barring the fact that Tim was obviously quite invested in the situation and in the larger span of his relationship with the NPC, this is also an expression of Tim having to give up due to frustration. As he states, there seems to be no other way out of the situation than the very ultimate choice of killing Jowan. Something that Tim did not enjoy doing, but felt he had to do so Jowan would not cause any more trouble, based on the fact that he would not join Tim in fixing the situation. As with Emma, the gameworld presented a situation in which Tim could no longer find the intersections needed for the playful self to continue. The self-perceptive aspect of the playful self must be in line with both the personal and the playful identity. The transformation asked from the game in these two instances were beyond each of the players' self-perception, in that they were in different ways forced to enact actions that went against their sensitivity and how it should be integrated into the gameworld environment. As such, the game can transgress against the player on profound levels (see Mortensen & Jørgensen, 2020) to the point where play simply ends, as the experience of the transgression is beyond the emotional, volitional, or social processing capacity of the playful self.

While I cannot say if Emma or Tim have ever resumed play with the game, there is an interesting defensive mechanism which is apparent in these two cases. As Jack Mezirow

defines: "Transformative learning is learning that transforms problematic frames of reference-sets of fixed assumptions and expectations (habits of mind, meaning perspectives, mindsets)—to make them more inclusive, discriminating, open, reflective, and emotionally able to change" (Mezirow, 2003, p. 58). In this definition lies the aspect of Critical Theory, in which transformative learning is seen as a means of empowerment and betterment on a sociocultural scale. Yet when the definition is brought into the frame of Emma and Tim's experiences above, it can be argued that it is exactly the opposite they achieve (but not necessarily in a negative way). As Emma expressed, she had assumptions and expectations of how she would be able to engage the gameworld discursively with a basis in her meaning perspectives. That is, that she would not do harm, but rather find solutions non-violently. Being faced then with a situation of unavoidable violence where she is forced to use her power to kill innocent and misled villagers/refugees instigated both an immediate and lasting resistance to being within the gameworld. That moment of the playful self becoming something new on the basis of the game-biography (a killer of innocents) was disjunctural and could not be immediately remedied or made sense of. The question is if it necessarily should be resolved, in that the gameworld presents a contrary to peaceful resolution and mutual exchange in this situation. It quite simply imposes a hegemony over Emma's playful self which she must accept in order to continue to play, since there is no exchange of meaning perspectives, but only an exposition of a singular reality as factual. Rejecting this speaks to the power of the player in such situations of potential transformation when faced with transgression. If the game imposes upon the player a self-perception which is fundamentally at odds with the player's lifeworld self, it alienates the playful self and play will naturally end. So, while it can be said that Emma could not enter into the critical dialectical discourse that Mezirow imagined as a means to a societal betterment, it is perhaps exactly the rejection of entering this dialogue which is the, according to Mezirow's theory, desirable dialectical outcome. Simply put, the game presents a monological truth in this scenario, which the other players (of *Dragon Age: Origins*) allowed to enter into transformative processes in gameplay as an addition to the game biography, but which Emma rejected. The sociality that Emma is forced to enact is not of her own choosing, yet seminal to her the game biography. What this means in this individual case, is that the game does not allow Emma the internal processing needed for transformation of the playful self, and resultantly, the dialogue between Emma's functionality and sensitivity in the alterity relation to the gameworld ends without resolution. In much the same way, Tim's meaning perspective and mindset toward what the NPC (Jowan) should be able to do was also presented without resolution. No matter what Tim did, he was ultimately forced to solve the situation by killing the NPC, leading him to dissolve the playful self.

As Jaakko Stenros and Tanja Sihvonen conclude in their theoretical work on solitary play activity with role-playing games, the player engages the game with a set of expectations as to what the game, as a toy, will reflect back at the player:

> […] the player expects the toy to reflect back at least some of what the player is performing, yet the game can only reflect on the basis of what has been pre-scripted in it. As a mirror, it is thus lacking, especially as there is no social play -- in other words, the reflection work

done by other players, foundational in other types of role-playing games is not a possibility. (Stenros & Sihvonen, 2020, Conclusion section)

In this, the authors pose an interesting proposition of pretend play as performance. As the authors argue, this performance of the player stands opposed to the procedurality of the game as a cybernetic system, meaning that the player can imagine more than what the game can "mirror", even though the mirror is not as socially fluent as interhuman-role-play would otherwise be defined by. In terms of the transformative process model, there are non-conforming aspects of the gameworld which can either be accepted or denied as a part of the playful self. The question is if the player has internalised a sense of worldness that allows for more than what the game may present, outside of its predetermined structures.

The self-perception that the playful self relies on is a living process of evaluation that encompasses the player's multitude of perspectives in solving the need to transform in order to play. It is perhaps exactly the point, that there is no mirror that situates the player in a situation of social judgement, but rather that the player is allowed to transform within a self-defined frame of their own habits of mind, meaning perspectives, and mindsets. In this sense, transformative processes in solitary play with single-player games lie in the intersection between *ludus* and *paidia*, between play within the game structures and the free-play without confinement (Caillois, 2001). The self that players employ and transform in play in this activity is more than a reflective mirror of something in the physical, social world and the gameworld. Gameplay in this sense is contingent on factors that rely on biographical reference, game biographies and self-hoods that precede and subvert the game's designed intentions, and reconstitutes the notion of self into significant and complex expressions of embodied internal processes.

Chapter 7. Applicability and Conclusion

With the playful self as a situated intersection of self-perception with a specific game, the way that the gameworld, game biography, and playful identity are formed in connection to the playful self has been presented in the previous chapter from a multitude of perspectives. To reiterate, the playful self is a constructed state of being in action, a developing entity, and a transformative amalgamation of the player's self, playing within and with a game(world). What is less described are the potential movements from the playful self to the personal identity, the personal biography, and the lifeworld. It is relevant to state that a sociocultural frame exists around the entirety of the transformative process model which gives both meaning and opportunity to the activity, which situates the transformative process model on the terms of an individual's lifeworld. Yet from this research, it is difficult to define the movements from the playful self towards the personal structures of being, and the potential transformation of the individual through these structures that otherwise make up a part of the playful self. Visualised here in **Figure 31**, arrows indicate the movements that the analysis revealed, and what I here question.

Figure 31. Questioning the movement from the playful self to the lifeworld self
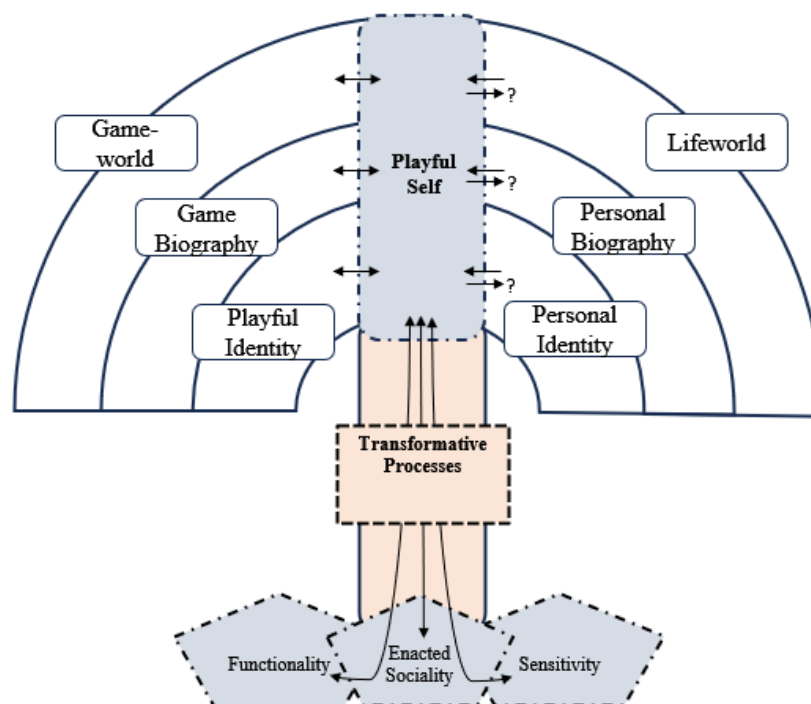
The most obvious part of the existential self that can transform outside of gameplay would be the personal biography. As many participants referenced, from entry into the project till end, play with specific games is embedded in this biography as memory. General as well as specific

experiences with specific games participants have played in the past are often activated as process elaboration or meta-reflections when trying to describe certain feelings or understandings of game structures. In this sense, it is likely that the experiences the participants have had with the games in this project are also embedded into personal biographies, and have likely also contributed to the individual participants' game literacy. That is, as presented also in Chapter 2, that game literacy holds both operational, critical and cultural value (see Bourgonjon, 2014), which can be seen as a competence of everyday life.

Yet the prominence of the participants' experiences during the project period, and how they may be activated in future experiences, remains unknown. There were indications to this, as for example Parker (he/him) referencing his emotional attachment to the narrative and generally being very attentive to minute details of how the game (*Nier: Automata* (PlatinumGames, 2017)) presented this. Parker's level of engagement would suggest that the experience should be well grounded within his personal biography, and in this sense be easy for Parker to evoke in relevant situations. Josh (he/him), as he himself stated, probably preferred the sequel to *Divinity: Original Sin* (Larian Studios, 2014), and as such his experiences with this "original game" will likely be remembered as a subsection to his more preferred game. How such mnemonic valuations are tied to immediate experiences must be considered highly individual. The activation of such memories into new experiences rests on the experience at hand in how it is perceived, evaluated, and processed. In much the same way, the effect of the playful self on the personal identity should be considered present, yet the extent, effect, and form remain hidden.

Transformative learning in and through gameplay towards a societal scale is a different anthropological complex than what the transformative process model was iterated upon. Yet the model itself raises interesting questions as to the potential movements between the playful self and the lifeworld of the player. While the playful self as an instance in specific gameplay is well rooted in the lifeworld of the individual, the transformative potential of this playful self in solitary play towards the person as transformed is less clear. In Paul's (he/him) case, having had played *StarCraft 2* more times than he could remember, there is something to be said about the game and its connection to Paul's lifeworld. The playful self that Paul had already established in previous playful engagements with the game became a stable part of all his play sessions. Playing to feel "cosy" indicates that the play activity and the play sessions held a specific lifeworld expectancy, underlining the habitual nature of certain play practices. That is, that the playful self can have, and be determined by, a predetermined internal recognisable value in connection to the habitual practices (as was presented in Chapter 3: The Four Stages of the Display Method).

Findings in Contexts

As such, solitary gameplay is an important activity and an important part of everyday practices, allowing the players to situate themselves in play that holds meaning and value on its own terms. Showing how the model connects with this wider idea of habitual practices, the qualitative responses from the questionnaires and the follow-up interviews give indications to

this. As has been presented before, the participants were sent a qualitative questionnaire after their participation in the video-elicited interview (see Chapter 3). Note that this was only sent to the participants who were active during the PhD project period, and as such there is no such qualitative data on Dan, Amy, Emma, Sara or Tim in the form of writing. Coming as little surprise, the participants all had different yet substantial history with playing digital games, starting in their early teens to engage regularly with either single-player or multi-player games, or both.

Two connected themes emerged in the participants' written feedback, with one being "escapism" and the other being "important and personal space". Two participants used the exact word "escapism" quite liberally, and three implied the notion of escapism to explain how the activity of play differs from the pressures of everyday life. Another two participants did not go in this direction, with Paul's responses being very short and not very descriptive, and Josh writing: "I've never really used games as a coping mechanism or as escapism from real-life issues". Tory (she/her) described in writing how playing single-player games are "[…] a huge mental free space", while simultaneously describing it as a form of escape from the many obligations of both work, family, and friends. Matt's (he/him) responses echoed this statement, yet also described how his play practices fluctuate based on his own feeling of freedom to engage with non-study-related activities.

Tory, Matt, and Fran were invited to a second interview based on their responses, which was more dialogical in nature (see Kvale, 2007) as there were only a few talking points on my part to ensure that we could go into a discussion. The hope was that the participants would be able to describe the emotional, motivational, or even volitional backgrounds of their play practices. The dialogical interview format was a way for me to grant them a greater power to themselves and their activities, rather than having to describe their playful engagements in immediate contrast to obligations outside of the activity, which seemed to lead to the concept of play-as-escape. The dialogical and relational interview created sessions in which stigmas and associated responses were removed in favour of more in-depth and accurate descriptions of the individual's experiences with gameplay as situated in their lifeworld. I asked Fran, Matt, and Tory in the follow-up interviews in what social contexts they could play single-player games. Fran and Tory both uniformly stated that they could only play if they were alone. While they both had partners, they did not live together with them. If the partner was with them, both Tory and Fran would not play games. Matt did not have a partner, but would not mind, as he said, if someone was around while he played games. In all three interviews, the discussion went into what might disturb the play session. It was again quite unison in that only phone calls from specific people would be answered. Otherwise, they would be ignored until the play session was over, or there was a natural pause in the gameplay where it would be ok to pause for a while. What was gained from these interviews was that solitary play occupies a specific space, place, and importance for the individual. Yet also that it is highly individual with what impetus the activity initiates.

Reverting to Tory, she stated that most of her work happens on her computer, and as such, the computer is the primary source of her obligations on a day-to-day basis. When playing games however, all that the computer would show was exactly the game, and nothing else. In

this way, Tory gains a free space, not only in the form of play, but in the very material nature of shutting out emails and the programmes she used for work. As was presented in Chapter 3 (**Table 3**, page 66), Tory played a large variety of games both single and multiplayer. When discussing her play with *Dead by Daylight* (Behaviour Interactive, 2016), a multiplayer survival game, Tory stated that she vastly prefers to play multiplayer games with strangers, as she could view them simply as very advanced AI. She didn't need or want to see the other players as entities requiring social attention. While wanting to play a first-person shooter game, she had had difficulty finding one, because:

> I hate playing games with voice chat. I have been wanting to play first-person shooter games, but a lot of them have voice chat; and people use the voice chat, which means that I can't ignore them. I can't see them as AI anymore because they become real people. I'm not a fan of that, it takes too much energy from me to be social in that way. (Tory, Follow-up Interview)

Tory did play *Shatterline* (Frag Lab LLC, 2022), exactly a first-person shooter game, during the project period. At this time, it did not have voice chat enabled, but seemingly does now at the time of writing.

What Tory shows here is that the form and function of the game matters. It is not simply about what the game can do in one's lifeworld, but mainly what it affords, and thereby how it is played. As Matt stated in the follow-up interview, he had started playing more single-player games as he had realised after the video-elicited interview that he hardly ever remembered anything special from his multiplayer experiences. While he still enjoyed playing *League of Legends* (Riot Games, 2009) with his friends, he was now more concerned with finding "the good story" that would keep him engaged with a gameworld and let him experience and feel the narrative development of characters. Matt referenced a significant experience when he had played Bastion (Supergiant Games, 2011) quite a few years ago. This experience, he states, was life-changing in transforming his abilities of being social, as the ending of the game had created "a crucial turning point" in his life. While not a contrast, Tory was more interested in single-player games in which she could organise and cultivate things, while still insisting on feeling part of a gameworld with significance. Fran (she/her) stated how even with a "tiny bit of energy left" after her many obligations, playing *Skyrim* (Bethesda Game Studios, 2011) had a very specific function for her:

> When I decide to play and I get invested in what I'm doing, it is like all my all of my thoughts clear in the experiences that I am having through my avatar. I don't know, it's like showering in a in a magical fountain. The feeling is so weird. (Fran, Follow-up Interview)

It is, as Gordon Calleja argues, important to not regard gameplay as a binary concept between real and virtual, as that can lead to misconceptions of the activity of play with digital games exactly as an escape from "the real" (2010). As the analysis uncovered, the amount of energy investment transformative processes in solitary gameplay require would indicate that it is not necessarily an activity that is done lightly. On the contrary, the processes required to form and

maintain a playful self are multifaceted, and should be considered a very active and if not extensive mental exercise. As some of the written feedback highlights, processes in gameplay can be both important and transformative for the individual:

> "Playing games helped me through depression: taking shelter in another world, living the life that I've always dreamt about, surrounded by dragons and magic, gave me a reason to get out of my bed in my darkest days. The mood boost that I got from that helped me face real life."

> "As a teenager I used The Sims as a way to get a sense of control, play out scenarios I found difficult, or "rehearsed" real life situations I didn't know how to deal with."

> "Playing RPGs allowed me to explore my gender at a time that I was questioning it. When I created a character of the opposite gender, I did not recognize myself in that character, and the experience of play was broken. I felt gender dysphoria, and no connection to the avatar I created. That helped me significantly in my private life, as I realized I was not trans-gender."

As can be seen in these responses, play with single-player games is not unimportant. Rather, it can serve important functions in letting players explore themselves, overcome hardships, and better understand the world through mimicry and self-exploration. But it is also a fragile form of activity, as Parker wrote: "Due to all my duties, chores, and work, finding time to play is getting more and more difficult for me, to a point where I am losing interest in casual play.". The pressures of everyday production and obligations can be devastating to the activity of single-player play, as the practice consumes both time and attention. In this, Fran made a disturbing point, that in many ways shows how single-player play practises could do with better popular acknowledgement. As she stated, she would sometimes decline social arrangements to gain the time to play games. But she would never give this reason when declining, because people wouldn't understand why it is important to her. As Fran said, saying that you need to be alone for a while is ok, but saying that you need to be alone for a while and play games is not. I asked Fran what her thoughts were on why that is:

> I think that in general, in our society, taking the time to for yourself to play alone is not very accepted, and you have to always and constantly do something and produce something socially. I notice that if you're not very social, you're not very accepted. Like you're perceived like a weirdo. At least in my experience. (Fran, Follow-up interview)

An importance then to further understand how solitary play with single-player games holds significance in individual lifeworlds, and how the practise can be transformative to an individual and can constitute seminal transitions in self-perception. The energy and attention required to engage with meaning in solitary gameplay is not basic or simple, at least when it comes to transformative processes involving a playful self. Finally, there is of course also an importance to disseminate such findings into public discourse so that the activity may be

acknowledged on a broader scale, although this is of course not easily done. Yet seeing single-player games for their eudaimonic potentials in creating meaning and purpose (see for example: Cole & Gillies, 2021; Daneels, Bowman, et al., 2021; Daneels, Malliet, et al., 2021) would seem a promising avenue to explore in this direction. That is, that experiences of meaning and purpose are very present in solitary gameplay, visible in the processes of meaning-making and transformation that players undergo, both in the long term and in shorter instances while playing a specific game. In this activity, the social accommodation of human relations is replaced with processes of self-perception through the transformation of the playful self. Removed is the toxic meritocracy (Paul, 2018) that can lead to inflammatory social aspects of gameplay, and introduced is the experience of play in many varying forms (including transgressive) as an impetus for transformative processes and internal processing. The panopticon of near, local, and global society leading to self-restraint, social accommodation, and potential fear of social judgement is removed. Open instead is the potential for introspection and novelty of self-perception. Players are in a free space full of potentials that affords experimentations and allows exploration of the borderlines of their social interaction through enacted sociality. A playful identity is allowed to form from self-perception through self-reflective and intersective experiences, as the affective and emotional impetus for action is allowed to be based on (conscious or unconscious) self-reflective reasoning processes in the alterity relation to the gameworld as a perceptible and congruent reality. Tory is not playing single-player games or engaging in multiplayer games with a solo-play mindset because she can't find friends to play with. She does this because that is what makes sense for her, in her lifeworld, where play is about freedom and meaningful experiences. The same can be said for both Matt and Fran, as presented above.

While the research may not be able to definitively state how these experiences of the playful self are transformative of the player in terms of their lifeworld self, it does say something about gameplay as a fundamental playground of transformation. That is, that while the activities may not consistently transform the person of the player fundamentally, it does speak into the player's perception of self and the way that the player might engage the larger lifeworld. Presumably, these transformations as they are experienced in gameplay can underline the transformational potential that the player has, in that learning to learn is an aspect of transformation itself. It is not easy to transform one's frames of reference in the face of a globalised and continuously changing society, yet maybe the competence of transformation that games support can lend the individual an easier access to the processes that are required on a larger scale. As I briefly mentioned in Chapter 2, transformation of oneself is a sociocultural condition, and a circumstance of everyday functioning whether one wants to transform or not. Indeed, in this view, it would seem a competence to both be able to engage and disengage from transformative situations depending on the transformational requirement. What the participants have shown in this research, is that playing single-player games means to experience their sensitivity towards the situation at hand, to evaluate the origins of their own understandings of the situation, and to enact these internal constructs into a constructive version of sociality that engages with the gameworld's reception of these deeply rooted personal constructions of self.

Revisiting the Method

The playful self in the transformational play activity represents the original play experiences that the participants experience as they are playing at their leisure. Yet as explained, the direct observation of this would skew the experience towards a social bias in the play activity, and as such it was not deemed sensible to observe directly. Indeed, internal evaluation and experiences of an "I as commented by Me" are delicate processes in themselves in representing a continuous state of being and becoming, which in terms of originality can only happen in the habitual setting. Utilising the DisPlay method to access a player's running commentary of "Me" is the closest I have managed to design to understand the internal processes of 'being' and 'becoming' in the creative and spontaneous activities of solitary play. This was the goal of this research, and based on the findings the method was successful.

Yet while the method can be considered successful in gaining access to intimate play activities, there were also certain aspects of it that are still to be questioned. Mainly, there is the question of transgressive play, where there were some indications as to the limits. On many levels, the method did access transgressive play in that such situations as murder, stealing, lying, extortion, and more were present in the gameplay of the participants. Of these, most were remembered by the participants with a certain amount of joy, speaking into to the aesthetic pleasure of (non-profound) transgressive play (Mortensen & Jørgensen, 2020) in solitary play, as well as the safe environment between the individual participant and myself. One such moment would be Tim, laughing as I showed him how he had 'deviously' convinced a child to give up the family heirloom sword (*Dragon Age: Origins*), and another being Paul as he bought a prostitute for his party member (a flying skull- "Morte") and thought it was funny how the skull came back all waxed and polished (*Planescape: Torment*). Finally, Adam (he/him) (*Star Wars: The Old Republic*) seduced a rebel leader, and stated his surprise that such was possible in the game. As he explained the processes of his decision-making, the moment was about testing the game and how much it would let him do. He had not thought about the fact that it was being recorded at the time, nor did he mind that it had been. As he remembered he yelled out: "I can flirt in this game! What the fuck!" much to the surprise of his partner who was in another room nearby. He fondly remembered that he and his partner had been joking later that day, that he had been cheating with a Twi'lek. By far, most of these situations did not make the participants think of the fact that they were recording, and as I presented in Chapter 5, they generally forgot that they were recording when they played. As a point of interest, romantic play was also not out of reach of the method, as Paul, Amy and Sara all engaged in romances in their respective gameplay, and did not seem inhibited in expressing how this was a part of their playful experiences.

Yet there were moments, primarily in connection to sexual content, which drew the participants' attention towards the fact that they were recording and that I would see this recording. Playing *Nier: Automata*, Parker stated how the camera sometimes moves in a way so that the view is directly up under the skirt of the player character. In these moments, he would quickly move the camera, and as he said, was aware that someone would see it and maybe think

he was "a creep". Amy (they/them) at one point stopped their stream, as they wanted to optimise her party members' equipment, and for this needed to strip all of them. As they said, they didn't want me to get the wrong impression, and had restarted the stream right after. Finally Tory had been playing *HuniePop* (HuniePot, 2015) and initially asked if it was ok for her to stream since it is a very sexually explicit game (which I agreed to). Yet she did not provide recordings of this, stating in the secondary interview that she felt that that game was a very private inner sphere. That she felt that sex, gender, and nudity are culturally defined to be and stay behind closed doors, and as such felt discomfort when she was thinking about recording it for me. As such it begs the question if the DisPlay method is usable for forms of play where sex and sexual content is a prominent part of the play experience. A note then, that the method itself can be transgressive of personal play spaces that are culturally defined as intimately private, and to a large extent sensitive. A reminder then of Margarete Kusenbach's argument that "go alongs" should be careful of entering very private and/or dangerous activities (2003), as I presented in Chapter 4. Research should not come at the expense of participants, and as such, even if possibly sensational, the use of the DisPlay method towards highly sensitive and private themes of self and personal identity should consider these findings. Also in transgressive play lies the underlying codes of sociality of the individual which are challenged and negotiated internally into the playful engagement (Aarseth, 2014; Mortensen, 2015). This is not simply done, performed, or acted in a vacuum, which means that the research must accommodate the potential harm of tapping into specific play practices. As the examples from the participants above show, the method does tap into a very private sphere of the participants' lives as they express both reluctance and concern in showing (and no less recording) intimate facets of their lives.

There are of course many more limitations to the method, most of which I presented in chapter 3 in terms of the many issues that surround the use of technology. Yet the one I have presented here centred on research ethics and consent. While it is certainly feasible to use the method once consent is given, it is also pertinent to create a relation with the participants in which they are both aware and feel confident in that they are the experts on their own activities. This relation also needs to extend to the participant's ever-present option to retract themselves from the research, and to not only make clear but also encourage that the participant will express if any boundaries are crossed. An interrelation is quite unavoidable in the use of this method, and this should not be considered a negative. On the contrary, an interpersonal relationship if handled correctly can clear boundaries and allow for the participants to express themselves without fear of repercussions. As I have stated before, I have not viewed the video, or the participants' statements with a judgmental mindset. The way that they played the games and the actions they took can only be considered the correct and right way of playing. The result of this openness from both me and the individual participants, was that they enjoyed the interview and the opportunity to express nuances about their gameplay that most of them had never had the opportunity to articulate before. As Parker stated:

> I didn't know what to expect of this talk, but it was quite pleasant. It was really nice revisiting some moments of the game, and even nicer to have to look back at what I was thinking at

that time. You know, even though it's been like a month or so. But it's funny how I remember most of those moments, and to look back at my own choices. It's pretty cool. I really liked this, the experience. (Parker, Interview)

The initial stages of the research arguably do best with "naïve" participants, as it is fruitful to not have them think specifically about what an observer might be interested in. Yet exactly the aspect of streaming makes this practically impossible, as consent forms should include what the project concerns, even if on a more general level. In this sense, it is preferable to have a conversation with the individual participant, in which they can be informed about the need for gameplay video that is centred on how they play, and to underline that they should simply play as they usually do. Even much more focussed research, for example, research into how players process tutorial text information, would be best to leave at a more opaque level, indicating only to the participants that it is about how they learn how to play a new game, for example. With such a specific focus, I would however also expect the interview to home in on this specific aspect in the introduction to the interview, as to let the participant be aware of such a particular aspect. I did not do this in the interviews of this project, mostly because information about the general interest in learning and identity was evident in the consent form, and also because of the explorative nature of the interview and project as a whole. I did not want the participants to construct statements in coherence with my theories at the time, but rather let them speak freely and openly about what they had experienced. Throughout this however, it is a matter of research ethics and consent, in which I have been highly attentive to the procedural ethics of the project (data security, GDPR, potentials of harm, anonymity etc.). But an equal amount of attention has been on the practical research ethics, meaning the representation of participants, truthfulness of presentation, potential discomfort, objectivity and reflexivity, my role as researcher, and quite importantly the impact of the research on the participants (including their everyday practises and activities) (see Johnson, 2014 on procedural and practical research ethics)). Arguably, future attempts at utilising the DisPlay method should exhibit the same attention to detail on the ethics of the research.

Gameplay and Learning

As I presented in the introduction, I had a hope that this dissertation could add to certain fields of research working with games and transformation, and indeed also learning. As Egenfeldt-Nielsen presents, there is a conflict in educational games in which play and educational goals most often stand opposed to each other (2006). That is, if there is a designed and intentional educational goal, play with and within the game will usually be compromised due to the result-oriented nature of the gameworld. In applying this model of transformative processes in gameplay a deeper understanding of this dilemma of design is revealed. That is, that the educational focus of a game would rest on the internal evaluation of functionality and sensitivity. Educational results being then based on the accuracy of meaning-making, understanding or knowledge that is internalised, meaning that there is a focus on the functional aspect of content as it is learned. Standing in contrast to this is sensitivity, where the emotional

and motivational aspect of internalisation has to be accounted for. Meaning a question of what the actual incentive for the player is to engage in the learning process. As I have proposed it here, the internal evaluation between these two aspects is based on the playful self. That is, the self as it is constructed and perceptive of both lifeworld and gameworld realities in the very moments of gameplay. In this sense, attempts at educational game design should account for the possibility and necessity of an emergent playful self in gameplay. Meaning then a more elaborate questioning of: to what extent does the game afford the merging of personal biography and game biography, and personal identity and playful identity to create a playful self. This intersection which will by all accounts create an impetus for internal evaluations both consciously and unconsciously in learning processes. The enactment of these internal evaluations needs to have an importance which in some shape or form builds on the game biography and the playful identity within the specific gameplay situation. That is, that a successful learning situation has to have a certain outcome that is perceived as important enough that it is relegated to memory, and in this becomes accessible for future situations.

As Vasilalo et al. find (through a survey panel) there are many different learning styles and equally many differing self-perceived learning outcomes of gameplay with (non-educational) digital games. Their research proposes an interesting aspect of how (informal) learning functions in non-educational games, albeit with a focus quite different from the one presented in this dissertation. The research I have conducted has not engaged with details of self-perceived outcomes of learning processes on the level of learner types, yet if such focus was to be attempted within the frame of this research certain aspects of learning styles and playstyles could potentially emerge. As I presented in the analysis section on "Functionality and Internalisation" in the previous chapter, learning systems and mechanics are ongoing processes happening continuously when playing. It is, relatively speaking, very visible in a video analysis when a certain system or mechanism of a game is being tested and explored in order to learn the meaning and function of it. An important point in terms of learning these structures was (as stated in the previous chapter), that this form of learning (that of increasing functionality) was most easily observed by mislearning or even absence. That is, that when a certain system has not been noticed (as was the case with Dan) it can clearly create situations of struggle within the gameplay. Revealed however only in the video-elicited interview, Josh had not investigated the "traits" system in *Divinity Original Sin* (Larian Studios, 2014) which poses bonuses to "Altruism", "Pragmatism", and many more concepts depending on his choices in dialogue situations. Such a system could otherwise function as a learning opportunity towards ethical concepts, but it was not something Josh relegated his attention to. What is interesting then from the point of learning and games, be it with educational or non-educational foci, is that the method may reveal underlying structures of *how* games can facilitate learning processes, and in terms of designing games for specific understandings the model begs the question of *what can facilitate* such *processes*. In this way, the theorisation of learning processes that the model presents along with the method reverse engineers the notion of designed learning settings in games. Instead of thinking of the content and how it is best presented to incite learning, then presenting this, and then looking for signs of learning, the reverse didactical analysis in relation to the method and model of this dissertation would be: Looking at signs of

learning, then identifying moments of learning, then investigating the learning processes in relation to the content, and then finally, analysing what processes are in question in order for the player to engage with the learning outcome.

While this does not give a definitive answer to the challenges of understanding games and learning or designing educational games, it most certainly refocuses the attention of such on a central issue. As Nicola Whitton advocated, there should be an appreciation of *playfulness in learning*, instead of a focus on games *for* learning (2014). A shift then, from a focus on functionality directly implemented to the lifeworld of the player, to a focus on the playful self, and how functionality can aid in establishing this intersectional and self-preceptive experiential form of being and becoming in gameplay. Transformation in this educational sense being the adaptation of functionality as the main learning form while still being subject to the playful engagement, shifting the focus from the game systems as vehicles of education and instead focussing on the interactive qualities of play. While not a novel point of view as both Nicola Whitton (2014), Eric Zimmerman (2009) and many more with a critical view on games and learning have expressed this need, this dissertation presents a form in which such a shift in perspective may be operationalised.

Conclusion

While there is a substantial interest in how learning functions in games and what transformation may happen when playing single-player games, the basis of understanding transformative processes in gameplay from a transformative learning theory perspective has largely been untouched up until this project. With a seminal shift to *how* transformations transpire in gameplay, the research presented throughout this dissertation has shown that this point of entry into understanding playful engagements and learning processes can uncover new and unusual insights. Philosophical understandings create a beneficial basis of understanding the player positions required for transformation (Gualeni & Vella, 2020; Leino, 2013, 2015; Vella, 2015), and in the merger with transformative learning theory (mainly based on theories of Illeris (2017a) and Jarvis (2006)), these create a solid ground for exploring how processes transpire in gameplay. This synthesis of embodied experiences in play and the internal functioning within the player in a learning perspective paves the way to rethink the way transformative learning processes both can and should be researched. A central component of this research, based on this synthesis, has therefore been *how* transformation transpires within the playful activity itself, foregoing the more general research approaches of *what* the result from the activity is. As such, Gameplay has been framed as a continuum of processes of embodied existence and experience, which brings intricate and individual nuances of transformation to the forefront. The player exists both within and outside of the game at the same time, and in this complicated alterity relation, the player is simultaneously being something and becoming something at the same time. There is a self in this relation, that perceives and guides how the player acts and reacts to the gameworld, and which is not bound but instead inspired by the gameworld and the lifeworld realities of the individual player.

The playful self emerges as a central component in this merger of the player as a full person and the player as a part of the gameworld. The sense of worldness (Klastrup, 2008; Tosca & Klastrup, 2019) that the player experiences means that there is both reason and meaning to engage the gameworld both as themselves, and with a playful identity that fits within the gameworld representations and narrative. The playful self is an intersection of selves, which is built by the player's conscious or unconscious activation of on the one side personal biography and personal identity, and on the other side game biography and playful identity. There is a lifeworld self, and an experienced sense of self through the gameworld, which intersect in the playful self as self-perception. This playful self is dependent on transformative processes that continuously reorganise how the player engages with the gameworld.

These transformative processes are dependent on internal evaluative processes consisting of functionality (meaning-making and understanding), sensitivity (emotional and volitional connection) and sociality (expression of identity and self) (Illeris, 2017a). In gameplay functionality is continuously expanded and represents the player's ability to make sense of the narrative through presentations of their playable figure's belonging in the gameworld. It is also an expression of the player's understanding and interaction with the game's systems, mechanics, and controls. This functionality is a part of transformational processes of the playful self in that the player internalises these meanings and structures as realities of the experience. Sensitivity represents the emotional connection to the gameworld, and is essential in the evaluation of both the importance and relevance of investing a self into the playful activity. It is not only about feelings or willpower, but about allowing the self to be connected and influenced by the gameworld and its entities, and in this sense allowing transformative processes to occur. An internal evaluation of functionality and sensitivity leads to interaction, which is finally expressed in the gameplay as enacted sociality as an expression of the player's integration of both personal and playful identity. In this enactment is the interactive part of the transformational process, as the mental and bodily energy spent in the internal evaluation (functionality and sensitivity) is experienced in the gameworld setting, and integrated into the gameworld biography, and is thereby a part of the self-perception of the playful self. If for any given reason the playful self is denied on the basis of gameworld interactions, such as demand for transformation which fundamentally goes against the personal identity of the player, play eventually ends. This leads to the conjecture, that transformation of the playful self as a self-perceptive state of being is the most central part to a playful engagement with digital games, and an essential part of play.

These findings are based on an elaborate research design which was centred on solitary play with digital single-player games, and as such are also presented in relation to this. The processes of learning and transformation that transpire within this activity must be researched in a manner that respects the basis of solitary gameplay that defines the activity itself. The importance of this view on the player and game relationship lies in the hidden nature of the solitary gameplay activity, which was the guiding principle for the iteration and application of the research methods. That is, that the methods needed to accommodate the private and sensitive context that solitary play with single-player games implies. Respecting this sensitivity of the activity would arguably be the sensible way to gain access to the nuances of transformative

processes unique to the experiences available in this form of gameplay. Inspired by ethnographic methods, a four-stage multimethod research design was designed and used in this research. The combined method, the DisPlay method, shows promising applicability towards a wide variety of activities with digital media, yet is especially applicable to solitary activities and practises.

The method's first stage is about gathering video material. With the many technological solutions to do so without cumbersome procedures for participants, it is possible to gather video material directly from the activity without unnecessary intrusion. This possibility does however come with many ethical considerations, as private and sensitive activities are usually such for a reason. In this research project, the video gathering used online streaming platforms to gather the video material. Resultantly, the participants were able to play like they usually would with minimal disturbance from being a part of the research project. The general consensus in the participants' statements was that they played as they usually would, and that they simply forgot that they were recording while they were playing.

The second stage consists of a video analysis in which the video material is watched, analysed and journalised from beginning to end. This stage of the method took inspiration from micro-ethnography (Baker et al., 2008; Giddings, 2009) in combination with the next stage. The main objective of the video analysis was to find moments or situations of particular interest in terms of the research question. That is, moments where there was a potential that a transformative process was occurring. Four observational criteria were the basis of identifying and choosing specific moments that were used in the later video-elicited interview. The participants were asked in the beginning of the video-elicited interview if there were any specific moments that they remembered from their gameplay. Most of the moments the participants mentioned were already chosen for the interview based on the video analysis, which indicated that the analysis was successful in identifying the more important moments of gameplay.

The third stage was the video-elicited interview, in which the participants were shown short segments of their gameplay video and prompted to articulate what they had experienced in those moments. The participants remembered nearly all situations and were able to describe their thoughts and emotions in the situation, and how those led to a specific decision of action. Oftentimes they exclaimed their connection to the video even before I had started playing it, remembering the situation purely by my explanation of where it was situated in the larger sequence of their gameplay and from the still picture of the yet un-played video clip. Seeing the video constituted a form of re-embodied experience, where participants were re-situated into the moment as it had originally transpired. They were generally able to articulate highly complex strings of both conscious and unconscious reasoning processes, where constructs of the gameworld, their perception of this, and their conceptions of what meaning their actions had in the game were expressed in detail. This part of the combined method delivered substantial data towards the research, and served to give body to the main analysis.

The fourth and final part of the method which was undertaken before the main analysis was a differentiation analysis. As the participants were able to articulate the details of their playful experiences close to the original experiences of both conscious and unconscious

processes, the statements from the transcriptions were very 'messy'. This was to be expected, as internal evaluation when expressed so directly as the video-elicited interview allowed and encouraged does not necessarily result in coherent transcriptions. The differentiation analysis was therefore meant to organise the data, as the statements from the interviews could be sorted into three categories: Process statements which were directly connected to a sequence of thought and/or emotion and as such represented play and gameplay through the lived processes. Process elaborations, which were connected to the process via explanations of experiences that constituted the processes in the situation at hand. And finally, meta-reflections which were statements about generalised play activity and engagement with games. These categorisations led to a further triangulation where the statements were put in connection to the gameplay video and explored and examined for the connectedness across the many different references of the processes. This resulted in a combined form of the data, which could be used in the main analysis focussing on the transformational aspects of processes in gameplay, with findings as presented here in the beginning of this conclusion.

This research overall shows that it is possible to investigate processes in solitary gameplay, which allows for original embodied experiences and original and embodied transformative processes to transpire. Solitary gameplay activities are inherently very sensitive to social accommodation, and so must be observed at a distance, which the presented DisPlay method allows. As this dissertation presents, the activity is important to individuals on the basis of the freedom of solitude and the freedom from interhuman social contact and accommodation. The activity itself must be allowed its habitual setting and must transpire in habitual contexts if transformation in solitary play with single-player games is to be thoroughly understood. While the research here has presented a theorisation of transformative processes in solitary gameplay, it cannot define how these transformations affect the player as a person outside of gameplay. Yet there are indications, as participants describe the meaning of the activity of solitary play as something important, relevant, and in some cases personally transformative on fundamental levels throughout their lives. With this, the hope is that the theoretical frame and the model of transformation in solitary gameplay of this research will be used to explore the phenomena of transformation and play with new questions. While this research has been exploratory, it has uncovered potential avenues for further research into how transformation and learning is constituted and transpires in gameplay, which has the potential to create new understandings of how play, learning, and gameplay intersect with the individual player in their individual lifeworld.

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