

Narrative Fiction and Cognition: Why We Should Read Fiction

Vera Nünning

Ruprecht-Karls-Universität Heidelberg, Anglistisches Seminar

Kettengasse 12, D-69117 Heidelberg, Germany

Email: Vera.Nuenning@urz.uni-heidelberg.de

Abstract This essay connects two strands of psychological research with insights from narrative theory in order to explore the cognitive and ethical potential of fictional narratives. After a brief introduction to psychological research on the persuasive power of fictional stories to change readers' beliefs and to improve readers' abilities of understanding other human beings, this essay examines which kinds of stories and which features of fiction can have such an impact on readers' minds. The essay focuses on the potential of fiction to enhance readers' abilities of social cognition, since they form a crucial basis of ethically informed behavior. The last part of the essay highlights further fields of research opened up by this combination and interrelation of psychological research and the theory of narrative.

Key words ethics; cognitive narratology; narrative conventions; multiperspectivity; simulation

Author Vera Nünning is professor of English philology at Heidelberg University, where she has also acted as pro-rector for international affairs. She has published books on eighteenth, nineteenth and twentieth century British literature and (co-) edited 21 volumes on contemporary literature and narrative theory. She was a fellow in two Institutes of Advanced Studies and is associate editor of three book series and the international journal *English Studies*. Her most recent publications include *Reading Fictions, Changing Minds* (2014), and an interdisciplinary collection of essays, *Unreliable Narration and Trustworthiness: Intermedial and Interdisciplinary Perspectives* (2015).

Both narrative fiction and cognition are wide fields of research which have attracted the interest of many scholars, particularly in cognitive narratology. In this essay, however, I want to pursue a different approach to the cognitive value of fictional stories and build on psychological research which has demonstrated that reading

fiction changes readers' minds as well as their cognitive abilities. Unfortunately, this psychological research on the cognitive effects of reading fiction is not well known in literary studies, even though it testifies to the cognitive potential of fiction and can supply important arguments for the value of fiction. According to these studies, reading literature is more than a pleasurable, but ultimately useless pastime; instead, it leaves traces in readers' minds and influences their cognitive abilities. Some of the results of this research are not only interesting to literary scholars trying to understand the cognitive and ethical value of fiction, they can also be fruitfully combined with categories gleaned from narrative theory and narratology. I will therefore interlace significant results of cognitive narratologists such as David Herman and Lisa Zunshine with those of empirical research in psychology. My main aim is a close investigation into the cognitive potential of fictional narratives to enrich our comprehension of why (and which) stories can improve readers' interpersonal abilities and change their beliefs.

This essay explores two issues which are important to ethical literary criticism. On the one hand, the essay asserts the power of fiction to change readers' beliefs and attitudes, which are at the core of people's behaviours and their individual ethics. On the other hand, this essay examines in how far particular kinds of stories can enhance readers cognitive abilities. Since these abilities to understand other people and oneself are necessary for social interaction and coexistence, they form a crucial basis of an ethically informed behaviour: in order to act in a pro-social and ethical way, one has to have the ability to understand others and the particular situation they are in.

In the following, I will begin by highlighting two strands of psychological and neurophysiological research which have demonstrated that reading fiction can have two different kinds of effects on readers' minds. First, the persuasive power of fiction has to be reckoned with. Contrary to prevalent beliefs, even "untrue," fictional stories, can change readers' beliefs and their cultural encyclopaedia. A second branch of research is concerned with the potential of fictional stories to improve readers' abilities to understand other human beings and themselves. After a very short introduction to these two tendencies in psychological research, which builds on my essay on "The Ethics of Fictional Form" I will explore which kinds of stories, and what features of fiction can result in the improvement of readers' cognitive skills. Since most psychologists assign an important role to readers' "simulation" of the thoughts and feelings of the characters, I will probe more deeply into the possible benefits of these kinds of simulation, and analyse their relation to particular features of fictional stories. In a next step, I will point out

some benefits of reading fiction that go beyond simulation and are based on features such as multiperspectivity and particular aesthetic devices. The last part of the essay will highlight some further fields of research opened up by this combination and interrelation of psychological research and the theory of narrative. A more elaborate discussion of these and other issues can be found in my book *Reading Fictions, Changing Minds* (2014), which this essay draws on (mainly on chapters 5 and 6).

1. Establishing Links between Reading Fiction and Readers' Minds

1.1 The Persuasive Power of Fiction

There are two fields of psychological research in which the impact of reading fictional and factual stories on readers' minds has been demonstrated. The first of these enquires into the persuasive power of fiction. Many experiments have shown that reading stories has cognitive effects; engaging with fiction can even persuade readers to believe in nonsense. Fiction can change readers' beliefs, it can influence what readers think about alleged facts and causes of events. Reading stories can work as powerful means of modifying readers' mental encyclopaedia and changing their attitudes; it can even influence their personality traits (Mar, Oatley, and Peterson; Green, Brock, and Kaufmann 313; Djikic, Oatley, and Moldoveanu 28). At first sight, these results seem surprising: who would have thought that a simple story can induce North American students to believe that, for instance, eating chocolate helps you lose weight or that brushing your teeth is bad for your gums? This is exactly what studies have found, however, and these initial findings have been replicated and broadened in scope. What is more, many experiments have shown that fictional as well as factual stories have this potential of persuading readers. Even though readers are, as often as not, aware of the fact that fictional stories do not aim at providing a correct account of the real world, they still incorporate fictional 'facts' into their own knowledge stores. We therefore have to reckon with the persuasive power of fiction.

If one takes this potential of fiction seriously, it opens up highly interesting fields of research not only for psychologists, but also for literary scholars. Psychologists have demonstrated that reading fiction can have long-term cognitive effects and persuade readers to believe a plethora of things. In order to examine what kinds of fictional texts are responsible for and can enhance these persuasive effects of reading, we need the abilities of literary scholars to analyse and interpret fictional texts. Exploring the persuasive power of fiction is also important to ethical criticism: if fiction can indeed change readers' knowledge, their values and even

their self-concept, it is worthwhile investigating those features of fiction which have these effects. So far, the persuasive power of fiction has been related to the degree of transportation, a term which designates the degree of immersion in a text, i.e. the extent to which readers forget about their immediate environment and enter the fictional world. The degree of the reader's immersion in a text is related to the degree of persuasiveness of a story: readers who are more "transported" or immersed in a story are far more likely to be persuaded that the fictional "facts" correspond to reality, while readers who are not transported are less likely to integrate the fictional facts into their mental encyclopaedia (Green and Dill).

It is important to bear in mind, however, that not each and every fictional text has the same effects on all readers. Some readers do not enjoy reading fiction and have a low degree of "transportability," and even readers who usually like reading fiction, but who are under stress or worried about something, do not become immersed in a story (cf. Vaughn et al.). While the factors related to readers, such as their individual preferences or "transportability," have been researched by psychologists, the factors relating to the particular text have only recently become the object of study (cf. Nünning, *Reading Fictions*). It stands to reason, however, that not every fictional story has the potential to change readers' minds. Moreover, the persuasive effect of fiction is only likely to be realised if fiction is read as fiction, that is if it is not processed in the same way as a factual story or textbook. The persuasive power of fiction is tied to transportation, which presupposes that fiction is read as an end in itself, for pleasure, in a state of immersion, with the reader being entranced by the fictional world.

1.2 The Potential of Fiction to Improve Cognitive Abilities

Another branch of psychological research has demonstrated that reading fiction can improve readers' cognitive abilities. Such abilities of social cognition are necessary for understanding other human beings, their emotions, intentions, thoughts and actions. These interpersonal skills are held to be extremely important, because they make communication and action in large, complex societies possible. We have to be able to gauge what others think and feel like in given situations, otherwise we would not be able to communicate with them. In many routine situations, this is a highly standardised process: you do not have to know what the cashier at the supermarket thinks and feels in order to find out that she expects you to pay the check. In many interactive, face-to-face situations, the process of communication and of understanding the intentions of others is standardised. In other situations, it is not. Unfortunately, these other situations tend to be the more important ones. It is in these situations, in which it is not directly apparent what the

others think or feel, that our abilities of social cognition are needed.

Several studies have demonstrated the link between reading fiction and improved social ability: readers of fiction do better in tests measuring the ability to understand others, and children whose parents recognise story book titles and read to them perform better in such tasks than those whose parents do not read to them (Mar, Oatley, Hirsh et al.). There is even one pioneer study, recently published in the journal *Science* (2013), demonstrating that reading *literary* fiction improves social cognition, while reading *popular* fiction did not have such an effect (Kidd and Castano). The question is, of course, why particular kinds of fictional stories can have such an effect, while others do not lead to any positive results. This question is closely related to another one, also worthy of further research: which kinds of stories, and which kinds of fictional features, can improve readers' cognitive abilities? Unfortunately, this question has not been answered by psychologists as yet:

[N]arrative fiction is associated with greater social ability. Although this association appears to be a reliable finding, observed across populations [...], there is still much mystery regarding how this association might be accounted for and what it represents. (Fong, Mullin, and Mar 374)

It is this question that I want to shed some light on in this essay. Fortunately, there are a number of psychological studies which provide partial answers to the cognitive value of fiction. The most promising — even though very vague — answer is based on the conceptualisation of fiction as simulation. Reading fiction allows us to simulate the thoughts and feelings of others. Many psychologists and cognitive scientists presume that mental simulation forms an important part of the process of understanding others; it is also necessary to make plans for the future (Goldman; Schacter, Addis and Buckner). For psychologists, simulation is thus a crucial activity, and an influential attempt to explain the cognitive potential of fiction regards fiction as simulation, or rather as a stimulus which initiates processes of simulation in the readers' minds. In this sense, fiction is held to function like a flight simulator used for training pilots to do their job: "Fiction is a kind of simulation, but one that runs on minds rather than on computers" (Oatley 41). Keith Oatley stresses that, just as a pilot can improve his abilities by practising in a flight simulator, readers can do so by engaging with fiction. It is not quite clear, however, just what is simulated, and whether fiction is more than just a stimulus for simulation. I will come back to this point later; at the moment I want to stress the

relation between reading, simulating, and improving one's cognitive abilities.

2. Establishing Links between Features of Fictional Works and Cognitive Abilities

2.1 Theory of Mind and Empathic Sharing in Fictional Stories

There are several processes involved in understanding the thoughts and feelings of human beings. Though it is possible to distinguish between several facets of our attempts to comprehend others — and the term ‘others’ here includes fictional characters — they usually occur in various combinations. Jerome Bruner has stressed that it is impossible to take the components apart; he used the term “*perfink*” in order to stress that usually there is a mixture between *perceiving*, *feeling*, and *thinking* (Bruner 93). All of us who have dealt with the process of focalization, and tried to understand the consciousness of fictional characters, know about this mix. Social cognition encompasses at least three different processes, which, for clarity's sake, should be first considered separately. I want to concentrate on two of these, and follow a long tradition by calling one of them empathic sharing or empathy, and the other “theory of mind.”

The process referred to as ‘theory of mind’ focusses on knowledge and thoughts; it is activated when one tries to account for or analyse the thoughts and emotions of others. This cognitive ability can be illustrated by the following example of how the fictional character Joe Rose, the narrator of Ian McEwan's novel *Enduring Love* (1997), tries to understand his wife, Clarissa. At this point of the story their relationship is breaking up; Clarissa is completely bewildered, and fears that she cannot deal with Joe any more. She has just told him that she wants to end their relationship. He, however, does not seem to listen, and does not answer, and then she says: “I don't know what's happening with you, Joe. I'm losing you. It's frightening. You need help, but I don't think it can come from me” (148). Joe is unable to react in an empathic way; he does not share her emotions, her fear, her bewilderment and frustration; he feels nothing. The way he understands Clarissa is described in the following quote: “Clarissa thought that her emotions were the appropriate guide, that she could feel her way to the truth, when what was needed was information, foresight and careful calculation” (150). Joe here uses “theory of mind”; he knows that Clarissa is frightened and emotionally pent up, but he reacts by concentrating on her thought processes, and by analysing and criticising them. In this and other passages, Joe employs his “theory-of-mind” capacities instead of his ability to empathise and share Clarissa's feelings. As a consequence, readers

follow Joe's thought processes. They may be angry at Joe for being so dumb and unfeeling, but it is unlikely that they empathically share his emotions; after all, he does not feel any, so there is nothing to share.

The second component of social cognition, empathic sharing, can be illustrated by an example from British fiction of the eighteenth century. In many so-called sentimental novels, heroes and heroines are supremely empathic, and they take great care to show that they share the feelings of others and that they feel *like* others. They often do so by means of gestures or facial expressions; there are many blushes and tears, and characters often grow pale or even faint. In the quote from Laurence Sterne's novel *Sentimental Journey through France and Italy* (1768), the narrator concentrates on his and others' feelings, and the bodily signs which demonstrate these feelings: "The poor monk blushed as red as scarlet [...]; I blushed in my turn" (57). The two communicate by sharing emotions, or, rather, responding affectively to the emotions of the other. They feel similar emotions, and they show each other that they share the other's emotion by their body language. The quote goes on with: "The poor monk blushed as red as scarlet [...]; I blushed in my turn; but from what movements, I leave to the few who feel to analyse" (57). The narrator seems to be wary of using his 'theory of mind,' he does not analyse these emotions, he does not even name them. There seems to be a distrust of words; feelings are understood and communicated by means of other signals. This extreme concentration on emotions, and the scepticism towards logical and analytical faculties is, however, just as rare as Joe's concentration on his logical abilities and "theory of mind." In most situations and communications, there is a mixture of both processes.

2.2 Some Forms and Functions of Perspective Taking: Advantages of Regarding Fiction as Simulation

The term "perspective taking," or with Daniel Batson "'sensitive' understanding" (267), is here used in order to designate the combination of affective sharing and thoughtful appreciation of the mental processes and intentions of others. This kind of understanding not only involves knowledge about the thoughts and feelings of others, but also an affective sharing of their emotions. According to psychologists, there are different kinds of perspective taking. Adopting the 'imagine-other' perspective is held to be particularly valuable. This term refers to imagining how someone else is thinking and feeling at the moment; it has been linked to pro-social action. In contrast to imagining how oneself would feel in a given situation, this "imagine-other" perspective has been shown to "reduce stereotyping and prejudice," "to know the other's thoughts, desires, and intentions,"

and “even to understand and evaluate — even to create — the self” (Batson 275-77). In the following, I want to argue that readers are encouraged to practice this kind of perspective taking when engaging with characters’ and narrators’ thoughts, feelings and actions in fictional stories.

Reading fiction induces “spontaneous perspective taking” (Johnson et al. 593), a process that may be at the core of the conceptualisation of fiction as ‘simulation.’ Reading stimulates readers to take the characters’ and narrators’ perspectives and to simulate their thought processes and feelings. Coming to terms with fictional stories presupposes understanding the characters’ and narrators’ motives, thoughts and emotions. If we cannot make sense of characters, we cannot come to terms with the story. This spontaneous perspective taking may be at the root of the potential of fiction to improve readers’ cognitive abilities: the necessity to follow and share characters’ thoughts and feelings, and to practice the combination of empathy and ‘theory of mind’ in a situation which provides ideal conditions for learning (Nünning, *Reading Fictions* 85-92).

Part of the cognitive value of fiction therefore lies in encouraging readers to take the narrators’ and characters’ perspectives. When reading fiction, this process is guided by narrative conventions which encourage or block readers’ empathic understanding. In most fictional works, there are many different conventions to be considered; moreover, it is necessary to take into account their specific combination. Let me give you two examples concerning three strategies which have been said to encourage perspective taking: first, focalization (free indirect discourse and related techniques), which induces readers to quite literally adopt the perspective of characters and to “simulate” their thoughts and feelings; second, engaging comments by an overt, preferably heterodiegetic narrator, and third, the creation of suspense and putting the character in a precarious situation which might lead to a bad end.

These three narrative strategies often occur in combination. The beginning of Oscar Wilde’s famous novel *The Picture of Dorian Gray* (1891) may serve as an example for such a mixture of narrative conventions. In the lush atmosphere of a beautiful garden and house, the painter Basil talks with Lord Henry about Dorian Gray, an outstanding and beautiful young man, who is Basil’s “dearest friend” (14) and who is apparently in danger of being corrupted by Henry, for Basil explicitly asks Henry to leave Dorian alone. While Basil is worried, the use of Henry as a focalizer serves to heighten the reader’s favourable impression of Dorian: “Lord Henry looked at him [Dorian]. Yes, he was certainly wonderfully handsome, with his finely-curved scarlet lips, his frank blue eyes, his crisp gold

hair. There was something in his face that made you trust him at once” (15). Readers therefore experience Dorian’s attractiveness via Henry’s perceptions and evaluations, knowing that Henry may harm the young man. This impression of danger and vulnerability is enhanced by a narrator’s comment: “The lad started and drew back. [...] There was a look of fear in his eyes, such as people have when they are suddenly awakened” (20). That the narrator refers to Dorian as a youthful and harmless “lad” and compares his reaction to a sudden, forceful waking up, which induces fear and insecurity, highlights Dorian’s passivity, innocence and vulnerability, which is confirmed by the depiction of his feelings when he serves as a focalizer: “But [Dorian] felt afraid of him, and ashamed of feeling afraid. [...] And, yet, what was there to be afraid of? He was not a schoolboy or girl. It was absurd to be frightened” (21). Since readers have been informed about the potential dangerousness of Henry, Dorian’s fear seems well-grounded, while his attempt to convince himself of the harmlessness of the situation is understandable, but misled. Readers are induced to adopt Dorian’s perspective, to understand his thoughts and feel like him and for him due to a combination of different narrative conventions: the choice of focalizers and presentation of consciousness, a comment by the narrator and the creation of a situation which raises anticipations of potential perils for the young protagonist.

However, there is no simple form-to-function mapping. It is impossible to identify narrative strategies which, regardless of the particular context, serve to evoke or block empathy. The same techniques can, in different combinations and contexts, just as well serve to enlarge the distance between the characters and the readers. As narrative conventions, focalization and narratorial comments are neutral; they can work both ways. Again, a few brief quotes from *The Picture of Dorian Gray* may illustrate this. After Dorian has told his fiancée Sibyl Vane in a most cruel way that he will not marry her, the following depiction of his feelings of guilt and remorse are first geared towards feeling with Dorian, who seems to be fully conscious of his responsibility and realises “how unjust, how cruel, he had been to Sibyl Vane. [...] She could still be his wife. His real and selfish love would yield to some higher influence, would be transformed into some nobler passion” (95). Here, readers can empathically relate to Dorian’s remorse; Dorian seems to want to improve his behaviour and his feelings. This process, however, is quickly counteracted by an explanatory generalisation by the narrator, who stresses: “There is a luxury in self-reproach. When we blame ourselves, we feel that no one else has a right to blame us. [...] When Dorian had finished the letter [in which he asks Sybil for forgiveness], he felt that he had been forgiven” (95f.). This

damning comment which highlights Dorian's self-complacency is supported by the following description of his feelings when he realises that Sybil has committed suicide: "She had no right to kill herself. It was selfish of her" (99). In this case, the seeming immediacy with which Dorian's feelings and thoughts are presented shows that focalization can just as well be turned against a character. Dorian's callous reaction to the death of an innocent young woman, who killed herself out of despair because of Dorian's cruelty, runs counter to established feeling rules, since we expect from people that they mourn for the death of people they loved. In this passage, the insight into Dorian's feelings, combined with the narrator's comment and the particular context, therefore serves to work against sensitive understanding. Readers are able to follow the protagonist's thoughts, they know what he thinks and feels, but they are unlikely to share his feelings.

This does *not* mean to say, however, that narrative conventions are unimportant. In contrast, it bears emphasising that complex combinations of narrative features guide the process of reception, and that it is too facile to isolate a few narrative conventions and claim that these always work in a particular way. Moreover, if one wants to explore the cognitive value of fiction, distancing devices are just as important as those which stimulate readers to take characters' perspectives.

This brief analysis of some examples shows that fictional texts can enable readers to "simulate," to follow and share the characters' and narrators' thoughts, and to empathise with their feelings. It also demonstrates that narrative conventions play a crucial part in this process. Particular combinations of narrative conventions can, depending on the situation in question, encourage readers to take the perspectives of given characters, and to feel like them. Engaging with such passages, readers can come to know the way the character's mind works, and they can practice their "theory-of-mind" abilities and empathy. However, in different contexts, such narrative conventions can also induce readers to follow the character's thoughts (thus practicing their "theory of mind"), but at the same time to distance themselves from these thoughts and feelings, to block empathic sharing, and to evaluate the characters negatively. Readers not only employ their theory of mind, they are also stimulated to rely on their ethical judgement, which is based upon the result of their understanding of the characters' thoughts and feelings.

Conceptualising fiction as simulation makes a number of advantages of fiction visible. Reading offers us a wider range of experiences than is available in daily life, and we need a wide range of stimuli in order to keep developing and recalibrating our mental faculties. Moreover, reading fiction makes it possible to

gather vicarious experiences with regard to a broad range of different characters, which we would not come to know intimately in everyday life. Such experiences render it easier to understand thoughts and emotions which we have not encountered in our own lives. Many empirical studies have testified to the tendency of human beings to project their own feelings, preferences and beliefs onto others. They take themselves as a model and attribute their own preferences, values and ways of thinking onto others — with often deploring results (Nickerson, Butler, and Carlin). People tend to take the “imagine-self” perspective, and not the “imagine-other” perspective. By encouraging readers to simulate the thoughts and emotions of characters who are not similar to themselves, fictional stories can enlarge readers’ experiences with unfamiliar and untypical feelings, thoughts and motives. Taking the perspectives of fictional characters, readers get guided experience in what the situation feels like to these characters, and how their perceptions are linked to their personality traits. Experiencing the fictional world through engaging with the characters, readers acquire knowledge that is very difficult to get by other means. We could, of course, always ask someone how he or she feels — but chances are that they either do not want to tell us or that they do not even know it themselves. Fictional stories make it possible for readers to come to know and experience the thoughts and emotions of fictional characters, they provide case studies which serve as a stimulus for simulation. However, fictional stories differ from factual ones; they are characterised by aesthetic qualities, and read for pleasure. Reading fiction offers many important advantages which can be gained by simulation, but at the same time, the cognitive value of fiction exceeds that of other simulation processes.

2.3 Simulation and Beyond: Cognitive Consequences of Shifting between Perspectives

This section focuses on a few possible benefits that the shifting between character perspectives can entail. From the broad range of the advantages of reading fictional stories, I will highlight three. The first lies in acquiring knowledge and practice which can serve to avoid a typical mistake many people make when trying to understand why someone acts the way he or she does. Particularly in Western cultures, people who observe the behaviour of others tend to understand this behaviour with regard to the personality of the actors, their preferences, emotions, personality traits or ways of thinking. People thus attribute dispositional causes to the action. When actors ascribe reasons to their own behaviour, in contrast, they tend to discount their own personality traits, while emphasising the pressures in the particular situation and other external causes. Being well aware of the circumstances which influence their choice of action, but less aware of their own

attitudes, they think that the vagaries of the particular situation have occasioned the action. The observer of an action, by contrast, tends to concentrate on the actor and attribute dispositional causes. This ‘fundamental attribution error’ is inherent in the differences between the perspectives of actor and observer (Kelley; Choi, Nisbett and Norenzyan).

The impact of changing between the perspective of either actors or observers can be illustrated by an empirical study which used video clips of the same scene, shot from various angles, thus shifting the position of the focalizer (Storms). The manipulation of spatio-visual perspective in the film led to changes in the way viewers understood the action: when an observer of the action was chosen as focalizer, the actor’s behaviour was explained in dispositional terms, and his traits and attitudes were held to be responsible. When the camera took the actor’s position and viewpoint, however, viewers thought that external pressures were responsible for the action. The change in visual perspective therefore led to a completely different assessment of the reasons for the action. Even those viewers of the film who had taken part in the scene and watched their own former actions, changed their causal attributions after they had seen a video of the same scene from the point of view of the observer. Correspondingly, observers changed their interpretation of the reasons after having watched a video in which the actor served as the focalizer of events. The choice of focalizers does matter: even the purely visual adoption of the perspective of the other led to “a complete reversal of the relative perspectives of actor and observer” (Storms 170), while viewing a video shot from a neutral perspective did not have any effect whatsoever. If the interpretation of the causes of behaviour is influenced even by a change of the spatio-visual perspective, it can be assumed that the use of narrative conventions which induce readers to adopt the ‘imagine-other’ perspective, and in addition to take the others’ thoughts and feelings into account, has a great impact on their understanding of the event.

By prompting readers to adopt the perspectives of heterogeneous characters, novels can serve to raise the awareness of the differences between actors’ and observers’ points of view. In fiction, three factors counter the readers’ tendency to fall into the trap of the fundamental attribution error: first, readers are often given much more information about the situation and the actor than is available in ordinary encounters. It is easier to take a balanced view of causes while observing characters’ actions. Second, in many novels, there is a constant shift in focalization between such “observing” and “acting” characters, and readers are required to consider contrastive perspectives on the same scene; they can become habituated to assume that there are two different kinds of perspectives (and types of reasons) to

be considered. Third, readers are temporarily led to see the situation from the point of view of the actor, but they usually oscillate between seeing the events through the eyes of characters, and a more distanced appraisal, interpreting the action in the light of their own knowledge and feelings. Especially in novels in which the same situation is depicted from heterogeneous perspectives, shifting between several acting and observing characters, readers practice a mode of cognition that counteracts the fundamental attribution error. Quite a number of fictional techniques — ranging from focalization to multiperspectivism — allow readers to arrive at less tendentious judgements than they would in real life.

A second benefit of reading fiction concerns shifts between focalizers. Such shifts often imply an alternation between empathic following of the characters' thoughts and actions on the one hand, and a critical distance to the character on the other. Especially in complex multiperspectival novels, which present the events from the point of view of several characters, readers are induced to alternately take several — often contradictory — perspectives on the same situation. Reading fiction practices the ability to distinguish between several perspectives, to recognise affiliations and contrasts between them, and to relate them to each other. To make sense of mutually exclusive perspectives on the same situation often requires the modulation and modification of empathy. If narrators or characters compare and balance the perspectives of others, if they ethically position themselves towards others and come up with their own interpretation, readers can simulate the characters' cognitive processes. If readers do not get such guidance, they are encouraged to arrive at their own conclusions. Readers have to position themselves in relation to the heterogeneous characters and to decide which traits, opinions and attitudes they like best, and which ones match the requirements of the particular situation. Such appraisals are often related to an evaluation of the characters according to moral or non-moral criteria, and to feelings of sympathy. Dealing with multiple points of view in a fictional narrative not only exceeds simple processes of simulation, it also implies creating new, more encompassing interpretations of the same event. In many novels, readers are faced with heterogeneous, even opposing characters that are presented in ways which make it possible to sensitively understand them. This is closely related to ethics, too: As James Phelan has pointed out with regard to the ethical positioning of readers,

[o]ur emotions and desires about both fictional and nonfictional characters are intimately tied to our judgments of them; and our ethical responses to narrative, as we have seen, are tied both to the ethical quality of characters'

actions and to the interaction of our own ethical positions with the ethics of technique and the ethical positions of the implied author. (Phelan 160)

Third, more often than not, reading fiction entails the revision of the first impressions of characters. Even in some kinds of popular fiction such as crime novels or romances, the question of whether a character is really what he seems to be or whether he will turn out to be a dangerous villain is one of the staple devices of generating suspense. In ordinary interactive encounters with others, there is usually no such suspense or openness: human beings are quick to evaluate others on the basis of their first impressions and assimilate them into some well-known category or even stereotype. In fiction, by contrast, readers are encouraged to devote the cognitive effort which is necessary to arrive at a deeper understanding of the characters and their actions. In many novels, the distribution of information and the use of narrative conventions oblige readers to revise their impressions and adjust their categorization (Gerrig and Allbritton).

Readers seem to be implicitly aware of the fact that, when reading fiction, things might turn out to be different than was assumed initially; they also seem to know that they had better pay close attention to details, and spend more cognitive effort than is necessary for the understanding of factual stories. Experiments have demonstrated that readers not only need a bit longer for engaging with fictional than with factual stories; they also pay more heed to the words, the style and the language. In comparison to factual stories, readers invest less effort in building a situation model (Zwaan 921, 925). They do not try very hard to understand the particular situation, probably because they expect that the situation will change, that there will be surprising twists and turns in the plot. Readers certainly expect such changes in the assessment of situations and characters with regard to crime fiction, when the most suspicious character is almost always innocent. Similarly, in romances the mysterious, dark figure might turn out to be Mr. Right after all. It might even be the boring Mr. Knightley — you never know. Revising first impressions is part and parcel of reading fiction.

One might argue that these suggestions highlight the cognitive value of fiction, but that they are still concerned with the process of perspective taking. That reading fiction stimulates readers to adopt the perspectives of characters and narrators is of crucial importance for social cognition, because this process involves the ‘imagine-other’ perspective, which reduces stereotyping and has been shown to lead to pro-social action. Not only the spontaneous initiation of perspective taking, but also the cognitive consequences of shifts between perspectives are highly rewarding

— but are they germane to reading fiction? I want to propose that they are, since these cognitive activities are intimately connected to the state of transportation and the use of narrative devices. Moreover, they are based on fictional features such as experientiality and the concentration on the changing affairs of human-like actors in concrete situations. In addition, these processes are closely related to what has been termed “narrative empathy” (Keen).

2.4 Beyond Simulation: Some Cognitive Functions of Aesthetic Devices

Though the cognitive benefits stemming from simulation, from sensitive understanding, and from shifting between perspectives are quite substantial, reading fiction can offer even more benefits, which are related to aesthetic devices. Again, I want to highlight three aspects which illustrate that the cognitive value of fiction exceeds that of simulation. First, I want to draw attention to what has been called the “defamiliarisation — recontextualisation cycle,” which introduces

a three-phase structure in response. First is the encounter with a defamiliarizing story event or feature (e.g., a stylistic device), which arouses feeling. A second phase ensues during which feeling directs a search for a context for the local meaning of the story, which has been unsettled. In the third phase a shift in the reader’s general story understanding takes place, and what had been defamiliarized is now contextualized. (Miall and Kuiken 299)

Such defamiliarising devices impede an easy understanding and processing of the text. They are closely connected to the aesthetic quality of literature, which has been related to distancing devices and the de-automatisation of perception. Since the beginning of the twentieth century, formalists such as Viktor Shklovsky have identified “de-familiarisation” as the most important characteristic of literary works which de-automatise perceptual processes, thus slowing down the time of reading (12-13). To make the familiar appear strange, to change ingrained paths of perception and to foreground particular details and techniques is thus a major asset of reading literature. Many unusual metaphors work this way, and such non-conventional usages of language have been said to be part of the aesthetic pleasure of reading fiction. Engaging with such unfamiliar language challenges cognition and fosters understanding in a way that cannot solely be related to perspective taking. In the opening pages of Virginia Woolf’s *Mrs. Dalloway* (1925), for instance, a number of (partly unnamed) characters watch a car, nearly all of them wondering which famous personage may be inside. One of the onlookers is Septimus Warren-Smith:

And there the motor car stood, with drawn blinds, and upon them a curious pattern like a tree, Septimus thought, and this gradual drawing together of everything to one centre before his eyes, as if some horror had come almost to the surface and was about to burst into flames, terrified him. The world wavered and quivered [...]. (18)

A perfectly ordinary — though, because of the possible passenger, at the same time somehow mysterious — motor car becomes an object of attention, which is, apparently due to a “curious pattern like a tree,” able to invoke terror. Since the reader at this point does not know that Septimus is a war veteran and suffers from shell shock, this passage is not easy to interpret. At this point during the reading process, readers searching for clues which make it possible to comprehend just what is going on are bound to fail. It is impossible to understand what has caused Septimus’ terror, and whether the impression that “the world wavered” is due to a perceptual distortion on the part of Septimus or caused by some changing of the light or a movement of the car, whose shiny surface works as a mirror. To reconceptualise the textual data is at this point not feasible, since in this case the necessary information for understanding Septimus is only given a few lines further down, with Lucrezia worrying about her husband’s talking about killing himself. It is then that the careful reader may begin to re-interpret the passage.

Secondly, reading fiction confronts readers with the difficulty of dealing with gaps, with what has been called “Leerstellen” or gaps and blanks by Wolfgang Iser (67, 68). Often, crucial facts are missing, and others remain open to contradictory interpretations. Readers have to use their knowledge of the text and their general world knowledge in order to fill such gaps and to build a mental model of the fictional world by inferring what might have happened. These “Leerstellen” are often used as aesthetic devices which can be functionalised in several ways. The beginning of *Mrs. Dalloway* and the car can serve as an example once again. A number of focalizers — who appear only once in the story — ask themselves who might be in that car. They speculate about the identity of the passenger: “a face of the very greatest importance” (16f.); “Was it the Prince of Wales’s, the Queen’s, the Prime Minister’s? Whose face was it? Nobody knew” (17). “Was it the Queen in there — the Queen shopping?” (18). The question of who might be in the car is raised no less than eleven times, which emphasises the gap (the “Leerstelle”). It also draws attention to the uniqueness of Septimus, who is the only one not concerned with the identity of the person in the car, which casts him as an outsider

out of tune with the others, who are not individualised or even given a name. The repetitions of the same question — the answer to which is not only insignificant as far as the understanding of the plot and the constellation of characters is concerned, but also more or less uninteresting to the reader — create a distance between readers and the anonymous characters who are enthralled by the identity of the passenger, putting them in a similar position to Septimus as outsider.

Third, reading fiction can involve having to accept cognitive dissonances, rather than interpreting and resolving them in a satisfying way. Instead of initiating the “defamiliarisation — recontextualisation cycle,” which encourages readers to revise their interpretations of what they have read and reach deeper insights, novels often induce readers to suspend judgement and admit the impossibility of arriving at conclusions. Aesthetic conventions guide readers’ attention and foreground complexity, but as often as not, there is no cognitive closure. Dissonances may be due to open questions, to (as yet) incomplete representation, to competing goals and evaluations of some of the characters, or to contradictory assessments and feelings of readers. The experience of cognitive dissonances is part of the reading process, and the expectation of dealing with such dissonances — as well as ambivalence and polyvalence — can be said to be one of the distinguishing features of reading literary texts. In everyday situations, people strive for cognitive closure, and often feel insecure or frustrated when they cannot understand what is going on. When dealing with literary fiction, readers expect and appreciate polyvalence. Engaging with fictional stories, readers thus seem to be more open to new experiences and less set on cognitive closure. It is one of the distinguishing features of fictional narratives that they provide the basis for more than just one interpretation, and that it is often impossible to decide which interpretation is the right one. This sometimes even concerns the very facts of the story. Just think of Henry James’ novella *The Turn of the Screw* (1898), or of Bret Easton Ellis’ *American Psycho* (1991), which seem to be deliberately providing contradictory clues to the events in the story world. Such novels not only challenge readers’ comprehensive abilities, they also invite the affective and moral engagement of readers, who are unable to find a solution to puzzling ethical questions.

Ethical issues are thus intricately involved in the cognitive processing of fictional narratives. The challenges that complicate readers’ assessment of heterogeneous and even contrastive character perspectives in multiperspectival novels, for instance, cannot merely be understood as a cognitive problem — characters embody traits, values and attitudes, and the coordination and evaluation of such aspects requires ethical evaluations, too. This, however, points towards

future fields of research, of which I will mention just a few.

2. Further Fields of Research

Though my book on the cognitive value of fiction, *Reading Fictions, Changing Minds*, provides a more thorough analysis of the relation between features of fictional stories and the cognitive potential of reading fiction than I could discuss in this essay, a single monograph can still only scratch the surface of such a complex area of research. There are still numerous important questions which we should know more about. In addition, I have concentrated on the benefits of particular kinds of fiction, but, given the multitude of stories that our cultures are saturated with, it seems necessary to explore possible drawbacks of specific kinds of fictional stories as well.

If we are to understand how literature functions in relation to social cognition in contemporary societies, we should also consider the cognitive potential of popular fiction. It is necessary to ask whether reading popular fiction, which has been said to have no effects as far as social cognition is concerned, can entail negative effects, such as the encouragement of stereotyping. We should explore to what extent fictional stories present simplistic and reductive ways of thinking; for instance implying that everyone always acts for thoroughly materialist and egotistic reasons. Reading fictional stories featuring such one-sided cause-and-effect patterns as well as simplistic modes of thinking might be detrimental to social cognition and impair the readers' ethical judgement. It seems probable that some fictional works can confirm prejudices, inhibit the willingness to revise first impressions, and encourage the denial of complexity and endorse Manichaeic forms of thinking. A different unresolved problem is posed by another important issue, the ethical power of stories. We need to enquire more deeply into the exploration of the hierarchies of values embedded in fictional stories. This comprises the positioning of characters to each other; it also involves the personality traits and values the characters embody.

Finally, we can improve our understanding of the significance of fictional stories by analysing possible links between the values disseminated in a story and the genre it belongs to. Can one relate particular genres or kinds of stories to particular modes of thinking and particular values? Which role do narrative conventions and aesthetic devices play in this process? Taking the power of reading fiction seriously therefore opens a whole range of promising fields of research. Reading fiction changes minds — and the choice of what is read as well as how it is read has far-reaching cognitive and ethical implications.

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