Towards a Framework for Embodied Narrativity

An enactive study of narrative phenomenology, through the lens of interactive digital media

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Abstract

Narrative is viewed by a growing body of interdisciplinary work as an immanent medium through which humans interpret the world and their life. The author claims that in accordance, a level of narrative interpretation should be situated within the temporality of lived experience, of being-in-interaction with the world. To achieve this, the predominant understanding of narrative as an abstract structure actualized in conscious, reflective thought should be supplemented with a more immediate phenomenological level, where narrative framing is in direct interplay with embodied experience. In this scope, this thesis develops an initial theoretical framework that posits narrativity, the narrative quality of experience, as an embodied and enactive modality.

Paul Ricoeur's theory of narrative identity, which develops a model of dynamic circularity between action, narrative interpretation, and the formation of life stories, is positioned at the base of this framework. Ricoeur's view is adapted and expanded via Alva Noë's theory of enactive perception, according to which all perceptual experience is actively enacted through implicit sensorimotor knowledge, and involves skillful interpretation via 'practical understanding' of movement in environment. The author stipulates that narrativity might be entangled with enactive perception, and therefore construed in relationality to the dynamics of movement and action. This claim is further expanded via Mieke Bal's narratological concept of focalization – according to which narrative perspective is calibrated through "the movement of the look" – to suggest the concept of enactive narrative focalization.

This framework is applied to discuss interactive digital narrative media, where the spectator is positioned inside the 'storyworld' to become an interactor, and stories unfold through navigating an environment. By analyzing past work in this field such as the game Journey (2012), the author claims that his thought on embodied narrativity provides a potentially valuable theorization of how interactive narratives take shape in experience. In particular, the notion of enactive focalization underscores the narrativity of movement, and hence the resonances between the authoring of tangible movement dynamics in digital environments and narrative understanding,

Keywords: narrative phenomenology; interactive digital narrative; embodied cognition; enactive perception; environmental storytelling; movement dynamics; focalization; narrative identity.

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Introduction

> *That every individual life between birth and death can eventually be told as a story with beginning and end is the prepolitical and prehistorical condition of history, the great story without beginning and end. But the reason why each human life tells its story and why history ultimately becomes the storybook of mankind […] is that both are the outcome of action.*
>
> –Hannah Arendt, *The Human Condition*, 1958

Prologue: storytelling in Journey

Journey (Thatgamecompany, 2012) is one of the most critically acclaimed adventure games of all time, often cited as a prime example that video games should be considered as serious artwork. The game puts the player in the robes of a nameless figure, embarking on a mysterious spiritual travel towards the snowy peak of a mountain cliff. It excels at channeling the joy and intrigue of world-exploration that defines the genre, but includes almost none of the puzzles and ludic challenges that dominate the gameplay of most adventure games, and is entirely devoid of language.

Fig. 1. *Journey* title poster.

Much of *Journey*'s praise is credited to its success at weaving together a powerful narrative experience. For example, the game's IGN review states that "*Journey* tells a special story [...] with grace and subtlety rarely employed in video games" (Clemens 2012). Yet it appears that *Journey*'s plot, or narrative fabula (a structural abstraction of the sequence of events) is far from exceedingly special in-and-of-itself. As the game's lead designer Jenova Chen openly admitted in an interview (Ohannessian 2012), the plot structure is largely borrowed from Joseph Campbell's model of 'The Hero's Journey', described in his pivotal work *Hero With a Thousand Faces* (1949). Campbell's meta-analysis sketches a generalized story arc, presented as the universal narrative archetype of mythological tales. This Hero's Journey model influenced many narrative works in the decades following its publication, most notably George Lucas' *Star Wars* saga.

Journey is a rather straightforward attempt at translating this model into a game narrative: in the first archetypical phase, 'separation', the protagonist is isolated from his culture, and crosses a threshold into the unknown. *Journey* skips the exposition that usually precedes this moment, and begins by situating the player at the crossing of this initial threshold, with the protagonist stepping into a vast desert and observing the destination-point on the horizon. In the second (and main) part of the story, 'initiation', the traveler navigates through the desert, and into a dark tunnel leading to the base of the mountain ('the dragon's lair', in Campbell's model). Having avoided a mysterious monster that lays there, she begins a long descent to the top, struggling increasingly against the cruel wind (in Campbell, the 'moment of despair'). After getting through this final challenge, the traveler reaches the final destination and undergoes a symbolic reincarnation, where (over the game's end credits) his spirit is seen traveling all the way back to the beginning – this is Campbell's third and final phase, 'return'.[1]

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1 Campbell's full model further divides these 3 phases into a structure of 10 steps, most of which are accounted for by Journey either directly or in clear equivalence: 'The ordinary world' (step 1) and 'the call to adventure' (step 2) are skipped, or hinted at very lightly at the game's minimal exposition, leaving it up to the player to fill in the gaps of the protagonist's abstract background. Steps 3 (cross the first threshold), 6 (dragon's lair), 7 (moment of despair), 8 (ultimate treasure – reaching the peak), 9 (homeward bound) and 10 (rebirth) are accounted for above. Step 4 (trials, friends, foes) is accounted for in the game's multiplayer operationality [see chapter III], while the runes that trigger the flashback cut-scenes – particularly at one point, where another character is seen descending to the top of the mountain and toppling over, like the protagonist will at the end - are equivalent to step 5 (magical mentor).

Re-told in abstract verbal form, then, *Journey*'s plot is anything but unique or original – it replicates a familiar and canonical pattern. So what makes the game's narrative 'special'? One immediate answer that springs to mind is that the story's symbolic meaning is much greater and broader than its specificities: the travel tale that *Journey* unfolds is metaphorically equivalent to the journey of human life, taking us from adolescence, to adulthood, to old age and death, to the mythical solace of reincarnation (or completing the circle and going back to the start). However, many other tales that fit Campbell's Hero's Journey formula can be said to attempt the same – this metaphorical potency is a large part of the archetypical structure's appeal. Therefore, even considering its symbolic elements, *Journey*'s plot cannot remotely account by itself for its narrative efficacy or innovation.

Journey stands out, in part, by delivering this metaphor in an elegantly minimalistic tone, or atmosphere: the symphonic soundtrack accompanying the wordless gameplay, and the dreamlike aesthetics of the game's immaculate environment design, are two of its most acclaimed elements. But what makes the game's tone and aesthetics into a narrative achievement? If I try to imagine, for example, a film depicting the same wordless atmospheric travel story, I highly doubt it would have been broadly considered a magnificent achievement in storytelling on account of being 'a metaphor for life'. A hypothetical critic of such film might even feel justified to write that the aesthetics and composition produce a beautiful world, but the level of story is rather weak.

What makes *Journey* unique, I argue, is how inconceivable the above judgement – or any statement which carries the premise of clear separation between the levels of 'story' and 'world'– seems in relation to the experience of playing it. The narrative unfolds through moving in *Journey*'s world, through the process of embodied interaction embedded within the environment, through actively undertaking the journey. The game's narrative achievement, then, is that performing this movement enacts the familiar narrative structure of travel-as-life in ways that feel poignant, laden with kinesthetic metaphorical meaning at every step, jump and turn.

Fig. 2. *Journey* gameplay.

In other words, I posit that *Journey*'s most notable innovation is the harmony and lucidity with which it designs movement, environment and story in close relationality. The game excels at harnessing the connection between embodied action and narrative interpretation in human experience. The main attempt of this thesis is to develop an initial theoretical framework that substantiates and expands upon this connection.

Main topic

Narrative is one of the most discussed concepts in contemporary humanities and social science research. The term 'narrative turn' became so conflated with different contexts of different fields that it is helpful, as Hyvärinen (2010) suggests, to distinguish between several turns toward narrative: in literary theory and historiography during the 1960s (when narratology first became a discipline), in the social sciences from the 1980s onwards, and a more recent turn in broader discourse on culture and society – which only seems to intensify in the current political era of 'post truth'.

This thesis discusses narrative primarily through the lens of further 'narrative turns' in hermeneutic phenomenology, the philosophy of mind, and cognitive sciences. The common notion posited by this turn is that the human mind is innately prone towards narrative structures of interpretation, in order to grasp the world with a degree of structure or continuity: "the process of narration is increasingly seen as a means of making human lives intelligible" (Mccarthy 10). It typically follows that relation to narrative is, in some form or another, a necessity of coherent

human experience. I refer to this notion as 'narrativity' – a concept which, in its original narratological context, meant the enabling force of narrative texts (Sturgess 1992), and in its philosophical adaptation by Galen Strawson (who staunchly opposes the concept) and others means the innate narrative quality of lived experience.

My thesis deals with the links between narrativity and another dimension that is increasingly understood as inseparable from the intelligibility of human lives: embodiment. Theories of enactive and embodied cognition assert, in strong opposition to the mind\body dualism, that our brains are only capable of perceiving and understanding the world we inhabit because we actively interact within this world through embodied movement. In support of both these ideas, I propose to integrate them by stipulating that, much like in *Journey*, the narrativity of lived experience may manifest directly through corporeal interaction, and through our understanding of the tangible dynamics of movement.

After developing the infrastructure for this integrated framework, I will attempt to demonstrate its potential by applying it to the analysis of interactive digital narrative (IDN) media. Rooted in visionary 1990s works by the likes of Janet Murray (1997), Henry Jenkins (2003), Marie-Laura Ryan (2001) and Brenda Laurel (1993), the academic study of IDN has developed into its own scholarly field, often on parallel tracks to canonical work in the larger field of game studies. Hartmut Koenitz traces the development of academic study of IDN, and calls for further development of a narrative theory for interactive digital works (2015 91-96). Interactive narratives strongly differ from classical narratives (such as novels), primality due to being constituted by the player's actions and choices in interaction with the game system. Koenitz asserts that the understanding of narrative should be expanded in order to accommodate the sort of narrative experience instantiated by the process of gameplay. My framework's aspiration for refined understanding of how narrative interpretation is formed within real-time experience, in *Journey* and other similar works, can be viewed in this context as a step towards this goal.

An initial case for embodied narrativity

The only consensus definition of narrative (other than 'story') is a temporal sequence of causally connected events, whether fictional or real. Narrative appears to work its magic through this

connection, which in one way or another makes the story mean something greater than the sum of its parts. In Mieke Bal's similar definition, narrative is a text (in whatever medium) that delivers a fabula (or plot) - a series of related events caused or experienced by actors (1997 5). David Herman provides a cognitive definition (which Koenitz [2015] suggests as particularly useful for interactive media): narrative is a "forgiving, flexible cognitive frame for constructing, communicating, and reconstructing mentally projected worlds" (Herman 2002 49).[2] These two definitions may seem to clash at first glance – an event sequence on the one hand, a projection of 'world' on the other – until we ask ourselves how can we describe a particular world (even to ourselves) without the use of stories? And conversely, how can we grasp a story without having, or developing, an implicit understanding of the world it takes place within?

While Herman's writing does not focus on such embodied perspective, he broaches the topic by citing Fludernik's experiential view of narrative, according to which "unless a text or a discourse registers the pressure of events on embodied human [...] consciousness, [...] that text or discourse will not be construed by interpreters as a full-fledged narrative" (in Herman 2007 256). Mentally constructed worlds that fail to affectively relate to embodied experience cannot fully function as narratives. Herman supports this claim, but also asserts a complementary opposite point: "we cannot even have a notion of the felt quality of experience without narrative" (ibid 257).

Katherine Hayles stipulates that narrative trajectories appear to be necessarily encapsulated within the process of gaining understanding of systems, ecologies and environments (1995) – like the only way to learn the geography of a large space is to start moving inside it in lines. It may be that we can only meaningfully grasp worlds by proxy of narrative framing, and stories by proxy of worldly context – as our phenomenology entails an entangled understanding of both. If our grasp of stories and worlds is entangled, so, perhaps, is our 'interface' of accessing them: narrative thought, and embodied interaction. I am not suggesting that narrativity and movement, or embodiment, are the same thing, nor that narrative is a part of the body, or of material

[2] Herman hence coined the term 'storyworld', stipulating that any narrative involves a mental modeling of the world it takes place within. This concept is often employed in IDN research informed by cognitive perspective, in the works of Marie-Laure Ryan and others.

interaction in some metaphysical sense – rather, I stipulate that the two are closely interwoven in human phenomenology, in our skillful capacity to live out, and meaningfully relate to, worldly experience.

According to Paul Ricoeur, narratives are an immanent medium for the hermeneutics of phenomenology partly because of their ability to balance continuity and change ("discordant concordance") [see part I]. Note that continuity and change are qualities we are prone to sense, in lived experience, directly at the level of movement. Ricoeur stipulates that narrative is crucial to the human grasp of temporality in space – much like movement in the writings of Bergson and others. There seems to be some meaningful parallelity, then, between narrative and movement in lived experience: they allow us to grasp both dynamism and 'identity' in the world, constant change alongside consistent qualities.

The etymological root of narrative is in the Latin (originally Sanskrit) term *gnarus*, which can mean either "knowing" or "skilled" (McCarthy 10). Alva Noë's theory of enactive perception draws a somewhat similar connection between skill, knowledge, and interpretation, in the domain of embodied cognition: perceptual experience is a mode of skillful interpretation, enacted through implicit 'sensorimotor knowledge' of the world [see chapter II]. Developing upon the above idea of co-constitutive relationality between narrative and embodiment, I will argue that narrative framing may be formed through, and later tightly integrated with, this sensorimotor knowledge (or practical understanding) through which our immediate perception of the world manifests. This notion of narrative as manifesting through enactive perception will be developed into the central concept meant to make my framework applicable to the analysis of narrative texts: enactive narrative focalization. It expresses an interplay between narrative framing and practical understanding of movement in the bringing-into-focus, or attentional gravity, of perceptual experience. The embodied metaphor of narrativity as equivalent, in a way, to gravity, is introduced in chapter I and further developed in my conclusion.

Previous work

The relationalities between narrative and embodiment are discussed in many previous works, whether as a secondary, often undeclared theme that nonetheless seems influential on the

broader understanding of narrative (e.g. Bal, Murray), or as a central theme (e.g. Hutto, Armstrong, Mackenzie). My thinking in this thesis is very much inspired by this rich corpus, and by my wish to link some of its many eclectic corners into a clearer joint understanding.

However, explicit arguments for the idea of a co-constitutive phenomenological bond between embodiment and narrative framing – where (as my framework will suggest) narrativity is essentially implicit in the perception of embodied experience, and neither can be said to be a byproduct of the other - are far more rare. I am aware of only two papers (both very recent) that make a similar argument: Priscilla Brandon's call for an entangled understanding of the body and the narrative *self* (2016), and Fleur Jongpier's account of 'implicit narrativity', which concludes that:

> Embodiment and narrativity […] are not two separate components, but are integrated into one unified first person perspective, which is why many of our experiences are genuinely, rather than merely superficially, embodied narratives. (Jonpier 2016 64)

My own framework, and the concept of enactive narrative focalization, can be said to stipulate similarly – though in a different, somewhat broader and more interdisciplinary scope of discussion.

To briefly map previous work relevant to my discussion, in the four main academic fields this thesis relates to:

- **Narrative identity**. I primarily examine two theoretical models: Paul Ricoeur's approach to narrative identity as a 'privileged medium' for the hermeneutics of phenomenology (1988; 1991), which serves as my framework's point of departure, is compared and contrasted with Daniel Dennett's (1991; 1992) more analytical approach to the *self* as a narrative construct. McCarthy's analysis of the two models (2007) and the volume on Ricoeur's theory edited by Wood (2002) serve as valuable resources for this discussion. I more briefly relate to support of narrative identity by Bruner (1986; 1987; 1991) and Sacks (1985). Further relevant sources of theory on the subject include books by Kerby (1991), McAdams (1993) and Schechtman (1997). The notion of narrative identity is famously and strongly critiqued by Galen Strawson (2004), whose argument is further

explained and examined by Phelan (2005). An interesting variance of this theory considers identity as composed of multiple different narratives, often in interaction with each other. Such approach is well exemplified in Maan's *Internarrative Identity* (2009) and in the volume discussing her concept edited by Way (2014). Similar notions are stipulated in a psychoanalytic scope by Mitchell (1993), and examined through the metaphor of a society of multiple *selves* by Hermans (2002) and Mendelovich (2005). Fireman et al.'s *Narrative and Consciousness* (2003) collects some original angles on narrative identity, often in attempt to tackle the notion through an approach inspired by the natural sciences. Finally, a number of more recent works more directly inquire into the connection between narrative identity and the body, in ways that often integrate insight on embodied cognition. These include Mackenzie (2009; 2014), Cunliffe and Coupland's work on embodied narrative sensemaking (2012), Køster (2016) and the aforementioned works by Jonpier and Brandon.

- **Enactivism:** My discussion of the canonical enactivist approach to narrative is composed as a meta-analysis of works by four prominent thinkers in the field that touch or focus on the subject: Daniel Hutto (2006; 2007; 2012), Dan Zahavi (2007; 2014), Shaun Gallagher (2000; 2018) and Richard Menary (2006; 2008). This corpus is strongly interconnected: two of the papers I relate to (Gallagher and Hutto 2008; Gallagher and Zahavi 2013) are fully co-authored. Menary is the editor of the 2006 volume *Radical Enactivsim*, which is focused on Hutto's approach and includes corresponding papers by Hutto and Gallagher, and his paper "Embodied Narratives" (Menary 2008) is based on Hutto's approach. The 2007 volume *Narrative and Understanding Persons,* edited by Hutto, and includes work by Zahavi and Gallagher. I will therefore portray their views as one unified approach. Though there are certainly some nuanced differences which my portrayal will not delve into, the four appear in agreement on the broad strokes of their enactivist approach to narrative, as presented in chapter II. My analysis also explores a central issue with this enactivist approach, and explains why I view Noë's theory of enactive perception (2004) – despite its lack of explicit connection to narrative – as more fitting infrastructure for my framework. Other relevant works that do not feature prominently in this thesis include Antonio Damasio's *The Feeling of What Happens,* where the minimal

account of interaction at the level of organism is considered " a simple narrative without words" (1999 168), and Lakoff and Johnson's embodied approach to language and metaphor (1980; 1999).

- **Narratology:** Much intriguing work has been done on highlighting and theorizing the role of embodiment in narratology. Examples include Punday's attempt to develop a 'corporeal narratology' (2003), Carraciolo 2011, and Hydén 2013. Monika Fludernik (1995) - and to an extent, as mentioned above, David Herman – tie in embodiment with a cognitivist approach to narratology. Meta-analysis of narratological discussion by Smith (2007) and Walsh (2016) showcases embodiment and cognition as central issues in contemporary research. Perhaps in particular affinity to my framework, Peterson and Langlier argue for a 'performance turn in narrative studies', which "situates narrative as both a making and a doing [...] [and] requires that narrative studies attend to the bodies of participants as well as to bodies of knowledge, to the materiality and the situationality of narrative practices" (2006 179).

  Even so, this corpus predominantly relates to the written narrative medium – the literary forms which narratology is rooted in, and traditionally understood as exclusively attached to. Instead of delving into the discussion of how literary texts evoke embodied experience, which is somewhat outside the scope of my thesis, my discussion connects to this field primarily through central narratological concept which appears highly relevant for grasping the narrative quality of action, movement and perception – focalization. I argue that Mieke Bal's understanding of this concept (1997; 2002) brings narrative focalization far more in-line with the purpose of my framework than its original conceptualization by Genette (1983; 1988). I also briefly discuss Marie-Laure Ryan's application of narratology to interactive digital media (2001; 2006).

- **IDN:** A rather considerable amount of previous work on interactive narratives and\or game studies relates to phenomenology (Ryan 2001 66-74; Nitsche 2008; Calleja 2009; Crick 2011), affordance theory (Cardona-Rivera and Young 2011; 2013), cognition (Ryan 2006; Kivikangas et al. 2010; Bruni and Baceviciute 2014; Gjøl et al. 2018) and identity (Frissen et al. 2015; Tanenbaum 2015). However, relatively little work integrates this connection with insight on embodied cognition and\or enactivism. Embodied cognition

has been applied to areas relevant to IDN, such as to the study of tangible digital interfaces by Black et al. (2012), Penny (1997) and Kirsh (2013), and to game studies by Gee (2008, 253-257) – but such works seldom mention narrative. I was unable to locate in-depth analysis of IDN in the context of embodied cognition – though the connection is promisingly touched upon in recent work by Knoller (2019) and Hameed and Perkins (2018). Further IDN concepts deemed relevant to embodied narrativity within the course of my discussion include the aesthetic qualities of the medium described by Janet Murray (1997); 'environmental storytelling' and Jenkins' metaphor of game design as narrative architecture (2003); and the more recent concepts of narrative game mechanics (Dubbleman 2016; Larsen and Schoenau-Fog 2016) and ludonarrative dissonance and resonance (Hocking 2009; Brice 2011; Sim and Mitchell 2017; Roth et al. 2018).

Secondary reviews of literature in particular contexts (such as previous work on focalization in games) will be provided within the course of my discussion.

A note on methodology

I do not pertain to 'prove' the notion of embodied narrativity, nor encapsulate its myriad consequences, within the scope of this thesis. Rather, my aim is to lay out an initial interdisciplinary framework that substantiates its potential significance and applicability, as well as some of the underpinnings and assertions that relate to this position. There is no fully formed theory of embodied narrative phenomenology, and this thesis navigates somewhat uncharted intersections between established academic territories as a potential step towards one.

My framework of embodied narrativity, and the concept of enactive narrative focalization, will be developed through relating to contemporary theoretical discussions of various disciplinary leanings: primarily involving phenomenology, embodied cognition, narratology, and the study of interactive digital narratives (also touching upon philosophy of mind, cognitive psychology and critical theory).

I attempt to demonstrate the potential of my framework to benefit some of these discussions I relate to, and partially integrate between them. In the course of doing so, I underscore and

expand upon connections between academic theories and concepts that have seldom been previously connected. The link between the primary conceptual pillars that my framework is based upon – Paul Ricoeur's work on narrative identity, Alva Noë's theory of enactive perception, and Mieke Bal's concept of narrative focalization – is entirely my own to the best of my knowledge. While similar ideas to each of these pillars were individually applied to the study of interactive digital narratives before, to a limited extent, my integrated framework hopefully provides a rather fresh perspective in the IDN scope – which will hopefully allow us to return, at the end of this thesis, to the analysis of storytelling through movement and embodied experience in *Journey,* with fortified theoretical infrastructure.

Structure of argumentation

In broad strokes, the course of my argumentation examines the theoretical need for an understanding of embodied narrativity [chapter I], develops an initial framework to facilitate such understanding [chapter II], and attempts to demonstrate the value of this framework by applying it to the analysis of interactive digital media [chapter III]. In accordance, the first two chapters are primarily abstract and theoretical, while my final chapter is interspersed with several case studies.

Chapter I deals with the theoretical debate on narrative identity: the assertion that the *self*, a certain continuous entity at the heart of human consciousness, is a narrative construct. I introduce Daniel Dennett's influential work on this idea, and develop a somewhat subversive take on his leading metaphor, the '*self* as center of narrative gravity', as powerfully embodied – despite the negligent significance that Dennett's theory ascribes to embodiment. I then explore Paul Ricoeur's work on narrative identity as an immanent hermeneutic medium of human phenomenology, and the circular dynamics it draws between the level of embodied action and abstract understanding of identity. Next, I turn to discuss two intriguing critiques of narrative identity – Strawson's "Against Narrativity", and Frissen et al.'s alternative notion of playful identity. While offering a defense on narrative identity against the brunt of this critique, I also argue it reveals a need to adapt Ricoeur's theory around two primary issues: the paradigm of identity construction as equivalent to the writing of an autobiographic novel, and the insufficient account of how narrative and identity manifest directly within the temporality of interaction (as in

the experience of play). Embodied narrativity is then proposed as an adaptation of Ricoeur's theory that may be pertinent for addressing these issues.

Chapter II turns to develop my framework of embodied narrativity. I attempt to integrate Ricoeur's model with insight from embodied and enactive theories of cognition, predominantly Alva Nöe's theory of enactive perception. In some similarity to Ricoeur, Noë recognizes an inseparable and potent connection between practical understanding at the level of action and more conceptual and abstract, 'higher order' levels of thought. Enactive perception is employed to facilitate the claim that a directly embodied sort of narrative framing is implicit in perceptual experience, and enacted through our practical understanding of movement. Next, I examine the utilization of narrative in other enactive theories (since Noë's does not expand on the concept), such as Daniel Hutto's narrative practice hypothesis. These theories support the notion of a purely embodied, 'pre-narrative' and pre-discursive *self* that predates. I briefly relate to feminist and critical thought to demonstrate the problem with this claim, and argue that Noë's theory, as opposed to his enactivist peers', may fit in with the view that no level of human experience is devoid from discursive influence. Finally, I further expand this joint understanding via Mieke Bal's concept of focalization (contrasted with Genette's original, more structuralist concept) – the perspective of narrative texts as situated by "the movement of the look" (2002). I utilize Bal's view to provide my framework with an applicable concept for analyzing how embodied narrativity is channeled via attentionality to environment: enactive narrative focalization (ENF).

Chapter III aims to provide a sort of initial proof of concept for my framework and concept of ENF, by applying them to the analysis of interactive digital narrative (IDN) media and exploring and exploring the benefit they may bring to the understanding of IDN phenomenology. IDN is viewed as particularly fitting for this purpose, due to replacing the spectatorial position of traditional narrative media with an interactor situated inside the virtual environment. My framework calls attention to the design of movement dynamics in the IDN 'storyworld' as a crucial component of the instantiated narrative experience. This view differs from more structural models of focalization in games, primarily since the innerworkings of movement are considered to immanently influence the shaping of perspective and perceptual attention. I then turn to discuss, through short case studies, how Murray's central 'qualities of the medium' – immersion,

agency and transformation – could be broached also as enactive modalities. Finally, this thesis' accumulated insight is applied to a more in-depth analysis of *Journey* along the lines discussed above. I argue that *Journey* demonstrates why the notion of 'ludonarrative dissonance' (tension between the level of gameplay and story) should not be understood as a default condition of narrative games – but rather, as a failure to channel the immense potential resonances between embodied interaction and narrative interpretation.

My conclusion examines promising venues for deeper understanding of embodied narrativity in future work, and consolidates the perspective of my framework through discussion of a unique design solution to sexual harassment in a multiplayer VR game and a return to the embodied metaphor of narrative gravity.

Chapter I: Narrative Identity in Action

Introduction to narrative identity

Chapter 12 of neurologist and popular author Oliver Sacks' *The Man Who Mistook His Wife for a Hat* ponders the state of William Thompson, a patient suffering from anterograde amnesia (the cognitive inability to form new memories, most commonly as a symptom of Korsakov's syndrome). Thompson would react to having his memory wiped clean every few moments with a brilliant and tragic capacity for improvisation: each time he found himself lost in the world, he would rapidly configure an interpretation of the situation and context, ascribing and re-ascribing various characters to the people around him and projecting his relationship to them based on an imagined past (shop clerk and customer, doctor and patient, two old friends). Sacks emphasizes that for Mr. Thompson, these "were not fictions, but how he suddenly saw, or interpreted, the world" (Sacks 1985 109). Essentially, Mr. Thompson is constantly creating and re-creating his own identity through the new immanent understanding of the situation: the ringing of the phone, for example, leads him to answer "Thompson's Delicatessen!" and take the caller for a client. As in improvised theatrical games, both self and other are invented in tandem through the projection of relationalities.

Discussing Mr. Thompson's case leads Sacks to speculate that:

> We have, each of us, a life-story, an inner narrative—whose continuity, whose sense, is our lives. It might be said that each of us constructs and lives, a 'narrative', and that this narrative is us, our identities. […]A man needs such a narrative, a continuous inner narrative, to maintain his identity, his self.[3] (Sacks 110)

This is an eloquent summary of the core hypothesis of narrative identity. Kerby provides a more academic description of it: "a model of the human subject that takes acts of self-narration not only as descriptive of the self but, more importantly, as fundamental to the emergence and reality

3 Thompson, being robbed of such continuity, is put into a perpetual state of "narrative frenzy", as he "must literally make himself (and his world) up every moment" (Sacks 110).

of that subject" (Kerby 1991 4). The idea rose to academic attention in the late 1980s and early 1990s, in uniquely interdisciplinary fashion (Flanagan 2003): scholars of continental hermeneutic phenomenology (such as Paul Ricoeur), cognitive psychology (such as Jerome Bruner) and analytic philosophy of mind (such as Daniel Dennett) were all composing versions of it in their respective frameworks roughly in parallel around that period.

The concept of identity narratives developed in psychoanalytic thought, and can be traced all the way back to Freud. However, the more contemporary and phenomenological accounts I am discussing here strongly differ from psychoanalytic discourse. To briefly account for the main differences: Narrative identity theories are not primarily concerned with the truth-value of identity narratives. They do not seek to unmask a more authentic *self*, nor to bring awareness to its repressed or unconscious corners, hidden from the ego. The essential premise is that the *self* is inevitably a narrative construct – "a perpetually rewritten story", in Bruner's words (1987 11). There is therefore no hard separation between (in Winnicot and Kohut's terms) 'true' and 'false' selves. These theories recognize that any narrative is partly an 'illusion', or a reductive interpretation of something more complex that cannot tell the 'full truth'. On the other hand, they typically also problematize the notion of treating identity narratives as a complete falsehood, given that the inclination to narrativize is viewed as an inherent existential condition.[4]

In accordance, the two theories I now turn to discuss and compare – Dennett's and Ricoeur's - are concerned first and foremost with the inherent and existential conditions through which narrative identity manifests. The central questions they mean to address are why are we prone to narrativize our life, and how should the structure of these life stories and the means through which they are constructed be understood?

4 This view also separates narrative identity theories from older philosophical treatments of the self as a story, such as Sartre's The Transcendence of the Ego (1957), which often view it as a deceiving illusion that the truly strong wise must struggle to reject (a rather Nietzschean idea). Neither Dennett nor Ricoeur view the notion of identity – however helpful it may be to acknowledge what they conceive as its narrative nature – as something to be dispelled or fought against.

Dennett's *self* as center of narrative gravity

Daniel Dennett is one of the most influential contemporary thinkers in the analytical philosophy of mind. He can be described as a staunchly naturalist thinker, intent on grounding his philosophical work in "the objective, materialistic, third-person world of the physical sciences" (Dennet 1987 5). Dennett terms his method of philosophical inquiry "heterophenomenology", since it is concerned with examining the conscious experience of human subjects from a more impersonal and external 'third-person' perspective (often through verbal reports of others) – which is therefore supposedly more grounded, unbiased and scientific (McCarthy 2007 25-30; Dennett 1991 70-98).

Accordingly, his thought on the narrative identity emerges from a practical dilemma in attempting to ground a philosophy of mind that coheres with cognitive sciences: What produces the *self,* an appearance of human consciousness organized around a certain notion of continuous subjective identity? The lay Western interpretation resembles Descartes' conception of the Cogito, or the thinking *self*, as an entity, existing independently from the material human body, which resides somewhere in our head and powers our thought. However, accumulated knowledge in cognitive sciences makes it near impossible to speculate where in the brain such entity may reside: it highly infeasible to attribute to the brain some sort of center or core of consciousness, to locate a clear domain or proxy for the *self* in our heads that interprets neural stimulation into subjective experience. Dennett therefore strongly rejects the notion that he somewhat mockingly terms the "*self* as soul pearl", or cognition as a "Cartesian Theater" being observed by some sort of "Central Meaner" in the brain.[5] Having concluded that "we are not the captains of our ships; there is no conscious *self* that is unproblematically in command of the mind's resources" (Dennett 1992 112), Dennett's work takes on the challenge of producing an alternative theoretical explanation for consciousness, and particularly the experience of identity, of consistently being\having a *self.*

5 This notion of 'the central meaner' is more commonly known as the 'homunculus fallacy'.

How should we account for something that is immanently present in human experience, yet lacks clear presence in the modeling of human cognition? Dennett attempts to solve this conundrum by suggesting to think of the *self* as a fictional theoretical object: an organizing structure that, emerging as a by-product of the many cognitive systems working in tandem, allows humans to grasp, represent and communicate the innerworkings of their mind in a coherent manner. In this vein, he suggests to consider the *self* as "a center of narrative gravity".

In Newtonian physics, the conceptualization of physical objects as ingrained with a 'center of gravity' is a highly useful abstraction that allows us to interpret their structure and predict their motion in response to physical forces: for example, the tipping point where a chair would fall over if pushed from various directions with various degrees of force. It aids in accounting for an object's "spatio-temporal career" (Dennett 1992 104), the way it moves and changes across time, as well as for the ways in which we can manipulate and affect this 'career': by spilling half the water into a glass, for example, I would be shifting its center of gravity. Still, we acknowledge that the center of gravity does not exist in the strictly ontological sense – no single part or atom in the chair is ingrained with some physical property that makes it a center of gravity. The center of gravity's properties are entirely ingrained through the theory that constitutes it – it is a *theoretical object* [6]created by the physicist's need for interpretation and understanding, rather than found within the chair's materiality. While fully accounting for the multiplicity of factors that would cause a chair to tilt a certain way when pushed with certain force from a certain direction at the level of sub-atomic interactions may demand a long book, the center of gravity offers an accessible and efficient metaphor to functionally grasp, in a nutshell, the chair's balance and contingencies of movement.[7] The center of gravity is hence, in Dennett's words, "a wonderful

6 The term 'theoretical object' is employed by Dennett in the meaning applied to it in the discourse of the physical sciences: a fictional object that is nonetheless functionally useful to imagine as support structure within the confines of a scientific theory. It is not intended to describe an actual object of theoretical efficacy, as the term is conceptualized by humanities thinkers such as Mieke Bal.

7 There are outlier moments, Dennett adds, where the center of gravity concept is insufficient for such understanding (when a glass object is shattered into separate shards, for example). This does not undo the concept's usefulness, since we do not have to produce a fully consistent account of the center of gravity's continuous movement. Much like the many potential discontinuities of the narrative self, the center of gravity can be selectively employed when useful for interpretation, while skipping over some gaps and dissonances in-between.

fictional object [...] (which) has a perfectly legitimate place within serious, sober [...] physical science" (Dennett 1992 104).

According to Dennett, the *self* is essentially equivalent: it is an abstract theoretical object, which aids our thought in addressing a pertinent need to interpret a complex plentitude of processes and interactions through conceptualizing a fictional central point.

The broad cause which Dennett posits for this immanent interpretative need is a communication issue occurring within the brain: Dennett defines the human mind as "*not* beautifully unified, but rather a problematically yoked-together bundle of partly autonomous systems" (110, emphasis in the original). Since different parts of the mind are often not fully accessible to each other, consciousness and the *self* emerge as a form of cognitive mediation, an interpretation of the mind to itself, in order to deliver a semblance of coherence to a dis-unified system. A sketch of the balance (or gravitational center) of these systemic innerworkings expresses itself in the form of lingual conscious thought and interpretation of experience, that appear to emerge from a continuous *self*. To Dennett, the *self* is not an entity that produces these thoughts, but rather a representation manufactured by them – an after-effect or byproduct of cognition, rather than its cause or source. The *self,* then, is a useful yet fragile illusion, which sustains a mediated image and trajectory of development for the unified character of 'me' with, through a narrative of identity.

In short, as explicitly argued, following Dennett, by Fireman et al. (2003) and by McAdams (1993), we are pulled towards narrative by the nature of minds, namely the need form a functionally fictional illusion of our overlying character to organize our conscious experience around. The constant process of narrative *self*- formation is hence parallel, according to this view, to the composition of an autobiography:

> We are all virtuoso novelists, who find ourselves engaged in all sorts of behavior, more or less unified, but sometimes disunified [...] we try to make all of our material cohere into a single good story. And that story is our autobiography. The chief fictional character at the center of that autobiography is one's self. And if you still want to know what the self really is, you're making a category mistake. (Dennett 1992 112-113)

Dennett raises a pertinent question that follows from this model – how can such autobiography[8] be authored, if its protagonist does not exist a priori to being construed through the writing?

> Just as spiders don't have to think, consciously and deliberately, about how to spin their webs, […] we (unlike professional human storytellers) do not consciously and deliberately figure out what narratives to tell and how to tell them. Our tales are spun, but for the most part we don't spin them; they spin us. Our human consciousness, and our narrative selfhood, is their product, not their source. (Dennett 1991 418)

In accordance with his computational understanding of the human mind, Dennett attempts to explain this counter-intuitive model through an analogy to artificial intelligence, which he proposes "that we take seriously": suppose that a novel-writing AI, through sophisticated grammatical programming and an immense database of literary works, [9] generates a convincing autobiography of a man called Gilbert. Next, rather than imagining this AI as a computer that is "just a box sitting in the corner of some lab", suppose that

> The computer has arms and legs - or better: wheels. […] It has a television eye, and it moves around in the world. […] The adventures of Gilbert, the fictional character, now bear a striking and presumably non-coincidental relationship to the adventures of this robot rolling around in the world. If you hit the robot with a baseball bat, very shortly thereafter the story of Gilbert includes his being hit with a baseball bat by somebody who looks like you. […] At this point we will be unable to ignore the fact that the fictional career of the fictional

[8] Dennett is fully aware that conceptualizing identity-formation as akin to an autobiography rather than through the "Cartesian theatre" model is merely replacing one metaphor for another. However, he believes his new metaphor to be far closer and more tuned to the innerworkings of the human mind. To solidify his hypothesis, Dennett often turns to outlier cases of cognitive damage or fission - split brain subjects, multiple personality disorder and other similarly radical conditions. The 'center of narrative gravity' model excels at accounting for split or fractured self-modelings, as the notion that there was ever a unified core to the mind is produced by the very systems that are damaged in these cases. Mr. Thompson's identity, for example, is explained far better through the notion of fluctuating forces of narrative gravity than through the metaphysical *Cogito.*

[9] The possibility of such AI was complete sci-fi at the time of Dennett's writing in 1992, and is quite realistic today. A better analogy, somewhat less deserving of the critique I attribute the Dennett's model, would be a deep-learning AI who collects information through the use of its 'body' as a sensory system. The discussion of whether such more embodied and sophisticated forms of AI are a good analogue for human cognition, and whether they should be understood as 'truly' intelligent or closer to conscious life, is intriguing, but entirely beyond the scope of this thesis.

> Gilbert bears an interesting resemblance to the "career" of this mere robot moving through the world. (Dennett 1992 107)

The point of this analogy is that, despite this resemblance, the reader is expected to intuitively ascertain that the robot's self-interpreting, Gilbert-composing CPU "really knows nothing about the world; it's not a self. It's just a clanky computer" (ibid). Our own human brains, themselves a combination of systems that do not independently "know what they are doing", are argued to function equivalently: procedurally interpreting our experience to produce a narrative of *self*, though the mind is no more governed or encapsulated by the apparent author of its identity narrative than the AI system is by the character of Gilbert.

Tellingly, this analogy examines the hypothetical robot from a quasi-objective perspective, and does not pay attention to the difference between the robot and humans in terms of possessing an experiential quality of felt life, that goes beyond the production of output that appears to represent such quality. Dennett's account of the *self* might be satisfying for an alien scientist, as foreign to human experience as humans are to the robot, but from the human perspective appears to circumvent the most important question, known as 'the hard problem of consciousness': how should we understand consciousness and the self from the perspective of actually being conscious beings, not only as a fact of nature but as one that is lived as an immediate, felt state?

Perhaps as a consequence of largely circumventing this defining question, it is also prudent to notice the negligent role ascribed to the body in this analogy: equivalent to equipping the brain in the black box with a set of wheels, which is entirely exterior to the working of the cognitive\computational system. Expanding upon this claim, Priscilla Brandon argues that the state of being embodied is entirely inconsequential to Dennett's portrayal of narrative identity:

> As a consequence of its impersonal role in the constitution of the self, the body is only contingently connected to the self; it forms no intrinsic part of it. That is why Dennett can claim that a self, in principle, can survive without a body, analogous to a computer program surviving the demolition of the computer on which it was first run, as long as it has been transferred to another disk. (Brandon 70)

The authoring of narrative identity is attributed fully to the innerworkings of the brain, examined from an exterior perspective as equivalent to the processing of computational data by a programmed algorithmic system. Dennett certainly rejects the Cartesian *Cogito*, but appears to hold onto a version of Cartesian dualism, to the perception of the body as secondary support-machinery for the true intrigue of consciousness, which occurs entirely within the brain.

The dancer's narrative gravity

Given this account, it is interesting to note that Dennett's choice of central metaphor for his disembodying theory is (perhaps entirely unintentionally) powerfully embodied: 'the center of gravity' is a concept employed not only in the abstract calculations of physics, but also and no less commonly in dance, sports, physiotherapy and other somatic practices. I would like to delve into this further dimension of the narrative gravity metaphor.

Many forms and practices of dance conceive the center of gravity as a shifting point through which the weight of the body may be said the act (Hamilton 2011). Imagining and working through this point may aid the dancer to better perceive the subtleties of her own movement in relation to the pull of gravitational force, and in learning to perform complex movements in more cohesive ways. Under both paradigms, the concept suggests a 'central point' that is functionally useful in addressing the causalities of movement. Yet there is a subtle but meaningful difference in implementing this conceptual structure to address movement in 'objective' physics, as opposed to in the subjective experience of physicality. In this second paradigm, the concept is not utilized to explain movement of objects from an exterior perspective – rather, it is implemented as an anchor for the tangible practice of moving skillfully.

In the context of practicing movement through the body's center of gravity, the lack of an objective property marking this shifting point matters none: for a "serious, sober" physicist, it is a somewhat meaningful concession that a theoretical structure hinges on an imagined point that is not, strictly speaking, objectively *there*. For a dancer, however, 'there-ness' of gravitational force carries a different meaning: phenomenological presence, rather than ontological fact. The center of gravity, then, absolutely is *there:* once one is familiarized with the concept of moving through the body's center of gravity in both theory and practice, it is tangibly and usefully present from

within the process of movement. The conceptual structure of a dancer's center of gravity is not used to compile some scientific database *about* movement – the knowledge it grants manifests through embodied existence, both facilitating and facilitated by the lived experience of being a moving body.

According to the framework of embodied narrativity I attempt to develop, the 'gravity' of narrative should be broached from a perspective much closer to the dancer's than the scientist's: as a lived process that unfolds from within the experience of *being* a person, rather than an abstract structure to be objectively inspected in the third-person. Much like the dancer's center of gravity, the stories we live by are carried out through, and carried within, our minded-bodies, constantly informing the ways in which we move about in the world.

Narrative understanding of identity may work similarly – the concept of *self* could simultaneously not exist in terms of the world of raw material facts, and make immanent, salient, tangible sense in terms of its capacity to meaningfully interpret our embodied interaction with the world we inhabit. Narrative identity does not make conceptual sense strictly because of how it organizes data in some purely objective domain – but because of how it figures into the embodied relationalities and sense-making of human life.

In summary of my above analysis, Dennett's metaphor of *self* as a center of narrative gravity can be useful for my framework of enactive narrativity, but only by paying attention to its function as an 'embodied metaphor' – a prevalent mode of human conceptualization, as discussed by Lakoff and Jonhson (1980) – and thereby somewhat detaching it from the objective scientific framework in which it is employed by Dennett. As argued by McCarthy (72-84), Dennett's heterophenomenological model can aid us in supporting narrative identity construction as a mode of observed behavior, but barely provides any tools to reflect on narrative as a mode of tangible experience (what would being an 'autobiographical robot' feel like?). The later, however, may be as crucial to the functionality of narrative as its structural capacity to organize lingual data. I therefore turn from analytic to continental thought, to examine an alternative modeling of narrative identity more in line with my above argument, in the writings of French hermeneutic phenomenologist Paul Ricoeur.

Ricoeur: narrative identity as a nexus of experience

If Dennett's thought on identity as narrative relates to a broader attempt at explaining consciousness, Ricoeur's emerges from a similarly much broader theory which tackles temporality from a phenomenological perspective. Ricoeur's leading argument in his pivotal work, the *Time and Narrative* trilogy, is that the temporality of experience and its narrative framing are immanently inseparable and co-constitutive:

> The truth claim of every narrative work, is the temporal character of human experience. […] Time becomes human time to the extent that it is organized after the manner of a narrative; narrative, in turn, is meaningful to the extent that it portrays the features of temporal experience. (Ricoeur 1984 3)

In short, there could be no human grasp of temporality without the narrative structure of interpretation, as well as vice versa. Ricoeur adds that "this thesis is undeniably circular. But such is the case, after all, in every hermeneutical assertion" (ibid.). His attempt is not to provide a logical or scientific model in the style of Dennett, but rather to account for the hermeneutic infrastructure of human experience through what his inquiry considers to be two of its most constitutive dimensions.

While a full analysis of Ricoeur's writing on narrative and temporality is beyond the scope of this thesis, it is useful to keep this broader assertion of his work in mind as we turn to address his 1991 article titled "Narrative Identity". Published 3 years after the third and final volume of *Time and Narrative*, the piece offers a more condensed model of narrative's role in Ricoeur's broader project, as phenomenologically "privileged mediation" (Ricoeur 1991 73). Ricoeur's position hinges on an inquiry into the concept of identity, which is analyzed as a fundamental modality in the hermeneutics, or sense-making, of lived experience. We are immanently prone to locate identity not only in the *self* and other subjects, but also in the world around us (through basic notions such as object permanence). Ricoeur's main argument is that the narrative structure performs key functions in enabling this experience of identity: it is not just an inherently

comfortable format for representing our identity, but rather "pre-eminently the medium we use to give our identity form" (Frissen et al. 32).[10]

Ricoeur's analysis begins by asserting that we must account for identity as manifesting across two parallel dimensions. He unveils these dimensions through an etymological inquiry into two Latin terms encapsulated by the modern concept of identity - arguing that it is crucial to both distinguish between these terms, and grasp the point of their phenomenological overlap (73-76).

The first of these dimensions is identity in the Latin term *idem*: identity as a concept of sameness and an answer to the question '*what?*'. According to Ricoeur, idem is itself composed of four different yet intertwined senses through which we appropriate sameness. *Sameness* (A) *as numerical uniqueness* marks the possibility of both distinctiveness and plurality. It closely corresponds with s*ameness* (B) *as extreme resemblance* – concluding through characteristics and mental categories that different phenomena, such as two look-alike dresses, are the same. Through these concepts, we could deduce that an original painting has a one-of-a-kind identity, and yet copies of this painting are somewhat identical to it (in the sense of extreme resemblance), and essentially identical to each other (in the sense of numerical uniqueness).

In order to maintain an experience of lasting identity across the inevitable occurrence of change, these above qualities of sameness hinge on being coupled with a sense of s*ameness (C) as continuity in time*, making their uniqueness re-identifiable. In attempting to account for what enables the recognition of identity across time, the first two qualities of sameness are revealed as insufficient for cases where a sense of clear identity is maintained despite constant and drastic change.[11] For instance, we are prone to recognize that an elderly person maintains some lasting identity throughout her life, despite knowing that she radically differs from her younger *self* in appearance, experience and personality, and that not a single atom that currently composes her

10 Through this assertion, Ricoeur is also attempting to posit narrative identity as tying together, in a sense, the two "great classes of narrative" that his previous work deals with separately: history and fiction.

11 To categorize identity as sameness is also to categorize otherness: distinction depends on differentiation, and there is no interiority without exteriority. In similar logic, there could be no sense of temporal continuity without a degree of discontinuity – only an account of what changes could allow us to meaningfully sense what stays the same.

has stayed in place since her birth. We can therefore only substantiate the sense of continuity if we fortify it through the further quality of s*ameness (D) as permanence over time*, a certain foundational core of sameness that we intuit as resistant to the temporal concept of change.

According to Ricoeur, it is the need to justify this fourth quality that brought many influential philosophical constructs – from the Platonic realm of Ideals to Kantian transcendentalism – to argue for the primacy of some form of *substance,* or permanence, of identity, over the accidental, chaotic contingencies of matter. Other strands of thought, such as Dennett's attempt at a scientific model (and the tradition of empiricist and skeptic thought it follows, dating back to David Hume),[12] dismiss this notion of substance as a mere illusion. Attributing core sameness to the *self* presumably leans on attributing to the brain a metaphysical support structure akin to the Cartesian 'soul pearl' or 'central meaner'.

Rather than either justifying this quality through metaphysical means or dismissing it as a misleading illusion, Ricoeur grounds our immanent impression of this permanence of substance in phenomenological inquiry. He achieves so through addressing the second dimension of identity, in the Latin term "ipse": identity as *self* – the agent or author of experience – and as an answer to the question '*who?".* Ipse addresses the core experience of one's continued existence, or "whatever makes me 'me'". Ricoeur maintains that this dimension of ipesity, this 'who' of experience, is an inherent, unshakable condition of human phenomenology.

Ipesity, or identity as *self*, may seem equal to the aforementioned idem quality of core sameness. Indeed, Ricoeur tells us that the two cover some of the same space of meaning: any answer to *who* is also a *what*, and any experience of *self* intersects with an idea of sameness (by ascribing a continuous agent, of certain consistent distinguishing qualities). Yet Ricoeur's theory highlights a fundamental difference between the two: idem is a category of hermeneutic thought, an interpretation of the world, while ipse is a condition of existence, of being in the world. The human state of continuous experience constantly floods the question of *who* exists, demanding

12 Hume famously viewed the self as merely a bundle of momentary impressions strung together by imagination and memory.

some sort of anchor for our sense of being in and across time.[13] The structure of identity as sameness provides us with the scaffolding to answer this immanent question – a *what*ness with which to characterize and concretize our answer to *who*, a link between the felt quality of being and the notion of being *something*. Coherent temporal experience, which Ricoeur terms "self-constancy", can only emerge by proxy of a bridge between ipse and idem, allowing the *who* and *what* of experience to substantiate each other.

Narrative, then, is essentially the medium that performs this bridging: at its heart, narrative identity is an interpretation that allows one to connect between ipse and idem, appropriate sameness to the *self*. If we assume the basic mental scaffolding required to form an identity that ties the categories of idem into ipesity – being a distinct entity with unique characteristics, which meaningfully stays itself despite going through many changes over time – we find that by doing so we have, in fact, produced the basis of a narrative protagonist. Hence, having an identity narrative imbues our interpretation of experience with a sense of "discordant concordance", balancing change and permanence across time in the answer to *who*, and in our understanding of others and of the world around us. Narrative hence serves as glue for what Ricoeur terms, at one point, "the interconnectedness of life" (77).

In other words, if we try to imagine this relation in a sort of reverse-engineering, the four categories of idem provide the bare necessities for the sufficient definition of an agent of

13 We can argue on the extent to which narrative is immanently bound to experience in general, or just to the experience of self – that is, on whether some experience can be devoid of self, of a clear notion of 'who'. Meditation and the taking of psychedelic drugs are two examples of practices explicitly meant to tone down this link between experience and the construct of identity, self or ego. Many schools of thought – from Buddhism to New Age to existentialist writing of Sartre to prorogates of scientific spirituality such as Sam Harris (2014) – consider the attempt to distantiate the self immensely beneficial and/or moral.

Ricoeur, on the other hand, firmly believes that such attempt is paradoxical, much like the sentence 'I am nothing' is an oxymoron: "nothing would not mean anything if it were not attached to an 'I'. For what indeed is an I when I say that I am nothing, if not a self deprived of the aid of sameness?" (Ricoeur 1991 80). I do not doubt that Ricoeur is correct at the level of hermeneutics. However, it seems to me that something in these practices is meant to alter the felt quality of experience, detaching or transforming the interpretation applied to it, in a way that Ricoeur does not dedicate much attention to. While further inquiry of this is outside my scope, it might suffice to say at this point that even if the question 'who?' actually can be circumvented by certain practices, it is a temporary and delicate circumvention, which may reframe narrative identity hermeneutics to a potentially beneficial effect, but (barring a state of eternal Nirvana) does not eradicate their necessity for the purpose of going about one's life outside of the meditative episode.

experience across time: a unique entity with certain appearance and properties, which is given to change yet maintains its continuity by remaining, at its core, the same ("discordant concordance"). If we examine what is entailed in being a certain 'who' imbued with such qualities of sameness, it functionally means being akin to a character in a story – like a narrative protagonist can go through many troubles and change drastically, and yet the reader intuitively understands him as the *same* character, projecting onto his identity a continuous core of existence equivalent to one's own. According to Ricoeur, this is no coincidence: "characters in a play or novel are similar entities to ourselves" (78). We form our stories in the same ways we form ourselves, form the characters of others like the character of 'me': "We equate life to the story or stories we tell about it" (Ricoeur 77). Narrative manifests because if we try to account for the notion of identity as sustained over time (balancing change and permanence), we inevitably do so in the structure of a story.[14] On the flipside, the form we call narrative – and can channel into the telling of countless other stories – is at its heart defined by its role in the hermeneutics of identity. Narrative is the interpretative form humans come to find when developing an understanding of themselves as lasting entities in the world. It can then be expanded into all sorts of stories of what all sorts of entities do in all sorts of worlds over all sorts of times.[15]

Ricoeur's theoretical portrayal is in many ways consistent with Dennett's – narrative is an immanent medium that forms to answer a dire interpretative need to organize experience around an understanding of identity, or *self*. Yet I cannot stress enough the importance of the difference in their understanding of where narrative stems from: an intra-cognitive by-product, organizing data drawn from experience, in Dennett's model, and a bridge between being in the world and

14 Ricoeur's argument, then, can be said provide phenomenological justification for Jerome Bruner's (1987) hypothesis that "we seem to have no other way of describing 'lived time' save in the form of narrative".

15 Clearly, personal phenomenological inquiry is not an accurate portrayal of how one first encounters the narrative structure: stories are told to us by others, from infancy, as part of the process through which we come to understand language. My narrative identity is partially extrapolated from narrative structures and tropes I am exposed to, stories I hear from others about myself, and grand, collective narratives of group identity I internalize. The discursive and sociocultural aspects of narrative are touched upon in chapter II and in the conclusion, but even though this thesis highlights narrative as an interactive medium (in relation to the others as well as to situatedness in the world), it is largely focused on a more stripped-down phenomenological inquiry of narrative as an interpretive framework relating to what we do and perceive in the world. Presumably, if we follow Ricoeur's position, narrative's cultural predominance has much to do with its immanent efficacy at explaining humans to themselves.

possessing a coherent interpretation of it, organizing the felt quality of action, of *having* experience, in Ricoeur's.

Ricoeur explores his position's divergence from the analytical view of identity by relating to a thought experiment suggested by Derek Parfit, meant to exemplify an issue with the lay understanding of individual identity (76-77): to briefly paraphrase, suppose a futuristic technology could replicate a person, molecule by molecule, effectively 'teleporting' them by forming a perfect copy somewhere else in the world. We naturally accept that teleported copy as identical to the person in the original location. Yet if the machine 'malfunctioned' by creating the clone without dismantling the original, the person seeking to teleport would be severely distressed at the notion that the only thing needed to correct and complete the teleportation process is to kill him and allow his clone to go about its business on the other side. This is a form of paradox that effectively separates the two notions of identity – as ipesity (experienced existence) and as idem (qualities of sameness) – making our intuitions about them clash against each other: The feeling that my specific instance of embodied being constitutes the 'true me' is pitched against the knowledge that my clone is functionally identical.[16]

Ricoeur comments that these sci-fi thought experiments are mistaken in the ease with which they assume that these two dimensions can be separated. By imagining that meaningful identity can be formed via sameness alone, they "depend on a technological dream in which the brain has to be taken as the substitutive equivalent of the person" (McCarthy 165). Whereas most narratives deal with the possible conditions and interpersonal realities of human existence, these sci-fi simulations of fictional technologies weave a story where the state of sustained embodied existence is merely one possibility for sustaining identity-as-database ('I' could just as easily be transported into another brain, location, or computer, like a complex stream of abstract code). Through this implicit dualistic split, the analytical view sterilizes identity, separating it from its manifestation in embodied experience and corporeal interaction. Much to the contrary, Ricoeur

16 In a similar vein, many recent sci-fi narratives (such as the multiple episodes of the show Black Mirror) are concerned with the notion of translating a person's identity into a database, producing digital data replications of one's unique persona in various ways.

asserts that narrative comes into being by relationality to tangible action, rather than purely by cognitive modelling: "There is no structural analysis of narrative that does not borrow from an explicit or an implicit phenomenology of 'doing something'" (Ricoeur 1984 56). Narrative always acts as further configuration of "what was already a figure in human action" (64), since "fictions are imitations (...) of actions, that is, they speak of what we already know as action and interaction in a physical and social environment" (78-79).

Ricoeur's view of narrative can therefore be said to support the fundamental position of this thesis: narrative, at its core level, is not just a structure of abstract mental representation, but a mode of interpretation enacted by corporeal human existence, in relation to others and to environment. Ricoeur views narrative not as some exterior theoretical object imposed upon our world, but as a hermeneutic framework immanently anchored in our being-in-the-world, fostering the need for coherence, meaning and continuity in the stream of conscious experience. De Mul captures this difference well by stating that in Ricoeur's theoretical framework, narrative is "no theoretical abstract, but a meaningful nexus that we experience and live" (de Mul 2015 167).

The construction of narrative identity: circular dynamics

One of the main pillars of Ricoeur's phenomenological project is to model how narrative integrates into the broader nexus of lived experience. Ricoeur defines these relationalities through a circular model – narrative is both composed through temporal human experience, and itself composes an inseparable part of how experience is construed and lived. This model will serve as a point of departure for the framework I suggest in the second chapter of this thesis.

In *Time and Narrative I,* Ricoeur lays out 3 levels of composition through which narrative identity is construed. The 3 levels are titled, in Aristotelean terminology, as *mimesis 1-3*:

The first level, *mimesis 1*, is the level of 'mimesis praxis', or of the "prenarrative quality of experience" (Ricoeur 1984 74). Richard Kirney describes it as relating to "the primordial capacity of human action to be symbolically mediated" (in Wood 59). In other words, it is the level at which the experience of everyday action is immanently geared to be processed into narrative: we "recognize in action temporal structures that call for narration" (Ricoeur 1984 59).

We must also understand any narrative to be derived from this level, as narrative composition emerges from "the very capacity of action to be narrated and perhaps the need to narrate it", and is "grounded in a preunderstanding of the world of action" (54).

The second level, *mimesis 2*, is the level of 'emplotment': the narrativity of our stream of experience is processed into a coherent plot – a sequence of related events framed into life's overarching story. Ricoeur understands the plot's construction as "a synthesis of the heterogeneous", uniting a multiplicity of different moments and changing circumstance under the same roof of meaningful causal relations. Another aforementioned key concept he attributes to this dramaturgic plot composition is 'discordant concordance': referring to the Arisotelean notion that the concordance of the plot acting as a unique whole has to win over the discordance, as well as to the rather chaotic contingencies of being which plot-making is tasked with organizing.[17] Emplotment, then, is a hermeneutic rendition, in which the network of action we take part in is integrated and synthesized (56) – the order of action comes to mean something additional, symbolically related to more than the simple sequence of occurrences. Lived experience is never just a raw sequence of actions – it calls for narrative, like ipse calls for idem. In Ricoeur's view, the experience of action is *actualized* through emplotment, which ties the contingencies of the moment into the interconnectedness of life. In being signified by emplotment, the sequence of actions becomes significant.

At the third level, *mimesis 3*, a sense of the durable character of oneself – a narrative identity – is derived from the plot. As previously discussed, we ascertain our own character by narrating the story of our life and interpreting ourselves through it. This occurs in much the way in which the characteristics of a protagonist are interpreted in the process of reading, gradually extrapolating properties from behaviors and descriptions as the plot unfolds.

17 Note that if we let go of the conceptual framework of Aristotelian poetics, where drama must be construed into one 'complete whole' of maximum internal coherence (unity of time, space and plot), I see no reason why discordant concordance in this context could not potentially mean a narrative constellation of multiple plots organized in some sort of relational balance and partially interweaving into a fractured whole [see discussion of multiple selves and 'Internarrative Identity' later in this chapter].

Mimesis 3, the 'end-product' of our narrative identity, in turn effects our experience and actions, and thus comes to prefigure the level of praxis that continues to shape its own construction. This constant interplay between the three levels of mimesis forms the "constitutive dynamism of the narrative configuration" (66). I will refer to this notion of a co-constitutive relationship between these three levels in short, as "dynamic circularity" (Wood 17) – essentially a phenomenological feedback loop between life and its narrativization.

Ricoeur's theory pivots around *mimesis 2*, the level of emplotment at which narrative truly performs its function as an intermediary, between ipse and idem, praxis and hermeneutics, action and identity:

> It is primarily in the plot […] that we must search for mediation between permanence and change, before being able to transfer it to the character. The narrative identity of this character will only be known correlative to the discordant concordance of the story itself. (1991 77-78)

Ricoeur's dynamic circularity hinges on emplotment as a reactive intermediary – a conductive thread allowing life and narrative to feed-forward into each other. One way in which Ricoeur phrases this idea is that narrative mediates between a preundersanding and postunderstanding of the order of action and its temporal features (1984 65). This operation of emplotment forms an adaptive relationship between the prefiguration of action and identity, making the ways in which we act in the world and understand ourselves adaptive to each other. This allows for narrative identity to be somewhat re-writable and reactive to change, and simultaneously capable of facilitating how we are prone to act – a crucial capacity for living in an ever-changing world.

Emplotment must itself remain highly dynamic, to successfully sustain the delicate balance of this dynamic circularity – adaptively grounding its story in worldly interactions while maintaining sufficient coherence and consistency. Ricoeur asserts that "highlighting the dynamic of emplotment is to me the key to the problem of the relation between time and narrative" (53). Ricoeur's model loosely theorizes the operationality that allows emplotment to perform this function: narrative identity is understood to take form equivalent to that of a modern biographical novel – the "biographies of great men where both history and fiction are found blended together" (73). Emplotment is accordingly understood as the equivalent to the process of

writing a autobiography which composes the *self* as narrative. If emplotment is ultimately a mental autobiography, the role of embodiment in narrative identity seems rather confined to the level of narrative praxis (*mimesis 1*). However, this autobiographical writing paradigm, as the following discussion will show, is cast into particular doubt by counter-arguments to the narrative identity theory.

Challenges to narrative identity

I now turn to discuss two works that I consider as strong critique not only of Ricoeur, but of theories of narrative identity as a whole: Galen Starwson's "Against Narrativity", and Frissens et al.'s "Homo Ludens 2.0". My aim in relating to these texts is twofold: to defend the core of Ricoeur's position regarding the immanent phenomenological need for narrative, while also fleshing out a shortcoming of his theory in regards to the narrativity of action and the need to expand and adapt his paradigm of narrative identity dynamics in accordance.

"Against Narrativity"

This paper by British scholar Galen Strawson, a leading contemporary figure in analytical philosophy of mind, is often cited as *the* prominent counter-argument to narrative identity. Strawson refers to the idea of narrative identity as the "psychological narrativity thesis": the "widespread agreement that human beings typically see or live or experience their lives as a narrative or story of some sort" (Strawson 2004 428). This notion is distinguished from two other positions it is often conflated with: firstly, the "ethical narrativity thesis", according to which a unified narrative outlook is "essential to a well lived life" (ibid), or in the words of one of its prominent supporters, Marya Schechtman: "One must be in possession of a full and 'explicit narrative [of one's life] to develop fully as a person" (Schechtman 1997 119; in Strawson 2004 435-436). Secondly, the diachronic experience of *self*, according to which "one naturally figures oneself [...] as something that was there in the (further) past and will be there in the (further) future" (430) – as having 'self-constancy', in Ricoeur's terminology. The paper's primary aim is to

refute the necessity of all three of these notions that place narrative as an integral component in the philosophy of mind.[18]

Like Ricoeur, Strawson is arguing primarily through the level of experience: as an alternative to the diachronic *self*-experience, often thought of as a universal human property, Strawson suggests 'episodic' *self*-experience as an equally valid opposite. An episodic individual "has little or no sense that the self that one is was there in the (further) past and will be there in the future, although one is perfectly well aware that one has long-term continuity considered as a whole human being" (430). The primary example he employs for the episodic *self* is his own experience:[19] "it seems clear to me, when I am experiencing or apprehending myself as a self, that the remoter past or future in question is not my past or future, although it is certainly the past or future of GS the human being" (433). In other words, some people are perfectly capable of thinking back to memories of how one was in the (remote) past, and even to be aware of how they shaped who one is in the present, without also ascribing to the view that the past person is 'me', in the strong sense of narrative linkage between (in Ricoeur's terms) ipesity and idem that composes 'me' as a permanent protagonist of one's human life: "the from-the-inside character of a memory can detach completely from any sense that one is the subject of the remembered experience" (434). Strawson views such episodic experience of temporality as decisive contrary evidence to the notion that the *self* inevitably manifests in narrative form. He therefore concludes that his 'reclamation' of the episodic experience as "one normal, non-pathological form of life" (429) is a refutation of the psychological narrativity thesis. Granted, every life (any temporal sequence, really) could be construed as a narrative – but the psychological narrativity thesis hinges on life immanently *feeling* like one, and the episodic experience provides a counter-example. Hence, by being "against narrativity", Strawson is essentially arguing that we do not

18 Strawson also stresses the separability of these views from each other: one can believe that narrative identity is an inherent condition of human psychology without necessarily supporting the view that it is ethically constructive, as well as vice versa, and one can have a diachronic life experience without ascribing to either thesis. A sense of narrative identity, however, seems to at least partially hinge on diachronic experience in his view.

19 In addition to Strawson's argument by self-example, the paper is also peppered with quotes from several thinkers and writers such as Henry James and Kathy Wilkes, which aim to justify their attribution as fellow 'episodics'.

necessarily experience life in narrative form, and would gain no certain moral benefit from opting to experience it as such.

I am most swayed by Strawson's arguments regarding the 'ethical narrativity thesis'. He presents Alasdair MacIntyre's claim, that "to ask what is good for me" is essentially to ask how I can best live out the 'unity' of my life's narrative, and therefore "the only criteria for success or failure in a human life as a whole are the criteria for success or failure in a narrated or to-be-narrated quest" (in Strawson 437). To the contrary, Strawson argues that the view of such pursuit as the path towards a good life may reflect the personal experience of those in support of this claim, but there is no absolute force binding an ethical life to narrative unity (438). Pursuing such quest can just as easily be seen as an obstacle to self-understanding: life is far more complex and chaotic than any unified narrative coherence we could weave to interpret it, and thus the quest for perfect narrative unity could likely mean a smoothened retelling of the *self* that is reductive to the point of near tyranny over one's being. In this context, Strawson quotes V.S Pritchett's saying that 'we live beyond any tale that we happen to enact" (450).[20] I am prone to agree. The more pertinent question in the context of my discussion, however, is whether we can ever form an understanding of lived experience without enacting, to some degree, a narrative interpretation – even if not as a fully composed tale? Ricoeur's theory provides excellent reasoning to answer in the negative: any sense of 'who' framing experience is partially a narrative construct.

Consider Sack's description of the amnesiac Mr. Thompson: Thompson is about as episodic as can be, a true episodic at the basic framework of his cognition. Yet he clings to narrative identity with extreme veracity – constantly projecting and re-projecting story situations to form an understanding of himself in relation to his surroundings. Thompson seems to experience the world with no less 'narrativity' than the diachronic. He simply facilitates the need for narrative framing through his own instantaneously improvised enactments, in accordance to the episodic

20 Some may be driven to understand themselves this way, but tagging people with a strong sense of their life as a unified quest (even a quest towards good) as inherently more moral is misguided. There also seems to be a sense of grandeur and self-importance in the need to construe life as a perfect autobiography, that is far from morally flattering. I would add that in times when of great societal (or personal) flux, clinging to a singular and rigid understanding of one's narrative identity may disincentive the sort of flexible thought required to cope well.

structure of his experience. Hence, the fundamental pillar of Ricoeur's theory - that narrative interpretation is a core need for some degree of *self*understanding - seems to hold even in cases of more episodic experience that undermine the extent to which identity is experienced as consistently and coherently diachronic.

Yet how should we account for this narrativity in episodic experience? In order to begin addressing this question, which is a leading interest of my discussion in chapter II, we must first somewhat expand our view of the forms that narrative identity may entail, beyond the metaphor of a written autobiography – which clearly struggles at accounting for episodic identities. I argue that both Strawson and Ricoeur himself seem to oversell the extent of unity and singular trajectory that experience must be imbued with in order to qualify as carrying narrativity.

Beyond the singular self and narrative arc

Strawson convincingly argues that identity neither necessarily is nor necessarily ought to be constructed in the structure of a unified and cohesive autobiography – contrary to the theory of Ricouer, MacIntyre, Schechtman and others. But this by no means disproves narrative identity as a whole – since a biographical novel is far from the only form of narrative structure.

Narrative identity theories (just like the field of narratology) tend to base their model of narrative on the paradigm of the modern Western novel – where the story is formed around a singular, continuous plot of clear causal relations from beginning to end, as in typical autobiographies and The Hero's Journey archetype. In accordance, Strawson understands the term narrative as "the paradigm of [...] a *conventional* story [...] (attributing) at the very least – a certain sort of developmental and hence temporal unity or coherence to the things to which it is standardly applied" (439, emphasis mine). Strawson openly grants that certain understandings of relationalities over time are necessary to the experience of a functional identity, but seems to

hold that as long as this understanding does not connect into a single, cohesive, "interesting" story – much like a standard, thoroughly edited autobiography - it cannot qualify as narrative.[21]

Yet there are many other forms of narrative out there, such non-Western narrative arcs – e.g. unique structures of African oral storytelling and the Kishōtenketsu, a conflict-free narrative structure common in Korean and Japanese writing (Koenitz et al. 2018) – theatrical improvisation techniques, and the open or branching structures of digital interactive narrative media [see chapter III]. Even staying within the constraints of the Western book, there is no reason that identity has to be more like a novel unfolding a singular story than, say, a collection of short stories relating to some loose overarching themes or idiosyncrasies in diverse ways. In accordance to this variation, it seems redundantly fixated to assume that narrative identity, like most autobiographies, must organize itself around a singular grand telos or strong unifying theme, or provide an account that integrates every dimension of life into one cohesive whole. The fact that the literary novel has functioned as the predominant medium for narrative delivery in modern times,[22] by no means necessitates that we define it as the singularly immanent form of narrative interpretation. Both the notion of "conventional" story (or in Ricoeur's writing, the Aristotelean plot structure) and the degree of unity and coherence which it is assumed to possess[23] are therefore optional rather than defining structures, in the extended understanding of narrative employed by this thesis.

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21 For example, arguing against the claim that narrative is necessary to psychoanalysis, Strawson asserts that "I don't need to take up any sort of Narrative attitude to myself in order to profit from coming to understand how the way X and Y treated me when I was very young is expressed in certain anxieties I have now" (448). If we free the concept of narrative from constraint to the autobiography paradigm, this claim seems impossible to sustain – connecting aspects of one's present character to past relationship trauma is an act of narrative interpretation par-excellance.

22 Arguably, the classical literary novel's history as the predominant medium of storytelling in Western culture only stretches over roughly 150 years, between the mid to late 18th century and cinema's rise to higher public popularity.

23 Strawson is even clearer elsewhere: in the course of arguing that diachronic experience does not necessitate narrativity, he states that "one can be Diachronic without actively conceiving of one's life, consciously or unconsciously, as some sort of ethical-historical-characterological developmental unity, or in terms of a story […] or 'quest'. One can be Diachronic without one's sense of who or what one is having any significant sort of narrative structure" (441). The notion of "ethical-historical characterological developmental unity", or what we might term 'life quest', is explicitly understood as equivalent to the concept of 'story' or 'narrative structure'.

The notion of a multiplicity of identities or selves sheds a light on alternative possibilities in this scope. Dennett's theory facilitates this view, in substantiating the assertion that the *self* is entirely a cognitive narrative construct via lengthy discussion of multiple-personality disorder (1991 419-426). Beyond the contentious example of this much-debated mental condition, where the different selves are entirely isolated from each other, normative people are argued to also experience a multiplicity of simultaneous identity narratives, existing in partial correlation and partial dissonance. The psychoanalyst Stephen A. Mitchell supports a similar notion, while also arguing that experience of a 'singular *self*" of some permanent internal continuity is an acute psychological need. Both the singular *self* and the multiple selves must therefore be taken into consideration in order to gain a deeper understanding of the human mind, and a well-functioning psyche must achieve a delicate balance between the two. Dennett's metaphor of "self as center of narrative gravity" seems fitting to elucidate Mitchell's position – particularly if we remember that this center may emerge as a compromise between multiple gravitational pulls in different directions, which (going back to my own discussion of the metaphor) shift, ebb and flow as one moves through space and time.

I view Mitchell's claim that people are prone to apply several parallel configurations to organize their experience, some of which are continuous and some discontinuous (114), as useful refinement of the concept of 'discordant concordance' in Ricoeur's theory: it is indeed crucial for narrative identity to allow for both discordance and concordance, but the manifestation of this delicate balance may be far more complex that the linear arc of Aristotelean drama which Ricoeur's terminology originates from. Ricoeur himself supports a similar notion to an extent at one point, when he states that forming a life story could be equated to unravelling a state of entanglement in many plots or stories that one can take up (some of which are repressed or never fully told) (74-75) – though the eventual identity narrative presumably remains singular throughout his writing. Support for the model of multiple selves goes much further: Ajit Maan's *Internarrative Identity* (2009) is an attempt to reconfigure the theory of narrative identity around this model of multitude, with a particular emphasis on social and group identity, particularly of de-privileged minority groups ostracized from the cultural 'master-narrative'. Hubert Hermans (2002) and Shlomo Mendelovitz (2005) suggest the metaphor of a society of selves, applying sociological and political concepts (such as negotiations, coalitions and regimes) to imagine the

human psyche as a heterogeneous and dialogical constellation between a multiplicity of forces and identity components.

As an interim conclusion to this discussion of Strawson's critique, instead of a binary division between diachronic and episodic experience of *self*, it seems to me more accurate to imagine a scale of varying degrees.[24] While some may be more prone towards diachronicity and others towards episodiality, positions in the scale may vary across time and adapt to the needs of different moments. Instead of a further dichotomy between narrative and non-narrative experience, I would insist that no point upon that scale is entirely devoid of narrative interpretation. I therefore agree with Strawson's claim that the experience of identity is far more varied than many narrative identity theories make it appear, but am prone to understand the variance as concerning degrees and properties of narrativity, rather than questioning the relevance of narrative altogether. I will not develop the discussion of such views further within the scope of this thesis, but the insight on the fluidity and multiplicity of identity is important to keep in mind, and figure into my later analysis of narrative focalization [see chapter II].

Support for episodic and implicit narrativity

There could be cause to argue against Strawson's description of his episodic identity, and the extent of disconnect from past and future versions of 'Galen Strawson' which he claims to experience (particularly regarding the pursuit of long term goals). But even if we accept this description entirely as read, I would argue that his experience of identity is far from devoid of narrativity – provided that we cease to define narrativity as relation to an all-encompassing autobiographical tale. The appropriation of identity across the timeline of one's life may vary in both extent and degree significantly more than Ricoeur's description seems to allow for, but this does not altogether extinguish the continuing need to conceive temporal continuity and relationalities in some narrative form or another.

24 I would guess that most people are somewhere around the middle of the scale: very few people experience the narrative of their everyday identity highly lucid and cohesive portrayal of a life story in most autobiographies on the one hand, and very few people are as episodic and detached from their past and future selves as Strawson describes himself, on the other.

Daniel Kahenman's *Thinking Fast and Slow* (2011), a book reflecting upon the author's decades of Noble prize winning research in cognitive behavioral psychology of decision making (alongside Amos Tversky), provides strong evidence on the cognitive prevalence of narrative structures. Kahneman forms a broad division between two cognitive systems (also commonly known as dual process theory): 'system 1', the fast system of automatic, intuitive processing and 'system 2', the 'slow' system of deliberative, conscious processing. The leading idea is that system 2 is much less often in active control than popular wisdom dictates: it is very often prone to delegate decisions to the fast system, which navigates based on mental heuristics that are efficient in most cases but also lead to judgement errors. If we view narrativity, like Strawson, as a predominantly diachronic modality of conscious reflection, we would be surprised to discover the prominent role of narrative framing in Kahneman's descriptions of system 1 functions and heuristics. Kahenman's exploration of the fast system describes it as deeply, helplessly prone towards narrative structures of sense-making.[25]

Kahenman also distinguishes between two notions of *self*: the 'remembering *self*' and the 'experiencing *self*'. Unsurprisingly, the remembering *self* is discussed as a narrative construct: Kahenman reports on an experiment regarding an unpleasant medical procedure, proving that patients' memory of the unpleasantness is shaped more by how they felt at the point of peak pain and at the ending moments of the treatment, than by the duration or total amount of pain. Peak and end are narrative concepts that feature prominently in the story through which we represent past experience. While there is much in common between Kahneman's portrayal of the remembering *self* and theories of narrative identity, the remembering *self*'s proclivity towards narrative is not limited to a diachronic, life-spanning arch: narrative framing (or emplotment) is already a factor in immediate memory of recent experience, rendered in relation to parameters

25 Kahenman explores quite a few ways in which narrative structures, interpretation and descriptions are incredibly salient in 'system 1' thinking. For example, when told about Linda, a young, activist student of liberal arts, and asked to rate how likely she is to become certain things in 10 years, participants consistently rate her as more likely that Linda is 'a feminist bank teller' than simply 'a bank teller' – even though the second option is true whenever the first one is true, and also in other cases, and thus objectively likelier. This is because the first option makes more salient narrative sense given the identity ascribed to Linda. Following Taleb's *The Black Swan* (2007), Kahenman terms the tendency to lose sight of true likelihood when faced with salient story structures as 'the narrative fallacy'.

of the event itself (such as its peak and end). We can assume that if a memory is significant enough, it may eventually integrate into a broader, more diachronic identity narrative arc – but the initial 'narartivization' of experience occurs automatically and almost instantaneously.

If narrative framing of experience happens initially through system 1 and at such pace, it should follow that narrativity remains a relevant modality of experience even for the staunch episodic – since we see story connections, essentially, in every episode we live. The term 'episode' literally means an isolated event that's part of some larger sequence. Strawson's use of the phrase "remoter" to describe the past and future versions of himself, which he does not experience any identification with, is telling in this context – it appears quite impossible to convincingly argue for feeling no narrative relation to one's near-past or near-future *self.* One may feasibly experience little to no sense of identification with the person one was as a child, or a decade into the past or future, but it is hard to imagine going through a single day without the implicit mediation of narrative *self*-continuity: how does one perform daily labors and mundane chores without the sense of cultivating future well-being? How could Strawson have completed the writing of his paper without, at the very least, a continuous episodic identity over the time it took to write it? How can meaningful relationships be nourished without a certain story of who significant others are to you, and you to them?

As Mr. Thomspon also exemplifies, episodic states seem to already require a degree of broader narrative framing in order to fulfill a basic phenomenological need for comprehensible meaning in lived experience. This idea of episodic narrativity prompts us to take a deeper look at the more 'practical' sort of narrative understanding [see chapter II[that facilitates the level of action (Ricoeur's *mimesis 1*) – the sort of narrativity that might be needed for a coherent grasp of the present moment, rather than of the overall arc of one's life. Strawson acknowledges that actions can be said to involve a degree of narrative understanding, but deems this mode of narrativity trivial and unimportant:

> The psychological Narrativity thesis is false in any non-trivial version. What do I mean by non-trivial? Well, if someone says, as some do, that making coffee is a narrative that involves Narrativity, because you have to think ahead, do things in the right order, and so on, and that everyday life involves many such narratives, then I take it the claim is trivial. (438-439)

Strawson dismisses the issue without further expansion, but we can attempt to extrapolate on his intention here: firstly, the claim is trivial because it is almost a tautology – if making of a cup of coffee requires narrative framing, than basically any sequence of actions does to whatever minimal extent. Secondly, it is trivial because the extent is minimal – I do not experience making coffee as part of a story in any significant capacity. I do not need to pay any attention to the narrative framing of what I'm doing in order to make coffee, and hence the degree of narrativity such day-to-day actions can be argued to entail is minimal to the point of being negligible.

It is hard to argue that making a routine cup of coffee channels narrativity in nontrivial ways. However, I argue that the implicit involvement of narrative even in such routine actions hints at a deeper connection between narrative framing and the practical understanding that guides our action and perception of the world [see chapter II]. The narrativity of making coffee is trivial to the extent that making coffee is a trivial action: like most everyday actions, our minded-bodies 'know' how to perform it without need for conscious attention or reflection, and it does nothing to change our understanding of identity or relationalities to the world. The importance of episodic narrativity is revealed when actions are not trivial: a preteen making coffee for the first time may need to pay conscious attention to getting the steps right, while exhilarated with the thought that doing this makes him more of an adult. By his 100th cup of coffee, neither the steps nor the sense of agency involved in coffeemaking are anything new. Similarly, adults that decide to install a new daily habit (such as going on morning runs) often apply conscious narrative thought on the adjustments required and the kind of person it will help them become in order to successfully adapt, to turn the action routine trivial.[26] The meaningful implications of such implicit, supposedly trivial understanding of action sequences, causalities and trajectories on narrative understanding are explored by Menary (2008) and Jongepier (2016).

26 The importance of narrativity at the level of action is most evident when the experience of the world of action is, for whatever reason, discontinuous of dissonant (such as in Mr. Thomson's case, see also Gallagher analysis of schizophrenia). As Judith Butler writes in *Giving an Account of Oneself*: "narrating a life has a crucial function, especially for those whose involuntary experience of discontinuity afflicts them in profound ways. No one can live in a radically non-narratable world or survive a radically non-narratable life" (Butler 2005 59).

Before delving further into this issue, I will next discuss the significance of the implicit and immediate understanding of narrativity in action by exploring another critique of narrative identity, that more directly relates to Ricoeur's model – seeking to adapt his understanding of narrative identity into a new parallel theory of identity formation through play.

Homo Ludens 2.0

Playful Identities (2015) is a volume collection of works primarily by Dutch media scholars, connecting play to identity construction in current times. Its opening essay, "Homo Ludens 2.0", is co-written by the volume's editors: Valerie Frissen, Sybille Lammes, Michiel de Lange, Jos de Mul and Joost Raessens. The title is a reference to Johan Huizinga's *Homo Ludens* (1938), a pilgrim work in the pre-history of game studies, which helped establish play as a subject of serious academic relevance. Building upon Huigzinga's claim that culture "arises *in*, and *as* play, and never leaves it" (173), the authors seek develop an updated perspective "for the study of the ludification of human identity in our contemporary media landscape" (Frissen et al. 10).

The essay explores the complex concept of play,[27] and portrays its sociopolitical importance and philosophical ambiguity in an age of cultural ludification, facilitated partially by the ubiquitous influence of digital technology.[28] This portrayal leads into the authors' main claim, regarding play's ever-increasing role in the construction of identity: "both play and games are currently appropriate metaphors for human identity, as well as the very means by which people reflexively construct their identity" (11). Ricoeur's model of narrative identity is introduced as "a good starting point for a theory of ludic identity" (32), since it "illuminates the mediated character of human identity construction" (34).

27 Much like narrativity, play is a highly fuzzy and diverse concept which is tough to pin down precisely – as the in-depth discussion of the play's various definitions and domains (Frissen et al 11-21) does well to show. Wittgenstein employs play to exemplify the notion different things fall under a shared semantic concept by virtue of 'family resemblance': a set of overlapping similarities, rather than one common feature.

28 The notion that technology is an agent of playfulness is a counterargument to Huizinga's position, which viewed technology as diametrically opposed to the freedom of play.

Playful vs. narrative identity

The authors initially propose their notion of ludic identity as a "supplement" (11) to Ricoeur's theory. To establish the need for such supplementation, they first critique Ricoeur's reliance on the paradigm of the biographic literary novel, partially due to its attachment to a single, all-encompassing life narrative trajectory, along the lines discussed above.[29] Following up on this point, they claim that the more open and playful narrative structures typical of new media are potentially superior for identity construction in contemporary times: the "*monomediality*, *linearity* and *closure*" (34, emphasis in the original) of traditional literary plot structures makes them insufficient for the purpose of achieving the sort of dynamism required to effectively perform the intermediary function required for emplotment (*mimesis 2*) in Ricoeur's theory. Other narrative expressions, common in digital platforms and games [see chapter III], tend to be "*multimedial*, *interactive*, *connected* and *open ended*" (ibid.), and therefore more fitting for the role. The main justification provided for this claim is historically specific: there is simply much more discordance nowadays, due to the "complexity, flexibility and changeability of our present life, and the abundance of media of expression" (35), and the newer, more open narrative forms do better at allowing for it.

Ultimately, the authors' line of critiquing Ricoeur leads them to assert that narrative at large is just a sub-category of play. This appears to be a new and controversial claim, and I am somewhat puzzled by the reasoning provided to substantiate it: According to Huzinga's Homo Ludens, "all poetry is born of play" (32) – Huizinga views poetry as a sort of last stronghold of an all-too-serious culture, where language may be used playfully – and the authors therefore deduce that from his perspective, "literature entirely belongs to the sphere of play" (ibid). However, going by Huizinga, essentially every element of human culture can be argued to derive from play (the authors themselves mention that Huizinga's understanding of play is

29 They add that describing the mechanism of identity construction through the paradigm of classical Western novels is an elitist approach, which privileges "serious high culture" at the expanse of everyday gossip and life stories, a far more common and probably far more globally influential form of narrative delivery (34). Literature is unarguably an immensely important and influential medium, but (as previously discussed) its status as the default, and often presumably all-encompassing, paradigm for narrative delivery calls for questioning.

problematically broad), though clearly even if play's influence is ubiquitous, most cultural elements are not *just* subcategories of play. Furthermore, this act of categorization fails to carry forward the authors' own previous claim, that narrative forms go far beyond the paradigm of literature. Nonetheless, the capacity to argue through Huizinga that poetry is play and therefore literature is play and therefore narrative is play seems to be taken as sufficient proof.

Having determined narrative to be a form of play, the authors continue to classify it within Roger Caillois' typology of four play categories (1955), and treat it from there on as a form of "mimicry" – play of imitation and simulation.[30] It then logically follows that their proposed theory of ludic identity already encapsulates narrative identity by default, and all that is needed is to expand it to also account for play's other categories. In addition to encapsulating all narrative forms, the concept of play emphasizes the sort of strategic adaptability, reflexive awareness, and balance between free movement and constrained sets of roles, which contemporary identity construction seems to require (partially because ludified structures have become so ubiquitous). Frissen et al. therefore suggest an alternative identity construction model, which mirrors Ricoeur's three levels of mimesis, but substitutes the primary role of narrative with play (35-40):

Play 1 refers to implicit experience of playfulness in everyday actions and perceptions, in a more free and open form (*paidia* as opposed to *ludos,* in Callois' terminology): such as the playfulness of children running around, of the observed movement of light and shadow, of clicking and manipulating the interface of digital devices. *Play 2* encapsulates "the expression of this experienced ludic nexus in more or less explicitly articulated games" (36) – the playful joy of running around channeled into playing football, for instance. In a culture where successful, adaptive living increasingly depends on various modalities of 'serious play', the ludic strategies

30 This branding of narrative as confined purely to mimicry is partially justified by Ricoeur's use of the Aristotelean term 'mimesis' (loosely translated as imitation). However, Ricoeur's application of the term to describe the narrative construction of identity follows a reading of Aristotle that emphasizes the connection between mimesis and poesis in art – an imitation of reality that is also an active creation of one. In relation to this, Ricoeur describes the shortcoming of the two English translations of mimesis: "If we continue to translate mimesis by 'imitation', we have to understand something completely contrary to a copy of some preexisting reality and speak instead of a creative imitation. And if we translate mimesis by 'representation', we must not understand by this word some redoubling of presence, as we could still do for Platonic mimesis, but rather the break that opens the space for fiction" (45). Tagging narrative purely as mimicry seems highly reductive if we keep this intent of Ricoeur's in mind.

we develop blend into our interpretation and management of many meaningful relationships and life domains. At the level of *play 3*, "the player understands her/himself from the perspective of his expressions, reflectively internalizing their structure and content" (38). We increasingly derive who we are from the ways in which we play.

While this model is intriguing and convincing at parts, I find that it falls short in its intent to accommodate the process of identity construction entirely through the concept of play. Most pertinently, this attempt is theoretically lacking at the level of *play 3*. The crux of the issue is that *play 3* parallels the level in Ricoeur's model where identity is produced not only *through* narrative, but *as* narrative – that is, in the form that fundamentally encapsulates our answer to the question 'who?'. I do not see how play might take over this role in the parallel model – how identity could not only be constructed via engaging in play, but also in the form of play - and the authors never address the question. As a result, in my understanding this model shows us how identity construction can occur in many ways *through* play, but still very much *as* narrative.

One salient example is the discussion of social networks. As Friseen et al. argue, the playful interface of social networks such as Facebook is today one of the most dominant means utilized for identity construction. Yet they function as such precisely by urging us to tell and share our *stories* (albeit often not in textual forms), and by projecting the accumulation of these stories back to us across a personal timeline. Social networks mediate identity in the open-ended, playful multimedial structures that Frissen et al. begin their critique by briefly relating to, but they nonetheless do so by channeling and constructing identity *narratives*.

In short, it seems that the identity formed via playful means, implicitly (and perhaps inevitably) ultimately remains a narrative construct – despite the authors' avoidance from employing this concept in their alternative model. Therefore, while the authors' critique of Ricoeur's paradigm and arguments for the significance of playfulness to identity in contemporary times are solid, there is no need to throw the baby out with the bathwater by attempting to 'trade narrative away' more or less altogether. Narrative's function as an immanent medium in Ricoeur's hermeneutics of phenomenology is extremely hard to replace.

The immediate meaningfulness of play as reclamation of narrativity

Though I doubt the validity of *Homo ludens 2.0* attempt at an entirely 'playful' circular dynamics of identity to parallel Ricoeur's, it is interesting to re-frame their model as an argument for supplementing Ricoeur's understanding of narrative identity construction with play in a way that connects both (as the authors originally suggest). In Ricoeur's terminology, the relation between play and identity may be defined as a necessary presence of narrative emplotment in the 'preunderstanding' and 'postunderstanding' of playful action. But what of the understanding employed within the 'magic circle' of play, within the process of interaction? Narrative appears to struggle at accounting for the movement of play is it unfolds: presumably, we can tell a story about any game (or action) we have completed, or weave a narrative about how a future game could\would unfold – yet locating narrativity within the moment of playing, within the unfolding episode of interactions, is trickier.

The conceptual framework of play is lacking in and of itself to grasp the phenomenological hermeneutics of identity along the lines described by Ricoeur, but may also reveal a significant shortcoming in Ricoeur's model: narrative encapsulates the formation of identity (*mimesis 3*) and the ways in which it follows from and into action, but struggles at accounting for the temporality of being *in* action, the processing and understanding of interaction from the perspective of lived experience as it unfolds. Ricoeur's *mimesis 1* deals with the "prenarrative quality" of action, but this temporality of action itself, of *doing*, of the present progressive, remains problematic in his model. I am inclined to argue that the primary reason for this issue is that emplotment is conceptualized as equivalent to the writing of a literary story in our heads. Try as Ricoeur might to emphasize the connection between narrative and action, the meaning we (often implicitly) encounter as directly attached to the immediacy of action is tough to sufficiently grasp through the paradigm of composing a fully internal and abstracted representation of life.

Play appears to be a superior paradigm for metaphorically capturing the participatory, situated framework of present interaction in which 'mimesis praxis' takes place: even in maximally descriptive autobiographical or historical texts, the writing is always performed after the fact, when sitting still in a room somewhere and retroactively reflecting on actions that have already turned into memories. We move our hands and eyes in order to write, but the real action takes

place in a parallel world, a space of representation, projected inside our heads. Writing may be borrowed from action, anchored in familiarity with the contingencies of action, but it is separated from the temporality of being in interaction with the world we inhabit. Play, on the other hand, is something that we do *here and now,* that places us directly inside whatever parallel world is enacted (even when further mediated by technology). This 'nowness' of play seems more in accordance with the view of identity as potentially episodic and multiple (discussed above in relation to Strawson). Considering identity as 'playful' should certainly disarm the notion that identity must be subjugated to one fully diachronic, all-encompassing hermeneutic track.

In addition, when we write stories, we are essentially creating something out of nothing. We have full control, and can write any situation into being. Ricoeur fully recognizes that the sphere of action which narrative captures is always a network of interaction, always relational to others and to environment (55), yet the others and the environment one writes about are ultimately something projected within one's own head. The activity of playing is different: we are participants in the game, rather than its designers. We take part in the active creation of whatever unfolds – far from 'passive readers' (if there can ever be such a thing) – but our agency is partial, dependent on interplay with actions of other players and on various contingencies of the play environment (the physics of shooting a ball into a basket, the rolling of dice).

The upshot of this it that we cannot understand the meaning that actualizes within the playspace as equivalent to the authoring of a structured text. For example, when one scores a goal in a football match, Ricoeur's 'side' might rightfully argue that the experience could not have been meaningful without narrative understanding (or narrative-involving systemic understanding) of the game of football and how significant a goal is within it. Yet one does not encounter such meaning by reflecting on the goal and composing a mental plot. The meaning is there, directly, in the moment of scoring, even in the prior moments of running and striving to score. The meaning also emanates from the partiality of agency, the uncertainty of how the interaction might unfold – a multiplicity of narratives of what the game, or a given sequence of play within it, might turn out to be. Huizinga's concept of the 'magic circle' of play can be functionally understood as an interpretative framework that, like Ricoeur's emplotment, integrates and actualizes a sequence of worldly interactions into an order of meaning – but it does so directly

within the spatiotemporal order of action, not in some separate reflective moment or internally projected space.

This comparison to play raises some tough questions regarding the capacity of emplotment as a paradigm for relating lived experience into narrative composition: Is emplotment as 'remotely borrowed' from action as autobiographical writing is? Should we therefore take narrative to be somewhat absent in the moment of interaction, to be an authored, reflective structure positioned just outside the domain of action, only projecting actions occurring in a time and space outside the present? And by expansion, is narrative identity processed entirely within the inner rooms of one's own head - where the plot is composed and updated as if writing new pages in a story (like Dennett's robot printing out a report), in a space isolated from the tangible comings and goings of the life which it reflects about?

If we answer these questions to the positive, I believe we'd have to retreat from, or else severely struggle to defend, one of Ricoeur's key positions: that the dynamic circularity between mimesis praxis and narrative identity (*mimes 1* and *3*) – narrative's crucial intermediary phenomenological function – is sustained by emplotment's "dynamic character" (1984 65) as a configuration operation. I fail to see how emplotment could sufficiently mediate between the preunderstanding and postunderstanding of the order of action (ibid), if emplotment itself happens outside the moment of action, and can only imitate or represent the tangible action that takes place in the world. Answering these questions in the negative, on the other hand, seems to require an alternative paradigm for the actualization of narrative relationalities in lived experience. If play nonetheless carries, as argued, a significant degree of narrativity, we must wonder how to define this different, more embodied, immediate, implicit, and environmental sort of narrative quality.

In this light, the primary aim of the next part of my thesis can be understood as an attempt to supplement the Ricoeur's narrative phenomenology in order to fill this gap at the level of doing, moving, perceiving, being inside the process of experience. Narrative phenomenology should address what Ricoeur terms "the interconnectedness of life", the dynamics of zigzag movement between action and interpretation, in somewhat closer connectedness to the temporality of tangible movement than Ricoeur's model does.

I am not trying to claim that we are mistaken to think of emplotment, in the sense of fully realized narratives structures in conscious reflective thought, as equivalent to the writing of a story or memory – I do not see how this paradigm could be replaced, nor why should it. I am searching, rather, for an additional, more immediate mode of narrative processing, that applies to the temporality of *doing*, or praxis (*mimesis 1*, or Kahenman's 'system 1' of fast nonconscious processing) – before actions have been distilled into stable structures, finished stories and long-term memories (and integrating into such higher-order narrative understandings). In being "against narrativity", Strawson is essentially making the opposite claim regarding the temporality of doing – life is not experienced in present tense through narrative. I fully concede that it is not experienced as a finished autobiography, and yet would like to conceive my attempt in the next chapter as a reclamation of narrativity: the narrative quality of immediate experience, which is somewhat more open, initial, implicit, episodic and most importantly, directly embodied, than that of a finished text or a long-term memory. To substantiate this aim, I will attempt develop a more lucid and entangled framework for the connection between narrative and action by integrating Ricoeur's narrative phenomenology with insight from the field of embodied cognition and enactive theory.

Chapter II: Narrativity in Enactive Perception

Sack's Mr. Thompson lives a distressed existence due to losing all stability of his identity and life 'plot', or *remembering self,* but remains a highly narrative being: as Sacks states, narratives constantly appeared in "how he suddenly saw, or interpreted, the world". There might be a significant degree of narrativity, then, in perception, in how the world immediately appears to us. In this chapter, I turn to theories on the close connection between cognition and embodiment, and concordantly, action and perception, in attempt to suggest a framework that would allow us to better approach narrativity at this level.

Introduction to embodied and enactive cognition

Many of the central issues addressed by narratology and narrative identity theories are aligned with burning topics of inquiry in contemporary cognitive science: such as temporal synchronicity, the action-perception circuit, and intersubjective influences (Armstrong 185). Empirical study of such questions has brought many to the hypothesis that observing what happens within the brain alone is insufficient to gain a full understanding of such phenomena, and of the innerworkings of conscious experience at large. This notion strongly contradicts a long-standing canonical assumption of Western thought: that experience is something that ultimately takes place entirely within our heads, and purely by proxy of the brain's processing capacity. A better account seems to require us to conceive cognition as something that occurs through, or inseparably from, the body, and in more direct relationality to the physical world in which it is situated.

Embodied cognition (EC) is a blanket term for a growing interdisciplinary body of scholarly work that extrapolates upon such findings in cognitive science, drawing also from phenomenology, perceptual psychology and studies of movement, dance and corporeal experience (Shapiro 2010). Some perceive it as detaching itself from, or being an evolution of, standard views in cognitive science, as it takes a different view on the defining question of "what it means to be a thinking thing" (Shapiro 1). EC provides scientific, philosophical and psychological support to the assertion that the Caresian split, or mind-body dualism, is an entirely false notion: embodied minds, or minded-bodies, are one inseparable whole. Not only is

there no "central meaner", in Dennett's term, sitting somewhere in our heads, but rather a decentralized cognitive system – our bodies are also not merely some fleshy machinery which high-order thought happens to reside in, but rather a fundamental part of our cognitive system. Cognition is anchored in and dependent upon the constant environmental feedback of being an embodied being. If thought could never appear in hermetic space, the mind (which has its conceptual roots in the notion of an ephemeral soul) is not entirely constrained to the "inner domain" of the brain, but is rather re-conceptualized as corporeal – encapsulating the body, and the relational position of being embodied, of tangible presence in the world, as an integral part of its operationality. We are, therefore we think. EC theories hence develop a model of cognition and consciousness that is in some ways opposite to the computational metaphor employed in Dennett's approach to narrativity – focused on honed reactivity to environment, rather than on internal processing and systemic logic.

Enactivism, a closely related school in cognitive science and the philosophy of mind which has also been gaining traction over the last three decades, originated from Thompson, Varela and Rosch's *The Embodied Mind* (1991) – a pivotal work in embodied cognition. The authors define the enactive approach based on the canonical assumption it differs from: enactivism "questions the centrality of the notion that cognition is fundamentally representation" (Thompson, Varela & Rosch 1991 9). It can be understood as a version of embodied cognition that also makes a further claim: embodied experience is never passive receptivity, never merely absorbing objective sense-datum and being subjected to sensations. Rather, our living systems actively perceive and (make) sense through our immanent state of being in constant dynamic interaction with environment. We can hence be said to *enact* – actively and selectively create – the world we perceive, through our minded-body's capacities to interact with it:

> Cognitive systems are simply not in the business of accessing their world in order to build accurate pictures of it. They participate in the generation of meaning through their bodies and action, often engaging in transformational and not merely informational interactions; they enact a world. (Stewart et al. 2010 39)

This core enactivist view appears to be in affinity with Ricoeur's phenomenology of narrative and temporality: despite their different terminologies and points of emphasis, in both theories lived

experience is understood not only as a mental rendering of sensory-data, but as a state of dynamic action and selective processing through which the meaning of oneself and of the world is generated together.

The conceptualization of narrative in works by prominent enactivist thinkers, such as Daniel Hutto, Shaun Gallagher, Dan Zahavi and Richard Menary will be discussed (and problematized) later on in this chapter. For the scope of this thesis, I relate to enactivism first and foremost through Alva Noë's theory of enactive perception, as laid out in his book *Action in Perception* (2004). I focus on Noë because, as will be argued extensively, I find his version of enactivist theory to be in particularly strong synergy with the framework I propose. This synergy is primarily based on two interwoven relationalities that Noë's work excels at emphasizing and analyzing: between movement and vision (and by extension, perception at large), and between practical and conceptual knowledge. After laying out Noë's position in some detail, I will develop a more nuanced discussion of how it compares with Ricoeur's.

Noë's enactive perception

Noë's central assertion is a strong take on the view that perception and consciousness are derived from embodied action, and should be considered "something we *do*" (Noë 2004 1). In this vein, he stresses that the capacity for physical movement is fundamentally integrated into the structure of our thought: "all perception [...] is intrinsically active. Perceptual experience acquires content thanks to the perceiver's skillful activity" (3), and concordantly "the world makes itself available to the perceiver through physical movement and interaction" (ibid. 1). Accumulated embodied knowledge of movement affordances defines the active, situated processing of environment, which consciousness at large is derived from.

Vision and movement

Noë lays out his theoretical view of sensory perception primarily through a discussion of vision (typically understood in Western culture as the most dominant, most 'objective', and least personal and embodied of the five senses, and thus most presumably challenging of his theory). He cites the condition of experiential blindness – people with access to visual sensation (often

after being surgically cured from blindness), who nonetheless cannot functionally see, due to a deficiency in applying "implicit practical knowledge of the ways movement gives rise to changes in stimulation" (Noë 2004 8). Hence, the ability to see is not defined by the operationality of the visual system alone (much like no system of sensory or cognitive processing can truly be understood in isolation). One could have 'normal' access to visual stimuli and yet be effectively blind, if one lacks an implicit understanding of the of the stimuli's "sensorimotor significance" (6), of how to integrate visual impressions with bodily movement and orientation, how the appearance of environment should be expected to change as we move our eyes, heads and bodies within it. Vision functions by allowing us to experience and navigate spatial relationalities through implicitly understanding the amount and quality of movement that would bring an object we perceive into contact (97). In this sense, all objects of sight are experienced through action affordances (106), all perception is somewhat inherently touch-like, and touch itself "acquires content through movement" (97).[31]

Noë's position should not be taken to mean that vision manifests from whatever tactile feedback or movement affordances are available in the present (we do not stop seeing if held stationary, or even paralyzed). Rather, the leading argument is that vision, and perception at large, are made actionable and meaningful via implicit integration into the framework of accumulated practical knowledge (or "know-how") gained through embodied interaction (which the experientially blind have yet to achieve). Anything we perceive manifests within "a network of sensorimotor contingencies" (112), and is processed through accumulated practical knowledge of these contingencies and their relationalities to our own embodiment and affordances for movement – our "sensorimotor bodily skill" (11).

For example, when we see a tomato, we directly perceive its three-dimensional shape, even though our visual sensors in fact only have access to the potentially ambiguous red surface of one

31 Noë's view of perception as calibrated through the understanding of affordances in environment is based on psychologist James J. Gibson's influential affordance theory, developed in *The Ecological Approach to Visual Perception* (originally published in 1979). As mentioned, his other formative source of influence is Merleau-Ponty's phenomenology. As Noë states, though such works provide strong indirect support for the enactivist view, they should not be fully or directly identified with it (2004 18).

side of the tomato – we see the tomato in its whole shape, regardless of not actually seeing the whole tomato. In perceiving it as such, we enact the full tomato, through our implicit practical knowledge of manipulating a tomato in our hands, of having grasped the tomato shape from all its sides. This position is largely consistent with Merleau-Ponty's analysis of the "intertwining of vision and movement" in *Eye and Mind* (1964), and his statement that "everything I see is on principle within my reach, at least within reach of my sight, and is marked upon the map of the 'I can'" (3).

Developing upon this conclusion, Noë analyzes empirical cognitive findings, demonstrating that the amount of visual information our system is capable of processing is much lesser in quantity and 'poorer' in quality than commonly assumed. Contrary to the 'snapshot conception' of vision, according to which our eyes are akin to sophisticated cameras that constantly capture a high-definition picture of our surroundings, information made available through vision appears to vastly outstrip the amount of information actually available to the retina (21). The rest of what we see is 'there for us', experienced as visually present, by proxy of our ability to move our eyes and heads at any given time and gain immediate access to that detail. When we read, for example, we do not see every line of the page in full focus, but we can instantly refocus to read whichever line we choose. Perception, then, enacts the full page (or tomato) as present to us – even though we only ever truly see a fraction of it in high detail.

A far more shocking example for the 'poverty' of vision is the case of change blindness, or 'inattentional blindness': in the now famous 'invisible gorilla' experiment (Simons and Chabris 1999), participants are asked to watch a video of a group of people passing a basketball around as they move in a circle, and count the passes. As they focus on ball's movement, most participants entirely fail to notice a man in a gorilla suit who walks into the middle of the frame, turns, does a little dance, and strolls off. A plentitude of other experiments have since testified to the mindboggling degree of change that we are prone to miss when our attention is directed elsewhere – including, in one entertaining video, switching the person standing right by us, asking for directions on a map ("Change Blindness Experiment", 2011).

As Noë comments, Dennett effectively predicted change blindness in his previous work on visual illusions (Noë 54; Dennett 1991 467-468).[32] Dennett utilizes the proclivity to illusions and sensory misconceptions to argue that perceptual experience is highly missing and discontinuous in its representation of the world, despite its appearance of continuity facilitated by the narratives we attach to experience. Skeptics in Dennett's camp suggest that change blindness proves that perception is largely an illusion – we believe ourselves to possess in our brains a rich, dynamic picture of the world, but we do not actually experience much of what we think we do (Noë 54-55). Noë, however, draws a very different conclusion: perception is only ripe to be deemed an illusion based on such findings if we hold onto the notion that it happens entirely within the confines of our brain (input-output theory), that in order to see something we must represent a detailed cognitive picture of it (it then follows that if our perceptual capacity is not that grand, "the brain" constantly fills our perceptual gaps with illusionary representations). If we drop this notion, then it is absolutely true that "we have perceptual access to a world that is richly detailed, complete, and gap-free" (57) – but this world is not an internal picture entirely computed or represented in our heads, it is simply the world we inhabit: the environment that perception is embedded within, and directed towards. As articulated by Rodney Brooks: why should we believe ourselves to be constantly constructing a detailed internal model of the world, if the world is right there to "serve as its own best model" (Brooks 1991; Noë 52).

Vision is hence not an internal picture drawn in the brain once the eyes get stimulated, but rather something the embodied mind achieves in direct, entangled relationality to the world, an exploration of environment through implicit understanding of its sensorimotor regularities. Certainly, perception is in some significant ways a representational medium, yet we should be wary of understanding it as *fully* representational – much of its detail is enacted, rather, as direct channeling of our access to the world. This is why detail in present perception tends to be much richer than in memories. Drawing a portrait is always a practice of representational skill, yet we

32 In the sense of his general approach to perception as a sort of projective process, Noë considers Dennett to be a valuable ally. The two widely differ, however, in their treatment of embodiment.

can draw a far more detailed portrait far more easily when the person being drawn is sitting in front of us, rather than recalled or imagined. In Noë's words:

> My sense of the presence of the detailed world is grounded in my ability to gain access to that detail by the movement of my body or the shifts of my attention. The world is present to me not as represented, but as accessible. (192-193)

Going back to the previous example, it is therefore not an illusion that we see the whole tomato – the tomato is *there,* a thing in the world we are situated in relationality towards, which our lived experience correctly perceives in its fullness. My vision of the other side of the tomato – and of many elements in my visual field – is *virtual*, not very different than the extent to which I can perceive my living room while sitting in my bedroom (63), because I know it to only be a few steps away.[33] Vision is enacted via tangible sensorimotor knowledge of, and affordances of interaction with, the environment, including parts of the environment that the eyes cannot currently see.

Seeing in Noë's theory can be described as a direct encounter with the world we inhabit, which is specifically situated rather than be objective or unfiltered. The presence of the room next door, for example, is very different for someone visiting a house for the first time. All perception (including nonvisual modalities such as touch) is perspectival – "determined by our shifting place within the world (86)" from which we explore it, and thus guided by our particular intentionality: "experience always presents the world as being some way to one" (116). Noë stresses that based on this, we should also assert that there could be no such thing as a fully passive, or inert, perceiver (13), nor as 'raw' or unfiltered perception (115-117). Perception always occurs from a situated perspective, actively enacted and directly processed through one's accumulated embodied understanding of worldly relationalities. Mere sensory impressions inherently fall short of perceptual awareness, and hence are insufficient to generate experience: to perceive is "to have sensations *that one* understands" (33, emphasis mine), through the sensorimotor knowledge

33 Perceived details of such virtual access can be mistaken, and relevant details can go unnoticed (even in direct perception), but that should not lead us to conclude that perception is fully illusionary – it is always enacted in direct interface with the world.

needed to enact perceptual content (17). If detail is present in experience as accessible, rather than represented (193), it follows that the degree to which we are prone to notice a certain kind of detail hinges on our practical understanding of the world: to paraphrase Maslow, if all you practically understand is a hammer, everything looks like a nail.

We should also learn from this perspectival aspect – and from the gorilla experiment – that "vision is, to some substantial degree, attention-dependent" (65): anything I see is enacted by my situated relationality to the world, and to some substantial degree, by my implicit understanding of what matters in it – which does not typically include, when watching a game a basketball, the search for a gorilla. We are always likely to functionally see, or be visually aware of, both more (the other side of the tomato) and less (the unexpected gorilla) then what enters our retinas. This perspectival and attentional aspect of situated interpretation is crucial to Noë's understanding of experience – it is the aspect that "marks the place of action in perception" (34).

Practical and conceptual knowledge

With the term "sensorimotor knowledge", Noë is implying that the 'subpersonal' embodied skillfulness we bring to bear in enactive experience, based on our acquaintance with movement in the world, is strongly related to the conceptual knowledge we apply in abstract thought and language. In this vein, Noë states that "thought and experience are, in important ways, continuous" (118):

> It only seems that to say perception is conceptual is to overintellectualize experience if we maintain an idea of concepts as conscious, determinative judgement, rather than potentially a background conceptual skills […] Perceptual experience, as mode of skillful exploration of the world, necessarily manifests both sensorimotor and conceptual skills. (194)

Conceptual thought is, at least in some significant sense, a further processing of enactive perception, which is already an interpretive framework constituted by knowing the world we inhabit: "Experience is a *thoughtful activity*" (205). In this sense, sensorimotor knowledge can be deemed as a sort of "proto conceptual" skillfulness (183): "their subpersonal character notwithstanding, the attribution of these [sensorimotor] skills is governed by the kinds of considerations [...] that characterize the domain of the conceptual" (201). It should therefore

follow that "our relation to the world, through thought, and our relation to it through experience, differ not in kind, but in degree" (207).

Most crucially for my discussion, though there is a level in which we can ascertain sensorimotor capacity to be more primordial than abstract conceptual capacity, in developed human experience practical knowledge is interwoven with conceptual knowledge, and there is no distinct border that tells the two apart. In Noë's words, "just as there is no sharp line between the personal and the subpersonal, so there may be no sharp line between the conceptual and the nonconceptual" (31). Highly conceptual or theoretical structures can be told apart from practical knowledge when inspected in isolation, but they are intermingled in the skillful framework through which we enact experience and in the body of knowledge that comes to bear in doing so. We can imagine practical and conceptual understanding as deriving from each other, constantly informing and expanding into each other, in a circular dynamics – or a sort of phenomenological spiral – that constitute our thought and experience. In an intricate structure, the affordances of movement and action continue to frame our capacity for thought, but also come full circle to become inherently thoughtful themselves (181-209).

Noë therefore holds that "the experience and the conceptualizing are *one and the same* activity. Neither is logically or conceptually prior" (194). Kant famously asserted that concepts without (sensory, experiential) intuitions are empty, and intuitions without concepts are blind. Enactive perception can be thought of as a phenomenological theory that radically affirms this position. It is more radical than the Kantian position in holding conceptual knowledge as inseparably intertwined with perceptual experience not due to being *applied* to judge, analyze or represent sensory impressions, but rather in a more immediate and entangled way: taking key part in the framework of practical knowledge through which experience of the world is directly enacted.

Narrative dynamics in Noë and Ricoeur

Though Noë's theory employs a very different terminology that does not refer to narrative, its view of experience as skillful interpretation and the close and co-dependent relationship it draws between practical understanding and conceptual thought carry strong parallelisms to Ricoeur's circular dynamics between action and narrative hermeneutics. Noë also hints at a connection

between practical understanding and narrative interpretation: the only mention of the term 'narrative' I found in his work (to be precise, in a transcribed video interview for *Edge* magazine) makes a somewhat similar claim to the above. Noë employs the term in the course of arguing that we should never think of consciousness as "somehow separable from the mode of dynamic activity". We can understand Noë's position in Ricoeur's terminology as stating that in order to think of, or even recognize in perceptual experience, the dynamic activity of a living organism in a meaningful way, we must attribute to it a notion of narrative identity:

> The organism has a certain unity, and it is only when I can conceptually bring that organism into focus as a unity that I can study it, that I can even recognize it. […] There is a sense in which just to perceive the life in the thing before me, I need already to see it as an integrated whole distinct from its environment. Once I do that, I can also see it as having needs and interesting goals, and, thus, in some sense, a mind. […] *Wherever we find life we find the necessity for a certain kind of narrative which makes the attribution of mind at least intelligible.* (Noë 2008, emphasis mine)

In other words, whenever we perceive through attribution of agents with intentionality and mind (or some semblance of either), whenever we grasp the actions of conscious life forms, we are integrating narrative framing (of a particular kind that construes a notion of identity) into enactive perception. Though Noë does not expand on this view, I believe it attests to the ample potential for the expansion of his thought in relation to the theory of narrative identity, as suggested in this thesis: enactive perception as facilitating embodied narrativity.

Ricoeur makes an appealing case to consider narrative as a phenomenologically privileged medium, inseparable from our capacity to grasp temporal continuity and identity, through which conceptual knowledge is interwoven with experience. If we compare and contrast this theory with Noë's, we see that a key form of knowledge delivered by Ricoeur's notion of narrative identity – an understanding of ourselves in distinct, temporally continuous inter-relationality to the world around us – is according to Noë already ingrained in enactive perception. The suggestion I develop for the rest of this chapter, integrating Noë and Ricoeur, is hence to consider the narrativity of our immediate understanding of action as an enactive modality, as part of the background conceptual skills that enact perceptual consciousness.

The connection between narrative understanding and the level of embodied praxis is already broached by Ricoeur's theory: Ricoeur states that the minimal narrative sentence is an action sentence (1984 56), and any narrative is a projected sequence of actions that also depends on broader familiarity with the "conceptual network" of action. In the course of discussing narrative at the level of *mimesis 1*, Ricoeur describes this conceptual network as present in our understanding of experience, and as immanently interactive in relation to others[34] and environment. In strong likeness to Noë, Ricoeur even employs the term 'practical understanding' in making this argument: "To master the conceptual network (of action) as a whole [...] is to have that competence we can call practical understanding" (55). Ricoeur stresses that this practical understanding distinguishes our experience of action from mere physical movement. This distinguishment is achieved through an initial form of mediation via narrative hermeneutics: actions already appear to us as intelligible in narrative terms, implying an understanding of causal interaction between agents with goals and motives (ibid). In the terms of Ricoeur's overlying theory, this can be grasped as an initial understanding of identity and temporal continuity, in regards to one's own mind and to the minds of others. These aspects of Ricoeur's thought are, to the best of my understanding, potentially entirely coherent with Noë's theoretical framework.

Having established a potential affinity, let us now turn to examine the primary point in which the two theories significantly diverge: in Ricoeur's view, the heart of narrative phenomenology dynamics takes place within the space of mental representation, while for Noë, narrativity (much like interpretation and consciousness at large) must be assumed to manifest directly from the dynamics of interaction between minded bodies and world.

As Ricoeur's choice of the key term mimesis implies (even though his theory relates to it in direct relation to poesis, and not as pure or passive mimicry), narrative identity is first and foremost a form of representation, a projection or reproduction of reality in a separate domain. The ability

34 "The other" is already part of our narrative identity, as comparison and interaction with otherness defines our life stories. Through this interaction, we also interact with other narrative identities, possibly making our identities more of a "tissue of stories" than an individual story (Ricoeur 1985, 356; Frissen et al. 39).

to utilize narrative intelligibility at the level of practical understanding is defined as the "first anchorage" (54) of emplotment (*mimesis 2*). 'Anchorage' is taken to mean that emplotment simultaneously depends on this domain of action in experience, while itself anchoring the practical understanding that distinguished the domain of experienced action from mere perception of movement. According to Ricoeur, though, this seems to mean that narrativity is never fully realized while *being* in action, from inside the movement, but rather only when action is anchored, when it docks into an additional cultural domain of representation and discourse:

> […]Narrative is not limited to making use of our familiarity with the conceptual network of action. It adds to it discursive features that distinguish it from a simple sequence of action sentences. These features no longer belong to the conceptual network of the semantics of action. They are syntactic features, whose function is to engender the composing of modes of discourse worthy of being called narratives […] Consequently, narrative understanding is not limited to pre-supposing a familiarity with the conceptual network constitutive of the semantics of action. It further requires a familiarity with the rules of composition that govern the diachronic order of a story. […] We may sum up this twofold relation between narrative understanding and practical understanding as follows: In passing from the paradigmatic order of action to the syntagmatic order of narrative, the terms of the semantics of action acquire integration and actuality. (Ricoeur 1984 56)

In short, Ricoeur understands the transition between *mimesis 1* and *mimesis 2* as a transformation that subsumes action into the domain of cultural discourse, representational and symbolic syntax. As mentioned, the conceptual network of practical understanding already imbues action with a degree of symbolic (pre)mediation – Ricoeur mentions, for example, the gesture of raising one's hand and the different contexts where it carries different symbolic meanings (greeting, voting, hailing a taxi, wanting to speak). Yet he asserts that it is important to distinguish "among symbols of a cultural nature, the ones that underlie action and that constitute its first signification, before autonomous symbolic wholes dependent upon speaking or writing become *detached from the practical level*" (57, emphasis mine). In crossing over to the level of emplotment, then, the hermeneutic narrative formation detaches itself from the domain of action and practical understanding.

We can easily agree with Ricoeur that the writing or reading of a literary narrative text – even a nonfiction one – forms a parallel, more symbolically composed and aesthetically assessed domain that is merely "borrowed" from life in one form or another. Ricoeur's position, however, is that we should think about narrative phenomenology at large as constituted, in its most crucial and dynamic level – emplotment – through detaching actions (such as raising a hand) from the domain of practical understanding and "submitting" them to interpretation in a supposedly other domain, or temporality, of mimetic representation (58).

As argued at length in chapter I, it is precisely in making this assumption that we lose a substantial degree of capacity to apply narrative phenomenology to more tangibly interactive domains of life (such as play), where conceptual or symbolic meanings appear directly at the level of perceiving movement. The assumption that we must transform and translate interaction into a purely representational realm in order to truly access narrative, makes the analysis of narrativity in the unfolding dynamics of movement somewhat clumsy, somewhat insufficient to account for our understanding of what's 'going on' around us. Noë also provides us with solid grounds to argue that composing a representation of the world in some separate internal order is not an accurate description of the processing of lived experience at large. I therefore seek to employ Noë's work to fortify Ricoeur's phenomenology in relation to the critique discussed in the previous part: enactive perception substantiates the argument that narrativity is present in the immediate practical understanding of experience, before the interpretation of life into some fully formulated story or memory (emplotment) can ever be said to have been 'written' into place.

I thus propose a theoretical framework for embodied narrativity that adapts Ricoeur's narrative phenomenology based on Noë's position that there is no sharp distinction to be made between practical and conceptual understanding: narrativity, I am prone to suggest, originates as an enactive modality of interpreting tangible relationalities to the world we inhabit. Enactive perception substantiates narrative understanding at the level of *mimesis 1*, which takes place within the *doing* rather than just in the pre-narrative quality of action. Actions acquire a degree of "integration and actuality", partially through a form of narrative sensemaking (however minimal), already at the level of enactive perception – they do not have to wait until they are consciously processed into some parallel, purely symbolic cultural order.

This adaptation of narrative phenomenology by no means forces us to relinquish the notion that narrative is a form of representation and interpretation (the view that 'narrative praxis' is not fully representational is already held by Ricoeur). Rather, I argue it calls for an adjusted understanding of the apparatus that forms such interpretation: embodied narrativity, the narrative quality of experience, is enacted directly through perception of the world, and the skillful understanding of tangible interaction that comes to bear in it. It is bound together with 'higher order', more abstract and diachronic narrative structures of plot and identity (*mimesis 2-3*) – in a relationship of dynamic circularity, much like between practical and conceptual knowledge at large – but already actualized in our active, immediate consciousness of environment.

Narrative and the pre-discursive in the enactivist view

Before developing my suggestion further, it is pertinent to qualify it with a strong caveat explaining what I by no means take my argument for an enactive understanding of narrativity to entail: that if narrative interpretation is anchored in and contingent upon corporeality, we can treat embodied narrativity as a pre-cultural or pre-discursive level of experience, or otherwise isolate it from some core level of non-narrative, non-interpretative embodied being, belonging purely to the physical realm. I argued that narrativity does not have to transition into the purely representation, cultural and discursive realm in order to be actualized, yet I do not take this to mean that any sort of narrative understanding can be fully detached from these. Rather, the cultural and discursive are in some ways inseparable from embodied experience. This caveat goes significantly against the canonical enactivist approach to narrative in previous works on the subject – which I now turn to discuss.

Broadly and succinctly, enactivist work on narrative is compatible with Ricoeur's narrative phenomenology on two main counts: supporting of the idea that narrative plays an important role in the composition of 'higher order' understanding of intersubjectivity and identity, while opposing Dennett's notion that the narrative *self* is purely a disembodied abstraction (most explicitly in Menary 2008 72-74). However, the enactivist approach tends to be incompatible with Ricoeur's model of dynamic circularity (ipse and idem, or action and narrative identity in lived experience, as co-constitutive): narrative experience must be embodied, but not the other way

around: “It is not narratives that shape experiences but, rather, experiences that structure narratives” (79). In other words, purely embodied experience exists before narrativity – we develop narrative understanding of ourselves and others based on the preexisting infrastructure of embodied consciousness.

Through analyzing the development of narrative comprehension from embodied interactions, enactivist thought substantiates one of its key positions regarding intersubjectivity: an opposition to the ‘theory of mind’ theory (referred to in short as ‘theory theory’), according to which we understand others by forming a representational model of their characteristics, feelings and intentions. ‘Theory theory’ tends to treat intersubjective understanding as detached from embodiment: If I must mentally compose a theory of others in order to functionally understand who they are, it seems to follow that I should treat their bodies as an opaque obstacle to carve my way through with hermeneutic thought in order to reach what truly matters: their inner, mental world. Hutto’s ‘narrative practice hypothesis’, explicitly supported by Gallagher and Menary, begs to differ: we learn to grasp intersubjective relationalities through narrative competence, which develops from the world of embodied interaction. Initially, infants acquire an understanding of “primary intersubjectivity” by around the age of one year: non-conceptual, action-based understanding of the intentions and dispositions of other persons which does not involve inferences about beliefs or desires understood as mental states” (Gallagher and Hutto 2008 20). By the age of 2-3, infants expand this this embodied level of intersubjective knowledge with a complementary understanding of others’ reasons, motives, and character via involvement in narrative and storytelling practices: “children normally achieve [folk psychological] understanding by engaging in story-telling practices, with the support of others. The stories about those who act for reasons – i.e. folk psychological narratives – are the foci of this practice” (Hutto 2007 53). By paying attention to narrative structures, children develop “implicit practical understanding of how to make sense of persons as those who act for reason. This is nothing like fashioning the concepts of the attitudes by means of theorizing” (Gallagher and Hutto 2008 26). In this way, exposure to narrative forms and the corresponding development of a capacity for narrative interpretation essentially act as “folk psychology 101” (Hutto 2006 234).

Notably, by "storytelling practices", Hutto is referring to much more than abstracted narrative structures communicated through literature and verbal dialogue. His discussion with Gallagher on narrative competence (Hutto 2006 241-243) supports Katherine Nelson's argument that "children's first narrative (or better, pre-narrative) productions occur in action, in episodes of symbolic play by groups of peers, accompanied by – rather than solely through – language. Play is an important developmental source of narrative" (Nelson 2003: 28).[35] Much of the 'narrative practice' going on in early life revolves around the implicit understanding of unfolding sequences of actions that are taken to mean something, as in the interactive experience of play.

Employing Bruner's terminology, the enactivists argue that narrative competency facilitates the construction of a "landscape of consciousness" built upon the preexisting "landscape of action" in human experience and understanding (Gallagher and Hutto 14; Menary 2008 65; Gallagher 2006 226-228). For example, Hutto notes that infants' first encounter with narrative media is usually through picture books, "the more advanced of which still only depict actions. They slowly graduate to properly discursive stories that describe and contextualize the various psychological attitudes of characters" (Hutto 2006 233). Narrative practice – alongside language acquisition and cognitive development at large – allows us to 'graduate' into an understanding of folk psychology at the landscape of consciousness.[36] This graduation process of "developing a narrative point of view, and, hence, a narrative sense of self" (Menary 2008 82) corresponds to transitions from the pre-lingual into the fully discursive realm, and from the state of childhood amnesia to the first appearance of long-term autobiographical memories.

This enactivist account of narrative practice provides much support for the importance of the implicit narrativity of action, which I argued for previously. I am also sympathetic to the posing of narrative competence as an alternative to theory of mind, as summarized by Gallagher:

35 "Humo Ludens 2.0" also refers to Nelson, in solidifying the position that identity is composed primarily out of play at the level of mimesis\play 1.

36 Bruner writes that this distinction between the two landscapes (to whatever degree it can be hypothesized as sharp regarding toddlers) quickly becomes unsustainable: "Eventually it becomes a vain enterprise to say which is the more basic – the mental process or the discourse form that expresses it" (Bruner 1991).

> What begins as perceptual and emotional resonance processes in early infancy, which allow us to pick up the feelings and intentions of others from their movements, gestures, and facial expressions, feeds into the development of a more sophisticated understanding of how and why people act as they do, found in our ability to frame their actions, and our own, in narrative structure. (Gallagher 2006 228)

The above can comfortably be read as a complementary hypothesis to Ricoeur's model of emplotment (*mimesis 2*) as mediating action (*mimesis 1*) with identity (*mimesis 3*), focused on tangible intersubjective experience rather than abstract hermeneutics. If Ricoeur and the enactivists mostly agree on what it means to have a 'graduated' sense of narrative self, they strongly differ on what it means, following this metaphor, to first attend the narrative school: we seek out narrative as a privileged phenomenological medium, but do we enter society as non-discursive beings, without a hermeneutic bone in our body? If so, does such raw state qualify as experience?

While Ricoeur's theory is based upon the notion that tangible and conceptual aspects of experience (beginning with ipse and idem) are caught in an inseparable, co-constitutive, circular relationship – the enactivists tend to frame their analysis of narrative as evidence that this relationship is in fact uni-directional: embodied existence is there first, and manifests independently from the domain of conceptual interpretation. The assumption is that for narrativity to manifest as an enactive modality, it must hinge on a more primitive level of "purely embodied" experience. In this spirit, Menary declares that "our embodied experiences, perceptions and actions are all prior to the narrative sense of *self,* indeed our narratives are structured by the sequence of embodied experiences" (75). Narrative is synonymous with the transition into the discursive, conceptual and reflective dimensions of experience, and its interconnectedness to action helps 'prove' that these are all 'added layers' of experience, constructed on top of a purely corporeal domain. In Zahavi's terminology, there is a "core experiential self" structured at the heart of phenomenal consciousness, which "must be regarded as a pre-linguistic presupposition for any narrative practice" (Zahavi 2007 191). Furthermore, we must assume that the existence of this core self persists into adulthood, despite integration with the 'added layers' of narrative and discourse – we always remain, at the root level of our mode of

experience, purely physical beings. In an apt summary of the enactive argument against theories of narrative phenomenology, Hutto builds upon Zahavi's position:

> Fundamentally, [narrative approaches to the self] fail to recognize appropriately the existence of a core consciousness of the sort that is primitive and pre-reflective; one is bound up with non-discursive ways of being in the world—i.e. the kinds of consciousness that are associated with the having of a first person perspective, experiences of embodied ownership and the like. Since such experiences are phenomenologically salient, if Zahavi is right to claim that 'it doesn't make sense to speak of a first-person perspective without speaking of a self' then it seems we have little option but to acknowledge the existence of non-narrative selves. (Hutto 2007 14)

Do we truly have no way of approaching the first-person perspective as a primary embodied modality of experience, without reaching this conclusion? Noë's theory seems to provide exactly this sort of alternative: as discussed above, the inherent perceptiveness of perception is for Noë formed through skillful interpretation of the world that experience fundamentally involves. The very core of experience is already an expression of our existence as minded bodies, of the entanglement of practical and conceptual knowledge.[37] Should we view this emphasis on enactive interpretation as also contradicting the apparently canonical position of enactive thought, that first-person perspective is at its core a "non-discursive way of being in the world" (and hence, untouched by culture)? Noë's writing, admittedly, is somewhat ambivalent on this point. Before setting out to develop a feasible reading of Noë in support of this position, I would like to first discuss why I believe that such a reading *should* be developed. I will therefore take a short bypass through the perspective of feminist and critical theory, in order to demonstrate why understanding the core embodied perspective as non-discursive at its roots could be a very problematic notion to hold on to.

37 To be fully accurate, Noë insists that sensorimotor knowledge is necessary for any 'true' or 'adult' experience. The nature of consciousness before such knowledge is accumulated, during early infancy, remains a mystery he does not pertain to solve – but clearly, such state cannot fully qualify, according to Noë, as having true perceptual experience, let alone a *self*.

Feminist insight on embodied narrativity

In *Throwing Like a Girl* (1980), Iris Marion Young conducts an astute investigation of gendered differences in bodily movement, which shines a spotlight at the blind-spots of phenomenological analysis that considers itself detached from the discursive realm. Young critiques a 1966 phenomenological study of movement in lateral space by Erwin Strauss, which detects a "remarkable difference between the two sexes" in the manner of movement recruited in the act of throwing a ball (in Young 137-138):

> Girls do not bring their whole bodies into the motion as much as the boys. They do not reach back, twist, move backward, step, and lean forward. Rather, the girls tend to remain relatively immobile except for their arms, and even the arm is not extended as far as it could be. (Young 142)

Since this difference is radical and observable already at the age of five, Strauss concludes that it seems to be "the manifestation of a biological, not an acquired, difference" (in Young 138) – women must be naturally prone to a "feminine attitude" in relation to the world and to space (ibid). I assume it should be generally clear to the contemporary reader how problematic it is to talk of a pre-discursive feminine essence or naturally feminine attitudes. Biological differences in strength and testosterone exist (on average), but they cannot independently explain such radically different bodily conduct in physical interaction – nothing in the female anatomy or biology is 'telling' women to extend their throwing movement less. As Young asserts, the substantial difference resides in cultural conditioning and gendered socialization. A five-year- old who developed to 'throw like a girl' must have already internalized, to some degree, how Western patriarchy conceives of feminine embodiment: women are more timid and fragile, more in need of protection from the world, belong primarily to 'interior space' and carry less agency over exterior environment, which they navigate with "a latent and sometimes conscious fear of getting hurt" (148). This girl throws more tentatively, with less mobility and extension into space, because she "learns actively to hamper her movements" (153).[38]

38 Young mentions many other examples of gendered tendencies of movement and body-language that fit this scope, from postures of sitting and standing to different typical ways of carrying books.

Connecting this line of thought with Merleau-Ponty's insight on worldly experience as accessed through "the bodily 'I can'", Young comments that phenomenological research needs to pay more attention to the ways in which the map of the "I can" is delimited not only by physical nature, but also by the socially-construed "I cannot" (146-147). For Young, this justifies thinking of the phenomenology of lived space in terms of different discursive delimitations: "if there are particular modalities of feminine bodily comportment and motility, then it must follow that there are also particular modalities of feminine spatiality" (149). This effectively means that though all living bodies inhabit the same world, we are socialized to differently grasp our system of possibilities in interacting with this world – in accordance to dominant cultural narratives of identity categories, which predate and partially configure the development of individual *selves*.

Surely, the five year old has not yet reached what Ricoeur would deem a fully developed narrative identity – a higher order, symbolic understanding of her life as emplotment, "detached from the practical level". Nevertheless, she is already significantly influenced by the discursive order. Ricoeur tells us that discursive systems are constitutive of narrative identity, but reserves this portrayal mostly to the level of *mimesis 2*. "Throwing Like a Girl" does well to exemplify why it could be important to conceive this dynamic circularity of narrative identity between practice and discourse as meaningfully actualized already at the level of praxis. It also reveals why it is highly problematic to speak, like Hutto, of a "non-discursive being in the world" at any level of experience.[39]

39 It should be noted that Hutto's theory – and the enactivist canon at large - is far more subtle and conscious of these issues than Strauss was in the 1960s. For example, a five year old is considered to have fully graduated into the discursive and conceptual realm – only toddlers are conceived of as purely non-discursive beings. However, if discursive forces influence our most initial exploration of affordances in the "landscape of action" within which narrativity and the "landscape of consciousness" are first grasped – regardless of whether we are consciously aware of this fact – can we truly draw some sharp line between the discursive and the non-discursive at the point where the capacity for language and memory is first fully realized? To think of this question back in the framework of gender dynamics: by the time they are a few months old – very much within "primary intersubjectivity" – male and female babies may be dressed differently, touched differently, spoken to in slightly different tones, appropriated with different degrees of fragility and tenderness in the perception of their caretakers. These different modalities of care strongly influence the (proto)narrative modalities through which infants experience affordances and contingencies of interaction with the world. For a neglected or abused toddler, the world is a neglectful and abusive place, and the implicit understanding of action affordances is formed in accordance. For example, babies who are seldom payed attention to are conditioned that it does not help to express distress, and therefore develop a sense of 'learned helplessness' and cry far less.

The enactivist view often broaches narrative identity as part of a general attempt to reduce the "incommensurability between phenomenology and the exact sciences" (Fireman et al. 2003 6). Owen Flanagan is perhaps most explicit in this intention, in declaring his aim to "deliver the concept from its ghostly past and provide it with a credible naturalistic analysis" (Flanagan 1991 364). In his discussion of gender and sexual identity narratives through the lens of biology and embodied cognition, Flanagan is wary of biological determinism and tries to constantly account for the cultural realm. However, the attempt to theorize narrative in scientific terms often leads into binary divisions and dualistic terminologies. For example, Flanagan states that "culture creates powerful pressures on the construction of the narrative of the sexual self – pressures that are sometimes relatively immune to the way one's body speaks" (Einstein and Flanagan 2003 223). This implies that culture and discourse belong purely to the mind, while the body 'speaks' with the voice of biological nature. Young reminds us that the body could never speak in a non-discursive voice, that the ways by which infants 'naturally' move are already in interplay with cultural framing of the world they are moving within.[40] Hence, while early embodied experiences and narrative understandings clearly differ from adult ones, and feature far less developed structures of interpretation, they relate to intersubjective and cultural domains from the moment a newborn is first embraced by its caretakers. The sharp enactivist division between the narrative and the pre-narrative\discursive\conceptual phase therefore seems infeasible.

This need to form a balanced, integrated view of embodiment and narrative identity, which takes discursive forces into account, is presented in the works of Catriona Mackenzie (2009; 2014), who also draws the connection to Young's feminist critique (mostly in response to the somewhat

40 A paper by Valerie Gray Hardcastle (2003), published in the same volume collection as Einstein and Flanagan's work, provides another interesting reason to resist the notion that human experience is at its roots "non-discursive". To paraphrase the gist of her argument, the gravitational pull towards narrative identity is already present in human existence from its very onset, because the affectivity of experience calls for it. The powerful affective dimension of infant phenomenology can be thought of as an inherent tendency to experience the world as ingrained with meaning. This embodied sense of meaning implicates the need to become reflective, lingual and narrative, to form a who, in order to give account of the meaning: "First and foremost […] we want to understand our world and our selves as meaning something, as stories […] Language and reason are only tacked on at the end as useful additions in completing this enterprise" (Hardcastle 38). Lingual hermeneutics, essentially, are just another layer to the intersubjective project of self-formation that begins with birth: in Ricoeur's terms, ipse is 'calling' for idem before we can grasp and express the categories of identity in language and narrative forms.

disembodied view of narrative identity according to Marya Schechtman). Building upon Mackenzie, Priscilla Brandon (2016) conceives the relationality between embodiment and identity\self as "an entangled narrative". Brandon connects the discussion to the realm of embodied cognition, critiquing Dennett's disembodied view of the core *self* on the one hand and Zahavi and Menary's purely embodied core *self* on the other. Her call for an entangled, radically holistic model, at the balancing point[41] of the scale between these two opposite notions of the core *self* – stressing that narrative framing can shape the experience of embodiment, as much as the other way around – is very much akin to the goal my own framework works towards.

This view of the *self* as constituted via entanglement, rather than a singular core of primal embodiment or purely abstract narrative rendering, also coheres with Judith Butler's position on the formation of identity as "constituted in relationality" (2005 64) – both embodied and discursive - to a social world that precedes and exceeds us, that is inseparable from our existence yet could never fully encapsulate it. In *Bodies that Matter,* Butler concludes that "there is no subject prior to its constructions, and neither is the subject determined by those constructions; it is always the nexus" (1993 124), and further asserts that:

> To claim that discourse is formative is not to claim that it originates, causes, or exhaustively composes that which it concedes; rather, it is to claim that there is no reference to a pure body which is not at the same time a further formation of that body. (10-11)

Such critique on the feasibility of 'pure body' conflicts with the canonical enactivist model reviewed above, but I believe it can potentially cohere with Noë's theory of enactive perception. According to Noë, worldly experience is a mode of 'skillful interpretation', enacted through a corpus of implicit knowledge gained by interaction with the world. This knowledge always involves both the practical and the conceptual – with no sharp difference between the two. This notion seems to go somewhat against the more 'radical' enactivist claim that experience should be explained at its core in purely material or natural terms. Indeed, Noë is strongly critiqued by Hutto

41 Køster (2016) attempts to develop a theoretical model that establishes a similar middle-point, and employs the narrativity of experience as a central concept in doing so - but his 'scalar' approach to the self still assumes, like the enactivists, a core, non-narrative self at the most basic level.

on exactly this point [see conclusion]. Owing to this difference, Noë's model may be less radically enactivist, but seems firmer in its insistence on mind-body holism, on a unified model of minded-bodies that examines experience as a discursive and conceptual modality as much as a biological and corporeal one. In my understanding, this disagreement opens the door for Noë's work to escape the crux of enactivist conflict with critical theory.

Much like Butler, Noë's work describes subjectivity as a relational modality, as a mode of encounter between the body and the world that substantiates, precedes and exceeds it. Noë's 'world' is described primarily in terms of material environment and physical contingencies of movement, while Butler's is primarily a sociocultural one. However, this strong difference in point of emphasis does not necessitate a deep contradiction – the two may be emphasizing opposite ends along a similar phenomenological nexus, dynamic circle, or feedback loop.

If there is indeed no deep contradiction regarding the potential for discursive rendering of embodied experience, I argue that we can successfully hold together Noë's assertion that conceptual framing forms a part of developed sensorimotor knowledge – and thus comes to bear directly at the level of perception and worldly interaction (115-117) – alongside Young's analysis of culturally dominant categorizations of identity framing the affordances of movement and the experience of space. Young's paper can be read as describing how discursive forces shape the 'feminine' framing of the enactive landscape as typically different from the 'masculine' framing. The conclusion of this conjoined reading would be that sensorimotor knowledge is partially yet meaningfully delimited by cultural delineation of the bodily 'I can'.

The landscape of bodily action may facilitate a 'preunderstanding' of narrative (to use Ricoeur's term), but it is not "prenarrative fodder" (as Menary defines it) in the sense of being primordial to narrative: the dynamics between the two are circular, and narrative equally becomes part of the 'preundertanding of action', thereby imbuing the cultural order into the most basic ways in which we find ourselves prone to move and interact with the world. I find it feasible and valuable to supplement Noë's theory with the argument that narrative framing, as the concept is understood in this thesis, deeply integrates into what he terms the "ways of moving and behavioral degrees of freedom" (86) that define the world as it is made available from one's perspective, and consequently one's grasp on 'absolute space' (207). To put Young's position in Noë's

terminology (which also follows Merleau-Ponty), the development of practical understanding – the enactive perspective on environment formed through affordances of movement and sensorimotor skill – is always influenced to some degree by discursive forces, implicitly or explicitly framing how we can actually *afford* to move.

With this caveat in mind, my proposed framework for embodied narrativity seeks to build upon Noë's enactive theory in the spirit of Ricoeur's notion of circular dynamics, alongside Brandon's call for an entangled understanding of narrative and embodiment. I wish to relate to Noë's work in a way that also coheres with holistic approaches to embodiment in performance studies and cultural studies – for example, Karen Barbour's perspective on the concept, as expressed in *Dancing Across the Page: Narrative and embodied ways of knowing*:

> Embodiment is a holistic experience, different from 'body' experience (which remains differentiated from the 'mind' and is typically based on a Cartesian dualistic understanding of body and mind). I argue that embodiment encompasses an individual person's biological (somatic), intellectual, emotional, social, gendered, artistic and spiritual experience, within their cultural, historical and geographical location. Embodiment is not a random or arbitrary set of genetic material – it recognizes the material conditions of race, gender, sexuality, ability, history and culture. Embodiment therefore indicates a holistic experiencing individual. Most importantly, embodiment can also be understood through movement, an embodied activity. (Barbour 2011 88)

Through this overview, I hope to have generally established the need to account for the presence of the cultural and the discursive in the landscape of enactive narrativity. I am now prepared to begin to tackle the question of how my theoretical framework may actually be utilized for the analysis of narrative artworks.

Enactive narrative focalization

> *Art provides an opportunity to catch ourselves in the act of achieving our conscious lives, of bringing the world into focus for perceptual consciousness.*
>
> -Alva Noë, *Strange Tools*, 2015

Before turning to implement this framework on interactive digital narratives in the final chapter of this thesis, I first briefly travel to the domain of narratology, in order to integrate a final theoretical

pillar into my framework, that should be of much aid in such analysis: Mieke Bal's concept of focalization. Though narratology predominantly studies structural elements of textual narratives, and therefore appears somewhat outside the scope of my discussion on the more immediate narrativity of experience (despite some previous works on narratology and embodiment – see introduction), I hold Bal's thought on focalization to be in strong affinity with my prior discussion regarding narrative interpretation and perspective. I will first present the original theoretical model of focalization, in order to compare and contrast it with Bal's recalibrated concept.

The term narrative focalization was first coined in Gérard Genette's *Narrative Discourse: an Essay on Method* (originally published in 1972), a foundational work in the structuralist analysis of the constituents and techniques of narrative texts. Focalization is conceptualized in the course of Genette's discussion of narrative perspective, to distinguish between two key narratological components: "who sees" (vision, narrative "mood") and "who speaks" (narration, narrative "voice") (Genette 1983 186). Genette posits focalization and narration as two distinct structural levels of narrative texts: for example, a story can be constantly focalized through a single protagonist, despite being narrated in the third-person by an uninvolved character or unspecified entity. 'Focalization' is chosen over 'point-of-view' or 'perspective' since the later terms are more easily conflated with narration, as well as "to avoid the too specifically visual connotations" (189). Upon reflection, Genette expanded its definition to "who perceives" (Genette 1988; Jahn 1996). Focalization, the focal point that "orients the narrative perspective" (Genette 1983 186), employs visual terminology to relate to something broader: the knowledge that comes to bear in narrative delivery, informing and positioning the perspective from which the story is told.

Already at this point, focalization can be connected to the two central theories from my previous discussion: the narratological question of 'who sees?' that focalization is meant to address recalls Ricoeur's notion that narrative identity mediates the 'who' of experience. Additionally, the relationship focalization draws between knowledge and the rendering of perception echoes Noë's view of all perception as inherently framed through implicit knowledge. Despite these similarities, Genette's structural analysis of focalization does not ultimately cohere with my proposed framework. Genette suggests a typology of three basic categories of focalization

(Genette 1983 189-190; Jahn 244), linking degrees of distance from character perspective to the relation between the reader and the character's knowledge:

- 'Zero focalization'\'nonfocalization' ("vision from behind", though 'vision from above' seems more appropriate) – events are presented from an objective, omniscient, fully unrestricted point of view.
- 'Internal focalization' ("vision with") means seeing through the character's eyes and consciousness, knowing as much as the character.[42][43]
- 'External focalization' ("vision from without") means seeing the character's actions without access to her thoughts or feelings, knowing less than the character.[44]

This model remains the basis for most narratological work on focalization (despite prominent alternatives, such as Shlomith Rimmon-Kenan's work on focalization in *Narrative Fiction* [1983], alongside Bal's suggestion). Genette's categorization is problematic for the framework of this thesis on two strongly connected counts: the level of 'nonfocalization', and the disregard of embodied and of implicit forms of knowledge that filter perception.

'Zero focalization' pertains that a narrative sequence of events could unfold without perspective, from an unbiased and all-seeing view. This notion strongly contrasts with Noë's understanding of perspective, according to which all perception presents the world "as being some way to someone" (116). Indeed, 'zero focalization' in Noë's terms would mean vision that somehow lacks a point-of-view, a disembodied and delocalized perception. There are solid

42 Note that focalization can be internal even if the story is narrated in the third-person, as long as the description of events remains' glued' to the character's perspective. The *Harry Potter* books are not narrated by Harry Potter, but they are largely an example of internal focalization through his character: the reader perceives the vast majority of the story from Harry's perspective, has access only to his thoughts and knows as much as he does.

43 Genette additionally notes three subtypes of internal focalization: fixed (staying with the same character), variable (switching between several focal characters, such as the switch from Charles to Emma to a bystander witnessing Emma's suicide in *Madam Bovary*), or multiple (several perspectives on the same event, as in the film *Rashomon*).

44 Genette determines the category of focalization in relation to the character of the main protagonist. *Around the World in 80 Days* is focalized through Passepartout, yet counts as 'external focalization' because we remain ignorant to the thoughts, motives and calculations of Passepartout's master Phileas Fogg, whose actions form the center of the plot.

phenomenological reasons to question the possibility of this notion: How could the world that comes into focus, through a narrative description written and read by humans, lack subjective perspective? If, in any act of narrating and in all lived experience, certain things or occurrences are brought to attention in certain ways, how could any visual description be nonfocalized? If we conclude that there could be no such third-person, neutral or objective perspective in narrative experience (somewhat in similarity to the impossibility of pre-personal or non-discursive experience, argued for above), it follows that in order to cohere with phenomenological and embodied insight on narrative, we need to adapt a different view of focalization.[45]

The concept of focalization is recalibrated in a way that seems to answer this need in the writings of Mieke Bal. Bal's thought on narratology combines the structuralist approach that dominated the field's early decades with insight from cultural analysis and visual art studies. Her pivotal work, *Narratology: Introduction to the Theory of Narrative* (1997, originally published 1985), approaches focalization partially in an attempt to think towards a narratological model applicable not only to literary forms of narrative media, but also to visual forms (162), which aided her own thought in going beyond the traditional narratological inclination to analyze narrative primarily via structuralist semantics of language (2002 37).

Bal's point of departure is that events are always presented "from within a certain 'vision' [...] a certain way of seeing things" (1997 142). She stresses, somewhat further than Genette, the caveat that the 'vision' focalization refers to should never be mistaken for the delivery of raw visual data – rather, it is an act of seeing. Bal can largely be said to understand focalization as a form of dynamics, where a multiplicity of forces in motion influence the particular way in which narrative

45 Jahn recounts a brief exchange between Genette and Shlomith Rimmon-Kenan, where the later critiques 'zero focalization' precisely on this count: "(Rimonn-Kenan) is in fact quick to identify the 'floating observer' – surely this 'witness' is once more the narrator – as well as the focus of omniscience: 'Whose omniscience? . . . The narrator creeps in through the back door'" (1983 59). In an uncharacteristically indifferent (or possibly ironic) response, Genette proposes to redefine omniscience as "the well-known `viewpoint of God […] about which people periodically wonder whether it is indeed a point of view" (1988 73). Genette's answer seems to concede the problem. Indeed, 'people' appear justified to wonder whether God's omniscient point-of-view constitutes a POV at all: either we conceive this divine perspective as something entirely supernatural and exterior to the world it stands above, in which case it is not a POV and is incompatible with worldly phenomenology (it then becomes a puzzle how a mere human could relate to this perspective); or otherwise, we define the divine POV as one specific, spatiotemporally bounded form of omniscience, in which case it is no longer objective and should count as a form of focalization.

vision comes into focus. She notes that the technical connotations of the term focalization, due to its origin in photography, underscore narrative visuals as rendered by means of crafted manipulation (1997). On the other hand, this analogy to the photographic apparatus must not allow us to forget that seeing is a cultural act that involves interpretation (2002 37) – rather than unbiased observation of something pre-recorded.[46] Structures of discourse and power are never absent from these dynamics. Bal is hence highly critical of the notion of objective vision\perception, or zero focalization:

> It is possible to try to give an 'objective' picture of the facts. But what does that involve? 'Objectivity' is an attempt to present only what is seen or is perceived in some other way. All comment is shunned and implicit interpretation is also avoided. Perception, however, is a psychosomatic process, strongly dependent on the position of the perceiving body; […] Perception depends on so many factors that striving for objectivity is pointless. (1997 142)

Note that this argument connects both aforementioned conflicts between my framework and Genette's model: perception cannot be nonfocalized, because it is inherently framed by embodied situatedness. In accordance, Bal develops a definition of focalization as a form of embodied relationality: "Focalization is [...] the relation between the vision and that which is 'seen': perceived"(142). Or later, in other words: "focalization is the relationship between vision, the agent that sees, and that which is seen" (146).

Bal subsequently speaks of narrative focalization as an encounter between the *focalizer* and the *focalized* (equivalent, perhaps, to the enactive rendering of experience on the threshold between perceiver and perceived). Genette's general categories of focalization are transformed into a sort of scale for the analysis of focalizer, between internal or character focalizer and external focalizer.[47] Note that the external focalizer is very much considered a form of agency that situates

46 Shlomith Rimmon-Kenan argues similarly: "the term 'focalization' is not free of optical-photographic connotations, and […] its purely visual sense has to be broadened to include cognitive, emotive and ideological orientation" (1983 71).

47 While maintaining the importance of being able to distinguish, when appropriate, between the focalizer and the narrator – "who speaks" and "who sees" – in Bal's system it is possible for both to be the same character: stories told in the first-person have a 'focalizer-narrator'. In stories with external focalization, the 'omniscient' narrator plays a role in how narrative perception is focalized. In short, the distinction between narrative perception and narrative voice is

narrative perception — we do not receive unfiltered visual content when the vision is external to any specific character in the story: in such cases, "the focalizer's bias is not absent [...] but it remains implicit" (149). Bal emphasizes the potential mobility of focalization between degrees of interiority and exteriority, as well as between different characters. Meanwhile, the notion of zero focalization is adamantly excluded – pretending that such full neutrality is possible only mystifies and ignores significant forms of perceptual and ideological relationalities that determine narrative orientation and interpretation (2002 41-42). The knowledge applied to perception remains a determining factor of focalization in Bal's model. Gaps of knowledge[48] between reader and focalizer may form different types of 'suspense'. As in Hitchcock's famous example, a peaceful dinner scene would be perceived entirely differently if we are made aware that, unbeknownst to the protagonist, a bomb is hidden under the table. We would then be prone to focus our attention on what is going on beneath – even, or all the more, if our view of under-the-table is blocked or cut out of the frame.

Whether we encounter narrative in literary texts or in visual signifiers, "focalization is already an interpretation, a subjectivized content. What we see is before our mind's eye, it has already been interpreted" (1997 163). Nonetheless, Bal's theory also leaves room for the focalized object to 'speak back' – for focalization to be both a framing of the world being viewed and a manifestation of some presence that is there beyond its framing. Focalization is not a tabula rasa interpretation, but an interpretation *of something* – "that which is seen" is formed not only by the focalizer, but by the encounter between focalizer and focalized, and by the dynamics of the environment (or the visual\cultural field) within which the encounter is situated and interpreted to mean something: "the question 'Who sees' is dramatically made meaningful by the complementary questions, 'Who is being seen?: 'Who is not seeing?: and 'What kind of act of

important but not hermetic. Genette, on the other hand, considers narration and focalization as two inherently distinct levels of narrative text.

[48] These are not necessarily determined by the type of focalizer – the reader can see the world through a given character's eyes (internal focalizer), and know less or more than that character. For example, in a story told through a toddler's perspective, the reader should understand more about what is innocently seen.

seeing is at stake?'" (168). Focalization reveals the delimitation of attention: what the encounter frames into focus, and what it leaves blurred.

In Bal's later writings, focalization was increasingly employed for the analysis of visual narrative delivery. She reflects back to her interdisciplinary work on focalization as a prime example of a 'traveling concept', and slightly redefines the concept's meaning in this new context:

> After traveling, first from the visual domain to narratology, then [...] [to] its new destination, visual analysis, [focalization] has received a meaning that overlaps neither with the old visual one – focusing with a lens – nor with the new narratological one – the cluster of perception and interpretation that guides the attention through the narrative. It now indicates neither a location of the gaze on the picture plain, nor a subject of it, such as either the figure or the viewer. Instead, what becomes visible is *the movement of the look.* (Bal 2002 39, emphasis mine)

The back and forth movement between narratological and visual analysis produced an understanding of focalization through the movement of the look. Focalization should now allow us to think of perspectival interpretation as emerging through the question of 'who sees' while also going beyond it, as a complex dynamics of corporeal and sociopolitical forces. The potential affinity between this understanding of narrative focalization as a relational nexus and my framework is immense. The terms of Bal's discussion are remarkably parallel to Noë's: vision (which is representative, in both theories, of perception at large) always occurs from a framed perspective. What comes into focus of visual attention is a direct interpretation of the defining encounter between perceiver and environment. This interpretation – which is never formed by the 'focalizer' alone – manifests from movement dynamics, and is fashioned via implicit understanding.

It should be noted that the crux of Bal's analysis of the motility of focalization is only secondarily related to the physical experience of movement and the material forces that constitute it. Bal primarily addresses the ways in which the cultural order deeply influences the visual landscape of movement. However, Bal's definition of narrative focalization as movement is not strictly metaphorical – it reflects her fundamental understanding of perception as dependent on the position of the perceiving body, which displays keen awareness of embodied phenomenology.

On the flipside, Noë's theory pays little attention to the cultural rendering of perception, but as argued in detail above, is not at all hostile to that notion and can in my opinion benefit from expansion by it. I therefore allow myself – while keeping these strong differences in emphasis and disciplinary leanings in mind – to attempt to fuse common threads in Bal's thought with my previous discussion on embodied narrativity.

In this spirit, I suggest the concept of enactive narrative focalization (ENF), which continues the travels of Bal's concept into new territories and aims for an expanded understanding of what the fashioning of narrative interpretation and perspective via movement entails. The concept of ENF will be used to describe how narrative framing and (mostly implicit) understanding at the level of action and perception are calibrated in strong relationality. This concept combines previously explored ideas by Ricoeur, Noë and Bal: Noë greatly expands upon the granular level of embodied cognition, and allows for a concrete model of perception-through-movement. Bal connects this enactive framework to narrative comprehension and structure, and allows us to consider its relationalities to higher-order conceptual, discursive and sociopolitical realms. Through Ricoeur, and by treating ENF as means to concretize the actualization of narrative identity already at the level of action (as argued for in chapter I), we can connect the "who sees" of ENF to a broader model of narrative phenomenology, and to further temporalities of narrative interpretation.[49] ENF, as a sort of recalibrated understanding of narrativity at the level of praxis, can be said to be in dynamic circularity, or feedback-loop, with Ricoeur's higher levels of narrative formation (emplotment and identity) – both feeding into these levels and constantly informed by them. In this sense, ENF corroborates the connection between narrative structures and embodied cognition, and can contextualize and expand upon past work on this connection: such as Brandon's call for an entangled understanding of the two, or Armstrong's assertion that "plots can play a central role in structuring our understanding of the world because action is thoroughly implicated in perception and cognition" (Armstrong 189).

49 Bal's narratological model somewhat similarly asserts that we have a meaningful direct encounter with narrative at the level of text (or in visual forms, perception) before we formulate a clear idea of the story's plot (the narrative fabula).

ENF is also meant to facilitate a discussion of narrativity – the narrative quality of lived experience – as an enactive modality. The concept is shorthand for the framework through which embodied knowledge of movement dynamics actively enacts the experience of narrative events and sequences. We tangibly grasp the environment we inhabit through accumulated skillful understanding of the relationalities and potentialities of movement within it. Any narrative comprehension we acquire, whether extremely trivial (like the sequence of actions it would take to make a morning coffee) or far more higher order and abstract (like complex aspects of identity), is informed by this embodied grasp. These higher order comprehensions then feed back into the ways in which our attention to tangible interactions is directly focalized. ENF is thus a step towards enabling analysis of narrative forms (whether in narrative media or of 'real life' interpretations) as an interplay of hermeneutics and practical knowledge, anchored in embodied aspects of perception and attention and in the ecology of movement dynamics.

For a minimal example of enactive narrative focalization taking place, imagine suddenly being tapped on the shoulder from behind. As you instinctively turn, the focus of your attention shifts in a way that is framed by an immediate sense of narrative meaning. You did not consciously reflect on the situation or form a clear story of what is going on in your head. That would take longer. Yet your experience of turning already carries narrativity. The tap instantly enacts a certain open story of the prospective interaction between you and the tapper, the structure of which is contingent on many potential aspects in the dynamics of your situation: a tap on the back is far more surprising and alarming when walking home alone at night than in a party setting, for example. The touch can feel instantly welcome and cause a burst of sudden joy, perhaps when waiting to pick someone up and feeling a familiarity in the texture of their touch. Alternatively, it can instantly feel distracting and annoying, perhaps when it cuts into a pleasant daydream or stream of thoughts. The experience is also influenced by more durable characteristics of personal and cultural identity – how open you are to interaction with strangers, how responsive or comfortable you are with being touched, how acceptable is a tap on the

shoulder considered in your culture, in what context is it usually expected, etc.[50] Note that this affective response may also strongly shift, re-focalize, your sense of who you are in the moment (Confident? Nervous? Exhilarated?). ENF is somewhat unique in the view that immediate, reflex-speed interpretations can meaningfully qualify as carrying narrativity. Perceptual focalization then comes into further interplay with higher-order levels of narrative structuring and understanding, because the way in which you will come to remember this tap on the back (if it is significant enough to remember) is partially determined by this initial mode of focalization.

The quality of the tapping touch can of course vary a great deal itself, but all of the above range of enactive responses (and much more) can be evoked by the same more or less neutral light tap on the shoulder. The responsivity can be said to vary based on the layout and current climate of your enactive landscape. Regardless of what form of narrative framing the tap triggers, it will be there in the immediate affective experience, and in the type and valance of reflex-response triggered by the tap.[51] Such immediate narrativity cannot be attributed to the 'personal' – it is not a product of conscious choice, or higher-order cognitive processing. You are hence focalized directly inside the meaningful moment of interaction, much before you could ever 'write' it into the story of your life, before (in Ricoeur's terminology) actualization at the level of emplotment. You grasp the narrativity of the moment before you comprehend it.

On the other hand, while the response is carried out by 'pre-personal' systems, to look only at them would be to miss out on the meaning of what you actually experienced – the nervous system's responsivity does not encapsulate the moment. 'Higher-order' understanding and narrative structures (such as identity) integrate into practical understanding of movement dynamics, and are anchored in even the most instantaneous forms of perception and response to lived environment. The constant circular dynamics between Ricoeur's three levels of narrative phenomenology (action, emplotment, and identity) should be particularly underscored through

50 As Brian Massumi asserts, "the most material of experience, the firing of a single neuron, is already positively sociocultural. […] we are capable of operating socially and culturally directly on a level with matter" (Massumi 199).

51 In this sense, ENF can connect to Merleau-Ponty's view of reflex responses as expressing 'modalities of instinct', in accordance to interpretation of environment and orientation towards a certain behavioral setting (in Noland 56-57).

this approach to the narrative focalization of perceptual experience, which also slightly recalibrates the temporality at which they are actualized. ENF is hence an attempt to describe an intermediary between the conceptual and physical levels of processing interaction with environment – a sort of bridge between both, which is reducible to neither [see conclusion]. This bridge is situated *at* the level of embodied action, of the immediate manifestation of experience and perception, rather than at its pre- or post- understanding.

The central assertion of theories discussed in chapter I is that narrative is an immanent means of making life intelligible. The enactive insight discussed in this chapter and the concept of ENF allow us to support a slight re-phrasing this notion: narrativity is a means of making life *sensible* (Cunliffe and Coupeland 2012), in both the meanings of this term – since narrative sensemaking is entangled with our sensory perception of the world.

Chapter III: Movement in Interactive Digital Narratives

In this final part of my thesis, I apply my proposed theoretical framework and the concept of enactive narrative focalization to the study of interactive digital narrative (IDN, also known as interactive digital storytelling) works and media phenomenology. While digital games have thus far been the flagship IDN form – and the discussion below refers primarily to them – the field also includes many other media forms such as virtual, augmented or mixed reality storytelling, interactive cinema, hypertext stories, and alternate reality games. The paradigm for IDN works discussed in this chapter refers to works that instantiate a representation of three-dimensional space, the 'storyworld' (Herman 2002; Ryan 2001), which the interactor can somehow navigate within.[52] I will attempt to demonstrate the potential value of my framework and the concept of ENF, in underscoring the narrative efficacy of the embodied affordances for such navigation.

Why speak about IDN in this context?

My view of embodied narrativity may potentially be explored through different forms of narrative media. It may tie into previous work on enactive spectatorship in theater and performance art (e.g. Bleeker and Isis 2014) or cinema (e.g. D'Aolia 2012; Kravanga 2015). IDN media seems particularly fitting for my framework, first and foremost due to re-positioning the spectator as an interactor, situated as an active participant in the 'storyworld' rather than watching from the outside. As Janet Murray stipulates:

> Digital narratives [offer] us the opportunity to enact[53] stories rather than to merely witness them. Enacted events have a transformative power that

52 Discussion of embodied narrativity in other IDN forms, such as hypertext, is excluded for the sake of brevity. Digital games essentially function by forming some sort of feedback-loop between the player's real movements (however minimal, such as pressing keys) and their reflection in the gamespace. One might additionally argue that any digital interface – Facebook, for example – is a virtual environment that allows the user\interactor to navigate space in a certain way and enact a certain range of stories. Such interpretation is beyond the scope of my thesis.

53 The term 'enacted narrative' is often employed in writing on IDN, such as in Jenkins (2003 124-126), Murray (1997), Tanenbaum (2011) and May et al. (2014). It is meant in the sense of 'acting out' the story, as particularly evident in the connection drawn by Tanenbaum to improvisational theater. This more traditional meaning of the term is not unconnected to the enactive theories, to the notion that perception is something we actively do: it should go without

> exceeds both narrated and conventionally dramatized events because we assimilate them as personal experiences. (Murray 1997 170)

While implicit understanding of movement and action dynamics may be necessary for narrative understanding in any kind of media, interactive digital narratives are literally enacted through actively moving. This more explicit and direct involvement in the narrative environment and the affordances of interaction within it imbues interactive digital media with particular affinity towards analysis through ENF: Their interactive capacities more closely resemble the domain of embodied worldly experience.

Additionally, I view IDN as a highly fitting medium for my framework because it is a potent territory for expanding upon the work of the three pillars it is based upon: Bal, Ricouer and Noë (none of which focus on digital media).

Since Bal's narratological theory is intended as intermedial, the application of her work on focalization (which travels back and forth between literature and the domain of visual culture) to games seems appropriate. If narrative perception always implicitly involves "the movement of the look" – and thereby manifests situatedness within environment – explicit interaction through movement should highlight this dimension.

Regarding Ricoeur, as argued in "Homo Ludens 2.0", "interactive, connected and open-ended" new media narrative forms may be a more fitting metaphor for his phenomenological theory of narrative identity construction (Frissens et al. 34). Digital forms expand the definition of 'storytelling', while undermining the understanding of narrative structure as a singular linear text: IDN stories are more mobile and fluid, and often multilinear (allowing for multiple trajectories in which the story can potentially unfold). They more explicitly take place and take on meaning through the enactment of action within the present moment. According to Hartrmut Koenitz's 'SPP' (system process product) model (2016), IDN design is essentially the creation of a system that ingrains a 'protostory', a space of potential narratives. The system then instantiates a process,

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saying that enacted stories are more explicitly enactive. However, relation to the enactive view of cognition and experience is seldom directly intended in this writing on IDN as enacted.

where a certain path through this potentiality space is actualized via interplay between the interactor's performance and the system's interpretation of it. This instantiated process gradually forms a story 'product' – a certain recorded 'playthrough', or the interactor's retroactive interpretation of the narrative experience. What stands out in juxtaposition with Ricoeur's three stages of mimesis, is that the crucial intermediary level is not emplotment – the conscious interpretation of narrative – but rather the process, the real-time interaction with environment (or between user and system). IDN, then, highlights the integral connection between real-time processes of interaction and higher order narrative structures. It is thus fertile grounds to explore the temporality of more episodic and implicit, action-based level of narrativity, whose importance I have been arguing for.

Noë's thought very much supports this focus on the level of process and skillful systemic interpretation. However, the application of enactive phenomenology to digital media faces a pertinent objection: the enactive view deals with the state of real material bodies in the world, and would not apply to the virtual spaces of digital media that circumvent or even 'transcend' the physical body. In the final chapter of *Action in Perception,* Noë relates to a similar notion: the hypothesis that we may feasibly be living in a virtual world (or simulation) supposedly discredits the core enactive position that experience is a skillful, embodied encounter, that cannot be explained in isolation by representational neural activity (if we may as well be brains in a jar seeing the world through virtual goggles, the body is not a constitutive element of experience). He convincingly refutes this claim: experience of the virtual world would not be a true counterexample, because it would not be composed of neural activity alone either – rather, it would require some form of embodied presence within the virtual space. Any virtual proxy for the physical world "would be just that, a world, a repository of information external to the living being, whose presence and availability is a condition on the possibility of experience" (Noë 2004 225). This world would resemble the 'nonvirutal' world[54] in the critical sense of necessitating the

54 As previously argued, our perception of the 'nonvirtual' world is according to Noë in many ways virtual – the presence of the room next door, which I cannot currently see, is formed as a virtual modality of access, yet it constitutes a very tangible part of my experience of the space I currently inhabit. The upshot is that what is currently consciously present to me is never enough to account exhaustively for the character of my current conscious experience. As Brian Massumi more thoroughly assert, the virtual is a constant presence in the perception of the 'real' (2002).

application of conceptual and sensorimotor skills, of implicit practical knowledge, to form a meaningful sense of experience (224).[55]

In other words, the core enactive understanding of phenomenology does not hinge on the question of whether the lived environment is 'real' or virtual: "virtual presence is a kind of presence, not a kind of non-presence or illusory presence" (216). Virtual experience is composed of "neural systems embedded in and interacting with a network of inputs (and thus eliciting outputs) carefully engineered by the designers of the system. It is this dynamic causal interaction that allows for experience with a given content" (224). The feedback loop between virtual action\movement and the digital system, then, enacts experience in much the same way as interaction with 'real' environment. As Ryan similarly asserts, "whether actual or virtual, objects are [...] present to me because my actual or virtual body can interact with them" (Ryan 2001 71).

Despite this core phenomenology similarity between material and digital environments, Noë mentions in the above an element that distinguishes interaction in digitally rendered space: its dynamics of movement, or the causal trajectories of what can potentially take place within it, are engineered by the system designers. This very element makes IDN media particularly potent for analysis through my framework of ENF: unlike the overbearing complexity of movement in the 'real world', the dynamics of movement in virtual 'storyworlds' can be analyzed as the product of intentional design by an authoring agency. The choice to analyze IDN hence uniquely enables us to analyze the design of movement dynamics as means of authoring enactive narrativity. Enactive narrative focalization in IDN is an emergent product of the ways in which the digital world is designed to be potentially perceived, moved through and interacted with.

55 To support this claim, let us consider the Wachowski sisters' *The Matrix* (1999) – probably the best-known portrayal of all-encompassing life in a virtual world. Though the lead plot is that humanity has been unwittingly transported to living in a digital network rendered by super-intelligent AI agents, life in this world in anything but disembodied. The film may be read as the story of the protagonist, Neo, vastly expanding and re-adjusting his sensorimotor skills following the realization that they are delimited only by the bend-able virtual system. The physical limits that Neo supersedes as he learns to fly and dodge bullets do not make his cognition any less embodied – he is simply moving within the environment he is embedded within in different ways, while simultaneously recalibrating his understanding of its dynamics.

ENF in IDN theory

While the interdisciplinary perspective I am suggesting is somewhat new to the field of IDN, much influential past work by key thinkers in the field's development displays keen awareness to the importance of embodied movement and interaction with environment for the experience of the medium. Exploring this insight, as well as how it may be underscored and expanded by my framework and the concept of ENF, is the leading aim of this chapter.

Movement dynamics design and environmental storytelling

Henry Jenkins considers game narrative as a form of 'environmental storytelling' (Jenkins 2003 124), evoked by exploration of the game world. He suggests that we understand games "less as stories than as spaces ripe with narrative possibility" (119). These spatial stories tend to rely on enacting episodic narrative moments throughout a process of exploration (that can be sequenced or open to different paths, to varying degrees), rather than construing a singular tightly integrated plot trajectory (120-121). Alongside the works of other scholarly pilgrims such as Janet Murray, Brenda Laurel and Marie-Laure Ryan, who similarly empathize digital spatiality as the key enabler of interactive narrative experience, this has led into a growing body of works that utilize concepts such as 'environmental storytelling' to analyze game narrative through spatial design (see, for example, Michael Nitsche's book *Video Game Spaces* [2008]).

The concept of environmental storytelling seems like a fitting point of departure for broaching IDN through the framework of embodied narrativity, since it posits that narrative manifests through navigating and interacting with environment. However, Jenkins' follow-up central metaphor of "game design as narrative architecture" (2003 120), misses out on an essential difference: *game designers do not just design space, but also the dynamics of moving through it.* There is a general tendency in the study of game narrative to treat the player as a sort of visitor, entering from the outside world into the storyworld (or game-space) as-is. The missing part in this equation is that it is not only significant that the storyworld *can* be moved through, but also *how* it can be moved through: the function of movement goes much further than allowing the story to progress by proxy of spatial design. I would like to emphasize movement dynamics as an

additional design element, which determines, alongside the design of spatial landscape or geography, how interactions within the digital environment instantiate narrative experiences.

Murray compares the structure of freeform player participation to improvised folk dance such as samba, where dancers invent interpretations of a given repertoire of movements (127), but also notes a key difference: in digital worlds, "it can feel as if the entire dance hall is at our command [...] we can be both the dancer and the caller of the dance" (128). This reflection should come with an important caveat – the player may improvise her own dance, and even control the proceedings of the entire 'dance hall', but the game or system designer determines all potential movements she can perform: "the procedural author is like a choreographer who provides the rhythms, the context and the set of steps that will be performed. The interactor [...] makes use of this particular repertoire of possible steps and rhythms to improvise a particular dance" (Murray 153). Game movement dynamics design should be considered, in this scope, as constituting the "movement vocabulary [...] [which forms] the narrative of the dance" (Kirsch 2013 24).

Somewhat beyond this dance vocabulary metaphor, IDN design extends to the bodies doing the dancing and the mechanics of movement through which any particular repertoire expresses itself. 'Real-life-like' environmental dynamics remain the default for processing gameplay, but games are not the least bit limited to imitating them. Architects design structures to be navigated by human bodies, walked through by pairs of legs and perceived through naked eyes. Game designers configure the sort of legs and eyes the player will possess, the avatars – or lack thereof – through which she is embodied. They also design the 'game physics' – the procedural rules of movement that structure contingencies of interaction and change in the virtual space, and determine the environmental dynamics within which the player can perform actions. A final necessary design element is the control interface through which the interactor's real movement (whether pressing keys, manipulating controllers, or moving in direct motion-capture) are interpreted by the system into movement in the storyworld. I will refer to these interconnected elements (player embodiment/avatar, movement affordances, game physics, control interface) that together calibrate the infrastructure for the instantiated process of navigating IDN space, in shorthand, as movement dynamics design.

In accordance to Noë's assertion that experience carries content "only thanks to the established dynamics of interaction between perceiver and world" (215-216), the design of movement dynamics essentially molds the practical understanding through which all perception of the environment is informed – and, hence, the embodied narrativity of action. As previously argued, these differences in the narrativity of action feed forward into significantly different understandings and experiences of broader narrative framing. Designing different movement dynamics for the same digital geography could carry potentially massive implications on how the experience of the space is focalized – like traveling through the neighborhood park should produce an entirely different experience with a jetpack tied to one's back as opposed to a sack of bricks. As Noë has it, "experience depends on the skills needed to make one's way" (217).

Granted, the 'narrative architecture' – design of space and of what happens where – may determine the overarching structure of the IDN plot, regardless of precisely how movement is conducted. But the nuanced facilitation of movement carries immense influence on the more immediate experience of embodied narrativity, on the level of narrative praxis (mimesis 1) which feeds into emplotment, and determines how environmental storytelling is experienced and payed attention to, how it comes to matter. The design of movement dynamics may therefore be understood, perhaps, as a defining element in the dramaturgy of interactive narrative – the ways in which the plot is composed into an actable form.

To enter a digital environment, where movement and perception are instantiated through some new perspective, avatar, and physics, is to some extent a metamorphosis. David Kirsch argues that technological tools alter and expand our sense of embodiment and the visual sphere, and thus "reshape our 'enactive landscape'" (2013 8).[56] The integrated design of spatial architecture and movement dynamics essentially forms a parallel phenomenological domain, where the environment not only 'tells' the story, but also shapes the enactive focalization of narrative experience.

56 Kirsch is mostly referring to the ways in which the ubiquitous presence of digital technologies in 'real life' changes our landscape of embodied affordances (see 'future work' in conclusion), but this holds at least as true in the case of presence in fully virtual space.

Game focalization

The element of my framework that has been most utilized in past IDN writings is narrative focalization: a corpus of academic work on focalization in games accumulated over the last decade, including Nietzel (2005), Nitsche (2005), Cajella & Langgaardsvej (2009),Thon (2009), Arjojanta (2015) and Fraser (2015). Comparison to this small canon of past work does well to highlight where my proposed framework differs in its analysis of interactive narratives, and how that difference might be valuable.

The first application of the concept of narrative focalization to games is most likely found in Marie-Laura Ryan's *Narrative as Virtual Reality* (2001). Focalization is mentioned as one of the narrative strategies that facilitate "the imaginative transportation of the reader's virtual body onto the scene of the events" (133-134). Ryan also interestingly argues that in first-person-perspective games, where players "see the image of the gameworld evolve as a result of their movements" (128), the perspective of being inside the story "annihilates the imaginative distance between discursive space and story-world, and fuses the consciousness of reader and narrator into the same act of perception. The virtual body whose perspective determines what is perceived belongs at the same time to the narrator and the reader" (132). As follows from this astute observation, the structural narratological distinction between the position of reader, narrator and focalizer\perceiver is often blurred and unified in IDN media. It is the player's navigation that enacts the story, and the answer to 'who sees?' or 'who speaks?' (particularly when character dialogue is chosen) is thus, to a certain extent, the player.

Britta Nietzel's 'Levels of Play and Narration' (2005) applies Genette's concept of focalization as part of her rather nuanced attempt to develop an adapted structuralist narratological framework for games. Nietzel ascribes a central narrative role to movement: since the narrativity of games manifests through the process of playing them (50), movement in game-space is an actualization of the system's range of potentiality for plot-formulation (55). Similarly to Ryan, Nietzel notes that different levels of narratological analysis seem to influence each other more in game narrative, and are tougher to clearly separate between: movement and action form the level of plot, but they are also partially equivalent to the level of discourse – the process of storytelling, or

presentation (49-50). She nonetheless attempts to speculate a parallel model, [57] but appears aware that it is somewhat clunky. Genette's level of 'narrative situation' – focalization and narration – is discussed as exemplifying more successful application of the narratological levels. Nietzel appropriately substitutes Genette's concept of narrating voice ('who speaks'?) – whose function in games is often secondary[58] – with action. She then develops a typology of games' 'point-of-action' in addition to point-of-view.

There are certainly ways in which such structural analysis of game focalization is valid and valuable. All games environments are presented from a certain point-of-view. It may directly reflect the perception of the protagonist character (internal, first-person), follow a protagonist (or several) closely from the outside (external), view the world from a more distant, bird's-eye perspective ('zero focalization'), or switch between these modes (variable focalization). Genette's typological division facilitates the argument that the player's point-of-view on the storyworld carries narrative implication, and allows for a generalized description of how different renderings of point-of-view streamline the narrative delivery.[59] It is quite understandable, then, that the vast majority of writing on focalization in IDN explores the concept through Genette's typology. Still, this attempt at a typology – even in Nietzel's adapted framework that also considers action – raises some pertinent difficulties: can we truly observe visual perspective in isolation from the affordances of action? What if actions directly change the position in the world, and hence the

57 Separating between diegetic 'story actions', their representation in the storywrold and the non-diegetic player actions that cause them (such as moving the mousepad).

58 Games may additionally feature narration as a separate level through character dialogue, voice-over, and sometimes exterior narrating. Games also remediate older storytelling techniques – employing text, and particularly cinematic cut-scenes. In the cut-scene game trope, the player is temporarily deprived of interactive affordances, the perspective (or even style of graphics) often shifts, and events play out in a certain predetermined way as they would in a movie. Cut-scenes are sometimes important to portray crucial story events, but it is generally accepted in IDN research that (particularly early) games tend to over-rely on them. This may be a characteristic of a relatively new medium still developing its own language and structures, much like early cinema's reliance on the replication of theatrical techniques, which diminished as the new medium established its own language.

59 Arjoranta (2015) conducts a brief analysis of games that fit each of Gennete's focalization categories, and emphasizes that shifts in perspective and extent of player control both negotiate focalization, and often closely relate to each other (such as in the switch to external focalization after being killed in a multiplayer first-person-shooter games, viewing one's dead avatar from the outside and losing agency while waiting to 'respawn').

point-of-view? How can the affordances of action in real-time environment even be confined to a single point?

Another relevant issue to account for in this modular equation, as pointed out by Thon (2009 291-297), is the influence of discursive forces that imbue a certain understanding or outlook on the visual perspective and 'point-of-action'. Thon attempts to address this by supplementing Nietzel's model with the additional concept of 'point-of-evaluation', or ideological perspective. The notion that ideology's effect on visual perception should, or could, be traced to a certain precise 'point' in order to complement the theoretical model, exemplifies the primary weakness of the structuralist concept of focalization: it is far too compartmentalized, while perception, according to the enactive view, occurs in a unified and entangled field. The ambition for a precise typology may de-empathize the close resonances between the different categories.

Bal's model of focalization is not as cleanly knit in its typology, but allows for a more nuanced and relational analysis of perspective. Michael Nitsche (2005) provides what appears to be the only past analysis of focalization in games that appropriates Bal's framework. However, his analysis in only focused on perspectival camera movement, and broaches the physical dynamics of movement within the gamespace only implicitly. My proposed framework builds upon Bal's concept and the enactive view of narrative phenomenology to suggest a more holistic analysis. Focalization is considered as more of a perceptual nexus than a visual streamline: not just 'who sees', but also what is seen, and what comes into the focus of attention as a result of interaction with the digital environment. The question becomes how 'the movement of the look', beyond the point from which it is visually rendered, is facilitated to enact a narrative experience. I will briefly argue for the advantage this carries over application of structural typologies for the purpose of in-depth IDN analysis.

Adaptations of Gennete's focalization to game narratives can excel at instances of 'internal focalization' – where the presentation of visual space is explicitly negotiated through the subjectivity of the protagonist character. An ideal example can be found in Fraser's (2015) close reading of *Mirror's Edge* (EA Dice, 2008) – where the player takes the role of an expert Parkour

artist, and like the protagonist, perceives the environment being navigated through as (literally) highlighted by possibilities for acrobatic maneuvers.[60] However, in games where the point-of-view and 'point-of-action' are not as explicitly congruent, particularly in instances of so-called 'zero focalization', systems such as Nietzel's would be inclined to assume a disconnect between movement and perspective. They would therefore be prone to miss out on many aspects of the constitutive interplay between perception and movement dynamics, which I argue is far from limited to first-person games.[61]

To accentuate my point, consider the classic real-time strategy game *Warcraft III* (Blizzard Entertainment, 2002): the player sees the gameworld from a bird's eye view as she assembles and manages a battalion of many different units, which according to Genette's or Nietzel's model would lead us to categorize perspective as objective and nonfocalized. However, it is quite evident that the player's attention to this world is designed to focus first and foremost on the 'hero' characters – who matter most in terms of strategic goals, 'level up' in the process of gameplay and hence go through most change, require the most active 'micro-management' (partially due to their ability to cast spells and use items), are bigger and flashier looking than other units, and have distinct personalities and central narrative significance in the game's

60 This concept of internal focalization allows for satisfying analysis in first-person-perspective works that aim for maximally close identification with the protagonist character, such as *Mirror's Edge* – where the player is literally walking in the shoes of Faith, the protagonist, and identifies with her perspective completely. There is an additional possibility, however: even in games of fully internal, first-person focalization, the player's perspective may be designed to meaningfully differ from that of the protagonist they play as. This potential for tension is masterfully explored in the game *The Stanley Parable* (2013): an external, all-knowing narrator relates the story of a strange workday in the life of Stanley, a bland office clerk protagonist controlled by the player. The player can decide whether to perform the action that the narration declares Stanley to take, or do something entirely different – in which case the narrator may become increasingly angry, and begin berating the character of Stanley or kill it in creative ways. By allowing the player to disobey the narrator, and by restarting the story each time it reaches a possible end, the game is designed to enact a conflict between the player and the narrator regarding the actions of the main, focalizing character. This is wholly different affective rhetorics of internal focalization: the player's perspective of the gameworld is engineered in reflexive distance from each instantiation of Stanley. Nietzel's model of is incapable of accounting for how the interactor's different relationship to Stanley as opposed to protagonists such as Faith would affect the narrative focalization.

61 Calleja (2009) provides somewhat of a counter-point by integrating Genette's concept of focalization into an environmental approach to game narrative. While focalization plays a helpful supporting role in his analysis, it is primarily based on other concepts from semiotics and phenomenology, which a structural view of focalization must be coupled with in order to relate to environmental dynamics.

campaign.[62] Because it relinquishes precise structural categories and the notion that mobile perception in interactive media is focalized from a single point, ENF would be able to account for the salient presence of these characters in the player's attention as a defining focalizing aspect.

Fig. 3. Focalization in *Warcraft III* (hero character shining in blue towards the top left).

In sum, to more deeply grasp what focalization entails, I argue it is helpful to supplement the base point-of-view structure with an inquiry into how the interactor is inclined to pay attention to the world being viewed. ENF allows us to attempt to account for the mobility and complexity of perspective in IDN environment, for the various 'gravitational pulls' of attentionality that emerge through the interplay between vision, movement, affordances of interaction and narrative interpretation.

62 As Bizzocchi et al. comment, the supposedly 'objective' point-of-view also places the player in a particular narrative relationship to the world she observes – the commander of an army – which is verbally acknowledged by the way the player is often directly addressed by different characters being controlled (2011 472).

The enactive qualities of the medium

Janet Murray's visionary book *Hamlet and the Holodeck: The Future of Narrative in Cyberspace* (1997) arguably birthed IDN as a serious academic discipline. Murray's central metaphor for the potential of what the new medium might become is the holodeck (Startship Enterprise's entertainment platform in the series *Star Trek: The Next Generation*), a sci-fi hologram technology that simulates complex interactive stories in real space. The holodeck vision is very much in line with Bolter and Grusin's claim (2000) that new forms of media develop in a double logic of ever-increasing hypermediacy, coupled with ever-increasing immediacy. The holodeck (and by proxy, Murray's vision of IDN) can be said to bring the artistic expression of narrative full circle: being the ultimate technological medium, it integrates seamlessly into the environmental framework of immediate experience.

Embodiment is not a central theme in Murray's writing, which highlights insight on the characteristics and potential of IDN from the author's perspective as a technologically informed comparative literature scholar. Nonetheless, her exploration of IDN's defining qualities repeatedly touches upon the central role of embodied action, spatial navigation and affordances of movement. This is most evident in part II of her book, "The Aesthetics of the Medium", where Murray defines three key qualities (or 'pleasures') of IDN experience: immersion, agency and transformation. I will briefly trace the connections between these qualities and my framework of embodied narrativity, and the ways in which each can be considered an enactive modality. The discussion below highlights how Murray's exploration of her three qualities relates to the dynamics of movement and attentionality, and complements each quality with a brief case study demonstrating how it may be beneficially analyzed through the lens of embodied narrativity, and particularly my concept of ENF.

Immersion

Murray defines immersion as the experience of a parallel state of being "that takes over all of our attention, our whole perceptual apparatus" (98), metaphorically equivalent to being submerged in water: "the sensation of being surrounded by a completely other reality" (ibid). She cites the

fantastical capacity of traditional storytelling to induce an immersive state: "our brains are programmed to tune into stories with an intensity that can obliterate the world around us" (ibid).

Digital technologies provide unprecedented capacities to construe a parallel reality, that is crucially also inherently interactive and participatory. Murray acknowledges that immersion hinges on what has traditionally been called 'suspension of disbelief', but argues that a better terminology in this context would be the active *creation* of belief: the directing of attention to engage with the parallel world and reinforce its fragile sense of realness to us (110-111).[63] Owing to this difference, an IDN immersive experience entails more than "the flooding of the mind with sensation" (99) – it entails "learning to swim, to do the things that the new environment makes possible" (ibid). Immersion hence channels "the feeling of alertness that comes from being in this new place, and the delight that comes from learning to move within it" (ibid).

In the context of my framework, the concept of immersion serves as a reminder that the extent to which we meaningfully experience ourselves as situated within IDN storyworlds directly depends on the degree to which these worlds elicit us to actively pay attention to them. Immersion may easily be thought of as an enactive modality, because it is formed through an embodied sense of attentive presence in environment that hinges upon what being-in-the-storyworld feels like. If true immersion entails an experience of the 'water' from the perspective of knowing to swim, it essentially leans on developing sensorimotor knowledge and practical understanding of movement in the perceived environment. ENF relates to the sort of narrative perception which such practical understanding plays into. Since focalization describes the ways in which we pay attention to the narrative world, achieving a degree of immersive experience seems like a necessary element in its successful design. [64]

63 Notice the affinity to Noë's fundamental enactive position on consciousness – narrative belief, and immersion in narrative worlds, is according to Murray essentially 'something we do'.

64 Though both immersion and focalization are aspects of perceptual attention, they should not be conflated together. Immersion, for one thing, is a potential quality of media experience that may or may not be reached (and is often desired), while enactive focalization is considered an immanent parameter of perceptual experience. It would not make sense to speak of a given moment as more focalized than another – perspective does not go away when we pay less attention to it. We can nonetheless detect meaningful interaction between these qualities.

Red Dead Redemption 2 (Rockstar games, 2018), a commercially successful and critically acclaimed Western action-adventure game, is an intriguing case study at construing an immersive experience through the performance of action. RDR2 employs unusually meticulous and rigorous action mechanics: common actions (such as picking up an item) – that in virtually any other high-budget game are either automatized or performable with a single click, to maximize simplicity – are designed to require pushing and holding buttons for precise amounts of time. This turns routine navigation of the gameworld into a series of slightly slower and more demanding tasks. In his review article on the game for *TheRinger*, Jason Conception astutely reflects on the influence of this design choice:

> In the early hours of playing RDR2, this was, frankly, annoying. Then something magical happened. After becoming attuned to the game's rhythms, I began to appreciate what I was doing in a way that felt almost Zen-like. […] [For example], in order to brew coffee, Arthur [the protagonist] first has to kneel over his campfire with his coffee pot. The player holds the action button until the coffee is brewed. During this time, your eye will naturally wander to whatever else is on the screen—the trees swaying in the wind, deer threading through the tall grass, and clouds sweeping across the sky. Once brewed, Arthur pours himself a cup. The player is then prompted to pull the right trigger in order to have Arthur drink the coffee. This is repeated several times until the coffee cup is empty. […] Most open-world games give players the option to avoid tedium. Red Dead Redemption 2 makes it integral to the experience. […] It's a game that asks you to stop, slow down, and pay attention to what you're doing. (Conception 2018)

In other words, the unusually high detail and slow pace that routine actions require, alongside the immensely rich environment design, enact an unusually contemplative and engaged focalization of the storyworld.[65] This mode of attuned perceptual attentionality, which Conception appropriately terms "enforced mindfulness", leads to a deeper sense of immersion, to uncommonly high levels of engagement and fascination with the sotryworld (as Conception's piece and many other enthusiastic responses testify). Such immersion in minute details naturally

65 Horseback travel from place to place also takes unusually long in RDR2 compared the spatial navigation in most large scale gameworlds, allowing more time to wander around and appreciate the environment.

translates into stronger involvement and higher emotional investment in the narrative identity of being a Western protagonist, tasked with surviving and building prestige in an untamed world.

Fig. 4. Coffee-making in *Red Dead Redemption 2.*

Recall that Strawson employs the making of a cup of coffee as an example that the narrativity of everyday action should be regarded as entirely trivial. *RDR2* demonstrates how the mechanics of routine actions, including coffeemaking, take part in shaping our mode of engaging with the world, and affect the sense of attention, interest and investment in environment and the ensuing relational understanding of our affordances and identity that emerges from this engagement.

Agency

Murray defines agency as "the satisfying power to take meaningful action and see the results of our decisions and choices" (126), essential for taking pleasure in interactive experience. Agency can be understood as a particular aspect of what Noë calls practical understanding – the extent to which and the ways by which actions can influence environment. The sense of agency develops as the interactor actively navigates the storyworld, gathering implicit and explicit knowledge on the affordances and potential impact of her actions (which often subtly vary as the narrative progresses). IDN leans on a fundamental form of agency in digital environments: the pleasures of spatial navigation (129). Any unfolding narrative or sense of impactful agency is tied to the interactor's movement and exploration within the digital space (132).

Presence in an interactive environment alone does not necessarily succeed in producing this quality – 'true agency' is experienced when the intentional choices we make are reliably linked to tangible and meaningful impact (Murray 128), when agency also involves 'commitment to meaning' (Tanenbaum and Tanenbaum 2009). If the fundamental experience of willful immersion depends on 'knowing to swim', a developed sense of narrative agency hinges on making the technique, direction and destination of swimming significant. In similar spirit, Murray asserts that IDN environments should develop a "repertoire of expressive gestures" (150) – beyond the common, somewhat narrow repertoire of navigation and attack movements – that mean more than a step towards winning\high score, due to influencing the narrative experience. As Harrell (2009) and Knoller (2010) remind us, the notion that good design of game agency entails maximizing the player's sense of freedom, choice or 'free will' is sorely mistaken. Experienced agency results from grasping one's affordances as meaningful in the context of immersive engagement with the storyworld. Careful obstruction of goals and delimitation of affordances can mean much more than the achievement of ubiquitous power (as in the roleplaying game trope of gradually gaining near-omnipotence over environment).

Brothers: a Tale of Two Sons (Starbreeze Studios, 2013) is an intriguing case study in the design of meaningful agency interplay – whose key ingredient is the game's "narrativized game interface" (Bizzocchi et al. 2011 462), particularly in the sense of poignant resonances between the player's real movements and the movement they enact in the storyworld. This single-player adventure game tells the story of two brothers that embark into the great outdoors to deliver a cure for their father's illness. The brothers are controlled individually and simultaneously, through a single game controller. Each sibling's movement is directed by one of the controller's two thumbsticks and a separate action button. These original control mechanics create a sense of identifying each hand with the affordances and character of the brother it controls – left for the older's strength, right for the younger's finesse.

The player must master a somewhat challenging ambidextrous manual coordination in order to get the brothers to successfully coordinate on the tasks and puzzles they come across (such as one brother distracting a hostile character while the other bypasses around it). The process of realizing the affordances of what the brothers can achieve together fashions a sort of dual

focalization of experience: a split yet cohesively relational attentionality, which enacts an embodied narrative of navigating a challenging environment by learning to closely cooperate. Progressing in this process enacts the development of a tight bond between the brothers in the course of their journey.[66] Hence, the coupling between the manual challenge of hand coordination and the narrative of brotherly collaboration forms a strong experience of agency, also in the sense of commitment to the narrative meaning.

Fig. 5. *Brothers: A Tale of Two Sons* gameplay.

The most significant narrative 'payoff' of this gameplay interface comes towards the game's ending, after the older brother is fatally injured in a fight and must be buried by his sibling. In the aftermath of this tragedy, the player only has use of the young brother's right side of the controls, making the left hand useless and thus providing embodied emphasis to the sense of absence and increasing the emotional impact the loss (Sim and Mitchell 7). *Brothers* designs this experience of a hole in the gameplay interface, and then fills it (May et al. 2014 3): not long after the death, the young brother reaches a river, which earlier in the game he was very afraid of

66 This is conveyed, like the game's entire narrative, without any words – the Brothers occasionally communicate with each other, but do so in a nonsense tongue.

swimming through, and only able to cross by climbing onto the back of his sibling. He must now attempt to swim himself, but if the player uses only the young brother's control buttons, it will cause him to drown. The player must realize that the older brother's action button is still usable, and that only this will enable the young brother to swim – symbolically ingraining him with his sibling's strength post-mortem. Two further instances in the game's final sequence carry forward this embodied realization that the young brother can now be controlled by both hands, and has gained access to his sibling's affordances. The 'dead' hand effectively regains its use, symbolizing the brothers' ongoing connection (the disembodied voice of the older brother egging the younger on clarifies this). As May et al. comment, the scene works because *Brothers* "introduced a mechanic that embodied the characters' traits, repeated that mechanic throughout the game [...] then subverted the mechanic by allowing a dead sibling's action to empower the living" (2014 5).

This fluctuation of affordances in the final scenes is an excellent expression of what Harrel calls a 'dance of agency' (a term originally coined by Andrew Pickering), a process of ongoing interplay between the affordances of humans and environment. The process through which this dance is enacted in *Brothers* urges the player to affirm her commitment to the narrative meaning through an adaptive understanding of control interface and game mechanics.

Transformation

Murray perceives transformation as the unprecedented capacity of digital environments to shapeshift in myriad ways. Even when producing a seemingly steady display, digital environment is always in essence a process of generative computing, potentially subject to instant and far reaching transformations. Digital formats are therefore "more plastic, more inviting of change" (154). Due to this inherent procedurality of digital media, the emergent experience of IDN allows us to "enact, modify, control and understand processes as we never could before" (181).

IDN works channel this capacity to structure what Murray terms 'multiform stories', or 'kaleidoscopic design'. Like film spectatorship conventions now allow us to easily grasp parallel editing between multiple spaces or timelines, Murray predicts that interactors would develop to internalize the dynamics of navigation in the "kaleidoscopic narrative canvas" (162). Given the

medium's interactive nature, some of the change in the instantiated narrative is determined by the interactor's own choices and actions. Good IDN design should enable some branching or variations in the path, while laying the ground for a coherent and meaningful narrative experience regardless of which turns are taken.

As Murray argues, IDN differs from the fluid transformations of perspective and location that novels and films can also evoke, because digital media do not describe or observe events, but rather embody and execute them (Murray 181). The procedural environment is literally transforming as the story unfolds – any material fragment is potentially transmutable, and the 'stage' may constantly expand or shapeshift. Alongside the storyworld geography or timeline,[67] this transformation may involve the body or avatar which the player inhabits, her situated point-of-view, and her action affordances. Even when less explicitly embodied, if we follow the principle of Noë's theory, the human capacity to perceive any sort of environmental transformation, no matter how mediated, is derived from our enactive grasp of change through movement. More complex narrative transformation channels "the kaleidoscopic capacity of our minds [...] to imagine life from multiple points of view" (161) – to shift between perspectives (a variable or mobile narrative focalization). Such perspectival transformation may express one of the most basic pleasures of both storytelling and play – becoming someone else, or something different, than who one experiences oneself to be in 'reality'.

Freud-me (formerly *VReflect-me),* a therapeutic virtual reality project by Virtual Bodyworks co-developed by the VR researcher Mel Slater, provides a straightforward example of utilizing embodied transformation to form a transformative narrative experience. This project, tag-lined "speak to yourself like never before", allows the interactor to converse with another version of himself embodied as Sigmund Freud. After the interactor's body is scanned to produce a similar

67 Transformational capacity is prevalent in IDN's flexible, multi-linear timeline(s). Interactive narratives may invite the interactor to essentially time-travel and explore different sets of choice and consequence trajectories (often simply through the potential of re-playability), and can allow to shift perspectives on an occurrence as it (re-) unfolds. The embodied experience of multiform temporality is a fascinating topic, and a very complex one. I avoid it here for the sake of simplicity, and focus instead on the more immediate tie between of this quality and my framework: the transformation of perspective, or what we might term kaleidoscopic focalization.

self-avatar, he enters the VR space as an animated version of himself, positioned in front of a Freud-lookalike character and prompted to share a personal problem. He is then transformed across the table into Freud's body, moving in Freud's image as he observes a recording of himself, sitting opposite, stating his problem. He is prompted to perform as Freud by asking his 'patient' follow-up questions and giving reflection and counsel. Next, he is transported back to his own body, and sees Freud conversing with him in his own previous words (in a digitally manipulated deepened voice) and gestures. This performative self-dialogue continues for as long as the interactor desires, typically until the issue reaches some sort of resolution.

Reporters who participated in the project (Hatterstone 2017; Abumrad and Krulwich 2018) claim that, as the design intended, conversing with themselves as Freud allowed them to process issues they felt stuck or frustrated with from a wiser, more distant and empathetic perspective – to be compassionate towards themselves as they would towards a friend sharing an issue, rather than critical and ruminating. Empirical research results on the effect of the experience (Osimo et al. 2015; Slater 2017) are also enthusiastic regarding its beneficial potential. The authors theorize that the embodied transformation grants participants access to mental resources that they do not normally possess, allowing them to approach their own issues in less biased and more beneficial ways.

Fig. 6. *Freud-me* VR graphics.

The authors also ran two alternative versions of the VR experience to compare the effect. In the first, instead of being interspersedly embodied as Freud, participants counseled themselves as another twin version of their own body. In the second, the 'visuomotor synchrony' in Freud's body was deprived – participants still took on Freud's role and spoke in his voice, but the movement of Freud's body no longer reflected their own, thus decreasing the illusion of body ownership. Both variations were found to significantly reduce the mood improvement and sense of happiness that participants experienced (Osimo et al. 2015).

In the context of previous discussion, this result harkens to the significant connection between embodiment and narrative identity: in Slater's words, "the form of the virtual body can result in implicit changes in attitudes, perception and cognition" (1) – essentially to a somewhat different notion of identity and focalization of experience. It thus seems demonstrative of my claim that narrative focalization should be understood as more than positioning and point-of-view, and relates also to the way one perceives presence and interaction within environment. Being physically transformed into another body, and the cultural narrative of Freud's character, both proved crucial for the transformation of perspective to form a productive performance of self-dialogue. Equally crucial was the capacity for movement – even though it did not translate into any particular action or influence on the environment, and participants were theoretically just as capable of counseling themselves as Freud without moving Freud's hands. Moving as Freud led to a deeper sense of being immersed in the transformation, directly present in the role. These enactive elements of narrative focalization – the sort of body and movement ingrained in one's perspective – are key elements for the successful channeling of digital transformation (in perspective or otherwise) into potentially transformational narrative experiences.

Returning to *Journey*

Having hopefully established the connection between central elements of IDN experience and design and the framework of embodied narrativity, we are now prepared to dive back into discussion of the case study this thesis opened with: enactive storytelling in the game *Journey*. *Journey*'s widely regarded narrative achievement is largely due, I argue, to its unique and affective design of movement dynamics, that focalize navigation of the game's environment in a

way that perfectly coheres with the narrative it seeks to deliver. The corporeal dynamics of movement and action make the game narratively poignant – much more than the story's abstracted structure, that we can now call 'emplotment'.

During his aforementioned discussion of game environments enacting stories, Henry Jenkins cites Dunniway's claim, that we can draw "parallels between the stages in the Hero's Journey as outlined by Joseph Campbell and the levels of a classic adventure game" (in Jenkins 2003 124). Expanding upon this idea, Jenkins comments that games may progress in narrative stages akin to Campbell's, but do so in a looser sequencing held together by facilitating movement:

> Spatial stories are […] pushed forward by the character's movement across the map. […] Resolution often hinges on the player's reaching their final destination […] The organization of the plot becomes a matter of designing the geography of imaginary worlds […] (to) facilitate the protagonist's forward movement towards resolution. (Jenkins 124)

This passage easily reads like a description of *Journey:* a short adventure game (around 1.5-2 hours of gameplay, equivalent to a feature film) that urges the player to continually navigate towards a final destination, constructed to tell a story explicitly based on Campbell's narrative formula of the hero's journey, and hailed for its excellence at manifesting this story through unique environment design. *Journey* is set in a rich and aesthetic world, which gently directs the player across a set path. The architecture of space seems to naturally lead into traveling this path[68] – the destination mountain peak is visible on the horizon through most of the game, and many salient bridges, slopes, and climbs practically lead towards it – while still giving off the feeling of open space.

As Jenkins would have it, the storyworld's spatial geography indeed facilitates the player's movement. Simultaneously, however, the game's meticulous design of movement dynamics facilitates the experience of spatial geography. Something in the way moving feels throughout the

68 The gamespace is designed without any observable boundaries, and truly feels like an open world. Straying too far away from the main path, however, causes a gust of wind to blow the player back – effectively setting a boundaries to the world and directing its exploration.

gameplay creates a feeling of pleasant flow, of being truly present in the storyworld and practically swimming in its sands. As YouTuber 'thinreaper' states in a video analysis of the game, "there's a sort of elegance in the way you traverse the landscape, a subtle joy in the fluidity of movement". If immersion in *Red Dead Redemption 2* was enhanced by the fastidiousness of having to perform detailed routine actions, in *Journey* the gameplay is light in ludic requirements, affordances and challenges. Immersion is enhanced, instead, by being in constant movement and allowed to truly indulge in its flow (partially due to the absence of factors that draw attention away). Significantly, this fluid flow is not smooth and steady, but rather of shifting tides: *Journey*'s geography and movement dynamics transform in strong parallelity throughout the gameplay process. Their transformation cleverly enacts and underscores the game narrative.

In the onset of gameplay, the player has to walk the desert sands, perfectly animated to capture how each step seems to sink and drag a little, slowing the movement and tracing a path of footsteps. As thinreaper comments, the slightly sluggish grounded movement in the desert is designed to be interspersed with small moments of freedom, via the affordance for beautifully animated bursts of jumping through the air, and the occasional smooth slide down a slope. As the player gradually comes across runes that power up her jumping capacity – visualized by the avatar's scarf, which lengthens incrementally – she gains enhanced mobility, and jumps may increasingly extend into each other to form an experience of gracefully drifting through the landscape in immense freedom. The player eventually enters a dark cave, patrolled by a mysterious monster, where jumps cannot be recharged and must be preserved carefully. The experience of moving is therefore re-focalized on navigating restricted space in efficiency and stealth. The sense of vulnerability and restriction is maximized as the player begins her ascent towards the mountain peak: moving against an increasing gust of icy wind, gradually losing the capacity to jump as her scarf freezes off, seeing the avatar hunch over and fight for every step as the world gets blurry and pales. This makes a stage that contains little ludic challenge feel like a true struggle against the elements – which culminates with the protagonist collapsing into the snow. After undergoing a sort of spiritual reincarnation or recovery, the player is magically freed to ascend the final part of the path by effortless flight - the scarf maintains full charge at all time, essentially allowing movement through an ongoing 'jump', unburdened by gravity and physical

limitations. The landscape (once more filled with light and natural detail) and soundtrack enhance the sense of majestic transcendence. Finally, the player lands inside the cleft of the mountain peak and takes the last few steps slowly again, essentially walking herself into a 'fade to white'. In a sort of epilogue, the title sequence depicts a shooting star – that can be interpreted as a reincarnation of the player's avatar – shining its way through Journey's path in reverse order, from the peak to the point of departure.

Fig. 7-8. Free (above) and constrained (below) movement in *Journey.*

Journey's narrative is a rather transparent metaphor for walking the path of life: childhood, adulthood, old age, death and a sort of spiritual ascent. Like a religious ritual of passage, it is not the spiritual plot alone, but rather the poignant symmetry between its metaphorical meaning and the embodied experience of performing the movements it channels, that makes this narrative effective. *Journey* makes zero use of language, and relies entirely on the experience of movement to tell its story. The sense of trajectory and agency negotiated by the shifts in movement dynamics powerfully echoes each phase of this abstract story-arc.

If *Journey*'s was navigated simply by holding the 'forward' button for two hours, leading the avatar to echo the path of The Hero's Journey by stutter-stepping its way through the breathtaking geography in a constant and steady pace, it would have been an entirely different game. The broad story arc would have stayed exactly the same, but the enactive focalization of experience would have functioned differently, channeling embodiment far less. This would have robbed *Journey*'s narrative, I argue, of the majority of its quality and potency.[69] Simultaneously, barring the abstract narrative framing and its metaphorical symbolism that frames the navigation of *Journey*'s path, the gameplay would have probably been experienced as kinesthetically entertaining at most, rather than touching and meaningful.

A final key element of *Joureny* is its multiplayer experience. The storyworld is instantiated online and inhabited by many players taking the journey at around the same time, so that any player is likely to run into other travelers throughout the gameplay. In a very rare choice for a multiplayer platform, players are intentionally deprived from any sort of chat interface. In synchronicity with the storyworld's wordlessness, there is no way to verbally communicate with others you come across.[70] The game thereby prefigures the players, in the absence of lingual expression, to attempt communication through abstract movement gestures. To facilitate such communication,

69 While use of soundtrack and occasional cinematic cut-scenes (which mostly display remnants of the once-great, vaguely Eastern, collapsed civilization the protagonist is apparently a remnant of) also contribute to Journey's narrative prowess, I hold that the shifting movement dynamics are its most powerful, defining and unique element.

70 Nor is it possible to add other players as friends, or stay in touch with the person behind an avatar in any way – the gameplay is meant to form serendipitous travel encounters with strangers that end, at the latest, when the journey does.

the three basic actions players can perform – moving, jumping, and interacting – have all been designed to double as meaningful expressive gestures. Pushing the interact button in the vicinity of particular environmental elements triggers certain affects, but even in the absence of such, produces a white circle around the avatar alongside an abstract symbol, and plays a single musical note. The shape of the symbol and the tone of the note are the only elements that change from player to player. Players can utilize this individualized gesture to draw each other's attention and abstractly communicate. It can seem to take on different context-dependent meanings, such as signaling location, urging another to join or follow, or expressing enthusiasm. Repetition of the gesture can also be utilized to form poetic sequences of symbols and notes into a sort of improvised melody, creating small audiovisual performances for each other, or together. Thereby, *Journey*'s movement design can instantiate fluid and abstract narratives of establishing serendipitous bonds with another, purely through shared travel. Players report to have been awed by the degree of depth and shared sense of companionship and wonder enabled by these minimalistic and open interaction mechanics.

Fig. 9. Multiplayer gestural communication in *Journey*.

As noted by *Joureny*'s IGN review, this "surreal multiplayer" element is among the game's most impressive achievements, partially because it amplifies the broader narrative theme: the potential

to allow others we happen to come across into our paths, to travel together, communicate by poetic gestures, and possibly separate at any point, fits perfectly with *Journey*'s narrative of abstract travel as a metaphor for life. In this way, the design of control interface and movement dynamics potentially enacts narratives of interpersonal connection through gameplay, that seamlessly integrate into the game's general plot and imbue it with a sense of greater depth.

The game camera's point-of-view is situated to follow the avatar from the outside (external focalizaton, in Genette's typology), in variable distance and angle. Particularly when navigating alongside other near-identical travelers, this slightly exterior and very mobile perspective can gives off a feeling of being part of a larger ecology of movements and landscape – where the path of life is actively focalized as a sort of harmonic dance. The fluidity of this dance-like movement dynamic, and the potential to enact meaningful interactions through it, ingrains the path through *Journey*'s storyworld – whose overall contours are linear and set in advance – with a sense of narrative flexibility, which, as Anne Albright mentions, can be made particularly salient in improvised dance interaction (2013 81).

Ludonarrative resonance

The infamous 'ludology vs. narratology debate', which mostly occurred during the early-mid 2000s, spurred from the call of key figures in game studies to protect their young discipline from what Espen Aarseth once called "narrativistic colonialism" (2004) – a conquest by the misapplication of narratological theory to games. In a way, this is a "debate that never took place" (Frasca 2003). As Murray wrote in 2005, the imperialist narratology camp never truly existed: while early IDN scholars were trying to create and adapt narrative theory appropriate to the new medium, it was the 'ludologists' who clang to the concept of story as traditionally understood in cinema or literature – and correctly doubted its direct applicability to games. They essentially opposed a position which the 'other side' never took. Nonetheless, the study of IDN

remains somewhat separated from its sister discipline of game studies by the specter of this debate (Koenitz 2018).[71]

Arguably the most influential concept that provides an afterlife to the ludology vs. narratology debate is 'ludonarrative dissonance' (Hocking 2009): tension or contradiction between the aims of gameplay and storytelling. As Roth et al. (2018) assert, the concept "takes narrative and interactivity as dichotomic ends of a design trajectory, reflecting the enduring trope of the narratology vs. ludology debate" (93). Ludonarrative dissonance can either be attributed to the design of a particular game, or (more in the ludology vs. narratology spirit) be discussed as a default condition of narrative games, a sort of inherent gap between the phenomenology of play and narrative hermeneutics.

Lindley (2002) makes a cognitive psychological argument in line with the notion of ludonarrative dissonance as a default condition: gameplay and narrative are simply two contradictory modes of attentionality. The 'gameplay gestalt' requires constant involvement in (often repetitive) action, movement and ludic conflict. The 'narrative gestalt' involves interpreting a sequence of phenomena via higher-order abstractions, that "unify the game experience into a coherent structure" (6). Since humans presumably have insufficient attention span to simultaneously engage with both these levels, the gameplay gestalt is argued to undermine narrative immersion. Put in the context of Ricoeur's theory, this is essentially an argument for phenomenological disconnect between praxis and emplotment (mimesis 1-2) – the opposite of my framework's attempt to link between the two.

In a limited sense, Lindley is correct – it is hard to reflect on broad narrative arcs or meanings when one's focus is overloaded by engagement with some immediate burning conflict. In accordance, perhaps, *Journey* is uniquely light in ludic challenges: the control interface is quite

71 Many central figures in game studies maintain the same resistance and traditional concept of narrative. Ian Bogost, for example, asserted in a TheAtlantic column that "to dream of the Holodeck is just to dream a complicated dream of the novel" (Bogost 2017).

straightforward, there are no puzzles to solve, and almost no fail conditions,[72] no strategizing to be done or complex mechanics to master in order to avoid having to start a part over. This allows for freer engagement with the game environment, which is one way of potentially drawing attention to narrative. In a broader sense, the fact we can primarily pay attention either to a current episodic conflict or to more diachronic narrative reflection does not at all prove a disconnect between tangible interaction (or gameplay) and narrative. As previously asserted regarding ENF, narrative framing is implicitly connected to immediate, even instinctive interaction, and may be significantly shaped through affective experience (even this relation is not consciously obvious).[73] The two 'gestalts' are not opposites on a scale, but rather connected on a spiral of dynamic circularity.

Sim and Mitchell (2017) discuss *Journey* as a case study for a wordless game whose narrative arc is construed by the interactivity of gameplay. It is considered a prime example for "ludonarrative resonance" (Brice 2011) (or "ludonarrative harmony", in Roth et al.) – the opposite of ludonarrative dissonance – as well as for the concept of 'narrative game mechanics' (Dubbleman 2016; Larsen and Schoenau-Fog 2016). This analysis is largely in sync with my own.[74] Despite its shortage of conflict, *Journey* is a game of constant movement, that can certainly be said to enact its story directly through 'gameplay gestalt'. If, as I have argued, embodied narrativity is enacted through the focalization of perceptual experience in relation to movement dynamics, *Journey's* narrative is structured almost entirely around this level of experience – rather than through any sort of separate 'gestalt' of internal, abstract representation, of being outside the movement.

72 The only place where the traveler can 'die' is in the monster's cave – and even in that episode, such result is quite unlikely given relatively little effort.

73 To provide an example for the connection between engagement in narrative and tangible conflict: if I am suddenly chased and nearly killed by a terrifying monster tomorrow (hopefully in the course of playing a game), I will not have the opportunity to stop and contemplate the narrative meaning of the moment while fleeing for my life. Yet it should be quite clear that having gone through such experience will change my narrative understanding of environment and of my trajectory and identity within it.

74 My own analysis of Journey, and the concept of enactive narrative focalization at large, originated in a previous paper (Shibolet 2018) written in parallel to Sim and Mitchell's. Some of my argumentation in this part is based on this paper.

Journey displays how IDN's aesthetic qualities – immersion, agency (as commitment to meaning, which may be enhanced by the limitation of affordances), and transformation – can be powerfully harnessed through fluid design of movement and environment. This success signals that ludonarrative resonances, or more precisely for my discussion, kinesthetic narrative resonances – meaningful connections between the experience of movement and narrative interpretation – are an innate potential of the medium. Games like *Brothers* and *Red Dead Redemption 2* exemplify that the potential for such resonances is very much extended to more traditionally 'ludic', strategically challenging gameplay.

Successfully harnessing this potential remains a challenge, which IDN media are still very much in the process of learning to broach. For digital games, designing the broad plot in coherence with the narrativity of gameplay action is no easy task. Much of the game industry, which typically assigns story and game mechanics to entirely separate design departments, is poorly equipped to address this goal, and often treats it as negligible. The experience of 'ludonarrative dissonance' is simply the result of design that fails this challenge,[75] where the level of embodied narrativity poorly channels into higher orders of emplotment or somehow conflicts with the overarching plot trajectory.

In the broader frame of my discussion, if meaningful narrative experience can be enacted and focalized through well-designed 'gameplay gestalt', the notion that successful storytelling requires some entirely different modality of contemplative attention is refuted. There is no inherent phenomenological conflict, then, between being immersed in the interplay of action and involved in a story. The experience of movement does not have to be contemplatively processed into a fully formed, consciously realized story in real-time in order in order to instantiate the formation of narrative understanding. Embodied narrativity, as I have argued, is directly anchored in interaction.

75 Game design may also intentionally wish to put the player in such conflict – as Roth et al.'s analysis of *The Way Out* (Hazelight Studios, 2018) demonstrates.

Conclusion

Narrative gravity: an embodied intermediary

To conclude my discussion, I would like to return the first chapter's examination of narrative gravity. While Dennett's "*self* as center of narrative gravity" is meant as a metaphor, I argued that it is a highly embodied one, since the center of gravity is an imagined, theoretical concept that can nonetheless be tangibly present within the process of moving (and is utilized as such in dance practices). In the context of my later discussion, this notion can be said to echo Noë's central assertion that perception is skillfully enacted via practical understanding and sensorimotor knowledge of movement affordances and dynamics, which does not fully separate between conceptual and non-conceptual thought. The center of gravity is a concept that can become entangled with practical understanding and sensorimotor knowledge, because it makes the intricate balance of being-in-movement more immediately graspable.

Journey provides an excellent example for a literal application of 'narrative gravity': as detailed in my above analysis, the story of undertaking a life journey is focalized and made poignant via changes in movement affordances, that affectively express a shifting tide of gravitational pull and freedom (in broad strokes, from developing mobility, to increasingly being restricted and gripped by the ground, to a final moment of utter, dreamlike freedom of movement). The means by which this dynamic gravitational relationality transforms our understanding of the storyworld, and our narrative experience of the metaphorical life journey we are undertaking, cannot be captured by Ricoeur's paradigm of emplotment. This gravitational interplay figures into our conscious understanding of the plot, but its meaningfulness is actualized faster than we can process such representation. The gravity of movement can be said to directly affect the pull of perceptual attentionality,[76] and thereby, the 'gravity' of implicit, embodied narrative framing. The direct meaningfulness of experienced movement, however, is not a primordial level that

76 For example, the snowy climate at Journey's mountain peak would have been experienced as background staging if it wasn't for the tangible limitation of movement by the freezing winds, that makes it much more saliently present.

than gives birth to narrative understanding at higher orders of processing – the sense of gravity is meaningful *because* it is contextualized by the epic, metaphorical journey narrative. Simultaneously, we process the trajectory and meaning of this grand journey directly through our real-time experience of moving in relation to gravity. The experience of movement and story emanate from each other in a circular dynamics. This example of narrative gravity perfectly captures the idea of enactive narrative focalization, and its ties to more abstract interpretations of plot. It elucidates an interplay between perception, narrativity and identity within the experience of being-in-movement, which seems to echo my entangled framework of embodied narrativity.

Intriguingly, the concept of gravity is also employed by Hutto, as analogical means of critiquing Noë's claim that cognition should be thought of as attuned to the rules, or patterns, of sensorimotor contingencies (i.e. forming practical understanding of environment). Hutto compares this idea to the notion that contingencies of movement are governed by the law of gravity, which is not scientifically precise:

> This law does not describe an external force, as Newton originally thought […] The 'force of gravity' was postulated as something external that explained why all bodies, despite their differences in mass, fall at the same rate. […] It wasn't until Einstein reformed our understanding of physics by introducing us to the idea of general relativity (and the concomitant notion of curved space time) that it became clear why there was no need to postulate any such force of gravity. […] What then does the 'Law of Gravity' so accurately describe? It is neither an internal rule, the common following of which causes bodies to fall uniformly, nor it is some exogenous force that externally governs the motions of all such bodies. It simply describes (in an idealized fashion) the behavior of bodies when accelerating, nothing more. No one in this day and age would be tempted to explain the behavior of a falling rock by suggesting that it, or any of its integral parts, is attuned to such laws […]Why then should operations of our sensory systems be regarded as essentially different, despite the fact that these too can be described mathematically? (In Menary 2006, 24-25)

Noë's theory of perception is supposedly analogous to foolishly holding on to Newtonian understanding of gravity: the brain cannot be tuned to worldly patterns, just as the rock cannot, in truth, be tuned to gravitational forces. Noë's assertion that the brain 'skillfully interprets' sensorimotor data is thus argued to be as fallacious as the representational view of cognition that he and Hutto both oppose: both simplistically attribute an intentional operation to a natural

system that merely interacts within the same space of material contingencies as anything else. In other words, attuned cognition, much like movement attuned to gravitational force, is essentially a simplistic story we tell ourselves, an intellectualization or anthropomorphism of the framework of experience, and it should be discarded in favor of more scientific and naturalistic models.

Hutto may be technically and scientifically correct, but his claim that no one would be tempted to understand the falling of objects through the laws of gravity is dead wrong in almost every practical sense. First, as Dennett asserts, the concept of 'center of gravity' – the fictional point of balance in relation to the fictional pulling force – is a wonderfully 'efficient' metaphor to grasp, in a nutshell, a multiplicity of factors governing the potential for movement (1992). Insofar as the falling of objects on planet Earth is concerned, Newtonian gravity is as accurately predictive as general relativity – and far more coherent and graspable. It would be functionally insane for an engineer (let alone a choreographer) to force herself to work and think in relation to equations of spatiotemporal curvature rather than gravitational centers and forces. Much like the term 'selfish genes', still employed by biologists though clearly DNA lacks intentional motives, the 'force' and 'center' of gravity are concepts that capture the upshot of a complex environmental dynamics in far simpler, more salient stories. It is often a wasted effort, when trying to make complex material interactions clear to humans, to avoid speaking in terms of narrative agents, telos and generalized rules (flying *defies* gravity, genes *want* to multiply, the brain *attunes* to environmental patterns).

Second, and perhaps more importantly, this superior efficiency and coherence of gravity-as-force is not due to objectively simpler organization or presentation of data, but rather due to the human 'readers' of the story. As Noë reminds us, "it is not brains who perceive, but active animals or people" (Noë 2015 7). Gravitational force makes for a lucid and salient narrative because it is powerfully embodied. The story of an invisible force constantly pulling everything downward, and latching objects to the ground, is far more ancient than Newtonian physics (which added the little 'twist' of us pulling the ground back, to some microscopic level, as gravity is a function of mass). This is not an arbitrary story (like an invisible force pulling all to the right would be), but a direct narrative interpretation of tangible patterns of sensorimotor contingencies in the environment we inhabit. It accurately captures our embodied experience of the world – being pulled towards the ground, same as any object we watch fall.

There may well be no good reason to think of gravity as an external pulling force from the perspective of a supreme, disembodied intelligence. From the perspective of an embodied human, however, replacing this story with the more accurate, 'objective' state of things in the perception of everyday life is incredibly tough – I doubt any scientist could fall down and immediately, intuitively, blame the curvature of space-time. Nor would this adapted story make the experience of the fall any more meaningful or educative. Dismissing the force of gravity as merely an inaccurate portrayal is equivalent to dismissing my analysis of *Journey* (and the reported experience of many of its players) because what appears to be an environmental relation to gravity is in truth a procedural system of digital 'physics' instantiated via lines of code. The 'truth' of digital materiality is of secondary relevance to the experience of *Journey*'s storyworld.[77] The sense of meaning that instantiated interactive processes in works such as *Journey* unfold is more equivalent to dance than science.

We will continue to more often think of gravity in terms other than its most theoretically accurate description possible, because we seek an understanding that's meaningful in relation to lived experience, and to the process of being in movement. Quite possibly, the same can be said of identity: in order to explain ourselves to ourselves, we are tilted towards narrative interpretations that functionally cohere with our embodied experience and perception of worldly contingencies.

The pulling force of gravity is not fully in the world, which makes it a mistaken notion in Hutto's thought. Nor is it fully our heads, as employed in Dennett's work – merely a useful theory, or metaphor. Gravity is a story we experience *through* the world, by means of embodied interaction and sensorimotor understanding. The force of gravity may not be fully real, but neither is it just an illusion – once we hear or compose the narrative of its existence, it can be *there* for us whenever we perceive movement. Though not objectively part of the material world,

77 An understanding of digital environments at the level of the system's algorithmic structure is crucial for an IDN designer, but to conflate this understanding with the player's experience of the instantiated process would be a reductive mistake. Gaps between perceptible digital space and the invisible functionality of its infrastructure are becoming a prevalent political issue – particularly insofar as the capturing of data by massively used platforms is concerned. In the domain of digital storytelling, where the user-experience really is (typically) the ultimate end-goal (and generator of income), this is arguably a less salient issue.

it captures an upshot of more complex and erratic physical dynamics – just like identity, the *self*, and countless other narratives, conceptual abstractions and metaphors – that nonetheless help us relate to, focalize, and make sense of, our experience of the world we inhabit. Stories make salient sense to us in entangled relationality to our means of sensing.

In sum, embodied narrativity, like the center of gravity, can be understood in similarity to Noë's view of lived experience at large: an intermediary between tangible occurrence and conceptual thought, body and mind, perceiver and environment, which does not allow to point at one or the other as a true source, or form binary divisions.[78] Experience cannot be properly understood if examined strictly under the magnifying lens of reactions in the nervous system (or at the molecular level), and observing conscious, deliberate action and understanding alone is equally insufficient. Experience is organized, rather, at the intermediate "embodiment level"[79] (Noë 2015 17). Since theoretical projects such as Ricoeur's, as well as narrative delivery in interactive media, provide excellent reasons to posit narrative hermeneutics as immanently connected to experience, this thesis has attempted to locate narrative directly within the level of embodiment.

As a guiding metaphor for this intermediary level, Noë often points to dance:

> A dancer is locked into an environment, responsive to music, responsive to a partner. The idea that the dance is […] something that happens in us is crazy. Our ability to dance depends on all sorts of things going on inside of us, but that we are dancing is fundamentally an attunement to the world around us. […]Perceptual consciousness is a mode of exploration of the world, making use of a certain kind of practical bodily understanding. And that is what dance is. And this makes dance, for me, the perfect metaphor for consciousness. […] It is interesting to compare this process whereby we bring a dance or other work of art into focus for aesthetic experience with the project of phenomenology itself. (2008)

78 This is not, of course, an entirely new idea. It is very much in the spirit of the original turn towards phenomenology, as an intermediary of sorts between the previously incompatible ontologies of rationalism and empiricism.

79 Noë borrows this terminology from robotics expert Dana Ballard.

As previously explored, the focalization of *Journey*'s gameplay experience is very much equivalent to such an attuned dance. And directly within the enactment and the bringing-into-focus of *Journey*'s dance, we are prone to discover an unfolding life story. This affinity between narrativity and dance raises the notion that movement perception and narrative understanding may fundamentally differ not in kind, but only in degree (as in Noë's view of the relationality between conceptual and practical knowledge) – two ways of processing contingencies, patterns and trajectories of interaction into sequences that temporalize, and give meaning to, our understanding of space.

Future work

The theoretical framework presented in this thesis is very much initial given the broad scope of this project. It can potentially expand in many venues of thought, integrate much further insight, and be applied to explore or inspect different territories, as well as further corners of the digital landscape. To briefly list four directions of further travel I find intriguing, some of which I hope to have the chance to embark on in future research:

- New media works, platforms and technologies related to the "bodily turn" in digital media dispositif. This turn is conceptualized in relation to IDN by Knoller and Ben-Arie (2016), relating to Frank Biocca's prophetic insight on "the steadily advancing immersion of sensorimotor channels to computer interfaces through a tighter and more pervasive coupling of the body to interface sensors and displays" (1997). Many aspects of the increasingly ubiquitous presence of digital technologies that respond to gestures, from smartphone touchscreens to motion-sensing doors, may be linked to this bodily turn. Storytelling in virtual, augmented and mixed reality media is particularly interesting to examine in this lens. The emerging medium of VR games, and any interactive VR works that somehow capture real-time gestures and meaningfully represent and/or process them, may be the most directly applicable medium for ENF. In contemporary VR technology, we are transported 'into the screen', with no visible threshold, and the immersive sense of presence is so riveting that users are often convinced they sense 'real' touch even when haptic technologies (still in their early phases) are not incorporated (Murray 1997 60).

Another intriguing medium, whose narrative qualities are still in earlier stages of emergence, is tangible user interfaces (TUI), such as wearables and other physical objects enhanced by digital systems. Harley et al. (2016) survey existing 'tangible narratives' and provide an initial framework for TUI storytelling. These technologies can be said to take us one step closer to the realization of Murray's holodeck vision – lifelike IDN in real space.[80]A closely connected notion, perhaps on the other side of the coin from this bodily turn of media technologies, is the transformation and 'cyborgization' of human embodiment by its increasingly inseparable connection to technology (Clark 2003; Haraway 1985). Digital channelings and transformations of embodied narrativity should become more prevalent and crucial to consider as entanglements between bodies and technologies continue to grow tighter and more intimate.

- Sociopolitical and historically specific perspective on embodied narrativity: the notion of interplay between embodied, implicit, practical understanding and the narrativity of experience and identity should be further applied to the lived experiences of actual people. The connection I drew between the narrative framing of embodiment and identity is far from original: it is thoroughly explored in feminist and queer thought. Aforementioned examples include works by Butler (2005) and Barbour (2011), and in more explicit connection of embodied cognition to narrative identity, by Brandon (2016) and Mackenzie (2009). Still, it seems that Noë's particular model of enactive phenomenology carries largely untapped efficacy for cultural and political analysis. My attempt at integrating his theory with Ricoeur's dynamics of narrative identity and Bal's concept of focalization may be valuable in unlocking some of it. Could this framework be of use in analyzing how narratives are fashioned and embedded in different cultural and communicational practices? Inquiries into identity narratives of minority, marginalized and outsider groups, in relation to their different range of perceiving embodied

80 If we take a somewhat extended understanding of narrative mediation, Knoller and Ben-Arie are correct in claiming that the holodeck, in a sense, is already "all around us" (63).

experience and movement affordances, may be valuable in addressing this question.[81] A rather straightforward way of looking into this may be to research the ways and extents to which such groups differently interpret narratives, interact with storyworlds, and experience movement dynamics in IDN media.

- Theoretical, empirical and\or practice-based research into how alternative designs of movement dynamics and interface affect experience and narrative understanding. Researching the significance of different movement dynamics designed by different works (or subtle variations on the same work), or utilized differently by different players, could produce valuable theoretical insight. Such insight may help develop a richer modeling of the affective influence of movement dynamics[82] on the practical understanding of environment (and the qualities of immersion, agency and transformation it entails), and thereby on emergent narrative interpretations.
- Embodied narrativity in dance and performance arts, the original "real-time media" performed through movement (Rouse 2018 369). I am particularly curious about the potential usefulness of this framework in broaching the dramaturgy of participatory, improvised or otherwise interactive performances. A closely connected topic is the potential affinity between IDN and performance: integration of interactive storytelling technologies in postdigital theater (Rouse 2018), and the insight that IDN design may draw from the design of interactive performances (Barnard 2018).

'Power Gesture'

I will conclude with a short case study that relates, to some extent, to all four of these venues. In a piece for the VR newsletter *Upload*, game designers Henry Jackson and Jonathan Schenker tell

81 A rather distinct example that interest me, as an Israeli, is the Zionist re-framing, or re-telling, of the new Jewish body (as analyzed in Weiss 2004, and in the context of Hebrew literature in Gluzman 2007) - as virile, vibrant, connected to land and nature, and very much opposed to the diasporic Jewish body and identity narrative. This was essentially an engineered transformation of what was perceived as an embodied internalization of oppression and otherness, into a narrative of hegemony and belonging.

82 A related topic that can also be examined in this scope is how to integrate, in this framework that relates mostly to vision and touch, the sense modality of sound (which is also highly tactile and affective).

the story of encountering Jordan Belamire's (2016) report on a new (yet all too familiar) form of traumatic experience she went through: being repeatedly groped by another user of a multiplayer VR game. To their horror, this occurred while she was playing QuiVr, the archery VR game they had been hard at work on designing (which at the time was at its beta phase of development). Belmaire describes how what looked like a laughable jest to her husband watching her play in a 2D display, felt hauntingly real from her perspective of immersive, embodied presence inside the VR world – and there was nothing she could do to stop her virtual assaulter. Schnecker and Jackson immediately felt responsible, and set out to design a solution that would prevent such experience from repeating itself.

Fig. 10. *QuiVr* multiplayer gameplay (screenshot from a YouTube LetsPlay video: real-time footage of player to the right, game perspective to the left)

Their intuitive fix was to create a "personal bubble" mechanic – one could now click a menu button to make other nearby players disappear if they come too close, essentially disseminating the danger. Upon reflection, they realized that this solution

> Was functional, but only addressed the act that caused the damage, not the damage itself. […]When harassment does happen […] we need to also offer the tools to re-empower the player as it happens […] by dramatically and demonstrably giving that power back to the player. (Jackson and Schenker 2016)

Their improvement upon this solution can be considered a pioneering and affective use of enactive narrative focalization:

> Activating your Personal Bubble is [now] more like engaging your own superpower. You can still turn it on via the settings, but you can also activate it by what we're calling a "power gesture" – putting your hands together, pulling both triggers, and pulling them apart as if you are creating a force field. No matter how you activate it, the effect is instantaneous and obvious – a ripple of force expands from you, dissolving any nearby player from view, at least from your perspective, and giving you a safety zone […]. You have the power to turn this on and off – essentially giving you dramatic and instant control of your own space again. (ibid)

With this tinker, they were not thinking at level of code or system design, but at the level of dramaturgy. Game-mechanics-wise, this nuance does not change a single thing: all they did was add some aesthetic animation and an alternative control trigger to an already existing mechanic. Enactive-focalization-wise, this makes all the change in the world. The movement dynamics of performing an appropriately designed 'power gesture', causing a ripple of force to literally erase your would-be-assailant from perception, provides an entirely different experience of embodied narrativity: self-empowerment and a performative restoration of agency over one's body, rather than rescue by an outside force.

Critical thought on the design of digital embodiment, and digital interference with 'real-world' embodiment, should be developed alongside the platforms, interfaces and practices that seek to implement it. Jackson and Schencker's innovation demonstrates that a certain understanding of dynamic connectivities between the performance of movement, perceptual experience, and narrative interpretation already exists in the community of practice (in some frontier corners, at least). Navigating the game environment with the knowledge you can turn to the settings menu for help should feel like being equipped with an emergency phone to the game-police (particularly in a VR game, where the juxtaposed presence of menus in 3D space is extremely non-diegetic). Doing the same with internalized mastery of the 'power gesture' should feel like possessing a personal superpower. The affordance transforms from theoretical possibility to something present in the 'narrative gravity', ingrained in sensorimotor knowledge of the storyworld, a part of the dance.

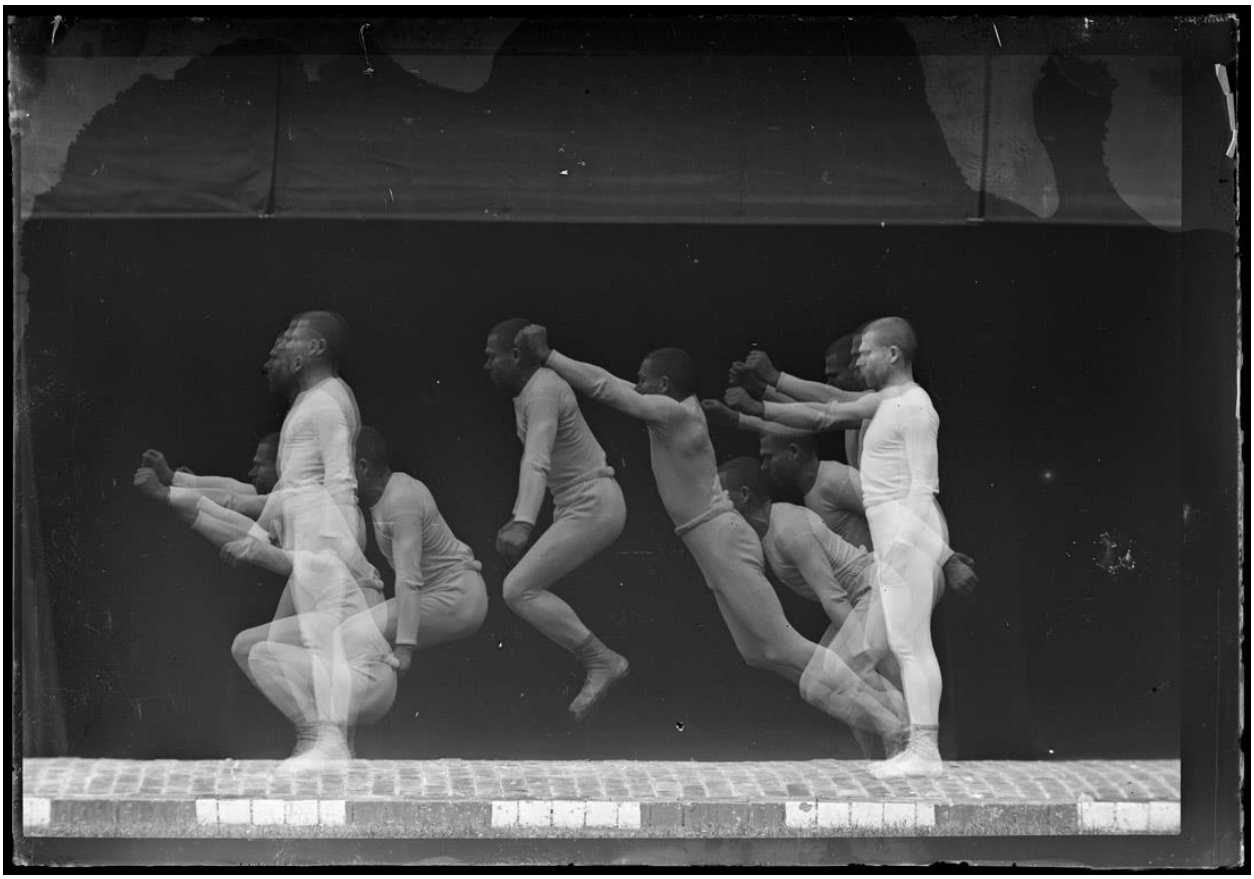

Fig. 11. Étienne-Jules Marey, Fixed plate chronophotograph of a long jump from a standing still position, c. 1882. Collège de France Archives.

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