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Objects of ›Empathy‹

Characters (and Other Such Things) as Psycho-Poetic Effects

In folk theories of art reception, readers and cinema audiences are said to experience fictional worlds vicariously ›through‹ characters, i.e. they ›identify‹ themselves with them, they partake in their experiences ›empathetically‹. In the first section of my essay, I will argue that it is not character but focalization (point of view) which, on a fundamental level, guides our fictional experience, and I will exemplify several ways that characters (or similar ideas) can then in addition come into play. In the next two sections, I will discuss possible cognitive correlates of both the textual device of focalization and textual clues indicating ›persons‹. The aim is to show that what I call ›psycho-poetic effects‹ (that is, the mental representation of anthropomorphic instances) are best described as by-products of various cognitive programs involved in the reception of narrative fiction. ›Empathy‹, as it is understood in the above mentioned folk theory of art reception, can then be analysed into individual algorithms of social cognition. And it can be differentiated, as is done in the last section, from other phenomena often confused with it, like emotional experience proper and emotional contagion. Also, I refer to the idea that mirror neurons provide the means to empathize with others, literary characters included. My general proposition is to revise and refine those concepts with the help of evolutionary theory and, thus, to hypothesize as cognitive correlates for textual features only programs specific enough to be correlated with a specific adaptive function which they may have performed in the process of human evolution.

1 Focalization – The Door of ›Perception‹

What if there are no characters at all? I start with several passages from the first chapter of Virginia Woolf's novel *Jacob's Room* (1922) in order to show how the imagination of a fictional world can arise independently from the presence of fictional characters, and to discuss various ways the idea of ›character‹, or of character-like entities, might come into play. The textual device I suggest as an alternative to character in explaining imagination processes is as old as the narratological concept of ›perspective‹ or ›point of view‹, though I refer to it in the more specific definition of »a restriction of ›field« as introduced by Gérard Genette.¹ His notion of ›focalization‹ designates the somewhat skeletonized,² mere technical fact of ›perception‹ without implicitly suggesting – as ›perspective‹ and ›point of view‹ tended to – that it is *someone's* perception.

In the following text passage Woolf depicts an empty room. There is no character aboard, we are alone with this sight:

The bareness of Mrs. Pearce's front room was fully displayed at ten o'clock at night when a powerful oil lamp stood on the middle of the table. The harsh light fell on the garden; cut straight across the lawn; lit up a child's bucket and a purple aster and reached the hedge. Mrs. Flanders had left her sewing on the table. There were her large reels of white cotton and her steel spectacles; her needle-case; her brown wool wound round an old postcard. There were the bulrushes and the *Strand* magazines; and the linoleum sandy from the boys' boots. A daddy-long-legs shot from corner to corner and hit the lamp globe. The wind blew straight dashes of rain across the window, which flashed silver as they passed through the light. A single leaf tapped hurriedly, persistently, upon the glass. There was a hurricane out at sea.³

The perceiving instance (Genette's ›situated focus‹ or ›focal position‹)⁴ is clearly located in the room,⁵ so that it can view the ›powerful oil lamp [...] on the middle of the table‹ and the other objects in the room (including the daddy-long-legs) as well as the garden outside the window, and that it

1 Genette: Revisited, p. 74.

2 Cf. Genette: Discourse, pp. 189–194; Genette: Revisited, pp. 72–78. As there are various conceptions of that term in post-genettian narrative theory (and as Genette himself was not all consistent), see also Mellmann: Voice, for my preferred understanding of ›focalization‹.

3 Woolf: *Jacob's Room*, p. 7.

4 Genette: Revisited, p. 74; Genette: Discourse, p. 193. Cf. also O'Neill: Origin, p. 333, who speaks of the ›point from which the narrative is perceived as being presented at any given moment‹.

5 The notions of ›perceiving instance‹/›uttering instance‹ and ›perceptual situation‹/›situation of utterance‹, were developed in Mellmann: Emotionalisierung, pp. 164–204.

can hear the leaf tapping at the window pane. However, the last sentence makes a small exception.

Theoretically, there are two possible analyses of this sentence, though one of them is more probable to take shape in the mind of a reader: (a) The scope of perception can be said to be widened and displaced out at sea, so that the perceiving instance can *see* that there is a hurricane. (b) Or the sentence can be categorized as a voice-only passage, that is, a comment by the narrator (the ›voice‹ in Genette's terms), simply speaking out of his knowledge (as he does, for instance, when he tells us *how it comes* that there are sewing utilities lying around, and sand on the floor). Option (b) is more likely to represent the understanding of empirical readers, because such a huge shift in imagination as required by (a) would take some time, and one single and short sentence does not really give time enough to fully flesh out the second perceptual situation. A second reason might be, as I will argue below, that we prefer focalizing strategies which mimic natural human movement, and a camera shift out at sea would clearly exceed these limits. So, in order to keep up with the pace of narration and a humanlike scope of experience, it would be easier to stay with the idea of the perceiving instance being in the room and to regard the last sentence as a mere *comment* on the perception of the tapping leaf.

But if we do so, something odd is taking place: For who makes this comment? Obviously, this is the ›voice‹, ergo, the ›narrator‹. But the special thing about this comment is that it is made directly *in response* to a perception. That is, the narrator behaves *as if he himself* is standing in the room (just in the place where the perceiving instance is assumed to be) and commented about *his own* perceptions. The sentence ›There was a hurricane out at sea‹ sounds like a thought someone might have standing there and hearing the leaf tapping at the window. Grammatically, it could even be read as a case of free indirect discourse, albeit there is no character to whom we could ascribe this reflection. Especially by using the deictic phrase ›out at‹, the voice adopts the angle of the perceiving instance. Similarly, the circumstances that ›Mrs. Flanders had left her sewing on the table‹ and that the ›linoleum [was] sandy from the boys' boots‹ are told in a way that makes them sound like the thoughts of somebody who *sees* the sewing lying on the table, the sand on the floor, *and then guesses* that it is Mrs. Flanders' sewing and sand from the boys' boots.

I call this something odd because voice-only passages do not always transfer the narrator into the perceptual situation. Imagine a sentence like: ›The bareness of the front room in Mrs. Pearce's house, which was built in 1891, was fully displayed at ten o'clock at night‹. Again the narrator simply speaks out of his *knowledge* when telling us when the house was built

(something which cannot be actually *perceived*). But in this example, the voice-only passage gives *additional* information, which has no close relation to the perceptual situation, and thus evokes the idea of an omniscient narrator external to the fictional world (Genette's ›heterodiegetic narrator‹). In Woolf's original text we have a heterodiegetic narrator too (for none of the characters is identical with the narrator), but what is peculiar is that he often adopts the role of a quasi-homodiegetic narrator by aligning himself with the perceiving instance. This is quite akin to what Franz K. Stanzel called the ›figural narrative situation‹:⁶ The impression of a ›figural‹ narrator is brought about by a particular narrative technique involving a tendency toward anthropomorphic focalization (that is, movements of the perceiving instance which mimic, or at least do not exceed, human capabilities of moving) and for a ›subsidiary voice system‹, which means that the voice does not make itself noticeable as a particular person, but rather ties itself down to a mere reflector function, adding no other comments than of the above kind, i.e. closely related to the perceptual situation.⁷

The perceiving instance, as a technical concept, can at heart be understood as kind of a camera (plus microphone, smell, touch and taste recorder). But we often treat it as if it was a personal entity, an incorporeal ›somebody‹ or vicarious ›I‹ witnessing the fictional events (standing in the empty front room of Mrs. Pearce's house, for example). Especially if its spatio-temporal access and its way of moving resembles human capabilities, we tend to imagine a ›figural‹ perceiver. This bias (or, ›fallacy‹) of anthropomorphizing the perceiving instance often entails another bias: to synthesize this ›somebody‹ with any available ›subject‹ in the text. If there is no character, like in the quoted passage,⁸ the only available ›subject‹ is that of the narrator, that is, the person we assume – again anthropomorphizing – is behind the ›voice‹ of a narrative. As

6 Stanzel: Situations; Stanzel: Theory. For a survey see also Fludernik / Margolin: Introduction.

7 Cf. Mellmann: Voice, pp. 125–129.

8 Or if they are not able to function as perceivers, for example, if they are sleeping: »The little boys in the front bedroom had thrown off their blankets and lay under the sheets. It was hot; rather sticky and steamy. Archer lay spread out, with one arm striking across the pillow. [...] In the other bed by the door Jacob lay asleep, fast asleep, profoundly unconscious« (Woolf: Jacob's Room, p. 9). It would be unreasonable to ascribe the perception that it was hot, ›sticky and steamy‹, to the boys (although they might feel it even sleeping), so again the narrator has to fill this space.

Bortolussi/Dixon have observed, empirical readers indeed tend to synthesize »narrator« and »perceiver« in their imagination.⁹

Authors exploit these biases by unfolding a versatile back and forth of potential attributions. Here is another example from *Jacob's Room*:

The rock was one of those tremendously solid brown, or rather black, rocks which emerge from the sand like something primitive. Rough with crinkled limpet shells and sparsely strewn with locks of dry seaweed, a small boy has to stretch his legs far apart, and indeed to feel rather heroic, before he gets to the top.

But there, on the very top, is a hollow full of water, with a sandy bottom; with a blob of jelly stuck to the side, and some mussels. A fish darts across. The fringe of yellow-brown seaweed flutters, and out pushes an opal-shelled crab – »Oh, a huge crab«, Jacob murmured – and begins his journey on weakly legs on the sandy bottom. Now! Jacob plunged his hand. The crab was cool and very light.¹⁰

The quoted passage is separated from its preceding paragraph by an asterisk, indicating kind of a cutaway from the chapter's initial scenery to another place on the beach. Starting with the description of a rock, the passage seems to exhibit a scene again void of characters, and the reader will probably begin with the idea of an anonymous perceiving instance which is installed in front of the rock. However, beginning at the latest with »But there«, he will imagine it as a strongly »figural« narrator-perceiver, because the »But« does not make sense except in relation to a psychic entity, to which the perception of the water hollow on the top of the rock would mean a sudden discovery. This anthropomorphization of the perceiving instance is further supported by the switch to present tense, which evokes the imagination of someone really being there. Not before the third paragraph, though, do we understand that this »someone« is Jacob, and that already the considerations of how much »a small boy«, of all things, »has to stretch his legs« might have been due to this fact. Thus, only retrospectively does the reader become aware that he has been seeing the rock all along »through Jacob's eyes«, and that the passage is, in Genette's terms, »internally focalized«.

Both examples make clear that, if there was not access to the fictional world independent from characters, texts like the quoted ones would not work. The first one, lacking any characters, would not give rise to any imagination at all. In the second one, Woolf would not be able to suspend

9 Bortolussi / Dixon: *Psychonarratology*, pp. 166–199. Yet I do not follow their conclusion that Genette's distinction of voice and perception therefore »loses [...] relevance« (p. 172) as an analytical concept, because how are we to make that important observation (that readers tend to synthesize voice and perception instance) *without* this distinction?

10 Woolf: *Jacob's Room*, p. 5.

the communication of Jacob's presence until the end of the passage. Only the existence of a textual device called focalization allows her to start as if there were no character, and to make a game out of letting the perceiver become more and more ›figurak, and finally Jacob.

The fact that ›focalization‹ and ›character‹ are only loosely connected and can combine differently in different cases becomes particularly apparent in the following passage:

›Ja-cob! Ja-cob!‹ Archer shouted.

›Scarborough‹, Mrs. Flanders wrote on the envelope, and dashed a bold line beneath; it was her native town; the hub of the universe. But a stamp? She ferreted in her bag; then held it up mouth downwards; then fumbled in her lap, all so vigorously that Charles Steele in the Panama hat suspended his paint-brush.

Like the antennae of some irritable insect it positively trembled. Here was that woman moving – actually going to get up – confound her! He struck the canvas a hasty violet-black dab. For the landscape needed it. It was too pale – greys flowing into lavenders, and one star or a white gull suspended just so – too pale as usual. The critics would say it was too pale, for he was an unknown man exhibiting obscurely, a favourite with his landladies' children, wearing a cross on his watch chain, and much gratified if his landladies liked his pictures – which they often did.¹¹

Again the passage begins with an unspecified perceiving instance; Archer's calls could be heard by anyone in this place. Then the perspective slowly becomes that of Mrs. Flanders, with culmination at ›But a stamp?‹, which reflects her looking for a stamp. Afterwards, the text abruptly switches to external focalization (›ferreted in her bag ...‹), which slowly turns into Steele's perception of her, that is, into an internal focalization again. It is most clearly his perception when we reach the exclamation mark (› – confound her!‹), which reflects his emotional reaction to the scene as it appears to him. Finally, the perceiving instance roughly follows the turn of his head to the canvas and, seemingly, glides into his head, depicting his thoughts about his painting and his reputation as an artist. Such a wandering perceiving instance, from one character to another and in and out each time, demonstrates with particular clarity that the focal position is an entity of its own, independent from (albeit casually associating with) characters. However, there are two difficulties which I left out in my analysis.

The first difficulty lies in the interdigitating of internal and external focalization. Similar to the switch from internal to external focalization in ›But a stamp? She ferreted in her bag‹, there are changes of focalization regarding Mr. Steele: The facts that he wears a Panama hat, that he suspends his paint-brush, making it tremble, and that he finally dabs the

11 Woolf: *Jacob's Room*, p. 4.

canvas, are seen from outside. But between these events there is an internally focalized passage about how he sees Mrs. Flanders move and confound herself. This back and forth between internal and external focalization is a technique very common in passages centred on characters,¹² and to lapse into an analysis of the sometimes very dense succession of multiple switches would miss the point. It would seem more reasonable to subsume both techniques under the notion of ›alignment‹, as it was used to describe similar phenomena with films:¹³ To ›align‹ a narration with a character means to seemingly walk about and keep close with him, applying internal focalizations (like in point-of-view shots) as well as external ones (like in close-up shots). One aim of alignment can be to provide ›subjective access‹ to a character; and sometimes external focalizations (showing an emotional reaction like that of the trembling paint-brush, for example) serve this purpose better than internal ones. Applying the concept of alignment, I can give a more homogenised description of the quoted passage, saying that it starts with an unspecified perceiving instance, which is then aligned with Mrs. Flanders, and then slowly turns into an alignment with Steele.

The second difficulty is that internal focalizations (like free indirect discourse) are oftentimes ambiguous. For instance, the causal relation which is expressed in ›For the landscape needed it‹ is likely to be understood as a reflection by Steele, because it informs about his motivation to add the black-violet dab; but do we really know that it is his own comprehension of his motives (and not a supposition by the narrator)? The same question applies to the next sentences: ›It was too pale – [...] – too pale as usual. The critics would say it was too pale [...]‹. Do we know for sure whether these are Mr. Steele's thoughts while gazing at his painting, or rather comments on the part of the narrator? And whose gaze on the picture is it then that is depicted in ›greys flowing into lavenders ...‹: Mr. Steele's or that of an anonymous perceiver? And whose knowledge is it when we are told that Steele is an ›unknown man‹ and that the landladies mostly like his pictures: his own or the narrator's knowledge? – If that sounds like (not really false, but) dispensable scepticism, I have achieved my aim. For it would confirm what I want to show: that we automatically yield to the above mentioned biases to

12 Cf. Genette's consideration that internal focalization (as a matter of entire narratives, not of single half sentences) is very rare and ›fully realized only in the ›interior monologue‹, or in that borderline work, Robbe-Grillet's *La Jalousie*, where the central character is limited absolutely to – and strictly *inferred* from – his focal position alone‹ (Genette: Discourse, p. 193).

13 Smith: Characters, pp. 142–165.

anthropomorphize the perceiving instance and to synthesize it with any available subject in the text, even if the text does not provide sufficient clues to force such interpretation. See as a counter-example another passage:

[...] for there her pen stuck; her eyes fixed, and tears slowly filled them. The entire bay quivered; the lighthouse wobbled; and she had the illusion that the mast of Mr. Connor's little yacht was bending like a wax candle in the sun.¹⁴

Here there *is* a reason intrinsic to the text to consider parts of the passage as internally focalized. For only Betty Flanders sees the bay quiver and the light house wobble, as she alone has tears in her eyes. We need to identify *her* as the focal position, because those perceptions cannot be reasonably ascribed to a merely technical perceiving instance (»camera«), or to the narrator. However, except for such rare cases of unambiguously internal focalization, the association of a focal position with the presence of a character must be regarded as something added by the reader, a *mental construction* which does not have its equivalent in the text. So where does the bias to build such specifying mental constructions come from?

2 Psycho-Poetic (Side-)Effects

My supposition is that the textual device of focalization relies on the same cognitive abilities which are involved in ordinary real-life experience, and that enacting those abilities automatically implies the idea of agency, because real-life experience is first-hand experience, that is, the experience *of someone*. In particular, anthropomorphic focalizations in a way mimic individual experience and thus evoke the idea of someone *who is* experiencing. My second claim will be that social cognition is a highly adaptive and highly rewarding mental occupation and that this is why we are prone to understand characters (or quasi-characters) wherever possible.

These suppositions draw upon an observation made by John Tooby and Leda Cosmides, who wondered why people say so many things in the form of stories, while »there is no extrinsic reason why communicated information needs to be formatted in such a way«. They suggest that »our richest systems for information extraction and learning are designed to operate on our own experience«, because »we evolved not so long ago from organisms whose sole source of (non-innate) information was the individual's own experience«. As a consequence, they consider it

14 Woolf: *Jacob's Room*, p. 3.

›inevitable, now that we can receive information through communication from others, that we should still process it more deeply when we receive it in a form that resembles individual experience [...]. That is, we extract more information from inputs structured in such a form«.¹⁵ I think that the two modes of information gathering mentioned here – social communication and individual experience – correlate perfectly with Genette's concepts of ›voicex and ›perceptionx:¹⁶ The ›voicex aspect of a narrative should involve mainly those cognitive mechanisms which are associated with verbal communication, that is, semiotic faculties, memory, syntax logic, and the like; whereas the ›perceptionx aspect should run a simulation on the perceptual systems of our brains. A focalized depiction of a narrative situation thus should be processed by more or less the same second-order circuits as are involved with processing sensory inputs.

If we assume this is true and that focalized narratives do generate an as-if simulation of first-hand experience on the reader's mind,¹⁷ then the feeling of being in the place oneself and personally witnessing the fictional events would be kind of a natural by-product of the process. This would account for the idea of a vicarious ›Ik, which is somewhat mirrored in the concepts of a ›figuralx perceiver, an ›invisible witnessx or ›imaginative spectatorx.¹⁸ – But what about the second bias to associate this figural ›as-if Ik with a character or, respectively, the narrator?

Tooby and Cosmides, when giving a closer description of what they mean by the story format, list a couple of ›preferences:

People prefer to receive information in the form of stories. Textbooks, which are full of true information, but which typically lack a narrative structure, are almost never read for pleasure. We prefer accounts to have one or more persons from whose perspective we can vicariously experience the unfolding receipt of information, expressed in terms of temporally sequenced events (as experience actually comes to us), with an agent's actions causing and caused by events (as we experience ourselves), in pursuit of intelligible purposes.¹⁹

15 Cosmides / Tooby: *Beauty*, p. 24.

16 This is my general hypothesis in Mellmann: *Voice*.

17 Cf. Decety: *Empathy, on neural correlates of a spatio-temporal ›sense of agencyx* (p. 257) and a natural bias ›toward self-perspectivex (p. 258).

18 Cf. Tan: *Affect, and Tan: Emotion, for ›invisible witnessx; for ›imaginative spectatorx* cf. Smith: *Characters*.

19 Cosmides / Tooby: *Beauty*, p. 24. See also Oatley / Gholamain: *Emotions*, p. 269: ›following a plot requires that actions be understood as steps in plans. [...] the basic modality of the fictional simulation is, therefore, that the actions of the protagonist are run on the planning processor of the reader or audience member. In real-world planning, we have a goal, and we arrange actions as steps in the plan to achieve it. In running a fictional simulation, we allow the text to guide our planning process, to steer

›Preference‹ in an evolutionary logic means something which is sustained by pleasure because it is highly adaptive and the organism shall be motivated to enact the related mechanisms as often as possible.²⁰ Innate preferences should become manifest by statistical dominance of certain behaviours (compared to others) and/or higher frequency of occurrence than would seem apt for rational means or other reasons. In this sense, the fact that ›[p]eople prefer to receive information in the form of stories‹ may for now pass as commonsensical;²¹ yet this is kind of a meta-preference, an across-the-board effect of *several* preferences served by ›narrative structure‹ (including as various features as perspective, sequence, or agency), each of which would need closer examination individually. Note that the analogical structures of narrative texts and real-world experiences are not pleasurable *per se*, but they allow the text to function as kind of a dummy stimulus for several adaptive faculties which, performed in an ›organizational mode‹,²² may be pleasurable. In order to state a preference for focalized passages over unfocalized ones,²³ and for anthropomorphic focalization over other focalization strategies, it might be sufficient to say that this simply enhances the text's ability to cooperate with the human mind;²⁴ but to explain why we prefer to ascribe the vision of the painting to Steele rather than to an anonymous perceiver, one has to ask for the reason why this should be more pleasurable than the non-ascribed version.

The answer would be that to regard Steele as the originator of the description of the canvas means to treat this passage as *information about*

us through the actions of the narrative. Emotions are then experienced in relation to the goals and plans we have adopted, much as emotions occur in relation to goals in everyday life, happiness with achievements, sadness with losses, anger at frustrations, and so forth.

- 20 See Frijda: Pleasure, for a general survey on the psychological concept of pleasure; for an evolutionary perspective on several systems of ›aesthetic preference‹ – i.e. of ›motivational systems [...] that are designed to find rewarding the kinds of actions and experiences that would have been adaptive for our ancestors‹ see Cosmides / Tooby: Beauty, pp. 13f.
- 21 Cf. Frey: Erfahrungshaftigkeit, with preliminary positive results in testing this preference empirically.
- 22 Cosmides / Tooby: Beauty, p. 16.
- 23 This preference (like all ›preferences‹ as referred to here) can of course be outrivald, in a particular case, by another preference; for instance, if the unfocalized passages are employed to flesh out the narrator persona as a social stimulus by interspersing his ironic comments.
- 24 In the sense of Oatley / Gholamain: Emotions, p. 273, saying that ›fiction involves a discourse level and a range of techniques that allow the simulation to run properly on the human mind‹.

Steele, that is, as fecund input for social cognition. The popular misbelief that we perceive fictional worlds somewhat ›through‹ characters in my opinion is induced by the fact that we never miss an opportunity to gather social information. A rectified version of that issue would be that we usually perceive fictional worlds directly (as a simulation of first-hand experience, granted by means of focalization), but that, *at the same time*, we use as much information as possible to draw conclusions about the social aspects of the fictional situation – that is, to feed our social cognition systems.

As we have seen, the ›persons from whose perspective we can vicariously experience‹ do not need to be literal persons. On the other hand, passages without any character, like the above quoted examples, occur rather seldom indeed and, typically, in highly modern literature. The ›classical‹ prototype of a story would rather begin with ›Once upon a time there was a king‹ than with ›Once upon a time there was a rock‹; and if it still did so, we would expect to be told immediately after about the role this rock played in some particular people's lives. For, as was rightly claimed, fictional events hardly make sense but in relation to agents.²⁵ Actually, the very value of narrative and stories seems to be to provide us with complex social models.²⁶ So, along with many others, I suppose that much of the pleasure we derive from fiction is due to its eliciting our social predispositions (cognitive as well as emotional ones).²⁷

Take for instance the detective novel: this ›whodunnit‹ genre is almost exclusively designed to address our capabilities for evaluating people in accordance with the ›good guy‹/›bad guy‹ schema,²⁸ for mind reading, and ›detecting the cheater‹.²⁹ The popularity of this genre may be a hint that cognitions of this sort are highly rewarding; and to always be aware of another's intentions, the friendly as well as the hostile ones, should indeed have enhanced the survival and reproductive success of our ancestors. Similar things can be said about other complex social programs such as, for instance, evaluating the hierarchical status of each member of a group,

25 Scalise Sugiyama: *Narrative*, pp. 183–185.

26 Cf. Oatley / Mar: *Pre-adaptations*.

27 See, for example, Zunshine: *Fiction*, who connects the study of how texts trigger and exploit our capacity for mindreading with the question of ›why we read fiction‹; further elaborated (and more explicitly drawing on evolutionary aesthetics) in Zunshine: *Mind*.

28 There is reason to understand this schema as part of a separate mechanism equipped with a separate memory of its own, for even people with completely impaired memory function are able to subliminally recognize someone who has been positive to them (cf. Damasio: *Feeling*, pp. 43–47).

29 Cf. Cosmides / Tooby: *Social reasoning*.

which requires permanent attention to their behaviour, memory in order to prepare potential coalitions, continuous reflection on what is good and bad from an ethical standpoint, and so on; another such program is social learning, which involves continuous observation too, and reflection on which behaviours are successful and which are not.³⁰ Intensely social animals that they are, humans possess plenty of those predispositions to reflect on and react to their social environment, be it real or fictional.³¹

Actually, this is how fictional characters emerge. As William James once said: we do not cry, because we are sorry, but we feel sorry because we cry.³² Similarly it could be said: we do not cogitate on social facts because we face literary characters, but we figure out personal entities because our social dispositions have been activated. They are triggered by a special kind of information which is appropriate to be used as social information. This is how characters become alive, and ›round‹; we fill them out by thinking about them, driven by our intrinsic interest in other ›members of the group‹ and making use of any available information. When mental processes, of whatever kind (emotional, perceptual, cognitive), thus entail, as mental by-product, the idea of animate beings (like for instance characters, but also ›narrator‹, ›figural perceiver‹, etc.), I speak of ›psycho-poetic effects‹, that is, the effect of ›making psyche‹ by imagining a psychic entity.³³ So what happens exactly when we understand a perceiving instance as an anthropomorphic entity ›walking on two legs‹, rather than a mere technical instance of ›camera‹? And what happens when we equip this anthropomorphic instance with a fully-fledged human psyche, having intentions and feelings?

3 Reverse-Engineering ›Empathy‹

What kind of information is it that is appropriate to be taken as social information? I shall give some suggestions for textual clues possibly corresponding to the releaser schema of particular routines of social cognition;³⁴ – which also means to dissect the broad popular concept of

30 Cf. Eibl: *Animal*, pp. 194f.

31 Cf. Norris / Cacioppo: *I Know*, pp. 88f., 90–95.

32 James: *Emotion*.

33 Mellmann: *Emotionalisierung*, pp. 99–103.

34 Cf., as a similar attempt, the list of probable sub-mechanisms involved in ›theory of mind‹ which Jannidis: *Intention*, pp. 191–197, deploys referring to findings from recent developmental psychology and primatology; similar lines of argument in Lauer: *Spiegelneuronen*.

›empathy‹ into a number of specific adaptations, which together constitute our capacity for empathic experience. This procedure conforms to what is called ›reverse-engineering‹³⁵ in evolutionary psychology and helps to identify the very entities of a complex design to which we can attribute specific adaptive functions.³⁶

For instance, the information that something is moving may belong to one type of socially relevant information, for we have reasons to assume there is a specific cognitive algorithm for distinguishing animate from inanimate objects by self-propelled movement.³⁷ Think of Steele's trembling paint-brush: As we are not told that his hand would tremble, but his paint-brush itself (›like the antennae of some irritable insect!‹), the paint-brush might momentarily gain qualities of an animate being and thus produce a slightly eerie effect on the reader. Action verbs may represent another type of socially significant triggers, because they indicate someone *doing* something and thus appeals to our ability to infer intentions and goals from animated motion.³⁸ See for instance phrases like ›A daddy-long-legs shot from corner to corner‹, ›A fish darts across‹, or ›and out pushes an opal-shelled crab: Of course semantic memory helps enough to understand that a daddy-long-legs, a fish and a crab are animals, but if they are shown as ›shooting from A to B‹, ›darting across‹, or ›pushing out‹, they gain real life in the imagination of the reader, for he assumes there is kind of an intention in their action. Generally, words indicating intentionality and motivation perform the same function, like for instance the adverbs in ›A single leaf tapped hurriedly, persistently, upon the glass‹.

As you might have noticed, those basic social triggers roughly pertain to what are known as the stylistic devices of ›personification‹ and ›prosopopeia‹ from classical rhetoric, making it possible to play psycho-

35 Tooby / Cosmides: Foundations, p. 61.

36 See also my critique of less strictly ›adaptationist‹ argumentations in the final section of Mellmann: Heuristic. – To give an example from physical evolution: The human hand as a whole is of course highly adaptive (as is ›empathy‹). But if I consider the human hand as ›an adaptation‹, I have to cope with a multitude of potentially adaptive functions (grasping, feeding, waving, beating, picking one's nose ...) and will fail to determine both the crucial function for which it was selected and the actually selected entity (for the human hand is not an entirely new design of the human species but the result of many a proto-design appearing throughout animal evolution). A more reasonable method of adaptationist analysis would be to look at one particular feature of the hand, for instance the opposable thumb, and to ask for its particular adaptive value.

37 See Stone: Perspective, pp. 320–322, and the literature reported in Blythe / Todd / Miller: Motion, p. 261, and Zunshine: Strange, pp. 6–14, 15.

38 Cf. Stone: Perspective, pp. 322f., and Blythe / Todd / Miller: Motion.

poetic effects even on inanimate objects or abstract concepts. Comparably, clues of movement and intention can be used to animate an inanimate perceiving instance: If, for instance, the perceiving instance in Mrs. Pearce's empty front room does not only look at the oil lamp on the table, but also at the garden out the window, then again back at the objects lying around in the room and, finally, at the corners where the daddy-long-legs shoots back and forth, it performs kind of a movement of the ›head, if not the whole ›body, which arouses the imagination of an animate being capable of autonomous movement. Moreover, if the focalization of a text thus performs kind of a zoom, changing from a rather wide scope of perception to the selective depiction of individual spots and details, or the inverse, or if it lingers longer at a place, we might infer from this movement ›behaviour‹ kind of an intention – which we normally ascribe to the ›voice‹ instance (the narrator), but which here additionally vivifies the perceptual instance, so that it tends to be merged with the narrator in the mind of the reader.

Focalization strategies like zooming or lingering do not only trigger our inference systems for detecting other people's intentions (known as the ›theory of mind³⁹ module), but may also meet our disposition for ›shared intentionality or ›joint attention,⁴⁰ that is, for directing our attention in accordance with another, which might be a subunit of social learning programs. The sentence ›There was a hurricane out at sea, for instance, signals attention to a particular circumstance and invites the reader to follow this selective concentration. This effect often goes along with the use of perception verbs, like if the sentence was: ›One could *hear* the hurricane out at sea. Or consider a passage like this one:

39 I use this term in the narrow sense of ›theories about another's intentions, beliefs, and desires. For a critique of broader conceptions (like, for instance, Sperber's and Wilson's proposition of a ›comprehension module) with empiricist arguments see Ermer et al.: Theory; for a comprehensive discussion on ›ToM‹ that convincingly differentiates between several domain-specific sub-mechanisms, including an implicit ›mentalism, and domain-general capacities that, among others, also subserv ToM-tasks see Stone: Perspective (especially pp. 319f., 332–337).

40 Cf. Jannidis: Intention, p. 195, Lauer: Spiegelneuronen, p. 148, and Stone: Perspective, pp. 323–329.

The two women murmured over the spirit-lamp, plotting the eternal conspiracy of hush and clean bottles while the wind raged and gave a sudden wrench at the cheap fastenings.

Both looked round at the cot. Their lips were pursed. Mrs. Flanders crossed over to the cot.

›Asleep?‹ whispered Rebecca, looking at the cot.

Mrs. Flanders nodded.⁴¹

We are tempted to follow their look at the cot, even if the pertaining view is not specifically depicted in the text. We even might figure it out on our own instead: Did you imagine a vision of the cot while reading this passage (or even of Mrs. Flanders' view *into* the cot, of the sleeping baby)? If so, you have obeyed the very social algorithm hypothesized here.

The capacities of guessing another's intentions or following another's attention are core components of the meta-capacity to ›understand the other‹, another important sub-program of which surely is the ability to create empathic representations of another's inner states. Empathic mental representations can be induced, for instance, by use of perceptual adjectives. For example, the remark that ›it was hot; rather sticky and steamy‹⁴² in the room requires the imagination of a perceiver endowed with a human sensory system and of how these perceptions feel to him. Another source of empathy triggers is the depicting of various emotional display behaviours. When we are told, for example, that Betty Flanders is ›pressing her heels rather deeper in the sand‹,⁴³ that she has tears in her eyes, or that Steele's paint-brush is trembling, we may make elaborate guesses about their states of mind. This is more than only inferring intentions or motives, or sharing in somebody's directed attention; it also includes a mental representation of complex sensual data (like feelings and sensations) and of complex cognitive frames (like individual beliefs, a particular set of values and level of information).

The strikingly sensuous quality of empathic representations is what most people first think of when talking about empathy or about experiencing fictional worlds ›through characters‹. And in this view, empathy is often understood as an emotional experience. I do not think that this is correct, and that is why I have to add another section on empathy.⁴⁴

41 Woolf: *Jacob's Room*, p. 8.

42 Cf. note 8.

43 Woolf: *Jacob's Room*, p. 3.

44 I do not attempt to list and discuss the numerous theories of ›empathy‹ (and ›sympathy‹, ›identification‹, and so on) in literary and, especially, film studies before and after the ›cognitive turn‹ (some of them being more, others less compatible with what I am suggesting in the following section). When, in what follows, I content myself with

4 ›Empathy‹ Revisited

Browsing handbooks of psychological emotion theory, one will rarely find articles on empathy. Publications on empathy are numerous, but, most of the time, without clear affiliation with the domains of emotion research or cognitive sciences; they rather stand alone (or, in the context of developmental psychology) and sometimes tend to reproduce a ›folk theory‹ of empathy, that is, they treat (or rather, celebrate) empathy as a highly valued prosocial endowment for ›sharing‹ the emotions of others. This imprecise notion of empathy has grown particularly virulent after the discovery of ›mirror neurons.‹⁴⁵ Vilayanur S. Ramachandran has coined the unfortunate abbreviation term »empathy neurons‹ or ›Dalai Llama neurons‹ that, »it would seem, dissolve the barrier between self and others.«⁴⁶ While it is true that empathic imaginations show an eminently sensuous quality (and thus *resemble* emotional experience) and that this might indeed be due to neural ›mirroring‹ processes (or similar phenomena),⁴⁷ there is no worth in metaphors suggesting miraculous fusions of self and other, or a kind of wired connection between them. Actually, it is important to keep in mind the fundamental ›barrier‹ between self and other, because otherwise we would not be able to differentiate between someone *experiencing* an emotion and someone *imagining* that experience.⁴⁸ The first may have a mental representation of his feeling too though, and it is quite possible that it closely resembles that one which the latter will elaborate by means of empathy; yet the first will show *both* the elicitation of an emotion program *and* a second-order representation of this process, while the latter shows a mental representation *only* – which, moreover, will have come about very differently and does not result from monitoring processes within the same nervous system. When I, in the following, speak of ›empathy‹, I understand by it »a form of complex psychological inference in which observation, memory, knowledge, and reasoning are combined to yield insights into the thoughts and feelings of another« and to construct a complex mental representation of his state of mind.⁴⁹ To

arguing against an anonymous ›popular notion‹ of empathy, note that this ›popular notion‹ is not a mere straw man, but has indeed strongly influenced most of the numerous conceptions of ›empathy‹ I have come across both in the humanities and the sciences.

45 See also Batson: Things, and Decety: Empathy, pp. 248–250.

46 Ramachandran: Mirror, par. 15.

47 See note 62.

48 Cf. Heberlein / Adolphs: Neurobiology, p. 46, and Decety: Empathy, pp. 258f.

49 Ickes: Introduction, p. 2; see also Decety: Empathy, pp. 248, 263f.

make more plausible why it does make sense to confine the term that way, I shall explain (a) what *emotional experience*, as opposed to empathic imagination, is, (b) what is understood by »emotional contagion«, (c) what role empathic imaginations play in social emotions, and, finally, (d) what it is, probably, that brings about the sensuous quality of empathic imaginations.

(a) To experience an emotion means that, to begin with, an emotion program is triggered. That is, a highly domain-specific situation schema is matched by a stimulus and thus initialises an equally highly domain-specific super-ordinate program of several sub-mechanisms. Those super-ordinate programs were shaped by evolution as »best-bet responses« to statistically reoccurring situations of selective significance. Involved sub-mechanisms include bodily changes as well as cognitive readjustments.⁵⁰ The neural second-order monitoring of these processes is what can show up as »feeling« in the experiencing subject's conscious mind.⁵¹

It is quite possible that two people's emotional experiences closely parallel one another, for instance if both respond to the same stimulus and the respective emotion is a very »basic« one (that is, with a high percentage of »hard-wired« innate sub-mechanisms and a low percentage of individually »learned« elements and modifications). Furthermore, not many but some emotion programs provide another possibility of paralleling two people's feelings by featuring their own »output« of emotional display behaviour also as part of their releasing mechanism, that is, as an additional releaser:⁵² for instance, seeing a weeping face may produce the impulse to weep oneself; seeing someone smile may produce the impulse to smile oneself; seeing someone's eyes widen with fear may also spontaneously excite an anxious feeling in the beholder, and so on.

(b) Phenomena of that kind are traditionally known as »emotional contagion«. Yet it is important to note that emotional contagion is no general principle, but occurs only with a limited number of emotional behaviours (like, particularly, crying and laughing) and reflexes (for

50 This model of emotions follows Cosmides / Tooby: Emotions. Cf. also Scherer: Emotion, and Mellmann: Emotionalisierung, pp. 23–41.

51 Cf. William James' above quoted view on emotions (cf. note 32), or Damasio's distinction of »emotion« – for the objective process of activating and performing an emotion program – and »feeling« – for the sensing of the consequences of the activation as a mental image which can be made conscious (Damasio: Feeling, pp. 37, 55, 79, and passim).

52 The terms of »releasing mechanism« (RM) and »releaser« (key stimulus) are taken from behavioural ecology.

instance, retching and yawning),⁵³ and, which is interesting, in infancy on a larger scale than with adults. It seems that it has been adaptive to attune and synchronize some (but not all) behaviours among group members, and especially to accord some of a child's reactions with those of its adult caregivers, as a still-developing organism may not yet be able to fully assess a situation on its own. Thus, emotional contagion seems to be a specifically adaptive algorithm itself, which applies only to very specific conditions; it cannot account for a general ›transmission‹ of feeling from one individual to another.

Another case of parallel emotional experience is often assumed for some social emotions, especially pity. According to folk psychology, when we cry with pity we cry because of sort of ›sharing‹ the sadness of the pitied person. In terms of films showing close-up shots of a weeping face, I would say that emotional contagion or emotional programs elicited by contextual information (like the one introduced below) would do to explain the impulse to cry on the part of the spectator; there is no need to claim that he cries with pity. It may be that he *also feels pity*, but the crying response is not very likely to result from this particular emotion. At least it would be hard to confirm this claim from an evolutionary standpoint, for pity as an adaptive prosocial program would be expected to coordinate actions of assistance and shelter,⁵⁴ and bursting out in tears would seem rather dysfunctional in this context. Yet there is another emotional response which applies to ›pitiful‹ stimuli (among others) and which does include the impulse to cry: the response of ›sentiment‹ as it has been described by Ed Tan and Nico Frijda. The sentimental response, according to them, is an archaic capitulation response toward the overwhelming, which can be triggered by ›any major resolution in a conflict‹ involving basic human concerns (like attachment, justice, survival).⁵⁵ That given, it is indeed possible that someone feels like crying when facing the fact that somebody has been done irremediable harm; much the same way as he may cry at two lovers' reunion, the birth of a baby, virtue's triumph, and so on (because ›any major resolution‹ signifies the positive as well as the negative ones). In fine, what appears to be ›crying with pity‹ at first sight, more likely is a compound response,

53 For the example of laughing cf. Gervais / Wilson: *Laughter*, pp. 402f., 413, 415.

54 Cf. Decety: *Empathy*, pp. 247f., and Mellmann: *Emotionalisierung*, pp. 125f., on pity as an emotional adaptation resulting from ›inclusive fitness‹.

55 Tan / Frijda: *Sentiment*, p. 54.

involving further emotion programs beyond pity (or even doing without).⁵⁶

(c) Nevertheless, pity can be said to be an »empathic« emotion, albeit in quite a different sense than in that of emotional transmission. As it is rather difficult to become aware of the fact that someone has been done harm and needs consolation and help (and of what kind) without guessing what he feels like, the emotion of pity somewhat *relies* on empathy. In that way, an empathic imagination is the initial trigger – or at least a crucial sub-mechanism in the emotion episode – of several social emotions. As Tan puts it:

I refer to emotions as empathic regardless of whether the character's emotions parallel those of the viewers; what matters is that the character's understanding of the situation is relevant for the viewer's emotion. Thus, pity is an empathic emotion, as is schadenfreude, where the viewer's feelings contrast with what is understood to be the character's (negative) appraisal of the situation. However, if the viewers were not aware of that appraisal they would not experience schadenfreude.⁵⁷

In this sense, »empathy« again does not denote any kind of transmission of an individual's emotional experience, but, as said above, »a form of complex psychological inference« on the part of the beholder, here as necessary part of some socially directed emotion programs.⁵⁸

(d) As the foregoing should have made clear, empathy as a component of the capacity to »understand the other« is not per se an emotional experience. Nevertheless, there is something like a »feeling« in empathy, some sensuous quality in imagining another's inner state. We seem to *feel* what it is like to stand in a hot and sticky room, to press one's heels deeper in the sand, to feel sad for certain reasons, and so on. This peculiar feeling might be due to what Antonio Damasio has called the »as-if-body-loop«.⁵⁹

Body states are represented in the brain by several neural second-order maps in body-sensing regions. If this process goes its »normal« way, that is, if the representation is the result of signals hailing from the body, Damasio speaks of *direct* simulation, or the »body-loop«. Yet it seems that the representation mechanisms can also be activated by cognitive stimulation, that is, by signals coming from »certain brain regions, such as

56 Cf. my suggestion to reformulate Lessing's concept of »weinendes Mitleiden« as a combination of a malperformance of the pity program and a subsequently triggered capitulation response in Mellmann: Emotionalisierung, pp. 128–131.

57 Tan: Affect, p. 18f.

58 Cf. note 49.

59 Damasio: Descartes; Damasio: Feeling; Damasio: Spinoza.

the prefrontal/premotor cortices.«⁶⁰ This is what he calls *internal* brain simulation, or the ›as-if-body-loop‹, because the somatosensory maps respond only ›as if‹ a sensuous experience had taken place, while there are no actually incoming signals from the body. Damasio considers the as-if-body-loop to be crucial for any process of mental simulation, including empathy. He draws on a study by Ralph Adolph which shows that patients with damage in brain regions concerned with accomplishing ›the highest level of integrated mapping of body state‹ were not able to correctly identify emotional facial expressions.⁶¹ ›In the absence of this region‹, Damasio suggests,

it is not possible for the brain to simulate other body states effectively. The brain lacks the playground where variations on the body-state theme can be played. [...] In summary, the body-sensing areas constitute a sort of theater where not only the ›actual body states can be ›performed‹, but varied assortments of ›false body states can be enacted as well, for example, as-if-body states, filtered body states, and so on.⁶²

Damasio believes that the as-if-body-loop mechanism draws ›on a variant‹⁶³ of the neural mirror system as described by Giacomo Rizzolatti and Vittorio Gallese.⁶⁴ And he does right to phrase rather cautiously here, because exactly how the many recent findings in the domain of neural simulation and empathy relate to one another is anything but clear at the moment.⁶⁵ ›Mirror neurons‹ is the name of neurons firing not only while performing, but also while observing an action. Note that what was initially observed is the mirroring of *visually* observed (and markedly specific) *motoric* actions.⁶⁶ Thus, a macaque's brain mirrors targeted

60 Damasio: Spinoza, p. 115.

61 Ibid., p. 117. For the study cf. Adolphs: Role.

62 Ibid., pp. 117f.

63 Ibid., pp. 115f.

64 For two attempts at integrating the discovery of mirror neurons in literary theory see Lauer: Spiegelneuronen, and Salgado: Stories, both of which in my opinion overstate the significance of mirror neurons in explaining literature; similar, albeit more cautious considerations in Lindenberger: Arts, pp. 15f.

65 Cf. the critical surveys by Heberlein / Adolphs: Neurobiology, and Shamay-Tsoory: Empathic; also, from the humanities, Borg: Mirror, Wübben: Lesen, pp. 34–36, and Koepsell / Spoerhase: Neuroscience.

66 Cf. Rizzolatti / Arbib: Language, p. 188: ›The response properties of mirror neurons to visual stimuli can be summarized as follows: mirror neurons do not discharge in response to object presentation; in order to be triggered they require a specific observed action. The majority of them respond selectively when the monkey observes one type of action (such as grasping). Some are highly specific, coding not only the action aim, but also how that action is executed. They fire, for example, during observation of grasping movements, but only when the object is grasped with the index finger and the thumb‹.

movements, and subjects who are confronted with pictures of emotional facial expressions activate the respective muscular groups of their own faces. However, Damasio's model of the as-if-body-loop describes a neural mirroring of *cognitive* information about *somatosensory* states. While I think it a plausible supposition that these are quite similar phenomena, I am most sceptical about the inference of a *general principle* of neural mirroring which would suggest an *all-purpose mechanism* mirroring whatever kind of information about whatever kind of another's activity or experience. Indeed, there is some evidence that the mirroring of motoric acts in macaques can also be stimulated cognitively, as the effect is the same when the action is partly hidden or only heard.⁶⁷ The more in humans, whose mirror systems respond even to merely mimed actions (without real object, for example).⁶⁸ Furthermore, emotion recognition seems to involve »a similar mechanism« as is involved in action recognition:⁶⁹ In terms of at least some basic emotions, like for instance disgust, there are findings which indicate that the sight of the corresponding facial expression produces partly the same neural maps as an individual's own experience of that emotion.⁷⁰ But these emotional maps still involve different cortical regions than Damasio's body-sensing maps⁷¹ and perhaps are more likely to prepare emotional contagion processes than empathic feelings.⁷² – As matters stand, the default hypothesis should be that neural mirroring is an abstraction from many quite specific sub-mechanisms built into specific adaptive programs, rather than a detached all-purpose mechanism. This supposition fits with the observation that the human mirror system responds more eagerly if the observed action has a perceptible goal or intention, and if this goal is a rather biologically »basic« than culturally learned one, like for instance drinking in comparison to

67 Gallese / Keysers / Rizzolatti: View, p. 397.

68 Ibid.

69 Ibid., p. 397.

70 Ibid., pp. 399f.; Gervais / Wilson: Laughter, p. 405; Heberlein / Adolphs: Neurobiology, pp. 40–42.

71 Gallese / Keysers / Rizzolatti: View, p. 400, and Rizzolatti / Sinigaglia: Mirrors, pp. 187–189. See also Heberlein / Adolphs: Neurobiology, pp. 42–44.

72 Existing neuroimaging experiments have concentrated on only a handful of affective states, including pain, fear, disgust and, more rarely, anger – all of which are possible instances of emotional contagion. Moreover, the performance of mirror neurons in perspective-taking tasks seems poorer than one would expect if mirror neurons are taken to provide a crucial substrate for empathic imagination (see Pfeifer / Dapretto: Mirror); rather it seems that empathy even works in patients who lack the neural circuits necessary for first-order mirroring (see Danziger / Faillenot / Peyron: Can We).

cleaning.⁷³ Findings of this kind strongly suggest that neural mirroring circuits always pertain to particular basic behavioural systems,⁷⁴ the identification of which should be at least as important as the observation that they involve mirroring processes.⁷⁵ Examples of such basic behavioural systems may be the above mentioned ones of mind reading, cheater detection, social learning, social status assessment, and the like.

To come back to literary characters: Programs of social cognition which are likely to be prerequisite to processes of neural mirroring are also likely to be prerequisite to psycho-poetic effects, because their activity, in the first place, identifies socially relevant information as such. Without those programs, textual information about people would remain pallid just as the textual device of focalization would remain pallid without the corresponding cognitive programs of individual experience. Since humans developed the art of storytelling, it is of course hardly surprising that the nature and properties of narratives in a way reproduce and reflect the nature and properties of the human mind. Consequently, the challenge within a perspective of ›cognitive poetics‹ aiming at more than speaking truisms would be to determine the particular mechanisms involved in this relationship. What I tried to show in this paper is that this aim is not achieved by simply replacing traditional aesthetic notions like mimesis, imagination or character with more ›mentalist‹ concepts like imitation, simulation or person schema, or by correlating it with assumed psychological verities like empathy, neural mirroring, or similarly broad concepts; but that the description of the mind probably requires the same grade of differentiation and functional analysis as the description of a text; and that the heuristic question of whether a particular cognitive routine could have evolved as a specifically adaptive algorithm may help us come closer to demounting the too-broad concepts of our intuitive psychological knowledge. It is needless to say that there still remains a lot to be done and that I could only draw a rough sketch of the field.

73 Iacoboni et al.: Grasping, p. 533, and Iacoboni: Revolution, pp. 447f.

74 See, as an example, a special mechanism for laughter contagion as proposed by Gervais / Wilson: Laughter, p. 406.

75 Similarly Gervais / Wilson: Laughter, p. 406, arguing that »the neural bases of laughter and yawn contagion should not necessarily be the same« and that »the two behaviors deserve to be evaluated on their own terms and only then compared«.

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