The Reader's Virtual Body

Narrative Space and Its Reconstruction

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This essay is concerned with the reader's imaginative projection into fictional worlds, and with the role of such projective acts in the reconstruction of narrative space. The essay has three parts. In the first I investigate the fictionalization of the reader's virtual body. By "fictionalization" I mean "actualization within the fictional world." In particular I argue that some passages provide the reader with a fictionally actual body on which to ground his or her virtual body. In the second part I examine what happens when the reader's virtual body is left to itself, without any fictional anchoring. Finally, in the conclusion I attempt to position all the cases considered on a scale of fictionalization.

My emphasis is not on the reader's real body, but on the reader's virtual body—the counterpart of the real body the reader sends into fictional worlds in order to reconstruct fictional space. This phenomenon is clear-

ly related to what has been described as "being transported" by Richard J. Gerrig (1993: 2–17), "fictional recentering" by Marie-Laure Ryan (2001: 103–5), or "deictic shift" by David Herman (2002: 271–74). For instance, Ryan defines her idea of "fictional recentering" in these terms: "consciousness relocates itself to another world and . . . reorganizes the entire universe of being around this virtual reality" (2001: 104). But as I argue, it is not just the consciousness that relocates itself; rather, narrative texts call upon the reader's virtual body to enter fictional worlds, as part of the process of co-constructing those worlds. No doubt, the authors I just listed are on the right track, but they seem to stop short of examining the phenomenon I have in mind. I argue that their accounts need to be extended along at least two dimensions. First, they seem to overlook the role our body plays in our "being transported" to fictional worlds. Of course, there are reams of pages on the embodiment of our cognitive faculties; it is well beyond the scope of this essay to review that literature.[1] However, I would point out that—since experience is always embodied—our bodily presence in fictional worlds could answer for the increased sense of experientiality some texts give us (that is, the sense that while reading them we are going through an experience).[2] Second, labels such as "being transported" or "fictional recentering" are suggestive, but they are meant to be understood in a metaphorical manner, and this seems to blunt their effect. On the contrary I believe that their full cognitive potential is unleashed only when we regard them as describing something that virtually happens to our own bodies. In a way we just need to take these metaphors more seriously.

Before turning to my case studies, however, I want to say a few words about the reader's virtual body and its relationship to his or her real body. To be sure, the reader's real and virtual bodies are linked, as Elaine Scarry acknowledges: the reader's eye and hand movements (visually scanning the text and turning the pages) are sometimes "incorporated into the motion of fictional persons" (2001: 148) with the aim of making it more vivid—that is, more similar to perceived motion than to imagined motion. If Scarry is right, something happening within the fiction is grounded in or tied to the reader's nonfictional routine actions; but since the reader doesn't do much apart from scanning the text and turning the pages, these slight movements cannot account for the vari-

ety of movements within the fiction—including the movements of the reader's fictionalized body. Thus, we need to turn to a more sophisticated model of how the reader's virtual body is linked to his or her real body. Psychological work on text processing can provide us with such a model. Specifically, Rolf A. Zwaan has developed what he calls the "Immersed Experiencer Framework" (IEF) for language comprehension. What Zwaan argues is basically that in order to comprehend a sentence, the comprehender has to "construct an experiential (perception plus action) simulation of the described situation" (2004: 38). Thus, the comprehender is "an immersed experiencer" and comprehension is "the vicarious experience of the described situation" (2004: 38). The underlying assumption of these claims is that the comprehension of a narrative passage triggers a mental simulation, usually in the form of mental imagery. According to the prevailing view, such imagery uses the same neuronal resources on which we draw for real perception (Kosslyn, Ganis, and Thompson 2001). This is shown by the so-called Perky effect: we are significantly less effective at processing visual stimuli when they are presented in the same part of our visual field where we are instructed to imagine something (see Bergen et al. 2007).

If mental simulations rely on our sensorimotor system, they must be subject to the same constraints of perception and thus have the same internal structure. My argument rests on this assumption. In short, simulation and mental imagery are embodied; they are deeply rooted in our real body. And even when the reader is required to make a "deictic shift" (that is, to imagine another world with a different set of space-time coordinates), the reader brings along a virtual counterpart of his or her real body.

A few clarifications are needed vis-à-vis the term *virtual* as I use it in this essay. Following Pierre Lévy (1998), I suggest distinguishing between the real versus the fictional on the one hand, and the actual versus the virtual on the other. The real should not be identified with the actual, nor the fictional with the virtual. Although fictional worlds have their own actual domain, readers can never be *actually* transported to them. Their presence is bound to remain virtual: the sense of "being there" that some immersive novels give us is, it seems to me, an illusion founded on the sense that we *could* be there. Thus I will speak of

a "virtual" body only in order to capture the ontological boundary that divides fictional worlds from the real world, and the fact that reading enables us to visit another world without physically leaving our own. Through imagination and mental simulation, our real body can be used to bridge the ontological gap between "reality" and fiction; its virtuality consists precisely in the fact that it can be detached from the here and now, and projected into *another* here and now.

In this connection it is well known that Maurice Merleau-Ponty's *Phenomenology of Perception* (1945/2002) prepared the groundwork for recent, "second-generation" cognitive science, which is centered on the idea of embodiment (Gallagher and Zahavi 2008: 140). What is perhaps less known is that Merleau-Ponty's conception of the body hinges on the idea of "virtuality." It is not the position we occupy in geometrical space that delimits our body, he explains, but the intentional threads linking us to the world—hence the body as a "centre of potential action" (1945/2002: 121). This means that our body is defined by its virtual access to the world, and this formulation captures neatly the essence of our interaction with both the real world and fictional worlds. In his enactivist approach to cognition, Alva Noë (2004) similarly insists on the virtuality of our perceptions: we have no need to store all the visual details of the world, he argues, because they are already in the world, ready to be retrieved by simple eye and body movements. Likewise, the comprehension of a narrative text grants us virtual access to the fictional world it constructs; but given the structural resemblance between our virtual access to the real world and our virtual access to fictional worlds, our reconstruction of narrative space will be mediated by the same cognitive strategies we adopt to apprehend real space. In what follows I refer to two projective cognitive strategies, variously labeled by cognitive scientists as "walking tour," "body tour," or "route" on the one hand, and "gaze tour" on the other.[3] Both these spatial frameworks—known respectively as "intrinsic" and "relative" (Tversky 1996; Levinson 2003)—rely on the presence of a perceiving subject; but whereas in the relative system the perceiver's body stands still, and his or her eyes roam around the scene, in the intrinsic system it is the perceiver's body that moves through space.

In the next section, I focus on the fictionalization of the reader's vir-

tual body—that is, on passages where the reader is invited to align his or her virtual body with a fictionally actual body. This body is generally a character's, as in the description from Émile Zola's *Germinal* that I examine (Zola 1885/2004). Or, though this is a rather special case, the fictionally actual body can be that of someone who is more a tourist than a permanent inhabitant of the fictional world—such as the visitor conjured by E. M. Forster in the description of the Marabar caves in his 1924 novel, *A Passage to India*. This visitor, I suggest, is a "deputy focalizor." In the subsequent section, I then turn to two texts where the fictionalization of the reader's virtual body is more or less explicitly denied. The first text is a passage from one of the interludes of Virginia Woolf's *The Waves*, a novel that was originally published in 1931 and that provides a prototypical instance of what Monika Fludernik (1996) terms "figuralization," or the projection of the reader into the fictional world, in the absence of any fictionally actual bodies. The second text is an "aperspectival" description from Gustave Flaubert's 1869 novel, *L'éducation sentimentale*.

Fictional Anchors: Forster's Deputy Focalizor and "Strict" Focalization

This section is dedicated to the fictionalization of the reader's virtual body. Before moving on, however, I would like to point out why it is so important that the reader positions himself or herself (his or her virtual body) in the represented situation. According to Zwaan's Immersed Experiencer Framework, in order to comprehend narrative texts, we need to construe them—that is, to process them so that they can be mentally represented (or simulated). A "construal" typically includes a continuous period of time, a spatial region, a perspective (defined as "the spatio-temporal relation between the experiencer and the situation" [Zwaan 2004: 43]), some referents, and those referents' features. Of special interest here is that, according to Zwaan, perspective is "necessarily and therefore routinely encoded during comprehension" (58), even when it is not explicitly characterized by the text. This means that readers always simulate narrative space from the position they occupy with their virtual body. The degree to which this position is encoded by the

text varies considerably, as recent focalization theory has shown. Manfred Jahn (1999), for instance, distinguishes between "strict" focalization, which employs an individuated reflector-character, and "ambient" focalization, where the reader can choose between a range of different perspectives, all more or less compatible with the text.

Of course, the presence of a fictionally actual body can help the reader position his or her virtual body within the fictional world. This is why the fictionalization of the reader's virtual body is likely to occur in instances of Jahn's strict focalization. However, this fictionalization is not a matter of presence/absence but can rather be understood as a "scalar phenomenon" (Herman 2002: 326), as I hope to make clear later with figure 1. At one end of the scale the reader's virtual body is fictionalized: the reader is encouraged to anchor his or her virtual body to a fictionally actual one. At the other end the text does not cue the reader to anchor his or her virtual body to a stand-in of this sort.

In my view, the fictionally actual bodies into which readers are invited to project themselves can be of two kinds. Usually, they belong to fictional characters. Sometimes, however, the reader's embodiment is mediated by a persona (typically an anonymous visitor or traveler), who has access to the fictional world without being a character of the story. I suggest that these fictional personas (*deputy focalizors* is my preferred term for them) allow for the highest degree of fictionalization of the reader's virtual body, even higher than full-blown characters. This is why I begin my analysis with the following excerpt from Forster's *A Passage to India*, where a deputy focalizor is evoked:

> The caves are readily described. A tunnel eight feet long, five feet high, three feet wide, leads to a circular chamber about twenty feet in diameter. This arrangement occurs again and again throughout the group of hills, and this is all, this is a Marabar cave. Having seen one such cave, having seen two, having seen three, four, fourteen, twenty-four, the visitor returns to Chandrapore uncertain whether he has had an interesting experience or a dull one or any experience at all. He finds it difficult to discuss the caves, or to keep them apart in his mind, for the pattern never varies, and no carving, not even a bees' nest or a bat, distinguishes one from another. Nothing, nothing attaches to them, and their reputation—for they have one—does not depend upon human

speech. It is as if the surrounding plain or the passing birds have taken upon themselves to exclaim "Extraordinary!" and the word has taken root in the air, and been inhaled by mankind.

They are very dark caves. Even when they are open towards the sun, very little light penetrates down the entrance tunnel into the circular chamber. There is little to see, and no eye to see it, until the visitor arrives for his five minutes, and strikes a match. Immediately another flame rises in the depths of the rock and moves towards the surface like an imprisoned spirit; the walls of the circular chamber have been most marvellously polished. The two flames approach and strive to unite, but cannot, because one of them breathes air, the other stone. (1924/1989: 138)

In the first place, it is important to note that the caves are not readily described at all (in the novel the description goes on for another half page). Initially the narrator throws a few numbers at the reader: the space of the caves is hastily measured and reduced to geometrical shapes (a straight tunnel, a circular chamber). Then, he adds—ready to move on—that the caves are all like that. But this brief description gives us only a very vague sense of "what it is like" to visit the caves, and if the description had stopped before the appearance of the unnamed visitor, it would have been legitimate to regard it as rather uninteresting. As Marie-Laure Ryan argues in a study of how people map out the spatial dimensions of storyworlds, "people read for the plot and not for the map" (2003: 138), tending to ignore the spatial setting when it does not add to the meaning of the text. If this does not happen here, it is because the narrator hesitates and introduces an anonymous visitor. In short, the visitor brings an experiential dimension, which was largely absent from the first part of the description.

Furthermore, there is no doubt that this persona has direct access to the fictional world of *A Passage to India*, and this is why this description cannot be regarded as an instance of Herman's "hypothetical focalization," which entails an explicit "appeal to a hypothetical witness, a counterfactual focalizor" (2002: 311). The character's visit to the caves is neither hypothetical nor counterfactual. On the contrary, it should be understood as fictionally real since the reader has to rely on the anonymous character's experience in order to make sense of Adela Quested's subsequent visit to the caves (more on this soon). It should be under-

scored, however, that this character is a stranger to the *story* of Forster's novel. He is instrumental in conveying a clear sense of "what it is like" to visit the Marabar caves, but the narrator dismisses him as soon as his purpose is achieved. Thus, past the point where the preceding quotation ends, the second paragraph of the description concludes: "The cave is dark again, like all the caves" (1924/1989: 139). And the visitor vanishes, never to be seen again. What I argue here is that the final disappearance of the anonymous visitor takes on a deeper meaning in light of the distinctive character of his experience in the caves. Moreover, I submit that this passage discloses its full significance only if the reader's virtual body and the visitor's fictionally actual one overlap.

Above I suggest that the fictionalization of the reader's body leads to an increased sense of experientiality. It is therefore ironic that Forster's unnamed visitor should wonder whether visiting the caves amounts to an experience at all. But this is precisely the point: what the visitor discovers is the irreducibility of that experience to a non-experiential account, such as a description of the caves in the absence of any experiencer. The caves, and the experience that they offer, seem to defy human comprehension, just as they seem to slip from the grasp of human language: "their reputation . . . does not depend upon human speech." This explains why the Marabar caves cannot be mapped, as the narrator had tried to do at first: the experience they bring has to be enacted by the reader through a fictional persona. But what does happen in the caves? The two flames "that approach and strive to unite, but cannot" are deeply symbolic of the relations between the British and the Indian population. They point to the conclusion of the novel, where the narrator says: "the horses didn't want [the friendship between Fielding and Aziz, Europeans and Indians] . . . the earth didn't want it . . . the temples, the tank, the jail, the palace, the birds, the carrion, the Guest House . . . they didn't want it" (Forster 1924/1989: 316). Actually, it is remarkable that the caves do not appear in this list since it is because of Adela Quested's visit to the caves that the relationship between the British and the indigenous population deteriorates. Having entered one of the caves alone, Adela unjustly accuses Aziz of sexually assaulting her. We know absolutely nothing about Adela's visit to the caves; it is a sort of blind spot, or gap, in the narration. But we do know something about the

kind of experience she has gone through; and we know it because—by the time we read of Adela's visit and its grave consequences—we have already undergone that experience ourselves, as readers, through the mediation of the anonymous visitor.

But how can this experience be characterized? In a few words, it is an experience of nothingness, a brush with the nonmeaning that lies at the heart of Forster's novel. In our closest encounter with this core of non-meaning we learn that "whatever is said" inside one of the caves, "the same monotonous noise replies. . . . 'Boum' is the sound as far the human alphabet can express it, or 'bou-oum,' or 'ou-boum'—utterly dull" (1924/1989: 159). This is highly indicative of the threat the caves pose to human language. But the threat doesn't stop here, since the utter negativity of the caves seems to expand in all directions, swallowing up the world: "one of them is . . . a bubble-shaped cave that has neither ceiling nor floor, and mirrors its own darkness in every direction infinitely" (1924/1989: 139). To return to our anonymous visitor and his sudden disappearance, it is as if he were swallowed up by the caves. But—and this is my main contention—the expanding nothingness is not meant to stop at the boundaries of the fictional world. It is intended to extend into, or trespass upon, the reader's own world. When the reader undergoes this experience, he or she touches with his or her hand the core of nonmeaning the caves literally embody. And, of course, this effect is more dramatic because of the fictionalization of the reader's virtual body, in the person of the anonymous visitor.

However, in order to fully understand the relationship between the reader and the anonymous visitor, we must specify the nature of this experience. Is it first-hand experience? I doubt it, since the reader's virtual body cannot be fully actualized in a fictional world, because of the ontological boundary between the real and the fictional. Is it second-hand experience? Possibly. Yet I would make a distinction between the experience mediated by a full-fledged fictional character and the experience mediated by Forster's anonymous traveler. The latter appears to fall somewhere in between actual and vicarious experience; it is, so to speak, a first-and-a-half-hand experience. Why is that? Because, I would argue, the reader and the visitor share a defining feature: they are granted imaginative or perceptual access to the fictional world but cannot act

on it. This similarity encourages the reader to project himself or herself into the visitor, thus making his body a more direct fictionalization of the reader's virtual body than a character's could be. Since he plays no part in the novel's plot, the sole function of Forster's visitor is to explore the caves on the reader's behalf; this is why I would call him a deputy focalizor.

To sum up: I have made two claims so far. In the first place, I have suggested that the second part of Forster's description foregrounds the reader's experience of the fictional world by anchoring his or her virtual body to the fictional body of the anonymous visitor. The quotient of experientiality associated with—or recoverable from—the description is thus increased. In the second place, I have suggested that the overlap between these two bodies facilitates the transfer of meanings between the fictional world and the real world: it is because the reader has had a quasi-firsthand experience of the Marabar caves that he or she can truly understand the nonmeaning around which the plot of the novel revolves.

Of course, anonymous visitors like Forster's are not always used to provide readers with experiential access to fictional worlds. Thus, I now turn to the identification between the reader's virtual body and the fictionally actual body of a full-fledged character—via the technique that Jahn terms "strict focalization." My argument is that though this device is probably less efficacious than the anonymous visitor when it comes to transferring meanings from the fictional world to the real world, character-based identifications can also be used for this purpose. But the first question we have to answer is, how is this identification brought about? Here, an old-fashioned narratological category, Jean Pouillon's (1946: 69–114) "vision avec" (vision with) can set us on the right track: readers tend to use the body of a perceiving character as a prop for their own mental representations. A fictionally actual body lends itself to the reader.

Consider this excerpt from Zola's *Germinal*:

Maheu had the worst of it. Up at the top the temperature reached thirty-five degrees; there was no circulation of air, and the suffocating atmosphere was potentially fatal. In order to see what he was doing he had to hang his lamp from a nail, just by his head; and the continued

heat of the lamp on his skull eventually raised his body temperature to fever level. But it was the wetness that made life particularly difficult. The rock above him, just a few centimeters from his face, was streaming with water, and large drops of it would keep falling in regular, rapid succession, always landing with stubborn insistence on exactly the same spot. Try as he might to twist his neck or bend his head back, they splattered remorselessly against his face and burst. After a quarter of an hour he would be soaked through, and with his body also bathed in sweat he steamed like a wash-tub. That particular morning a drop of water was continually hitting him in the eye, and it made him curse. He didn't want to stop hewing, and as he continued to hack fiercely at the rock, his body shook violently in the narrow space, like a greenfly caught between the leaves of a book and about to be squashed completely flat. (1885/2004: 40)

This passage describes the appalling working conditions in a coalmine in northern France. The rhetorical and ideological appeal to the reader is even stronger if we note that as the imperfect tense in the original makes clear, this is no special day, but the character's routine. If all we have is the English translation, this realization comes as a shock when we read the words "that particular morning" and work backward to reconstruct the temporal aspect of the passage. In any case, despite narrating Maheu's toil, the character is a patient, not an agent, as the opening sentence highlights: the narrow tunnel in which Maheu is forced to work impinges on his body. The few actions he does accomplish (hanging the lamp, twisting his neck, swinging his pickaxe) end up aggravating his position. All in all, what strikes us is not what Maheu does, but the way his body is affected by the surrounding space and the natural forces that permeate it. This passage constructs a perceptual space centered on the worker's body.

The reader's virtual body is not inert, however. The simile that closes the excerpt is quite clear in this respect: the image of a bug crushed between the pages of a book doesn't belong in the mental world of the (illiterate) character. In the context of Maheu's perceptual flow, it sounds out of place, incongruous. Rather, the simile looks like a more or less concealed wink to the reader by Zola. This simile forces Maheu's position on readers by calling attention to the object that is closest to them:

the book they are holding in their hands. What would it be like to be a bug crushed between *these* pages? Like the temporally punctual sentence ("that particular morning"), then, this image recapitulates the larger purpose of the passage, in case that wasn't already clear to the reader. The text reaches its rhetorical peak if the reader positions himself or herself inside the worker's body. In a way, the menace of being "squashed completely flat" that closes the passage is intended for the reader as well. Through this device, Zola manages to convey the labors of the working class to his bourgeois audience, largely unaware of the working conditions of the miners. What is more, he achieves this not by means of generic empathic identification, but rather by prompting the reader's painstaking perceptual projection into the character's body. Maheu's toil is not externally constructed so much as imposed on the reader, who is forced to reconstruct it from the inside.

Again, the text invites the reader to blend his or her virtual body with the character's fictionally actual one—although the blend is less forceful than in Forster's passage. Interestingly, such readerly projections into the bodies of characters have received experimental confirmation. Barbara Tversky describes a series of experiments in which subjects read a narrative engineered so that they could "choose" between an external, observer perspective and an internal, character-centered one. The result was that "readers readily take the perspective of either a character or an object central in a scene, even when the character or object is described in the third person" (1996: 476). What I would like to add here is that in passages such as the ones I have examined in this section, perceptual information seems to be inextricably linked to the meanings the text prompts us to construct. We have already seen that Forster's deputy focalizor serves the function of "getting across" to the reader the nonmeaning that lies at the heart of the novel, spanning the divide between the fictional world and the real world. Similarly, in the passage from *Germinal*, Zola achieves his condemnation of the working conditions of miners by forcing the reader to assume Maheu's physical position inside the mine. The passage implies that the embodiment of the reader allows meanings to be transferred from the fictional world to the real world. The fictionalization of the reader's virtual presence seems to facilitate this transfer, since the reader is actively involved in the construction of

meaning. The simile involving the "greenfly caught between the leaves of a book" serves this rhetorical function.

Virtual Presences: "Empty Center" and Aperspectival Texts

So far, we have examined two cases where the reader's virtual body takes a fictional shape, one involving what I've termed a deputy focalizor and the other a full-fledged character in the storyworld. What happens, however, when the text explicitly denies the reader a fictional body in which to ground his or her imaginings? In this section I examine two passages where the reader's presence is purely virtual—that is, unsupported by the presence of a fictionally actual body. The first is an instance of Fludernik's "figuralization" (1996: 192–207). Fludernik introduces this concept while discussing Ann Banfield's reading of the descriptive interludes of Woolf's *The Waves*. In Banfield's words, the "unspeakable sentences" of the interludes present "a deictic centre . . . without any explicit or implicit representation of an observer" (1987: 273). The sentences at issue are situated around an empty deictic center but do not contain "subjective elements and constructions implying the mental states of a personal subject" (273). Still, Fludernik argues that "the empty centre, if it remains empty, a mere centre of perception, can induce reader identification, allowing a reading of the story through an empathetic projection of the reader into the figure of an observer 'on the scene'" (1996: 198). This process of figuralization, as characterized by Fludernik, is well exemplified by the following passage from Virginia Woolf's 1931 novel *The Waves*:

> The sun struck straight upon the house, making the white walls glare between the dark windows. Their panes, woven thickly with green branches, held circles of impenetrable darkness. Sharp-edged wedges of light lay upon the window-sill and showed inside the room plates with blue rings, cups with curved handles, the bulge of a great bowl, the criss-cross pattern in the rug, and the formidable corners and lines of cabinets and bookcases. Behind their conglomeration hung a zone of shadow in which might be a further shape to be disencumbered of shadow or still denser depths of darkness. (Woolf 1931/2000: 112)

What strikes me while reading these lines is the way the narrator uses sunlight as a stand-in for human vision. Despite the absence of human observers on the scene, it is fairly easy to imagine the situation described here. And this happens because we follow the sunbeams in a movement that takes us from an outside view of the house (seen from a certain distance) to a close view of the window and eventually to an inspection of the kitchen (from the window, through which sunlight peers). The movement is gradual, and it is not hard to accommodate it in our imagination. Indeed, this passage seems to support Scarry's (2001) claim that light is one of the principal means to set our mental images in motion (she calls this technique "radiant ignition"). Somewhat paradoxically, despite there being no fictional bodies with which the reader's virtual body can overlap, we are carried on a "body tour" by sunlight itself. Thus, Woolf's passage illustrates how spatial descriptions can be built around the absence of any fictional counterpart for the reader's virtual body. This point can be further clarified by a comparison with Gaetano Kanizsa's (1955) famous triangle: in that case, we perceive the illusory contours of a triangle that is *not* there because the geometrical shapes arranged around it appear occluded. In Fludernik's figuralization, we project ourselves into the empty deictic center in order to fill a gap the text has left for us. To be sure, in these descriptive interludes there is no fictionally actual body to which we can anchor our virtual presence. Yet, this absence is so conspicuous that we almost automatically see it as indicative of our own (virtual) presence, just as we naturally perceive Kanizsa's triangle—even if it is not there.

However, we should not forget that figuralization is a fairly uncommon device. Most descriptive passages that are "aperspectival" (to use Franz Stanzel's [1984] term) do not revolve around the reader's virtual presence—and some of them seem to challenge it. Take, for instance, this passage from Flaubert's *L'éducation sentimentale*, a spectacular example of what Jahn calls "ambient focalization":

the sun set and a cold wind was whirling up clouds of dust. The drivers sank their chins into their neck-cloths, the wheels started to turn faster, rasping on the asphalt, and off the carriages went down the avenue at a brisk trot, wheel to wheel, swerving, overtaking, and finally dispersing at the place de la Concorde. Behind the Tuileries the sky turned slate-grey;

in the garden the trees formed two huge clumps topped with indigo; the gas jets were lighting up and the Seine, greenish in colour over its whole expanse, was shredded into shimmering silver against the piers of the bridges. (1869/2000: 26)

To be sure, it is extremely difficult to produce a global mental representation of the situation described in this passage. The difficulty stems, I believe, from the lack of any explicit criterion of spatial organization (hence the impression of disconnectedness we get from this description). Although Frédéric Moreau is present on the scene, in Peter Brooks's words "there is no compelling reason for [attributing to him this view], since we are given no indication of his personal investment in the seen" (1985: 182). Thus, connecting the various settings mentioned in the passage is entirely up to the reader.[4] I take this text to describe three different settings: the avenue (in real-world Paris, the "avenue des Champs-Elysées") leading to place de la Concorde, the axis along which the carriages move; the Tuileries and their garden (again, the reader relies on real-world information to associate the garden mentioned here with the Tuileries; otherwise, he or she could be led to consider it a fourth setting); and the Seine. The problem is that we don't know how to relate these elements: it is not clear, for instance, whether this scene invites use of the cognitive strategy of the "gaze tour" or else that of the "walking tour" or route. In a gaze tour the reader would imagine seeing this scene from a fixed position and turning his or her gaze from one setting to the other. In a walking tour the reader would imagine moving within the fictional world. The reason why both solutions are unsatisfactory is that neither the relative positions of the settings (in the gaze tour) nor the reader's virtual movements (in the walking tour) are specified by the text. This is an elliptical description: in Zwaan's terms there seems to be an insufficient overlap between the various "attentional frames" (or settings).

Yet, Flaubert's passage is far from being unimaginable: with some work, a mental representation of the scene can be produced. According to Tversky, "consistency of perspective within a discourse can provide coherence to a discourse, rendering it more comprehensible. Switching perspective carries cognitive costs, at least for comprehension" (1996: 469). And, of course, the cost is even higher if the transitions between

different perspectives are suppressed. Now the question is: does running a mental simulation of the scene described here force the reader to decide on the relative position of—say—the Seine and the avenue? Probably not: mental images are far more indeterminate than real images, and it is possible that while reading these lines (especially within the context of Flaubert's novel), readers acknowledge the presence of the three settings constructed by the text without feeling the need to map out the spatial relationships among them. The Seine, the avenue, and the garden seem to hover in the reader's imagination; we know they are there, somewhere, but we would be hard-pressed to say where exactly they are to be found. Arguably, though, despite the indeterminacy we do experience the space this text constructs.

Noë's enactivist theory of perception suggests how such spatialization of the storyworld is possible. Research has shown that our retinal image is highly imperfect: it is upside down; it is black and white at the edges; and it has a macroscopic blind spot where the optic nerve passes through it. The question is: where do the continuity and visual richness of our experience of the world come from? According to what Noë calls the "snapshot view" of perception, it is by building a mental model of the world that we make up for the shortcomings of our retinal image. We "take in" the world through our senses; then we fill in the blanks and produce a detailed, gap-free mental image of the world. But Noë refutes this view, largely based on a visual paradigm, pointing out that there is increasing evidence against it: for instance, recent research on difference and change blindness has shown that people are largely incapable of spotting the differences between two nearly identical images and are almost blind to changes outside their scope of attention. Against the snapshot view, Noë contends that the "visual field . . . is not the field available to the fixed gaze. The visual field, rather, is made available by *looking around*. . . . It is no part of our phenomenological commitments that we take ourselves to have all that detail at hand *in a single fixation*" (2004: 57). This leads to the gist of Noë's book: that, in short, perception is a form of action. This does not mean (or does not only mean) that we perceive for purposes of acting or for the guidance of action, but that perception is an active exploration of the environment. Hence, there's no need to download the world onto our minds: it can always be

retrieved through eye and body movements. The blind person making contact with the world through his cane becomes the central metaphor in Noë's account: it stands for *any* form of perception. All in all, we offload our cognition onto the environment: even though we never actually possess the world in all its detail, we *virtually* do so because "[w]e take ourselves to have access to that detail, not all at once, but thanks to movements of our eyes and head and shifts of attention" (2004: 57).

How does all this bear on the passage from Flaubert? Noë's approach suggests that, put simply, the linearity or sequentiality of the text seems to compensate for the lack of information about the exact whereabouts of the various "attentional frames." Like a blind person tapping his or her way with a cane, the reader is immersed in an indeterminate environment and is shown—in sequence—carriages going down an avenue and separating at place de la Concorde, the sky behind the Tuileries, their garden, and the Seine beating against the pillars of the bridges. It does not really matter whether this is a gaze or a body tour. We do not even have the time for this sort of question: we stick to the awareness that we are experiencing this space *somehow*. But how? It is at this point that the structural resemblance between our perceptions and our imaginings comes into play (see Scarry 2001: 9): just as perception is (according to the enactive approach) virtual access to perceptual detail, imagination could be seen as virtual access to our mental images. In other words, we experience the space constructed by this description because we know that we could, at least in principle, rearrange the settings in a coherent and fully determinate mental image. For instance, we could imagine the Tuileries and their garden visible far behind the place de la Concorde, the Seine to the right of the perceiver. We have no need to imagine this, as long as we know that the scene is imaginable—and it must be so, since there are no glaring inconsistencies in the way it is presented. Thus, while the reader is reading a description such as this, his or her body is a purely virtual presence. It *almost* does not seem to count, but it does count, given that (in Kendall Walton's words) "all imagining involves a kind of self-imagining" (1990: 29). Just like perception, imagination is grounded on our sensorimotor skills, on the movements we could perform in order to gain access to imaginative detail.

Conclusion

My starting point for this analysis is the premise that our comprehension of spatial references in narrative contexts draws on mental imagery to produce a simulation of narrative space. Comprehenders are always virtually present in their mental simulations, since imagination and perception seem subject to the same physical constraints: they are both centered on the perceiver's (imaginer's) body. My aim in this essay has been to show that there are various degrees of fictionalization (i.e., of actualization within the fiction) of the reader's virtual body, and that such variable fictionalization can in turn serve a variety of functions.

Let me go back to the passages I analyze in the previous pages in order to position them on a scale of fictionalization (see fig. 1).

Flaubert's passage is the only one that completely denies the fictionalization of the reader's virtual body. Thus, it represents a "zero degree" of fictionalization—the lower end of the scale. In Zwaan's (2004) terms the reader of Flaubert's description has a hard time running a mental simulation of the scene, because of the juxtaposition of several (at least three) settings or "attentional frames," and because of the insufficient "overlap" (connections) among them. However, as I point out, the simulation can be run; it is just that it requires a considerable cognitive effort.

Instances of Fludernik's "figuralization" (such as the brief passage I quote from one of the interludes of Woolf's *The Waves*) are only superficially similar to Flaubert's description. In fact, as Fludernik explains, these texts contain many "features of a subjective nature" (1996: 197). However paradoxical this might sound, they hint so strongly at the reader's virtual presence that this presence becomes *almost* actual within the fiction. To make this point clear I have drawn a comparison between the reader's virtual body in Woolf's passage and Kanizsa's triangle: in both the text and the figure, everything is so artfully arranged that we see the virtual body and the triangle, even if they are not actually there. Again, this is a purely virtual presence; but I believe it *tends* toward actuality within the fiction, and this is why I think that, on a scale of fictionalization like that represented in figure 1, passages such as Woolf's would score higher than Flaubert's description.

Moving on to Zola, we cross the boundary between virtual and ac-

| Jahn's "ambient focalization" (Flaubert, *L'éducation sentimentale*) | Fludernik's "figuralization" (Woolf, *The Waves*) | Jahn's "strict focalization" (Zola, *Germinal*) | Deputy focalizors (Forster, *A Passage to India*) |

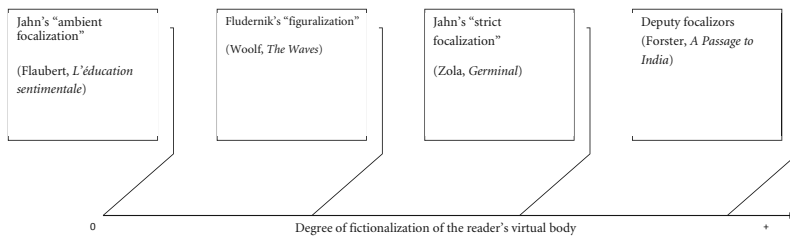| 0 | Degree of fictionalization of the reader's virtual body | + |

Fig. 1. A scale of fictionalization, representing the degree to which the reader's virtual body is actualized within a fictional world.

tual presence. There is no doubt that in the passage from *Germinal* the reader uses the character's fictionally actual body as a prop for his or her imaginings. (As discussed above, this claim is supported by empirical evidence.) This does not mean that the reader's virtual body ceases to be virtual, since virtuality is an integral part of both perception and imagination. It means, rather, that there is a temporary overlap between the reader's virtual body and the character's fictional body, and that this overlap facilitates the reader's production of mental images. Finally, in Forster's passage the actualization of the reader's virtual access to the fictional world is even more evident, since the anonymous visitor has a defining characteristic in common with the reader: he is granted access to the fictional world but, unlike characters such as Maheu, cannot act on or within it. The mysterious character's visit to the Marabar caves has no impact whatsoever on the plot of *A Passage to India*. However, the deputy focalizor's presence prepares the reader for the inner core of non-meaning that will lead to the novel's turning point, the trial against Aziz.

Deputy focalizors such as Forster's unnamed visitor (or the "traveler" at the beginning of Stendhal's *Le Rouge et le Noir* [1830]), must be placed near the upper end of the scale represented in figure 1, since they are, just like the reader, parasitical on the storyworld: both are given perceptual or imaginative access to the fictional world without playing a part in the story. Because of this similarity, the actualization of the reader's virtual body within the fictional world reaches a maximum in the presence of a deputy focalizor. But even in this case the actualization is not complete, since the reader cannot actually be transported,

qua reader, to a fictional world. Virtuality is our only mode of transportation to fictional worlds.

We may ask, however, what is really at stake in the fictionalization of the reader's virtual body? As I hope to have made clear in this article, it is not sufficient to answer that the actualization of the reader's body within the fictional world is designed to facilitate the reader's production of mental images. Fiction is not about the generation of mental imagery. We do not read novels in order to see things with our mind's eye. Rather, the imagery readers produce is, I would argue, a means to an end. Such imagery is one of the resources that interpreters use to make sense of the text they are reading, constructing meanings that can be exported to the real world. Accordingly my analysis has focused on how the fictionalization of the reader's virtual body prompts readers to construct meanings—by having interpreters undergo a quasi-first-hand experience. In the passages from Forster and Zola, for instance, the reader's body, actualized in the bodies of the visitor and Maheu, becomes the hinge on which the communication between the fictional world and the real world turns. It allows for the transfer of meanings between them. This transfer is particularly evident in Zola's description, given its ideological function: forcing upon the bourgeois reader the poor condition of the working class. In this way the passage highlights a fundamental aspect of the reader's "fictional recentering": after visiting fictional worlds we bring back a new perspective on our own. And the reader's involvement—the fictionalization of his or her body—is likely to make such cross-world transfers much smoother, since it foregrounds the structural resemblance between our experience of the real world and our experience of fictional worlds.

Notes

1. For a comprehensive survey of approaches to the embodied mind, see Raymond Gibbs (2005).
2. I am using the term *experientiality* in a sense broadly analogous to Monika Fludernik's (1996: 12–13), even though—unlike Fludernik—I place a premium not on the represented experience of characters but on the reader's imaginative experience.
3. On these cognitive strategies, see David Herman (2002: 280–81).

4. I take "setting" in the specialized meaning proposed by Ruth Ronen (1986). In short, "a setting is distinguished from frames . . . in being formed by a set of fictional spaces which are the *topological focus* of the story" (423).

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