The Fully Extended Mind

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Many representatives of contemporary philosophy of mind, cognitive science and neuroscience consider themselves to be 'post-Cartesian' in the sense that they have overcome what Antonio Damasio calls *Descartes' Error* (1994), namely, the categorical separation between mind and matter. These 'post-Cartesian' accounts argue that our thoughts are rooted in our bodies, shaped by their movement and gestures, fed by the experience of their physical and emotional states and related to the thoughts of others through so-called motor resonances of other bodies, movements and experience. This new thoughtworld of '4e cognition' is inhabited by a complex conglomerate of (very) different theoretical perspectives and empirical studies on the interrelatedness between the mind and the body. Among these, one account in particular pushes the boundary between mind and matter: the 'extended mind'. If we understand the mind as 'extended', it not only stretches out into the body and its movements (as is the case for the other embodied approaches, too), but beyond that into the material world that surrounds us. As Andy Clark puts it succinctly in the introduction to *Supersizing the Mind*: 'Cognition leaks out into the body and world' (2008: xxviii).

Several other contributions to this companion already consider the implications of an embodied perspective on cognition for the study of narrative; an approach which has gathered increasing interest in recent years (see Caracciolo and Polvinen in this volume). The present article will concern itself more specifically with the embodied approach that reaches the furthest, namely the 'extended mind'. What does it mean to develop a narrative theory based on the notion of the 'extended mind'? In order to answer this question, we will discuss the implications of an extended-mind perspective for literary narrative, as well as potential

complements to the current philosophical account arising from earlier work on the relation between mind and matter in the work of Jacques Lacan, from a transmedial perspective with examples from novels and graphic narrative. In the course of our argument, the possibilities and limitations of the extended-mind approach in informing narrative theory are explored and, in turn, the scope of the extended-mind approach is unfolded in what I call the 'fully extended mind' in order to do justice to the varied ways in which cognition may 'leak out' in novels and graphic narrative.

1. The Extended Mind in Literary Narrative

The notion of the 'extended mind' is closely connected to a little narrative that has travelled with the concept from Andy Clark's and David Chalmers' original article from 1998 into many contemporary recaps of their hypothesis. This is the story of Otto and Inga. Otto (who has Alzheimer's) consults his notebook for directions when he wants to visit the Museum of Modern Art in New York, while Inga simply remembers that it is on 53rd Street and sets off. The point of the philosophers' story is that, in both cases, a cognitive process is taking place. The only difference lies in the fact that Otto's cognitive process includes his brain, his body *and* a material object in the world, namely, his notebook. Otto's mind, in other words, extends for the purposes of remembering into the world, making the notebook part of his cognitive process. Clark and Chalmers (1998) and Clark (2008), continuing this line of argument, suggest that many cognitive processes (besides memory) reach into the material environment in a similar fashion and that such 'coupling' between the mind-body and the environment is not necessarily a compensation for neuro-degenerative diseases, such as Alzheimers', but, instead, a rather common mode of human cognition.

Let us consider a page from Brian Azzarello and Eduardo Risso's *100 Bullets* (1999-2009) as an illustration of this claim. A young woman called Dizzy looks at a photograph of a happy family (featuring herself as the mother), then at a gun and then at figurines which we can identify as a crucifix and a little statue of the Virgin. Without knowing much about the narrative, we can tell that she is making a decision between two different options for action. Indeed, she has just received an attaché case with a hundred bullets, an untraceable gun and evidence of who killed her husband and child (in the photograph) and sent her to prison for the murder. Dizzy's decision is between taking vengeance into her own hands (an option for action opened up by the gun) and leaving it up to divine providence (an option related to her implements of religious devotion). Dizzy's perception of the fictional world is structured along the potentials for interaction which the objects within it offer to her, or, as representatives of the enactive strand within the 4e cognition such as Alva Noë, would put it, she perceives the world in terms of how it becomes 'available' to her

[1] Noë writes, 'The most fundamental kind of skills enabling perceptual access to the world are sensory-motor skills' (2008: 662). Because we know what actions and movements are enabled by particular objects through our sensory-motor skills (called 'affordances' in the parlance of embodied approaches to cognition), we perceive these objects as present and available to us. The layout of the page in *100 Bullets* paces the different options available to Dizzy by confining them to separate panel images.

In the final two panels, Dizzy puts the gun into the attaché case, closes it and then opens it again. She manipulates the affordances of the environment as part of her cognitive process by making the gun first unavailable ('out of sight, out of mind') and then available again, thus first excluding it as an option for action and then reconsidering the feasibility of revenge. Dizzy's mind, if you will, extends into its environment. The affordances of objects

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such as the gun, the figurines and the attaché case not only shape her perception of the situation in which she finds herself but also offer targets for the cognitive ‘coupling’ between mind and matter as described by the extended mind hypothesis. What the notebook is to Otto in the cognitive process of remembering, the attaché case becomes for Dizzy as she opens and closes it while weighing her options. This example is more than merely an illustration of the basic tenet of the extended mind hypotheses: it also carries an important point for the narratological analysis of the visual component of graphic narrative. On a page with very little written discourse in captions or speech bubbles, readers of *100 Bullets* nevertheless get a clear focalisation of how Dizzy experiences her decision-making process through the ways in which the images and panel sequence highlight her perception and manipulation of the world around her. The process of extended cognition becomes accessible to readers in the visual representation of Dizzy’s embodied interaction with her environment.

On an earlier page in *100 Bullets*, when Dizzy is released from prison, we see how issues of extended cognition, visual perspective and focalisation are further related to each other in graphic narrative. In the first and second panel, readers see the photograph and the religious figurines. The next panel then shows that readers here had taken the point of view of Dizzy, who is standing in her prison cell. The panel after that reveals that the third panel is perceived from the point of view of the prison guard who has come to release her. The final panels of the page then show readers Dizzy and the guard walking through the prison from a more distant point of view that is not anchored in a character’s physical position. The shifts in visual perspective in the four panels mark the point of view connected to the panel images for readers, as the field that can be perceived is enlarged with every panel, moving from the photograph to the cell and to the corridor outside it leading to freedom. According to the logic of enactive and extended cognition, as the field of perception enlarges from panel to panel, so does the range of the fictional world with which the character can interact and into which the

character's cognition can extend. The expanding field of perception, marked and paced through the shifts of point of view between the panels, in other words, corresponds to the way in which more of the fictional world becomes accessible and available to Dizzy as she is released from prison. From the constrained space in which she focusses on the photograph of happier days and on her religious devotion, she moves into a much wider and less pre-structured environment.

Tracing the couplings between mind and matter also opens a new perspective on the written, verbal narrative of the novel. Consider the following passage from Alexandre Dumas' *The Three Musketeers* (1844):

> Dans la rue de Seine, il rencontra Planchet, qui était arrêté devant la boutique d'un pâtissier, et qui semblait en extase devant une brioche de la forme la plus appétissante.
>
> Il lui donna l'ordre d'aller seller deux chevaux dans les écuries de M. de Tréville, un pour lui d'Artagnan, l'autre pour lui Planchet, et de venir le joindre chez Athos – M. de Tréville, une fois pour toutes, ayant mis ses écuries au service de d'Artagnan. (2011: 350)[1]

While the servant Planchet pushes his nose against the window of the bakery, admiring a formidable brioche from a distance, the world looks very different for his master d'Artagnan. He moves through the city, ordering horses to be saddled and brought to him, and knowing that the resources of the powerful captain of the musketeers are at his disposal. The whole world is 'available' to Dumas' adventuring protagonist as he prepares his departure to retrieve the queen's jewels from Britain. More generally, we could say that the extended mind perspective invites narratology to consider the ways in which characters and their fictional

worlds are related, and how fictional worlds are shaped very differently for different kinds of characters. Perception, agency and the range of possible interactions are connected in a way that includes but also reaches beyond more traditional notions of focalisation and characterisation here.

The correspondence between the embodied clues of the changing point of view with the increasing field of perception and the narrative process of Dizzy's release from prison, and that between the embodied appropriation of the world and the respective statuses of master and servant with d'Artagnan and Planchet, can be considered in terms of what the psycholinguist Lawrence Barsalou calls 'situated conceptualisation' (see Barsalou 2003; 2016; see Kukkonen 2013 for an earlier discussion of situated conceptualisation in graphic narrative). According to Barsalou, the comprehension of concepts depends crucially on our running embodied simulations of what it is like to engage with or experience what they reference. The concept of 'table' or 'anger', for example, are meaningful because we have sat at a table and we have been angry before and can summon an embodied simulation of this experience to support our comprehension of this concept. Arguably, the aspects on the page that evoke an embodied simulation on the part of readers through motor resonances with the represented bodies and their movements (in graphic narrative) or with motion verbs, descriptions of bodily states, and indicated directions (in verbal narrative) support readers' comprehension of the conceptual level of the narrative.

When Dizzy makes her decision in *100 Bullets*, Azzarello and Risso present readers with a poignant use of situated conceptualisation. On this page, we see images of Dizzy's husband and child, walking outside and eventually getting killed in a drive-by shooting, in a series of panels. At the bottom of the page is an oversized gun, held by Dizzy's hand, with the dead bodies of her husband and child lying on her trigger finger. When we investigate the composition of the page more closely, it seems that, in addition to the path indicated by the

panel sequence, there is also a diagonal trajectory along which the bodies of Dizzy's husband and child are falling across the page and land on her trigger finger. The metaphors of the 'weight' and 'impact' of their deaths are literalised as the cause for Dizzy's decision to pull the trigger and take revenge, as the graphic narrative makes use of situated conceptualisation with an embodied rendition of what goes on in Dizzy's mind.

The extended mind hypothesis leads the narratologist to train her attention on the way in which characters perceive the fictional world as 'available' to them, the way in which they interact with the world and manipulate its material constitutedness in an extended process of cognition, and how conceptualisation is situated in embodied cues in the sequence of panel perspectives or in the composition of the comics page. Such a perspective invites us to consider the ways in which character, fictional world and meaningful structurations are entwined within the representations of fictional worlds and in their different mediations of novels and graphic novels. It continues the work of cognitive narratologists like Alan Palmer (2004; 2011) who suggests moving away from analysing fictional minds as based on speech categories exclusively and towards tracing the cognitive processes involved in these representations, an argument which has great potential for the project of transmedial narratology.

2. The Extended Mind's Evil Twin

The extended mind hypothesis, however, would not be the first approach that asks narratologists to consider the ways in which minds and their material, social and cultural environments are entwined. Structuralist, Marxist, Feminist and Psychoanalytical traditions have all foregrounded that an individual's thoughts and actions are (often without their knowledge) beholden to and limited by the larger structures and systems in which they live their lives. Yet the perspective taken by these traditions and that voiced in the context of the

extended mind hypothesis could hardly be more different. Miranda Anderson highlights that in particular 'psychoanalytical theories provide a critical perspective on notions of extendedness, uncovering the dark side of this aspect of human nature' (2015: 41). Proceeding from Anderson's observations, I take as my example for the purposes of comparison here Jacques Lacan's psychoanalytic theory.[2] According to Lacan, everyone is inscribed into the 'symbolic order' of language and the cultural world which we inhabit.

> Symbols in fact envelop the life of man in a network so total that they join together, before he comes into the world [...] the shape of his destiny; so total that they give the words that will make him faithful or renegade, the law of the acts that will follow him right to the very place where he is not yet and even beyond his death (Lacan, 2009, 74-75)[3]

The structures of language (and cultural meaning) shackle the individual into place and, what is worse, constantly leave a painful gap between this symbolic order and what Lacan calls 'the real'. In Andy Clark's (2008) account of the role of language in the extended mind hypothesis, we are presented with a rather different picture. Language, according to Clark, is a much more jovial abstract symbol system that 'can push, pull, tweak, cajole, and eventually co-operate' with processes of embodied cognition (2008: 47). It works as a 'cognitive super-niche', in which embodied protocols of behaviour, learning, experimentation, problem-solving, etc. can be communicated, improved and taught. Language is not given by some mysterious, determinist 'law' (as Lacan would have it), but rather figures as 'a potent overlay that effectively and iteratively reconfigures the space for biological reason and self-control' (59) and an environment that is 'self-engineered' to an astounding degree of complexity (60). The individual in the narrative that Clark unfolds here is profoundly embedded in its linguistic

and cultural contexts. These contexts, however, are continually reconfigured and self-engineered in moment-by-moment reassembly, rather than fixed into an immutable symbolic order.

Literary narrative, however, affords numerous examples where individual characters are embedded into their environment in a Lacanian fashion. Here, I have chosen to discuss as an example Philippe Druillet's *Salammbô* (1980-1989). Druillet places the action of Gustave Flaubert's novel *Salammbô* (1862) away from the mercenary wars in ancient Carthage into outer space in the far-distant future (where also many of Druillet's original narratives are set), and he turns Flaubert's main character, the mercenary captain Matho, into his own protagonist Loan Sloane. In the future Carthage, readers encounter Salammbô on a two-page spread in the full ornament of her station as the high priestess of the goddess Tanit. However, it is very difficult to make out where her body ends and her attire begins, which arabesques belong to her headdress and which to the decorations of the palace, and when exactly the shoulder pads of her dress merge with the columns between which she stands. Salammbô in Druillet is ensconced in the stiff and unmovable symbolic order of the splendour of Old Carthage, and this is illustrated by her lack of movement and the difficulties which readers have in distinguishing between her body and elements of her environment. When we look into Flaubert's novel, we find a rather similar strategy:

> Des femmes dormaient en dehors des cellules, étendues sur des nattes, Leurs corps, tout gras d'onguents, exhalaient une odeur d'épices et de cassolettes éteintes ; elles étaient si couvertes de tatouages, de colliers, d'anneaux, de vermillon et d'antimoine, qu'on les eût prises, sans le mouvement de leur poitrine, pour des idoles ainsi couchées par terre. ([1862] 2011, 136)[4]

Making part of a description of a sweeping vista of Carthage, the women are covered by the accoutrements of culture to such a degree that it becomes difficult to discern whether they are women or '*idoles*' made of stones for the ornamentation of the palaces and temples. Even though Druillet takes his *Salammbô* into a very different time and space from Flaubert's imagined antiquity, his adaptation is very faithful when it comes to the way in which individuals are embodied and the degree to which their extension into the environment resembles the 'total network' of Lacan's symbolic order.

Indeed, the presentation of Salammbô as an object to be looked at in Druillet's graphic narrative recalls key points from Laura Mulvey's influential article 'Visual Pleasure and Narrative Cinema' ([1975] 2009) that apply Lacanian psychoanalysis to the medium of film. Mulvey argues that the cinematic apparatus of the camera and its point of view are shaped by the (patriarchal) logic of the symbolic order that turns men into beholders and women into objects to be beheld. She writes, 'psychoanalytic theory is thus appropriate here as a political weapon, demonstrating the way the unconscious of patriarchal society has structured film form' ([1975] 2009: 432). To the extent that graphic narrative works through images and perspectives, the same might be true for the form of graphic narrative and the ways in which it, too, presents and perspectivises male gazes and female bodies. More generally, when protagonists hover between animate and inanimate states, as does Salammbô in Druillet and in Flaubert, there is arguably a tendency toward a concurrent objectification of their bodies.

Yet the bodies in the symbolic order of Druillet's Carthage are not necessarily immobile. When for example the 'Moloch', god of the ancient Carthaginians makes his appearance, Druillet presents the Carthagians as engaged in the movements of a religious ritual. The god is presented in the guise of a giant furnace with the linked wheels of a locomotive and with chains of moving staircases and conveyor belts leading to its open jaws. Its metallic teeth are echoed in the pointed head-dresses of the priests, and the connected

series of links between its mechanical parts reflects the chain of human beings walking in a kind of conga-line towards their sacrifice into the mouth of Moloch. Again, human bodies and their cultural and social environments are presented in rigid similarity. Here, it is not just the material constitution that is alike but also human movement seems to follow the rhythm of the machine. The Carthaginians are not independently exploring their environment, making full use of their sensory-motor skills, as Noë envisages it; their actions are automated rather than autonomous. When Lacan discusses Edgar Allen Poe's 'The Purloined Letter' ([1966] 1988), he highlights a similar kind of automated chain within the symbolic order in the short story. As the letter moves from the possession of the queen, to that of the minister and to that of Auguste Dupin, it constitutes what Lacan calls a 'signifying chain' ([1966] 1988: 43) which places the characters of the short-story automatically into different subject positions without any of them noticing or having much control over it. As Lacan explains, 'rather than possessing the letter, the letter possesses [the character]' ([1966] 1988: 64). Druillet's characters are similarly inscribed in the sacrificial ritual and determined in their actions by the larger logic of the symbolic order and its signifying chains that come to be materialized in the representation of mechanical and human links in the ritual of Moloch.

Also when we compare the two comics in terms of 'situated conceptualization', we find that Druillet offers a take rather different from Azzarello's and Rizzo's. In the great battle scenes between the Carthaginian army and the mercenary bands that challenge them, Druillet begins with a reasonably clear presentation of the adversaries. A long panel at the top of the page might present an establishing shot showing the scene: on the main panel, the two armies can be identified through the colours and patterns of their coats of arms, and, in some places, individual fighters are shown attacking and defending, thus standing in for the mass of the two armies that face off. As the battle continues, however, it once again becomes more difficult to make out where individual bodies and armours are delineated, where man ends and

mount begins and where the lines between friend and foe run. At some point, Druillet juxtaposes the confusing images of the midst of battle with smaller panels in which we see abstract renditions of battle formations. These schematic drawing present an analytical, conceptual view of manoeuvres on the battlefield with squares, triangles and arrows, but it is not possible to discern how they would correspond to the goings-on in the mess of bodies, animals and weapons in the panels that represent the main battle events. The best-laid plans of the commanders come to naught. Similarly, readers' attempts at connecting the embodied cues on the page with the larger pattern of 'situated conceptualisation' are thwarted. These bodied are attacked, mutilated and killed in such a muddle that it becomes impossible to discern a meaningful arrangement, much as when Dizzy thinks through the killing of her husband and child in *100 Bullets*. Readers' embodied engagement with the cues of bodies, their movement and the overall composition of the page does not cohere into a 'situated conceptualisation'. Rather, it seems that Druillet mocks any such attempt at making sense of the battle scene by introducing the strategic drawings.

The Lacanian model does not exclude the possibility of 'situated conceptualisation'. In fact, we have analysed the introduction of Salammbô and the presentation of the ritual of the Moloch according to such a model. 'Situated conceptualisation' can easily represent the rigid patterns of the symbolic order. In the battle scene, however, Druillet is after something else. He presents a moment when 'situated conceptualisation' explicitly fails and when trauma and affect break through its cracks. Slavoj Žižek discusses through a Lacanian model the conflicts among the Balkans in the 1990s and argues that here the breakdown of the symbolic order of Soviet ideology has led to the 'real', that lies behind the symbolic order and stands in constant tension with processes of symbolisation, to come to the fore (1993: 200-237). Arguably, we have something similar in Druillet. While such instances take centre-stage in the writings of Lacan and his followers, the proponents of the extended mind have surprisingly little to say

about moments when language fails. It seems that, in these cases, the self-engineering human mind will rise to the occasion, fix the momentary problem through the affordances of the abstract symbol system of language, or develop a more long-term solution within the complexly embedded cognitive super-niche. The so-called problem-solution model indeed underlies much of the thinking in the extended mind hypothesis (see Clark 2008; see Kukkonen forthcoming for a critique), and it seems as if the proponents of the extended mind point towards the ingenious solutions which the embodied mind can create while the proponents of the Lacanian model dwell on the problem and its affective dimension.

3. The Fully Extended Mind

We have seen that the relationship between the embodied individual and the cultural environment into which it is extended is envisioned in profoundly different ways by the extended mind hypothesis and the psychoanalytical tradition. To give a perhaps slightly caricaturist summary, one could say that for Clark, Chalmers and Noë, we all turn into little d'Artagnans, controlling and engineering our environments, whereas for Lacan and those critics who take up his perspective we are doomed to the fate of Planchet pressing our noses against the shop window of the symbolic order, longing for a desirable brioche. It is not my interest in this article to advocate one perspective over the other (let alone determine which one of them is 'correct'). Rather, I wanted to introduce two profoundly different conceptualisations of the relationship between the embodied individual and its material, cultural and social environments in order to begin mapping the scales along which this undoubtedly complex encounter can be analysed in literary narrative.

Let us begin our survey by considering the ways in which the world and the character are related to each other. In *100 Bullets*, we had a rather flexible relationship between Dizzy Cordova and the items that facilitate her decision-making, such as the gun, the crucifix and

the attaché case. Dizzy can rearrange these items, she can make them unavailable or consider her options for them. When she is released from prison, these items fit into a handy box. Salammbô in Druillet's comic, on the other hand, cannot pack up her things and leave Carthage. She is literally installed in this environment, through her social role as priestess and daughter to Hamilcar, but also through the ways in which she is constantly connected with buildings and accoutrements of her material surroundings. With *100 Bullets* and *Salammbô* as points at either end, we can hence establish a scale for the relationship between world and character, which can be either completely separable and mobile or completely connected and immobile (see figure 1). On a second scale, we can mark the degree to which the actions of characters are under these characters' control and the degree to which these actions are coerced by the logic of the situation. In *100 Bullets*, Dizzy is generally an autonomous agent, and also other characters use the affordances of the attaché case to take fate (to some extent) into their own hands. Indeed, some characters choose to use the attaché case for purposes other than those indicated by its options (see Kukkonen 2013 for an extended discussion of *100 Bullets* as a treatment of postmodern ethics). In *Salammbô*, on the other hand, we have the participants of the ritual who show no autonomous agency but rather fall into step with the mechanical movements of the Moloch machine and the ritual. The actions of characters can thus, at their extremes, be either controlled or coerced.

The final scale relates to situated conceptualisation. When a page in *100 Bullets* presents the falling bodies of Dizzy's husband and child as if they were falling on her trigger finger, the impact causing her decision, the composition of the page configures into an overarching pattern of meaning. In other words, these embodied cues become conceptualisable, as their constellation and the overall plot of the narrative correspond. In the battle scenes in *Salammbô*, by contrast, there is no correspondence between the embodied cues and any conceptual pattern. The embodied simulation which they provoke is experienced

in what we could call an ‘immediate’ fashion, without the patterns of meaning that allow us to relate to them in a more or less analytical fashion. The first two scales are related to how embodied individuals are represented within their environments; the third scale to the representation itself either in visual form or in linguistic forms.

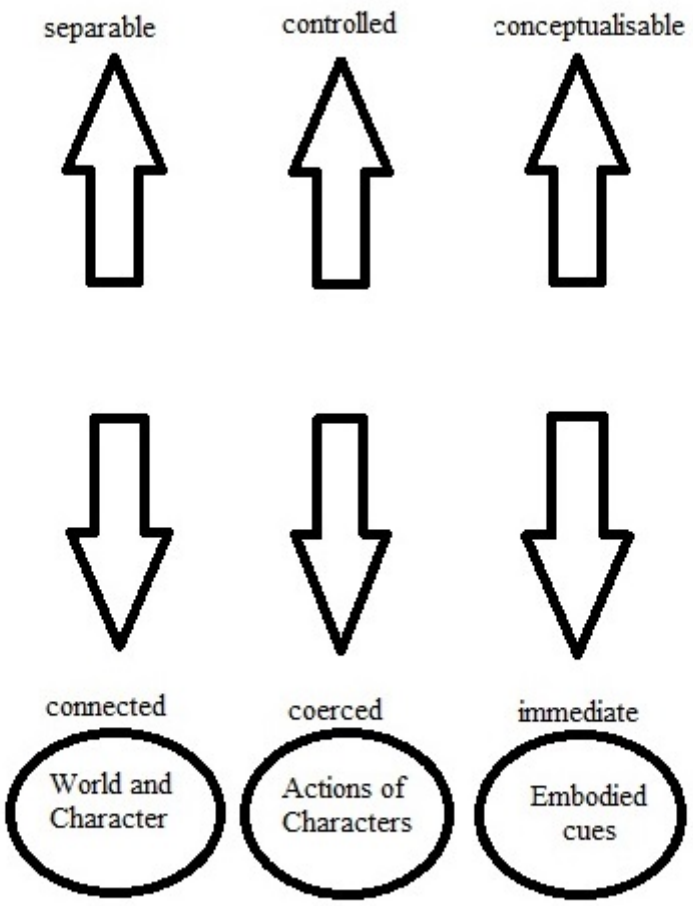

Figure 1. The three scales of the Fully Extended Mind

Most graphic narratives and, indeed, most narratives generally speaking will move between the extremes of these scales. The account of the battle between the mercenaries in Druillet's *Salammbô*, as I have observed, begins for example with embodied cues that are reasonably conceptualisable. It is only when the real horror of the battle comes to the fore that the correspondence in situated conceptualisation starts to break and that the cues begin to gain immediacy. Similarly, we can find instances in which d'Artagnan's actions are coerced rather than controlled (usually, when he encounters Milady) and in which he seems strongly connected to his environment (namely, before he leaves Gascogny and the narrative proper begins). Some narratives are overall located more on the upper end (such as *The Three Musketeers* and *100 Bullets*) or on the lower end (such as *Salammbô*) of the scales that span the fully extended mind. Besides a general characterisation of narratives, these scales allow us, perhaps more interestingly, to trace how the treatment of the extended mind progresses throughout a single narrative.

The fully extended mind relates closely to issues of what narratology calls 'narrativity', namely, the qualities that make a text more or less like a narrative (see Abbott 2008 for an introductory discussion of the topic). By and large, it seems that a high degree of narrativity would require world and character to be separable and the actions of characters to be autonomous; the representation should be conceptualisable so that the overall plot of the narrative can cohere. The three scales do not all need to be on the upper end for a story to have narrativity, however. In Samuel Beckett's *Waiting for Godot* (1953), for example, world and character are closely connected and the two protagonists show little autonomy of action.[5] However, what happens on the stage (or what we read on the page) is nevertheless highly conceptualisable because it adds up to an allegory of futility, and hence carries a significant degree of narrativity. Also *Salammbô*, as we have seen, has passages that show this

combination of inseparable worlds and character, coerced actions and high conceptualisability, that lead narrativity to its tendency toward static sumptuousness.

Both the extended-mind hypothesis in philosophy and the tradition of Lacanian psychoanalysis have informed these observations. The extended mind hypothesis gave me the key impetus to look at graphic narrative and the written narrative in the novel in a new way. It has, however, a certain optimistic bias towards the possibilities that are opened up by the notion of extension and does not always engage with the downsides. In order to explore the range of these impulses from e-cognition and other strands of philosophy of mind, psychology and the neurosciences, it makes sense to turn our gaze at the dark underbelly of the phenomena which they describe. Arguably, we can find able guides in in the traditional approaches that have informed the humanities for a very long time now. Now that cognitive narratology has come into its own, it is time to say hello to our forgotten twins and include them in the project of extending the mind fully.

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Žižek, S. *Tarrying with the Negative: Kant, Hegel and the Critique of Ideology*, (Durham: Duke University Press, 1993).

[1] 'In the Rue de Seine, he met Planchet who had stopped in front of a bakery and seemed in ecstasy about a brioche of the most appetising shape. He gave him the order to go and saddle two horses in the stables of M. de Treville, one for d'Artagnan and one for Planchet, and to meet him at Athos' house. Once and for all, M. de Treville hat put his stables at the disposal of d'Artagnan.' (my translation, KK):

[2] Another promising candidate for the 'twin' of the extended mind would be Karl Marx and the notion of 'historical materialism', especially given that Clark in certain places in *Supersizing the Mind* seems to employ language familiar from the context of neoliberalism. He writes, for example, 'The primary lessons of embodiment are thus lessons in economy, efficiency and spreading the load' (2008: 166), as cognition becomes a system where processes are 'off-loaded' and 'out-sourced' and assembly happens 'just in time' and 'on demand'. It would be going too far, however, to characterize the extended mind hypothesis as beholden to any neoliberal ideology, and it seems to me quite possible to phrase its assumptions in the language of craft (as opposed to the capitalist 'alienation' from one's labour), mutual support and contingency systems, as well as the serendipity that arises from slack in such systems. This, however, would be the subject of a different article.

[3] Anderson offers the same reference though from a different translation of Lacan (see Anderson 2015: 54).

[4] Women slept outside the cells, stretched out on mats. Their bodies, greasy with unguents, gave a smell of spices and burnt out perfumes; they were so covered with tattoos, necklaces, rings, vermilion and antimony, that but for the movement of their chests, they might have been taken for idols lying on the ground (Flaubert [1862] 1977: 77).

[5] My thanks to Luc Herman for asking about Beckett when I presented this material at the University of Antwerp.