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E-Motion: Being Moved by Fiction and Media? Notes on Fictional Worlds, Virtual Contacts and the Reality of Emotions

by Katja Mellmann

Our response to fictional cues is often as emotional as to real life occurrences. Such emotional responses do not mean that we mistake fiction for reality; rather they are affected by our innate social behaviors and by complex neural structures. Some responses, as for instance fright or pity, take place spontaneously, like a reflex act. Also, emotions can be evoked by means of thoughts. Some texts rouse the reader's ability to share the emotional experiences of a fictional character. Other emotions refer to a work of art as a whole or to some implicit components of meaning or allusions to facts external to the text. Further modes of emotional engagement are pleasure and suspense (tension), the affective bases for the reception of art or any media. This essay undertakes to give, to a general audience, a short survey on a subject which is not yet much investigated within literary studies, and, by this, to point to further readings.

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keywords: emotion; film studies; German literature; fiction; reader response; suspense; evolutionary psychology; aesthetics; identification

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E-Motion: Being Moved by Fiction and Media? Notes on Fictional Worlds, Virtual Contacts and the Reality of Emotions¹

Katja Mellmann

Traditionally, it is thought that emotions for objects logically presuppose beliefs in the existence of such objects. But why then do novels move us, though we know that these people who laugh and cry there are nothing but pure inventions? In philosophical aesthetics this is called the "paradox of fiction" (cf. Levinson 1997). It seems a paradox if it is put into the conceptual logic of philosophy, but rather it is just a very complex phenomenon which—as ordinary and familiar it may seem to our intuition—is unfortunately hard to observe and to describe systematically.

The "paradox of fiction" within a neurophysiological perspective

Indeed, neurophysiology has improved much in imaging the brain's activity, but every new experiment can only readjust preexisting models of the brain's functioning, of cognition and of consciousness. Experiments can only make more plausible or falsify what we have already hypothesized. What is *really* going on—which neural processes are involved with emotions and which with belief in the existence of certain things—is something that nobody knows exactly, now as before.

Nevertheless there are reasons to suppose that the *mental representation*² of certain occurrences on the one hand and their *cognitive appraisal* on the other hand (for instance as "real" or "unreal") are *two separate processes* in the brain, which can combine differently each time. If, for example, subject A lifts an arm and another subject B watches, imaging shows an identical pattern of neuronal activation in one area of both of their brains (cf. Fadiga and Fogassi 1995; Buccino and Binofski 2001). For A this pattern is linked to further neuronal maps that tell him that it is he himself who moves the arm. For B this pattern is linked to the information that it is A who moves the arm. The same with a third subject C who sees the action on a movie screen: C activates the same quasi-semantic pattern "lift the arm." C

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also identifies the person who does so, and C is quite aware of the fact of seeing this action on a movie screen. Similarly, when subjects are shown pictures of their friends, they turn out to activate to some extent the same areas of their brains as they do in real confrontation with these friends (Kanwisher and O'Craven 2000). Those experiments—the papers I refer to here pertain to a much more extensive field of exploration, often summarized by G. Rizzolatti's and V. Gallese's notion of 'mirror neurons' (Rizzolatti and Arbib 1998; Gallese and Goldman 1998)—suggest that the emergence of a mental representation, furnished by a specific neuronal activation pattern, is a relatively distinct process, and that the awareness of the *medium* of the sensual representation, like attributions of the source or personal associations, is a separate additional information.

But why do our hairs stand on end if a tough guy in a photo or on the screen not only lifts his arm, but shakes a fist and swears revenge? Why the well known "lump in your throat" if two persons lift their arms to embrace each other for ever, after all the longing and craving of two hours? We do not only *recognize* the action, but we also *respond* to it.

Feelings like these in real life: social dispositions and automatic reflexes

Film theorists agree today that we respond to the fictional personae on the movie screen with our common everyday social emotions, with sympathy, pity, horror and fright; at least we do within the visual medium of film. We do not deceive ourselves about the factuality of these persons. We know that these characters are merely fictional, and this knowledge is always latently there in our brains and can be more or less highlighted, depending on the quality and intensity of the emotion. From too strong emotions we prefer to liberate ourselves, for instance, by changing to anger against the director for manipulating us. But our first sentimental response to the fictional characters happens spontaneously. It obviously comes from an innate psychological mechanism. We can mask it somewhat with other actions, but we cannot avoid it completely. We do feel the *impulse* to cry after all, whether we really will or not, and every further action of avoidance builds on this primary affect.

Isolating aesthetics as an autonomous subject of philosophy in the eighteenth century has misled theorists to the conventional view that there is something like an exclusively "aesthetic" emotion, a feeling that we only experience with works of art. But today in the study of arts, another psychological proposition is changing crucially this traditional view. Though the aesthetic "framing" of the object and the beholder's awareness of that object as a fiction are still important topics in the analysis of reader response, our basic responses are nothing but those emotional dispositions that go along with our everyday life. How could they be otherwise?

To be sure, the feelings evoked by works of art indeed are often so complex that we do not want to name them by an ordinary word for an emotion. For aesthetic experiences, we do not speak of "pity," but of "sentiment"; not of "fear," but of "thrill." Moreover, works of art often contain highly selected stimuli. The traditional situations and artificial arrangements that our works of art repeat over and over, have proved themselves efficient in the long history of human culture. They are tailor-made for optimal emotional effect on the emotional apparatus that evolution has given us. In reality such stimuli would scarcely occur in quite the same way. This is why aesthetically evoked emotions may seem somewhat "purer" (Heller in press) to us than "real" emotions. In truth (or say, in a biological view), they are rather alloyed and contaminated—for instance with the information "you need not act."

Nevertheless, there is a kind of meditative calm that goes along sometimes with our contemplation of a work of art. Kant called it the "disinterested delight." But it is not a distinct, or "merely" aesthetic emotion. Kant's aesthetic "disinterestedness" is an additional cognition, in the neurophysiological sense I suggested above, to the primary emotional experience. This additional information ensures, for instance, that we control our possible actions toward the aesthetic object. But it is no *sine qua non* of aesthetic experience, and it does not make the crucial difference to a "real" experience. For there are many more situations in life to which we better not react, or not react immediately—though we instantly simulate such possible reactions in our brains.

Whether these simulations turn out as a behavioral activation or not is no question of "aesthetic education," as often supposed (for examples, see Mellmann in press), but of social adequacy. We need not first learn what fiction is, we only have to be familiar with the social situation we are in during art reception, and we have to know what response would be adequate in this situation. The factual state of fiction is no such extraordinary thing if regarded from the point of view of our biological dispositions. I daresay we have a veritable innate "sense" for fiction, just as for hypothetical or conditional truth (it might be that ...; he says that ...; if ..., then ...) and other sorts of mental "scope syntax" (see Tooby and Cosmides 1994/95 and Eibl in press). Our behavioral responses rather depend on social facts like age and gender, on if we are alone, or with whom we are, and on whether we are familiar with the medium. To give some examples: Whereas a five year old child still tends to yell "Look behind you! Look behind you!," when the crocodile appears in the puppet theatre, or tries to save the puppet with its own hands, no grown-up would offer a cigarette to a movie hero after some stressful episode. But in certain situations even adults may show sort of a "Look behind you!"-behavior. For example, fans of "cult films" are more lively in their responses than ordinary cinema audiences. When I watched The Lord of the Rings, the audience applauded long and loud when Aragorn, after a nearly endless fight, finally cut off the head of the giant ork. Generally, a woman is more free to cry in the cinema, whereas her husband would be more likely to say to her, "It's only a movie." In the first period of movies, we know that the audience shrieked with fear and ran before a train hurtling out of the screen towards them. Similarly, people in the eighteenth century who were listening for the first time to a crescendo in music raised up in their seats, and with the diminuendo they stopped breathing for a while.

Artists today play with this gradual transition between awareness of fiction on the one hand and emotions leading to these spontaneous dispositions to act on the other hand. There is an ambitious competition especially among the popular arts to achieve ever new illusions of reality and thus to meet audiences where they are most receptive, in the

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heart of their real lives, in their spontaneous emotional reactions. Fear before a suddenly looming danger shows with particular clarity how such "illusions of reality" work. Even those first cinema audiences should not have been in any doubt whether they were actually in danger—The automatic behavioral response simply was faster! faster than all the cognitive processes that went along with it. Thus, the strongest "reality effects" in cinema occur when they affect our automatic reflex system. The signal from the sensual stimulus then goes directly to the brainstem and is, so to speak, immediately fired into the motoric system as a neurochemical command. We jerk, ready to lift the arm in a gesture of defense, to close our eyes, to cringe, or to protect our heads. Sometimes, a sudden loud sound or a quick film cut can be enough to rouse such fearful reactions.

Our specific emotional responses are relatively quick, too. The impulse to laugh or to cry is often hard to repress. The dense succession of jokes or embarrassing behavior in a sitcom stimulates giggling (cf. Eitzen 1999), and we choke up at the self-sacrifice of a hero (cf. Tan and Frijda 1999). This is presumably due to the facial display function of laughing and crying. Those important social functions are deeply anchored in our genetic program by biological evolution. They even work through simple "contagion": If the persons on stage laugh with humor, we participate involuntarily, as we laugh when stepping into a room where someone has just made a joke, though we have not been there to listen to it. Comparably, if one child in a little children's group starts crying, all others start crying, too. Adults, seeing a weeping face on the screen that shows serious grief and despair, when they are not able to help the woman, but must sit and wait through the scene as it is, feel the same impulse to just cry and weep with her, regardless of her reasons. We cannot avoid by consciousness alone the power of our limbic system, the principal domain of our emotional responses. We can only stand up and leave—if we decide for instance that this film is much too cheap for our taste—, turn off the television and no longer expose ourselves to the stimulus.

Besides, sentimental emotion has not always been regarded as trivial affect. The notion of sentimentality today has a pejorative smack. But in the eighteenth century the emotion of "sentiment"—famously promoted in Germany by Lessing—became, as "pity," the most valued of emotions in the theatre. Paradigmatically, a contemporary play by C. F. Gellert, *Die zärtlichen Schwestern* (*The tender-hearted sisters*, 1747), ends with the simplest, but most significant last sentence. The unfortunate heroine says: "*Bedauern Sie mich.*" ("Pity me.")

Illusion-weaving: reflexive emotions, identification processes, and friendship with the virtual

In that so-called "age of sensibility," another kind of emotional influence on the reader developed, this time mainly in the domain of narrative literature. Writers created a new poetic eloquence for rendering subjective states. This new style affected not only the reader's social dispositions, but also the reflexive emotions. It arose in the sentimental novels by Richardson and proved a great success all over Europe. The many transported readers of, for instance, Goethe's *Die Leiden des jungen Werthers* (*The Sorrows of Young Werther*, 1774) did not simply feel pity for the hero, and they did not cry just because he was crying. They were overwhelmed by a sense of really *understanding* him and his problems. This is often phrased, they "identified" themselves with him.

Identification here should not mean, though, that they thought themselves to be Werther, or that they strived to be like Werther—that is how some mocking or worried contemporaries regarded the case—but that they could, in the fullest sense of the phrase, *feel with* him. They could feel his despair and his desires as if they were their own. Identification thus means active empathy. A new literary genre brought about this possibility: the epistolary novel, in which the characters told what was happening to them and how they felt. The writer thus could guide the higher cognitive mechanisms (including values, ideas of a better world, etc.) in a particular way. Now, not only the limbic system (i.e. our immediate emotional responses) was affected, but the work equally determined—to put it a bit simply—further patterns of neuronal activation on the neocortex, evolutionarily the youngest part of our brain. Werther's unhappy letters provide complete and detailed information about all the protagonist's experiences, thoughts and feelings. The reader—if willing to do so⁶—takes over the world of Werther's; he hypothetically adopts Werther's goals, plans, and situation (cf. Oatley and Gholamain 1997, 265, 269). Thus, the reader experiences, in an *as-if* way, the same emotions that Werther writes of. He lives, for the time of reading, in the same fictional world as Werther, and he sees this world through Werther's eyes—but it is the reader's own actual experience, involving his own emotional system, i.e. his own physiological reactions.

Those character-related effects of identification are not guite the same as simple immersion. Immersion is a transitory state in art reception, brought about by what I would like to call the "habituating vacuum." Normally, we remove anything that could disturb our concentration on the aesthetic stimulus. We need not pay attention to the world around a book or a movie screen. We are still latently aware of our situation, but as long as there do not occur any changes, we do not consciously process any information about the surrounding world. This effect is cut off immediately, though, if we hear a key in the lock of our door while we are reading, or if within a cinema audience someone suddenly cries "Fire!" (The usual word "absorption" therefore is a bit misleading. It tells only half the truth: It is not the aesthetic stimulus that "absorbs" us from our response to the rest of the world, but it is the lack of relevant stimuli in an artificially provided habituating environment. What is true about the idea of absorption is that our subliminal (i.e. pre-conscious) selection of stimulus recognition works more strictly as long as we are involved with fiction. That is why, during the act of reading, we may not hear a dog barking outside on the road; or maybe we hear it, but we do not listen to it.) Identification instead is not based on the habituating vacuum alone, and it is less transitory. Though character identification may occur together with strong immersion, it initiates a sort of acquaintance, or even friendship, with the respective character (Mellmann in press). We do not forget that he is merely fictional, but we then know him, as we would know a real person (see also Benzon 2000). That is, we will keep him in mind for some time, also while we are doing other things in our lives than reading. We can think of him while doing the dishes, imagine other situations with him than the book has told us, or even long for his company.

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Often we identify the main character with the whole of the book (cf. Mellmann in press); then we may yearn for the feeling we derived from the reading, regardless of whether we mean the person or the book. Much as we yearn for a beloved person, it could be for the person or for our first meeting that person. We simply yearn for the exceptional emotional experience (cf. Heller in press). Vice versa, a work of art can grow to a quasi-personal status in our mind, sometimes embodied by the author. Those mental occupations could be explained by what biologists call the "theory of mind." To have a "theory of mind" means that we are able to identify another conscious being as such and take into account an *alter ego*'s motives. This faculty is not found in human beings alone, some apes show it, too. What is special about human theory of mind is that we have language to produce *artificially* what I would suggest to call psycho-genetic effects. In the case of loving an author for the feeling we derived from his poems or novels, we infer an intentional entity, a person, that is "shining through" the text. In the case of characters in novels we respond to what might be called mere dummies of mindful beings. We spontaneously assume a human psyche, where definitely there is none—a fact which every lecturer giving introductions to first-year students in literary studies can tell stories of.

Historical development: externalization of emotional potentiality

Appeal through empathy or identification did not come off better in the development of literary history than sentiment. Both models, if over-done in a modern work of art, we regard as "Kitsch." When we see through how it is done—unavoidable if such innovations have grown common—the plain enjoyment of one's own emotional involvement fails. Instead, we feel manipulated, even taken advantage of. Literary history since the eighteenth century (for instance, in German literature) shows an increase of devices that avoid or only play with the possibility of sentimental affection and identification. For example, Kafka's works inhibit sentimental responses. His protagonists are shown from outside, not introducing themselves by their own "merely human" thoughts and feelings as Werther did, and they never reach their aims or bring any action to its happy or tragic ending. As a result, the reader's feelings are given no clear temporal structure in which to take effect. Abstraction serves the same purpose for the movements of Symbolism and Surrealism. There we often meet no realistic characters, or no human beings at all, for whom we could feel pity or empathy. The novels of Mann and Musil put an ironic narrator and his commentary between the reader and the fictional characters. More and more the emotional organization is left to the reader alone. The text gives only hints, clues, incomplete or ambiguous suggestions that the reader has to associate, complete and fill with his own ideas, inferences, and remembered experiences.

The rage for "truth" in the works of naturalism, and the notorious "O Mensch!"-pathos (the "O mankind!") of expressionism are but isolated outbreaks as ever new generations of writers take their places within the cultural patrimony, and rediscover the aim of moving audiences through language. Indeed, even in these examples the play with alienation and mere suggestion goes beyond the immediate plea for identification one finds in Goethe's Werther. But it is just this will to play within the art of alienation which may legitimate, or in some sense excuse, an emotional outburst as an aesthetic exception. And writers have another—rather different—way to legitimate an emphasis on emotions in the age of modernism. They can refer to social and political issues external to the literary work. This is the way taken by the generation of the revolutions of 1848. The revolutionaries of 1968 also referred to political matters in their literary works. These emotions, those evoked by politically engaged works of art, do not arise so much from the fictional events as from the real ones behind them. As another example, the well known "Verfremdungseffekt" ("alienation-effect") of Brechtian dramaturgy repeatedly unsettles any illusion. The audience is always to be reminded of reality.

A by-product of the historical development is the fact that modern works of art are much more intertwined with the more general vocabulary of their period. The less our limbic system gets to do, the more we depend on being well-informed about contemporary symbols, cultural allusion, and social significances external to the text. As a result, modern art tends to become partially "obscure," because styles and fashions change quickly. The codes disappear from our consciousness, the works rapidly grow out of date. People nowadays may find abstract art boring, or the emphases of politically "engaged" literature laughable. Ennui comes from the historical decline of the "Allgemeinmenschliches" (the "generally human"—for Goethe and his contemporaries, this was an important term in their aesthetics). The symbolisms and social problems of modern works of art fade. By contrast, the novel Werther will never—at least for the foreseeable future—become obscure. We may regard it—in Goethe's times as well as in ours—as too passionate, or disapprove of it as a too excessively emotional articulation, but we will always understand at least the story of loneliness, disappointed hopes, unspecific yearning and unhappy love.

Indeed, that said, we do not today respond less emotionally to art than people did two hundred years ago. The primary methods of arousing the reader's emotions persist unchanged in the popular arts, for instance, in detective novels, thrillers, and romances. And also in "serious" literature, something new has arisen.

Reader response mediated by culture and individual biography

What today we conventionally consider "aesthetic emotions" is the worship of a very well made, i.e. a "sublime" or "genial" work of art. Again, I would not assume a distinct, purely "aesthetic" emotion as source. The feeling of worship for a work of art, in my opinion, is the consequence of an innate social disposition: admiration. We feel admiration (and sometimes love) for the artist because of originality and artistic skills. The experience of the "sublime" is due to a cognitive shift (Freeland 1999, 73) within the reader's or beholder's consciousness while reading/beholding. He switches from emotions concerning the fictional world (so-called *F emotions*; see Tan 1996, 65, 82) to emotions concerning the work of art as an artefact (so-called *A emotions*). This experience is not so different from a religious one, say if we look on the nature around us and realize "how very well it is all done." Hence, this kind of experience involves cognitive processes: additional thoughts, conceptions (like "God" or "Nature"), values, and anything which in cognitive theory of emotion is called "attributions" or "inferences." These conceptions, values, etc., depend on our culture and socialization. If we call a work of art "sublime" or "genial" for its linguistic quality, for instance, we do so

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mainly because of the Western tradition of "genius" as it is understood since the late eighteenth century, and because of our education with canonical literary works. Our literary socialization provides criteria for aesthetic evaluation that determine our cognitive as well as our emotional response. We appreciate the extreme perspectives an author may take, we value linguistic inventions and detailed descriptions, and we like being tricked by an author's cunning. We are using the emotional principle of admiratio—as old as Aristotle. Admiration that was, in antique times and still in the martyr plays of the seventeenth century, directed to the hero, i.e. to an element of the fictional world—today focuses on the virtual contact between author and the reader. The mechanisms of our innate emotional repertoire are the same, only the object has changed.

In addition to the domain of culturally mediated emotional cues like the conception of "genius," there are symbols and personal meanings. The feelings some Americans derive from the Stars and Stripes, or some people have while beholding Picasso's dove of peace, or with which lovers may listen to "our song," are very complexly structured emotions, composed of a variety of individual memories and cultural conditionings (cf. Aiken 1998, 15-18). It is hard to describe them objectively. They nevertheless contain something very concrete, for example, emotionally intense situations of the reader's past, or ideals and values that are of great importance to him in his life.

The intellectual and ideological reservations that modulate our emotional behavior are also highly individual. A pacifist may be irritated by a military march. Someone else might find the easy emotionality of popular music manipulative or even molesting. You will not approve of the Pleasantville if you have come to think that "the world is bad" and that all agreeable forms of art are nothing but "opiates for the masses." So too a sexist or xenophobic joke will be "not funny" (even if it is).

But there are some basic affective processes in the reception of art that are not determined by cultural influence and historical changes. They not only show another overlap of real life and aesthetic experience, but also determine our behavior in other pastimes and leisure entertainments, for instance, playing games or surfing on the internet.

Basic affective processes in media interaction: pleasure and suspense (tension)

What Kant has called the agreeable and the beautiful constitutes—to put it in the terminology of modern psychology—the domain of pleasure.⁸ This is the odd and comfortable feeling that keeps children playing on and on, without termination. And even grown-ups can build sand castles and play many rounds of Tetris without getting tired of it. Karl and Charlotte Bühler tried to make this comfortable feeling precise as "function pleasure" (Bühler 1927, 179-212; cf. Frijda 2000). They suggested that people enjoy the mere, uninhibited functioning of their cognitive and physical apparatus. Thus we enjoy dancing or solving crosswords. The activity giving pleasure is—in Kant's sense—"without purpose" (one cannot inhabit a sand castle), although it seems "purposive" at the same time. We are not able to say exactly where this impression of "purposiveness" comes from, but a recent branch of psychology, evolutionary psychology, 9 has made plausible suggestions during the last two or three decades.

Consider that we have a kind of innate preferences for certain objects. The idea of, for instance, the locus amoenus (the "amiable place" of the bucolic tradition) as a simply beautiful and comfortable place we can understand as inherited from the environmental conditions of our Pleistocene hunter and gatherer ancestors. Their-by no means irrational—preferences for certain landscapes for habitat (greenness, canopies, water, the presence of edible mammals or mammals providing edible products, semi-open space, etc.; cf. Orians and Heerwagen 1992) over the long period of time, in which the genome of the human species has evolved, is crucial for what we today consider as simply "beautiful" or "pleasant," without a conscious reason or special preconditioning.

This evolutionary explanation does not imply any sort of Lamarckism. The basic postulate for any evolutionary (or sociobiological) explanation of hedonic phenomena is that the arbitrary combination of an object with the sensation of pleasure in an individual by random genetic mutation will have an increased reproductive payoff if the object, or the correlated behavior towards it, contributes positively to survival and reproductive success. As a result, this arbitrary combination will be reproduced in the next generation of individuals, and thus can grow common within a whole species, simply by an evolutionary selection process. "This is why sugar is sweet and sexual activity is fun," as Orians and Heerwagen (1992, 555) put it: "Those of our ancestors who found consuming carbohydrates and engaging in intercourse enjoyable left more surviving descendants than those individuals who were not motivated in those behaviors." Thus, animals seem to have sort of an intrinsic "reward system" which comforts us each time we do something "good for evolution." But to be exact, this means "good for the reproduction of our genes," yet not necessarily "good for us." Things that may have had an adaptive value in EEA (the "environment of evolutionary adaptedness"; cf. Tooby and Cosmides 1990, 386) can be neutral or even detrimental in a modern civilization; and—equally important!—any action that elicits pleasure and is "good for us" today must not have been "good" in EEA for the same reasons that it is today. 10 The so-called "ultimate cause" for pleasure is definitely not conscious (and, strictly speaking, not "unconscious" either).

Likewise, the fact that we like to see beautiful bodies in cinema (male as well as female, regardless of the beholder's sex), or that we follow fashion shows with interest may be because of our disposition for mating behavior. We feel attracted by the beautiful figures, and by this we experience a smooth pleasure by acting out our biologically inherited responsiveness to them. 11 I want to stress that this pleasure still is a form of "function pleasure" as suggested above; it is—even in the case of mating behavior as responding disposition—not an erotic pleasure. One may experience the latter as well, certainly, but this is not what I mean here. One does not necessarily think of sexual attraction or a possible mating partner while beholding beautiful people, but simply of something pleasant; but this is, in a Darwinian perspective, because of their principal potentiality as mating partners (for anyone, not necessarily for a particular person).

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Moreover, there a several cognitive rules—as I may sum them up—that are deeply anchored in the human mind. For instance, we enjoy recognizing certain structures—for instance, the simple idea that a story should have a beginning, a middle, and a formally substantiated ending. To enjoy those structures also means to find them "beautiful." Turner and Pöppel (1988, 75) therefore speak of the "kalogenetic" functioning of the brain. Another such rule is our predisposition to recognize repetitions (cf. Zajonc 1968; 1980). The simple pleasure we enjoy at the recurrence of a group of sounds (rhyme), of a rhythmic pattern (poetic meter), ¹² or a poetic image (isotopics; cf. Greimas 1966) is something no one would care to give up in reading poems. In fairy-tales the crucial episodes are often told three times the same, nearly literally. The pleasure we derive from the formal organization of literature is presumable due to the "function pleasure" we get from enacting our innate cognitive abilities. One might therefore also speak of "cognition pleasure" (Eibl in press). Pleasure-giving formal arrangements "tie up" the meaningful content in order to make it "over-coherent," and, as such, transportable (Eibl 1993, 25-26; 1995, 22-23). If we economize too much with such arrangements (as for instance in experimental art), the work of art risks losing its spontaneous attraction and loses the wider audience.

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Pleasure, by the way, is no distinct emotion in the basic sense of the word; it is sort of affective "comment" on the separate transient sensations and emotions we experience (Wilhelm Wundt; cf. Frijda 2000, 73). It consists merely in the unconscious impulse to go on, to read further, to not stop. That is how we arrive at a seemingly paradoxical combination: Even if you lose a round of Uno, you might still want to play again. We "enjoy" even a dreadful horror film. To be unhappily in love may still feel good somehow. It is this impulse to continue which also leads to the phenomenon of "addiction" so often observed in history. Eighteenths century moralists railed against the "reading epidemic" ("Lesefieber") and the "addiction to novels" ("Romanensucht") among youngsters. Twentieth century moralists do the same with the craze for movies among the young, their dependence on TV, their deep love for the Walkman, and recently even their "internet addiction." Whether the moralists are right does not lie within my scope here, but such opinions show how strongly the success of media with our pleasure apparatus may sometimes influence behavior.

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A phenomenon of origin similar to pleasure is suspense. Why, even in a wholly frivolous, shallow, and intellectually unsatisfying mystery story, do we like to know who the murderer was (cf. Eibl 1993, 21; 1995, 17)? And how can a Hitchcock film that we watch for the second time still seem very suspenseful and interesting, even if we have *not* forgotten what the final resolution of it all was (cf. Carroll 1996)? Suspense, or tension, is not, despite the longtime common view, merely a question of knowledge and distribution of information. Rather, it depends on our active co-experiencing of narrative episodes, therefore often called "tension arcs."

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Psychologists long ago realized that people perceive their life by means of "gestalt." That is we divide our lives into separate episodes with beginnings, middles and endings, and we represent our lives to ourselves as a kind of emotional sum or essence (the "*Prägnanzprinzip*" within *gestalt* theory). There is obviously another innate cognitive rule involved here. We cannot cognitively digest the chaotic flood of experiences, and thus we constantly form graspable entities. Cooking for dinner, eating, and making the dishes may be one such entity. Planning, projecting, and achieving a professional task another one. If we let one such *gestalt* disturb the other continuously, we would fail in the common challenges of everyday life.

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Within the arts, this cognitive disposition can be exploited. In works of art we are shown *gestalts* from which everything that does not pertain to them directly has been removed. "Blind motives" in a play or film script are considered as an error, whereas the presentation of "pure" or "ideal" forms elicits delight, that is, the "reward" pleasure of freely satisfying our disposition for *gestalt* recognition.

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But you may also *play* with this disposition. If, for instance, a story begins with an act of injustice, a misunderstanding, or a menacing peril—examples of a "bad" or imperfect *gestalt*—the reader will feel uneasy (the "Zeigarnik-effect" within *gestalt* theory) until the injustice is repaired or revenged, the misunderstanding is cleared up, and the peril either is removed or has come true. This is the way tension is provoked. Tension, like pleasure, is not a distinct emotion, but it affords the division of our emotional experience into distinct units, into separate "emotion episodes" (Frijda 1993), or, within fiction, into sequential "tension arcs."

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If the work withholds from the reader the "good" *gestalt* of an injustice dealt with somehow, the reader may experience the "tragic." The bewilderment created by a happy ending refused, or by an "open" ending, may last even long after the experience of that particular work of art. The "tension arc" was not achieved, or "closed," by the work of art, and its reader or viewer feels the undissolved suspense and restlessness. Another way of dissolving tension without simply achieving the *gestalt* norm, is comic. A comic impression can be evoked for instance by an inadequate—but marked as ironic—final resolution; or by an unexpected turning that makes the reader forget about the before evoked expectations in a sudden surprise. A once initiated theme is simply given another ending than the one normally expected; a principle often summarized as "the incongruity-resolution theory of humor." Not only narrative works, but also for instance music may work on the listener by principles of tension: by the restless play of eliciting auditory expectations and achieving (or hesitating with) the harmonic solution. And even comical effects can be worked out in music, for instance by a sudden change of style.

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These basic affective processes of art reception also influence our behavior in front of the TV or in using the internet. Passionate channel surfers skip only after recognizing what they perceive as a specific genre. As long as they do not grasp it, they are held by their own uncertainty in front of the mysterious and cannot act unless they know if it is a film, news, quiz, talk-show, or commercial—and if the last, for what product. Surfers on the World Wide Web show a comparable behavior. The current homepage must quickly be put in its place within a pre-existent schema ("interesting/not interesting," "informative/not informative," "serious/frivolous," etc.). If this is not possible, we are

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tensed, and we keep on. But, if we succeed in recognizing the genre, information value, and so on, we experience satisfaction. This sort of satisfaction I mean here is independent from the substantial content of the page we found. Sometimes we consider a website as interesting, informative and serious—and then move on to the next instead of reading it. If we search the internet "just for fun" (not for work, for then we should read), the mere process of searching, and hoping to find something, can itself be the sole object of satisfaction, or—in the sense of the psychological term—of pleasure. Because we still perform in these actions an innate cognitive disposition.

43 Conclusion

The examples of a variety of emotional involvement with "unreal" ("fictional" or "virtual") worlds given in this essay should illustrate why our emotional responsiveness is not strictly tied to our conviction that these occurrences are of any pragmatic relevance to us. Works of art, games and other leisure entertainments do move us as thoughts can, as old memories may annoy us or fill us with shame; as dreams sometimes can agonize us even after we get up. The content of such experiences may refer to unreal scenarios or situations that are not ours, yet the feeling we have is empirically real.

Notes:

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- 1 The original German version of this essay in *Parapluie*, a non-scholarly online journal, was meant to give a short and readable survey on a subject not yet much explored within literary studies. I tried to be not too specific in my arguments and examples, writing for a general audience. The examples I give are not meant to strictly prove, but rather to illustrate, what I suggest, by some everyday experiences. Nevertheless this essay was based on some scholarly papers; so the translated version, which I was kindly invited to publish in *PsyArt*, now provides all the documentation, and was partly revised and extended, though the principal style of an essay was retained. (*Back to Main Text*)
- 2 I use this term in the sense of "idea," as proposed for instance by Damasio 1999. (Back to Main Text)
- 3 Tan (1994) speaks of "witness emotions" in general. For a survey on this subject see the contributions in Plantinga and Smith 1999 and Tan 1996. I think that many of these already advanced investigations in the domain of film studies could be transferred into literary studies, though, as far as I can see, there have not been any comparable attempts yet. (Back to Main Text)
- 4 I use the term "psychological mechanism" as proposed by Buss 1999; it is one of the current suggestions, besides "program" or "disposition," or "mental module," to replace the older terms of "instinct" and "drive." It implies the rediscovery of William James' idea that humans have rather *more* instincts than other animals, not *fewer* (cf. Cosmides and Tooby 1997, Introduction). The term "innate" in a more technical essay should have been replaced by "intrinsic" (see the discussion in Tooby and Cosmides 1992, 81), for I do not mean "present from birth," but "within our genetic program," regardless when exactly the mechanism will be "unpacked" and put into function ontogenetically. (*Back to Main Text*)
- 5 Some authors (for instance Damasio 1999) distinguish "emotion" (the objective, not necessarily conscious physiological process) from "feeling" (the conscious subjective experience of an emotion). I will not strictly follow this distinction, for both words tend to be used synonymic in colloquial language. (Back to Main Text)
- 6 I should add that I do not adhere to the idea of our "willing suspension of disbelief" (for a survey on the major resolutions of the "paradox of fiction," see Levinson 1997, 23). Though it may be a good model for describing the so-called "paradox of fiction," it implies—by saying that a suspension of disbelief is *necessary* for emotion—the proposition that emotion depends on belief, that is, on a cognitive proposition. Indeed, what I strive to show is that we respond to the thing itself, regardless of its factual status; and that we may modify our response intellectually in proportion mainly to its *quality*, less in proportion to its factuality. If the readers of *Werther* are willing to merge within Werther's experiences, they do not do so for reasons of belief, but for reasons of sympathy. They are not willing to believe in spite of fiction, but to *co-experience because of* sympathy. (*Back to Main Text*)
- 7 Tan and Frijda (1999, 54) suggest "any major resolution in a conflict" involving deep human needs (like attachment, surviving, birth and death, etc.), if good or bad, to be the principal trigger for the sentiment response (response to the overwhelming), which they very plausibly interpret as an innately biased response to situations of helplessness. As an example of the inhibition of sentiment within the work of Kafka, see his short text "Heimkehr" (Homecoming), a kind of adaptation of the biblical story of the Prodigal Son. The "separation and reunion theme" by Tan and Frijda (1999, 56-58) is thought to be one of the main themes for a sentimental response. Kafka's protagonist, though, never steps into the house of his father, but ends up with bashful and reluctant thoughts in a subjunctive mood. Nevertheless, the story would not work if the reader did not somehow expect the act of homecoming to be finally achieved. This is what above I called "only playing with" the emotional potentiality. (Back to Main Text)
- 8 For an excellent survey on this subject see Frijda 2000. In general, I would like to warmly recommend Frijda's book on "The Emotions" (1986); it would be of great help to those (non-psychologist) readers who are looking for a synthesizing, yet carefully informed introduction into the study of emotion and find themselves desperately confronted to the enormous multitude of issues by physiologists, behaviorists, cognitivists, evolutionists, constructivists, etc. To study those further questions, the multiple contributions in Ekman and Davidson (1994) might be a good start. (Back to Main Text)
- 9 One may read for introduction the little primer by Cosmides and Tooby (1997), Buss' book (1999) and the

fundamental manifest by Barkow, Cosmides and Tooby (1992). For daily information and further discussions one may join the newsgroup moderated by Ian Pitchford at http://groups.yahoo.com/group/evolutionary-psychology/. (Back to Main Text)

- 10 Most of the contributions in Cooke and Turner (1999) ignore these considerations (for an exception, see Ellen Dissanayake's contribution on music, 367-397). For a fundamental discussion on the problem of adaptation and maladaptation now and then, as brought about by different usages of these terms, see Tooby and Cosmides 1990. For further examples of presumably innate preferences see Thornhill 1998, Aiken 1998, and Dissanayake 1992. (Back to Main Text)
 - 11 Frijda (2000, 86), discussing the evolutionary explanation of pleasure, has asked: "Do people feel attracted because they like the appearance, or [rather] do they like the appearance because they are attracted?" Frijda opts for "function pleasure" in objection to "innate preferences." Both should be the same though, if you consider the evolutionary explanation given above. For the systematic locus of "function pleasure" as in play and fiction within Darwinian logic see Tooby and Cosmides (1994/95). They suppose an hedonic "organizational mode" in acting out our innate dispositions, a kind of "decoupling" to aid aims of ontogenetic development of innate faculties and of the self-calibrating of the brain. (Back to Main Text)
- 12 The topic of rhythm seen from a cognitivist perspective was thoroughly investigated by Tsur (1998). (Back to Main Text)
 - 13 The *gestalt* notion has become a bit archaic. Moreover, it has always been rather imprecise and thus been misused. For our purposes, it may be good enough. For more precise investigation, one could probably adopt the more differentiated notions of *concept*, *schema*, *script*, and *frame*, as used within the cognitive sciences and sociology. Another way that may lead further, may be the theory of "erotetic narration" by Carroll (1988), or the narration-as-problem-solving-theory by Bordwell (1985); cf. Eitzen 1999, 86-88. (Back to Main Text)
 - 14 For a telling discussion on the three main theories of humor within psychology—the incongruity-resolution theory, the tension-relief theory, and the superiority theory—see Eitzen 1999, 93-99. I completely agree with Eitzen's finding that we laugh in situations of social stress (as, similarly, with embarrassment), as long as the stressful concerns involved in this situation are not of vital importance for us at the moment. In his conclusion though, Eitzen returns to consider our laughing at some sort of verbal wit and badinage humor as "mainly an aesthetic response" (1999, 99), which, in my opinion, does not exist. I would suggest that we regard all verbal jokes, like all suspension-relief humor, as another sort of social stress, this time within the virtual author-reader- or artist-recipient-contact, which we should consider as well (Eitzen only discusses situations within the fictional world). The author may be playing jokes on the reader or purposely giving wrong or misleading information about something, and the reader or spectator has to settle hastily all these upsettings of expectation. Here, in my opinion, it is the reader's stress in understanding that triggers the humor response. (Back to Main Text)
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