7

Empathy, Expansionism, and the Extended Mind

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> *Fever Pitch* is about being a fan. I have read books written by people who obviously love *football*, but that's a different thing entirely; and I have read books written, for want of a better word, by hooligans, but at least 95 per cent of the millions who watch games every year have never hit anyone in their lives. So this is for the rest of us, and for anyone who has wondered what it might be like to be this way.
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> Nick Hornby, *Fever Pitch*[1]

> I think people go to the movies to live other lives . . . [y]ou want to get out of your own life and kind of become someone else for a while, even if you wouldn't want to stay in that life. There's a kind of vicariousness that's a part of all art, I think. So if you're going to be Nikolai, who lives a life that is fraught with danger, I want you to experience his life as it really is.
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> David Cronenberg, on *Eastern Promises*[2]

Commenting recently on the landmark Pink Floyd album *The Dark Side of the Moon*, bassist and principal songwriter Roger Waters characterized the album as 'the beginning of empathy'.[3] Waters wasn't advancing the novel hypothesis that the process or the concept of empathy sprang into being in 1974, when the album was released, but rather emphasizing a shift in the mood and lyrical content of the group's work, away from the delirious, if solipsistic, psychedelia of their earlier work—the mind turned in upon itself in the exploration of 'inner space'—and towards the outer world, especially the social world of other minds. Also recently, but in a very different context, neuroscientist Marco Iacoboni has employed fMRI scanning technology in order to ascertain the motives underlying political allegiances and voting behaviour. Identifying particular regions of the brain as responsible for the processing of empathy, Iacoboni

[1] Hornby (1996): 11–12.
[2] Thielman (2007). Nikolai is the protogonist of Cronenberg's film *Eastern Promises* (2007).
[3] Waters makes this remark in *Classic Albums: Dark Side of the Moon*, Isis Productions (2003).

claims to have gathered evidence showing that the sense of empathic connection with favoured political candidates is eroded by negative political adverts.[4] And more generally, Iacoboni argues that we are 'wired for empathy'.[5] Waters and Iacoboni could both very well be spouting nonsense. But the fact that they both make reference to the concept of empathy, in the very different contexts of biographical art criticism and what I suppose we should call 'neuro-social scientific' research, shows that the concept of empathy is alive and, possibly though not necessarily, well.

Regrettably I won't be lingering on *The Dark Side of the Moon* in this paper. Instead, my goals here are twofold; first, to place empathy in the novel context of the theory of the 'extended mind'; and second, to address some objections to the notion of empathy, and its place within our experience of representational art in general and film in particular, objections which become particularly salient when empathy is set in this context. So let's begin at the beginning: what sort of thing do I take empathy to be?

Empathy is a kind of imagining; in particular it is a type of *personal* or *central* imagining. Such imagining takes the form of imagining perceiving or more generally experiencing events, in contrast to *impersonal* or *acentral* imagining, where we imagine that certain events have taken or are taking place, but without imagining that we perceive or experience them. In centrally imagining a situation, we mentally *simulate* experiencing it.[6] Consider the following as an example of central or personal imagining. I find myself gazing out of the window, down onto the relatively quiet, semi-rural, residential street on which we live. My eldest son is playing behind me, building a castle from wooden blocks, flying model planes in close to the towers, and bombing the hapless figures populating the structure. A car shoots by, its noise and sudden appearance startling me—it must be going at least 60 miles an hour, I think to myself—and this tips me into a brief, but quite disturbing, train of thought—of imagination—for a few seconds. What if, one day, we are outside on the street when one of these reckless drivers thunders by? What if we'd been outside just now, when that car sped by, and one of the children—lost in one of their own imaginative games—had veered into the road at the wrong moment? A queasy feeling passes through me; my breathing becomes irregular for a couple of seconds. We've all had this sort of experience—indeed, I suspect that, for some people, these alarming micro-fictions of catastrophe are quite common, part of the texture of their lives. In spite of the palpable emotional consequences of such personal imaginings, though, when we find ourselves thinking such thoughts—when, as we say, our imaginations run away with themselves—it is not as if

[4] Iacoboni (2008): 239–58.

[5] Iacoboni (2008): 268.

[6] The contrast between central and acentral imagining is from Wollheim (1984): 74; that between personal and impersonal imagining is from Currie 1995: ch. 6. Although subtle differences may arise from the larger conceptual schemes in which the contrasts are situated, for present purposes, they may be treated as identical. I also follow Wollheim, Currie, and many others in treating imagination as a form mental simulation. For a recent account, see Goldman (2006a). For more detail on the connections between Wollheim and Currie on empathy, see my (1997): 412–30.

we lose sight of where we actually are, of what actually is the case, of the fact that the imagining is just that: a vivid mental projection of a possible state of affairs. Our imaginations run away with themselves, but they do not hijack the mind as a whole.

In this case, I am imagining a variation on my own state of affairs. I am imagining an alternative version of myself; many aspects of the scenario are carried over directly from the way the world actually is. Let us call such imagining *self-focussed personal imagining*. Empathic imagining takes a slightly different form. In imagining how some other, *specified agent* sees the world, and in imagining how they think and feel, I empathize with them.[7] Let us call this type of imagining *other-focussed personal imagining*. Such imagining allows us not merely to recognize or understand, but to grasp directly—an idea I'll return to—the emotional frames of mind of others. And the purpose of such imagining, like the function of emotions more generally, is to lend our ascriptions of the mental states of others more 'bite'—that is, to assess them in terms of their urgency, salience, and relevance. In this way empathy functions just as emotions do in general, affectively mapping out the world in terms of its potential harms and benefits.

Empathy, however, does not take place or arise in isolation from other mental processes. In particular, empathy is systematically connected with certain other, lower-level, 'pre-reflective' responses, in particular motor and affective *mimicry*, and emotional *contagion*.[8] Consider, as an example, affective mimicry through facial expression. When we witness legible instances of the facial expressions associated with certain basic kinds of affective state—the so-called 'basic' emotions—we are apt to simulate the feeling associated with the expression, via the mechanism of facial feedback.[9] Emotional contagion is closely related, but where in affective mimicry we have some awareness that the source of the mimicked emotion lies in another person with whom we engage, in contagion we lack any such awareness of the source of the 'caught' emotion. Affective mimicry and emotional contagion can, I've suggested in earlier work, act as prompts to, and props within, fully-fledged imaginative projects. I do not say these mechanisms always work in this way; the precise effect of the expressive faces in films, for example, is very much a matter of exactly how they are deployed—framed, lit, contextualized—by filmmakers. *United 93* (Paul Greengrass (2006)), for example, gives ample screen space to the facial expressions of the hijackers—mostly expressions of anger and fear. And I think we do feel their fear by mimicry and contagion. But the film doesn't nurture a deeper imaginative engagement with the hijackers; no attempt is made to contextualize their immediate affective states in terms of their life stories. On the other hand, the film provides relatively extensive

[7] Note the importance of the causal history of the state here: a *parallel* state of mind—as when two people are both shocked by the same event—is not, on this definition, an empathic state of mind.

[8] For an illuminating discussion of this distinction, and a very thorough review of the pertinence of empathy for film, see Vaage (2008).

[9] For a fuller account of this process, see my (1995): 98–102. On the tie between recognizing and experiencing basic emotions, see Goldman (2006a): ch. 6.

context for many of the passengers on the plane, in this way fostering a fuller, more 'plenitudinous' imaginative engagement with them.

In passing we may note how the still emerging body of research on 'mirror neurons' relates to the account of empathy I've sketched. Mirror neurons are neurons which fire both when a subject executes and observes an action. They were first discovered, in the early 1990s, in macaque monkeys, but subsequent research has revealed that humans possess an even more active and extensive mirror neuron system.[10] The discovery of the mirror system provides further evidence in support of motor and affective mimicry, as well as specifying some of the neural mechanisms underpinning them. More recent research has shown that our understanding of at least some emotional states in others, including our old friends fear and disgust, is also mediated by a neural mirroring system. Such understanding constitutes a 'direct experiential' knowledge of these emotions, achieved by the 'direct mapping' of visual information concerning the emotions of others—in the form of expressions, gestures, and posture—'onto the same viscero-motor neural structures that determine the experience of that emotion in the observer'.[11] The mirror system does not constitute a complete neural foundation for imaginative simulation as it has been defined and debated by philosophers, but it does suggest how simulation of higher-order states can work from the platform of motor and affective mimicry. Mimicry of basic actions and emotions may *scaffold* the imagination, including the empathic imagination, of more elaborate, finely-specified states of mind.[12]

Strangers on a Train (Alfred Hitchcock (1951)) provides us with an example of the way in which vivid depictions of actions and facial expressions can scaffold more elaborate empathic imaginings. In one celebrated sequence, the film crosscuts between the desperate efforts of Bruno (Robert Walker) to retrieve a cigarette lighter that has fallen into a drain, with the no less determined attempt by Guy (Farley Granger) to win a tennis match. In both lines of action, Hitchcock presents us with highly legible close-ups of facial expressions (of concentration, exertion, anxiety, and pain) and motor actions (stretching, grasping, running, swinging) apt to trigger motor and affective mimicry of these very gestures and affective states. (Bruno's grasping for the lighter is particularly resonant in this context, since most of the early mirror neuron experiments involved subjects witnessing objects being picked up.) These mimickings may initiate, support, and enrich our broader imaginative efforts, also prompted by the film, to understand what it is like to be each of these characters—that is, to be in these situations possessing their distinctive character traits, histories, and goals. Thus we might centrally

[10] Gallese, Keysers, & Rizzolatti (2004): 397; Iacoboni (2008): 111; Iacoboni (this volume).

[11] Gallese et al. (2004): 397 and box 3 (p. 401). Those neural structures being (predominantly) the amygdala in the case of fear, and the insula in the case of disgust. See Gallese et al. (2004): box 1 (p. 399).

[12] Gallese et al. (2004): box 3 (p. 401). Giacomo Rizzolatti treats affective mirroring as 'a necessary condition for' fully-fledged imaginative empathy, while stressing that on its own such mirroring does not amount to empathy. Rizzolatti's perspective on mirror neurons is laid out in full in G. Rizzolatti & C. Sinigaglia (2008). The quoted phrase appears on page 190.

imagine Guy's immediate urgency as he attempts to finish off the tennis match, but also his anger towards Bruno and the excruciating injustice of his situation (in which he has every reason to resent his wife, but, appearances notwithstanding, has neither killed her nor connived with Bruno to kill her). The mirror system allows us to feel Guy's exertions on the tennis court, palpably connecting us with him, and thereby grounds and consolidates our imaginative appreciation of the larger complex of thoughts and feelings undergone by him.[13] My hypothesis, then, is twofold: *Strangers on a Train* not only shows us how a film might strive to elicit 'motor resonance'[14] and affective mimicry, but also suggests how such mimicry might go on to scaffold fully-fledged empathic imagining.

One might wonder, given the distinct types of mental process gathered under the umbrella of empathy in the discussion so far, whether the definition of the concept on offer here is really coherent. That worry might be fuelled further by considering the tangled history of the term. Introduced originally as a specialist term in psychology and art history in German, on the one hand 'empathy' has spread into ordinary English usage, and on the other hand the term has been revived—as this book testifies—as a term of art in psychology and philosophy of mind. The history of the term is further complicated by its relationship with the English 'sympathy'. In contemporary debate, empathy is typically contrasted with sympathy, where the latter is defined as a 'pro' attitude undergirding positive but *acentral* emotional responses to others—a kind of 'feeling for' others, rather than the 'feeling with' characteristic of empathy.[15] But David Hume and Adam Smith used 'sympathy' to refer to a phenomenon that we would label empathy. So long as our aim is to track and define a *phenomenon*, however, rather than give an account of the use of a *term* in ordinary or any other kind of language, the complex history of the term(s) used to refer to the phenomenon we are interested in need not derail the project. In this spirit, then, we can condense the description of empathy given in the discussion so far in the following way:

Person A empathizes with target person B if and only if A personally (or centrally) imagines perceiving, cognizing, or feeling, partially or globally, the perceiving, cognizing, and feeling of B, where such imagining involves conscious, qualitative awareness of the state imagined. A may engage in such empathy on the basis of information gleaned from perceiving B, or information inferred or otherwise derived indirectly. Various 'sub-imaginative' forms of direct responsiveness to the mental states of others, such as contagion and mimicry, may initiate and/or bolster empathy (and perhaps typically do bolster empathy); these phenomena form a family with

[13] The example does raise a further and somewhat unusual complication: given that the sequence (and the film as a whole) alternates our attention between two characters with opposing goals, how do we 'manage' conflicting mimickings and imaginings? Can we run, in parallel, two conflicting empathic scenarios, or does the larger context of our sympathy for Guy entail that the sequence will likely only prompt empathic imagining for him, while our response to Bruno will be 'contained' at the level of lower-level motor and affective mimicry?

[14] Iacoboni (this volume).

[15] For a fuller discussion of sympathy (and its converse, antipathy), see Smith (1995): 187ff.

empathy insofar as all are characterized by A 'feeling with' B, such that if A feels anxious, B 'takes on' this anxiety (by contagion, mimicry, or volitional simulation). But contagion and mimicry alone do not constitute fully-fledged empathy, which on this account requires the higher-level type of volitional imagining described above.

It might also be objected that the effort to render through literature or film 'what it is like' to be some other kind of person in a particular situation might involve only an 'imaginative grasp' of the situation, rather than the form of intersubjective relationship specified by empathy. There are several problems, however, with this counter-proposal. On its own, it is simply underspecified—if having an 'imaginative grasp' of a situation does not amount to simulating the states that one seeks to 'grasp', and in that sense empathizing with the person experiencing those states, we need to know what it *does* amount to. The alternative construals of 'having an imaginative grasp' that I can see are as follows:

- We recognize or understand what it would be like to be a certain kind of person in a certain situation in a purely cognitive sense—that the grief of a parent losing a child has a particular quality, for example, characterized by the ironic survival of the child by the parent. We can identify the state in terms of its relationship to various practices, norms, and other situations and states of mind. In this sense we come to understand or grasp it, but without at any point simulating it (or empathizing with the subject by simulating it).
- Our imaginative grasp of the situation takes on an emotional character, but remains an 'acentral' one, a sympathetic (in the contemporary sense) rather than empathetic response. Coming to know the character or person who experiences the grief of the loss of their child, we feel *for* them, but not *with* them. Of course, such feeling for a person necessitates the kind of intellectual or cognitive understanding of situations and states specified in our first option above—we can't feel pity for a grieving individual unless we understand in this sense the nature of grief. So in this second option, we go beyond cognitive understanding to respond emotionally, but not in the form of empathy. Our emotional response is asymmetrical with the character's—since they are responding to one situation but we are responding to their response to that situation. Empathy plays no role here, either as a prerequisite for understanding or for having a sympathetic emotional response, nor as an overall outcome of the process of engaging with the person or character.[16]
- A third possibility: having an 'imaginative grasp' of a situation might amount to 'in his shoes' imagining.[17] This form of imagining is closely related to but distinct from empathy as defined here. In such cases I might imagine how *I* would react in

[16] Noël Carroll has pursued this line of argument for many years. See, for example, Carroll (1990) and (2001b): 306–16. See also Goldie (this volume).

[17] Goldie (2000): ch. 7.

> the situation of another—if I were in his shoes, *but possessed of my own rather than his traits, states, and history*. As I have implied through my initial example of personal imagining—the example of imagining the road accident—such imagining forms the ground of possibility for empathy. In being able to detach myself from *my* current actual state and situation and project myself imaginatively into an alternative situation, I open up the possibility of imagining how some other person might experience this situation. (Or, to put it differently, my imagining of the alternative situation might extend to include the dispositions and characters of the agents involved, in addition to its 'non-personal' elements—the setting, goals and roles at stake.) Thinking of the movement from self to imagined other in incremental terms demystifies the idea of empathy—there is no magical transplanting of one person into another, but rather the gradual and cumulative substitution of elements appropriate for myself with those appropriate for another. I have no particular anxiety around crowds, but this character does, so imagining being trapped in a surging crowd at a football stadium comes out differently if I am engaging in 'empathic' or 'in his shoes' imagining respectively. Certainly this is a process that admits of degrees, but to the extent that our imagining involves some degree of modelling on another person, empathic imagining is involved. In our experience of fictions, these two forms of personal imagining run together, either in parallel or commingled.[18]

The problem with the first two options is that they fail to take seriously the qualitative, 'what it is like' dimension of statements like Hornby's (on his football memoir *Fever Pitch*), and Cronenberg's (on his film *Eastern Promises*), quoted at the head of this essay. I think it is implausible simply to deny that many authors and filmmakers regard empathic response, along the lines described here, as among the responses they seek from readers and viewers; remarks of this type by artists are legion.[19] Perhaps such artists are simply wrong about the nature of the psychological transactions that their fictions initiate, in which case 'empathy' might be explained *away* by a kind of 'error theory'. Certainly there is often hyperbole in such statements, as in the case of Cronenberg's comments on *Eastern Promises*. But we have yet to see a really convincing version of such an error theory of empathy.[20] The third option is more plausible insofar as it addresses the qualitative dimension of empathy, but such 'in his shoes' imagining,

[18] Cf. Smith (1995): 80; Goldman (2006a): ch. 7. In the electronic abstract for this chapter (Oxford Scholarship Online), Goldman notes that 'an important stage of simulation for mindreading requires reflection on one's own current states'.

[19] Dan Flory notes the use of the line 'entertainment that challenges your own ability to experience the emotions of others' in the trailer for *No Way Out* (Joseph Mankiewicz (1950)), a formulation that once again points to the idea of empathy. Flory (2008): 31–2.

[20] Noël Carroll (in conversation) suggested this way of characterizing the case against empathy. Carroll and I have both pursued an 'error theory' of the notion of 'identification', arguing that all or most of the implications of the concept are conceptually confused or empirically unfounded (see my (1995), and the references to Carroll in note 16). In effect, Carroll carries over his error theory of identification to empathy, while I take the latter concept to be defensible and to pick out a real phenomenon.

I contend, is intimately bound up with empathy, both conceptually and in the actual practice and experience of engaging with fictions. 'In his shoes' imagining is not an alternative to the account I propose, but an oversimplified version of it. The third option does, however, underline an important point. Our experience of engaging with characters in fictions and other narratives cannot be understood on the basis of empathy alone. There may be particular types of narrative in which empathy plays no significant role. But every type of response assayed in the discussion so far—purely cognitive understanding, 'acentral' sympathetic responses, contagion, mimicry, 'in his shoes' imagining, and, yes, empathy—plays a role in an account of the psychology of fictional response as a whole. And empathy is usually conjoined with other responses (a point to which I return in the final section of this essay). The issue at stake in this essay is to understand the nature and place of empathy in particular, within this array of types of response, more adequately.

7.1 Expansionism and the Extended Mind

So much for an initial characterization of empathy; what about the *extended mind*? Proponents of the theory of the extended mind hold that the human mind is distinctive in part because of the manner and extent to which it exploits features of the environment to enhance its cognitive capacities, including, for example, memory, mathematical calculation, pattern recognition, and other forms of problem solving. Andy Clark and David Chalmers characterize the extended mind hypothesis as a form of '*active externalism*, based on the active role of the environment in driving cognitive processes'.[21] The use of pen and paper to perform long multiplication, physical rearranging of letter tiles in games like Scrabble, and slide rules are all offered as quotidian instances of the cognitive exploitation of 'environmental supports'. Another example for them is language, which 'appears to be a central means by which cognitive processes are extended into the world. Think of a group of people brainstorming around a table, or a philosopher who thinks best by writing, developing her ideas as she goes'.[22] What is key in such cases is that some part of the world is reliably *coupled* with the mind to form an integrated cognitive system; it is in this sense that the mind is extended into the world, structuring and co-opting part of it in order to augment its capabilities. Clark and Chalmers begin their essay with the image of a person working at a computer screen, their attempts to solve a spatial problem aided by the externalization of the problem on the screen before them. Equally we might think of a skilled musician playing their instrument, in terms of the intimate 'coupling' between person and instrument, and the enhancement of the musical cognition that this enables.[23]

[21] Clark & Chalmers (1998): 7.

[22] Ibid. 11–12.

[23] One of Jimi Hendrix's bass players, Billy Cox, commented on Hendrix: 'Some people thought he was crazy because they couldn't understand why a man would constantly be playing a guitar all the time. But basically what he was doing was making this instrument an extension of his body' (Wheeler (2004): 137).

A closely-related proposal, due to Stephen Kosslyn, puts the emphasis on the extension of the individual mind by *social* means, that is, through other individuals and groups. Kosslyn argues that 'Evolution has allowed our brains to be configured during development so that we are 'plug compatible' with other humans, so that others can help us extend ourselves'.[24] We will see shortly just how apt Kosslyn's description here of what he terms 'social prosthetic systems' is as a context for understanding empathy.

The extended mind thesis is a radical one that by no means commands the assent of all or even most philosophers of mind. But it comes in different strengths, and the version explicated here is considerably stronger than is necessary for my purposes (which, as will become clear, include the idea that empathy and narrative cognition may be enhanced by virtue of external elements). Frederick Adams and Kenneth Aizawa mark a distinction between the extended mind thesis, and what they regard as the more modest 'extended cognitive system hypothesis'.[25] One of Clark and Chalmers thought experiments concerns a character called Otto, who is afflicted with Alzheimer's disease.[26] Otto relies on a notebook to record crucial new information about the world, just as Leonard—who endures anterograde amnesia—relies on polaroids and verbal tattoos in Christopher Nolan's *Memento* (2000). Otto's language skills are intact, and the notebook is always with him and poised for access. Now, according to Clark and Chalmers' extended mind thesis, the notebook is quite literally a part of Otto's mind. On Adams and Aizawa's weaker thesis, the notebook is certainly part of a system established *by* Otto's mind to assist his memory, but the notebook itself lies outside his mind. Otto's mind remains in the driving seat of an extended cognitive system; the elements outside the mind, though part of the system, do not have the same status as those elements bound by the mind in the traditional sense. And note that, though not all mental states are conscious, it doesn't look plausible to treat consciousness as arising from every element of the extended cognitive system—from the pens and paper beyond the skull as well as from the neurons beneath it. The physical seat of the conscious mind, as well as our phenomenal sense of its location, both appear to be located immediately 'north of the neck.'[27]

[24] Kosslyn (2007): 547.

[25] Adams & Aizawa (2008): 11; see also x and 106–32.

[26] Clark & Chalmers (1998): 12–13.

[27] The phrase—not the argument—is from Fodor (1999): 68. Two other models might deliver what is necessary to recognize the distinctive way in which the human mind expands its capacities by exploiting external resources, without demanding drastic metaphysical revisionism. The first is the familiar concept of *technology*. Film-making is a technology, obviously enough, but on this argument narrative and fiction are also (overlapping) technologies, one of whose functions is to exercise and enhance our empathic capacity. Patrick Maynard, who defines technologies as 'extenders or *amplifiers of our powers* to do things', has advanced a comprehensive account of photography as a technology expanding our powers of visualization and imagination (Maynard (1997a): 75). Maynard is also at pains to stress that 'filtering' or 'suppression' of our capacities goes hand in hand with such amplification. The second model is afforded by the notion of *niche construction*, a concept of much more recent vintage, which highlights the relevance for evolution of the way in which organisms in general, and humans particularly emphatically, are not only *adapted* to their environments, but actively *adapt* them to their needs. '[I]t is readily apparent that contemporary humans are born into a massively

So what is the relevance of all of this for the notion of empathy? There are, I think, two ways in which empathy might play a role within a theory of extended mentality. We might regard empathy as a mechanism of the *coupling* between the mind and that part of the world through which it extends itself (in which case it takes its place alongside other such mechanisms, like the visual perception which enables Otto to couple his notebook with his mind). When we empathize with another person, we extend our mind to incorporate part of his or her mind. (Iacoboni, by way of Husserl, also uses the term 'coupling' to describe the work of mirror neurons in forging empathic connections between individuals.[28]) In doing so, we exploit some part of the environment around us—in this case, another human being—and thereby learn something about the environment. Imagine that I am standing, face to face, in a conversational exchange with Amy; her eye is caught by something behind me, and an alarmed expression appears on her face. I not only immediately recognize the class of expression she exhibits, but *feel* the emotion and its force, via the mechanism of mimicry.[29] Even before I turn to discover the object of her glance, I have thus learnt something about her, and about the wider environment in which we both find ourselves—something significant and untoward has taken place and Amy is concerned about it. Much, of course, remains to be filled in; but empathy, triggered here by affective mimicry, has played a crucial initiating role, acting like a sentry alerting me to the presence of something likely to be relevant to me. I have learned something, and I have learned it in part by co-opting the perceptual and emotive capacities of another agent. (Of course, Amy's emotion and my mimicking of it are numerically distinct; she possesses and experiences her alarm, and I possess and experience my mimicking of her alarm. But my perceptual 'reach' has been extended by virtue of my uptake and mimicking of her alarm.)[30]

Alternatively, empathy might be seen as one of those capacities—alongside memory—which is *enhanced by* the extended mind; that is, it might be seen as an end as well as a means in extended mentality. And if empathy is enhanced in this way,

constructed world, with an ecological inheritance that includes a legacy of houses, cities, cars, farms, nations, e-commerce, and global warming. Niche construction and ecological inheritance are thus likely to have been particularly consequential in human evolution' (Odling-Smee, Laland, & Feldman (2003): 241). Storytelling in general and fiction in particular are part of the niche that humans have constructed for themselves over evolutionary time.

[28] Iacoboni (2008): 265. Iacoboni also states that 'The mirror neuron system seems to project internally . . . other people onto our own brains' (260), and in his paper in this volume, he writes: 'We empathize effortlessly and automatically with each other because evolution has selected neural systems that blend self and other's actions, intentions, and emotions . . . Our neurobiology . . . puts us "within each other"' (57).

[29] See again the references in note 9.

[30] Cf. Dominic Lopes' discussion of social referencing in 'The Empathic Eye' (this volume). Of course, it remains true in this example that, in theory, a non-empathic process of inference—of the sort associated with 'theory of mind'—would be sufficient to arrive at the conclusion that Amy is alarmed by some change in the environment. Here I simply assume that mimicry, or some such process, is in fact the characteristic way in which we make such inferences, in order to focus on how such a process would cohere with the theory of the extended mind.

the domain of representation, and especially the practice of narration, constitutes the 'environmental support' created by the mind to drive its amplified performance. Public narration—exemplified above all by the narrative arts—is the anvil on which such extension is forged. We can think, for example, of the devices of film-making as *cognitive prostheses*, in much the same way that we think of other devices, like the telescope or microscope, as perceptual prostheses—devices which reinforce our native perceptual capacities.

How, then, do the various forms of representation and narration augment empathy? They do so as part of a more general reinforcement of the imagination. We all possess an innate capacity to imagine things. We use our imaginations routinely and pervasively in the course of planning our lives, an activity which requires us to imagine and assess different paths of action that we might take in the immediate and more distant future. But now contemplate the difference between the kind and scale of imagining instantiated by, say, *War and Peace*, or *Hamlet*, or *Heimat* (Edgar Reitz (1984)), or *The Sopranos* (David Chase (1997–2008)), and the kind of imagining we can cope with unaided. 'The intrigues of people in conflict', writes Steven Pinker,

> can multiply out in so many ways that no one could possibly play out the consequences of all the courses of action in the mind's eye. Fictional narratives supply us with a mental catalogue of the fatal conundrums we might face someday and the outcome of strategies we could deploy in them. What are the options if I were to suspect that my uncle killed my father, took his position, and married my mother? If my hapless older brother got no respect in the family, are there circumstances that might lead him to betray me?[31]

So it is that we extend our imaginative capacity—and thus our capacity to ponder and perhaps even solve moral and social problems—by, to take another example of public narration, arraying a set on a stage and adding some props. As Kendall Walton has argued, our first acts of mimesis are those embodied by childhood games of make-believe;[32] these games also constitute the beginnings, in the development of the individual, of the *extended imagination*.

Patrick Hogan and Lisa Zunshine have both objected to Pinker's argument, partly on the grounds that his argument makes narrative as such essentially didactic.[33] Several things can be said in response to this. First, the argument here is only that this is one

[31] Pinker (1999): 543. Pinker speaks here of a 'mental catalogue', but tellingly he follows his list of questions posed by well-known fictions by saying: 'The answers are to be found in any bookstore or video shop', indicating how the 'mental' extends out into, and is supported by, the physical environment. Note also that Pinker likens this to *case-based reasoning* in research on artificial intelligence. One might also connect the role of gossip and fiction in building up such a catalogue of 'cases' with a particularist view of moral psychology and reasoning: the making of moral judgements is so complex that it cannot be based (at least not solely) on the application of abstract moral principles, but must work via analogy with, or through, the database of cases. The complex domain of moral deliberation and action is a central part of the broader complexity of human interaction and conflict described by Pinker.

[32] Walton (1990).

[33] 'Instructive' is the word Zunshine uses (Zunshine (2006): 178). See also Hogan (2003): 211–12.

significant function of narrative. Second, Pinker's proposal may be more plausible if it is not put merely in terms of possible actions, but in terms of feelings and states of being which may lead to actions—what would it be or feel like to be such a person in such a situation? Take a literary example—the figure of Bonnie Clutter in Truman Capote's *In Cold Blood*, who suffers from a form of chronic depression. In one scene, Mrs Clutter is discovered weeping in her room by a visiting family friend, Wilma Kidwell. As Mrs Kidwell comforts her, Mrs Clutter speaks:

'Wilma,' she said, 'I've been listening to you, Wilma. All of you. Laughing. Having a good time. I'm missing out on everything. The best years, the children—everything. A little while, and even Kenyon [her son] will be grown up—a man. And how will he remember me ? As a kind of ghost, Wilma.'[34]

Most of us, most of the time, don't think beyond stereotypes, generic ideas, and familiar imagery of experiences like 'depression'. Capote's precise delineation of Mrs Clutter's mindset, as manifest in her agonized outburst, allows us to go beyond such schematic ideas. Once we can appreciate the specificity of Mrs Clutter's situation and her feelings, the idea that we might then contemplate the possible paths of action leading from her situation—what *we* might do, and what *she* might do, in her shoes—does not seem so far-fetched. Theorists of emotion, after all, regard 'action readiness' as a typical element of an emotion (though Mrs Clutter may be a limit case, her depression precisely denying her the sense that there is anything she can do to help herself).[35] Finally, it might be that the classics invoked by Pinker are poor examples—either for the good reason that their complexity obscures this basic narrative function, or for the bad reason that we just can't stand the idea that *Hamlet* is, after all, in one respect at least, not that different to one of Aesop's fables. If we substitute, say, *United 93*, is it really such a stretch to say that the film helps us imagine what being on that flight was like for its passengers (or even, to a lesser degree, its hijackers)—and that this includes imagining deliberating over the options they had: compliance with the hijackers, resistance through subterfuge, or outright counter-attack?

The domain of artistic representation, then, provides us with the most striking and complex examples of extended imagining. But we shouldn't allow these objects to overshadow their more humdrum cousins. Gossip, everyday 'thought experiments' ('what are you going to do *if* you're made redundant?'), doodling, and sketching[36] are all ways of playing out our thoughts with the aid of external supports, in the form of both purely physical props and (as in the case of empathy) other human agents with whom we converse and exchange ideas. Such activities are tools that we use in the course of practical, social, and ethical problem-solving each and every day, and they

[34] Truman Capote, *In Cold Blood*, 28.

[35] See, for example, Oatley & Jenkins (1996): 96, 105–6.

[36] Patrick Maynard describes drawing as 'a way of thinking for most of us [as pre-adolescent children], for working out, observing, imagining, stating; and, for most, the fossil that remains is a doodle on a telephone pad' (1997b): 231.

form the seedbed and training ground for the artistic imagination (just as much as does 'pure' imagination—that is, imagination conceived as a mental activity in 'narrow,' purely internal terms).

Thinking of the narrative arts in this way brings my proposal into contact with another recent argument, advanced by Dominic Lopes, concerning the basis on which we study the perception and cognition of artworks in relation to perception and cognition in non-aesthetic, 'everyday' contexts. Lopes notes that most empirical research on 'artistic cognition' seeks to show how the appreciation of various sorts of artwork depends on the deployment of ordinary perceptual and cognitive capacities. Lopes distinguishes such an approach from a related but more sophisticated position that he designates *expansionism*, through a pair of proposals:

> First, I propose that our engagement with most works of art, either as creators or as consumers, depends on the exercise of the very cognitive capacities we use to navigate our environment and to deal with others of our species. Second, I propose that in our engagement with works of art, these cognitive capacities are frequently extended in quite new directions, operating in ways not seen outside artistic contexts.[37]

If Lopes' first thesis is correct, we should expect that, in one sense or another, empathizing with human agents will play an important a role in our engagement with fictions.[38] If Lopes' second thesis is correct, we might expect to find empathy 'flexing its muscles fully' in the context of narrative art, that is, functioning in 'new ways, perhaps in ways never evident' in extra-artistic perception'.[39]

In what ways might empathy, then, be stretched and refined through its engagement by the narrative arts? In *scope* and *intensity*. Our ability to empathize is extended across a wide range of types of person, and sustained and intensified by virtue of the artificial, 'designed' environment of fictional experience. We are all limited, to a greater or lesser extent, in the opportunities we have to engage with situations, persons, and cultures different to a greater or lesser extent from our own. For those who want to take it up, fiction—and, once again, public narration more generally—affords a limitless horizon of opportunities for such engagement; and if empathy (along with its relatives) is as basic to human social life as the argument so far suggests, empathy will be one form of such engagement. The possibility of understanding 'from the inside'—that is, empathically imagining—human agents in social situations more or less radically different from our own emerges. We may come not only to see, but to feel, how an agent in a given situation comes to feel that there are only a particular set of 'live options'—viable choices—open to them, a much narrower range than we might believe them to possess

[37] Lopes (2003): 645–6. The first and second proposals here correspond, respectively, with the problems of 'carryover' and 'difference' discussed in Lopes, 'The Empathic Eye' (this volume). Lopes also speaks of pictures as 'perceptual prostheses' in that essay. See also his (1996).

[38] For a similar argument, making the link between the everyday functioning of emotion and its operation in relation to fictional entities, see Robinson (2005): 130.

[39] Lopes (2003): 645.

if we assess their situation from the outside—that is, in narrowly rational terms and without an attempt to model or simulate their state of mind.

Public forms of narration help us to sustain imaginative projects of this sort, allowing us to work through the details, and the possible dramatic patterns or 'arcs' of development, of such unfamiliar scenarios with a clarity and precision impossible without them. Consider once again the analogy with music: just as instrumentation and notation enable composers to create, and listeners to appreciate, musical form on an exponentially higher scale of elaboration than is possible without these material supports, so the novelist and the filmmaker, through the technologies of their trade, are able to sustain ambitious imaginative projects, thereby affording readers and viewers of their narrative works an opportunity to do likewise.

Along with this process of sustained elaboration comes the possibility of *intensifying* our empathic responses. This might well sound highly counterintuitive, since we are, generally speaking, accustomed to thinking of the responses we have to imagined scenarios, even those embodied and supported by material representations, as pale versions of the equivalent responses we would feel in real circumstances.[40] I can be moved by the untimely death of a sympathetic and central character, but not to the extent that I will be moved by the untimely death of an actual friend. My claim is that the crafted environment of narrative artifacts enables the authors of such objects to shape, and thus to distil and concentrate, our responses to a high degree. As Carl Plantinga has demonstrated, mainstream narrative films commonly feature one or more 'scenes of empathy', in which a critical moment in the drama is capped and highlighted by prolonged and vivid depiction of a major character in the throes of emotion.[41] Such scenes, for Plantinga, are designed to elicit an empathic response, and maximize the possibility and intensity of such a response by their sustained and detailed representation of facial and vocal expressions of affect. These expressions, as we have seen, are apt to trigger mimicry and contagion in the viewer, which may then scaffold imaginative empathy. Thus, in terms of both narrative set-up and stylistic presentation, the maker of a narrative representation has the opportunity to 'engineer' an object precisely designed to elicit empathy; not for nothing do we speak of 'tear-*jerkers*'. Just as the culinary arts enable us to refine, and intensify, the flavours available in unprocessed, natural foods, so the makers of fiction may refine and intensify certain kinds of natural emotional response. It is in this sense, and only in this sense, that I propose our empathic responses to fiction may be more intense than those to real circumstances.

[40] This is an assumption carried over in Gregory Currie's simulation theory of fiction; or at least, something like this is suggested by him in his (2003), where he states: 'Imaginative counterparts of beliefs and desires will have these capacities to mimic beliefs and desires [and the role of beliefs and desires in generating affective states] only in certain circumstances and even then only approximately' (294).

[41] Plantinga (1999).

7.2 Empathy Stays in the Picture

Unfortunately for me, the drift of my argument is in the opposite direction of that recently taken by at least some of those who would seem to be my natural allies. Responding to a number of arguments sceptical that imaginative simulation has any important role to play in our comprehension and appreciation of fictions, Gregory Currie concedes that 'understanding real people and understanding fictional, and especially literary characters are very different activities'.[42] However, a number of points can be made in defence of the claim that empathy (along with its relatives) plays a significant role in our apprehension of fictions and other narratives. The first of these points concerns the distinction between the *quantitative* and the *qualitative* dimensions of the claim for the significance of empathy. Sceptics tend to assume that any claim for the centrality of empathy to the process of apprehending narrative must make it quantitatively dominant, or at least among the dominant modes by which we engage with the story; it must be something, so the assumption goes, that we are doing most or much of the time when we watch a movie or read a novel. But one may ascribe qualitative significance to empathy even if it occupies, quantitatively speaking, a rather small proportion of the time we devote to engaging with the fiction. Consider again Plantinga's argument, according to which mainstream films periodically elicit an empathic response from the viewer. These moments of empathy are clearly significant, because they occur at the climactic moments in the drama of the film, even though they might occupy no more than, say, 5% of the duration of the film (and quite probably a good deal less than that).

Similarly, it is important to keep apart the *instrumental* and *intrinsic* value that we might attach to empathy. Although Currie acknowledges that there are some fictions which seem to call out for empathy with characters as an end in its own right, simulating characters' states of mind performs only an instrumental value in his scheme as a whole. Currie labels such simulation *secondary* imagining because it performs this instrumental role in relation to *primary* imagining—the business, that is, of imagining what is true-in-the-fiction.[43] But one might argue that empathy has intrinsic value in general in our experience of narrative; that empathy, so valued, is central to the institutions of narrative and fiction, and not merely of interest in the case of some exceptional narratives. In life, empathy is typically functional, a means to an end, insofar as the capacity itself most likely evolved as a result of its utility in helping us to navigate the physical and social worlds (consider again the example of my encounter with the alarmed Amy, above). In narrative art, by contrast, empathy often becomes an end as well as a means. As both Hornby and Cronenberg indicate, to know what it is like to be a certain kind of person in a certain kind of situation is something that we

[42] Currie (2003): 295.
[43] Currie (1995): 152–5.

value for its own sake, and a primary motivation for both the creation and consumption of fiction.

The distinction between instrumental and intrinsic value points to a tension in the literature on empathy concerning the *conditions* which are likely to elicit empathy in the context of narrative consumption, and the *purpose* of such empathy when it does arise. On the one hand we find the argument that empathy is most likely to arise when we have some, but very limited, knowledge of an agent in a situation, empathy serving in such a context to probe and reveal more of what is or might be going on inside the agent. Call this the *mindreading* function of empathy in relation to representational art. On the other hand, we find the argument that empathy is most likely to arise—or in the case of radically unfamiliar cultural settings, can only arise—when we are furnished with extensive and detailed knowledge regarding the agent and their situation. (Perhaps this is the lesson of Florian Henckel von Donnersmarck's *Das Leben der Anderen* (*The Lives of Others*) (2007): only when the Stasi agent engages in sustained surveillance of the personal life of the radical playwright he is assigned to spy on is he capable of empathically understanding *what it is like* for the dramatist.) Here empathy does not serve to uncover possible new information, but to put the information that we do possess under a new description, so to speak, allowing us to feel it 'from the inside'. Call this the *mindfeeling* function of empathy. In the first case, empathy operates at or near the base of the narrative understanding; in the second, empathy arises at the apex of such understanding.

We can explore these two very different possibilities through the following three sequences from Julio Médem's *Los amantes del círculo polar* (*Lovers of the Arctic Circle*) (1998). The opening credit sequence of the film reveals a small plane grounded in a blizzard landscape. The image fades to black, and the new image which fades in is superficially similar, but difficult to recognize as such—a black and white photograph of the plane in a newspaper which is moving up and down. The newspaper flies into air, and then we see alternating shots of a woman (played by Najwa Nimri) running, from behind, up some stairs and into an apartment, with frontal shots of a man (Fele Martínez), apparently pursuing her. Inside the apartment, the man and woman embrace, but the woman possesses a strange, glassy stare, suggesting neither relief nor passion, even though her eyes well up with tears. Careful attention reveals other enigmatic features: the man's face can be seen in the woman's eyes in certain shots, a reflection which is hard to make sense of spatially. During these opening moments of the film, we're largely at a loss as to what is going on. Disdaining the sort of dense, redundant, and direct exposition characteristic of many narrative openings, the narration here is highly elliptical. According to the mindreading hypothesis, empathic imagining might come into play quite naturally, as a means of fathoming what might be going on. Urged along by automatic, instinctive, low-level mimicry and contagion, I might imaginatively simulate being a woman, running, being pursued by a man, but then embracing the pursuer: what beliefs, emotions, and states of affair might account

for such actions?[44] In initiating such imagining, we draw on what information we can perceive and infer, and our imagining may be assisted by mimicry and contagion; indeed, as I have suggested, these processes may have nudged us towards empathic imagining in the first place.

By contrast, some way into the film we witness a scene in which Otto—the male protagonist and the male character we see in the opening sequence, and no relation to Clark and Chalmers' Otto!—grieves over his mother's death. Otto is shown in medium close-up, peering through a small window into the furnace room where his mother's body is about to be cremated. His father, stepmother, and stepsister Ana—also his lover—stand behind him. As the coffin bursts into flames, Otto's hostility towards his father (Nancho Novo)—who he blames for his mother's death—recedes, the two of them falling into a grief-stricken embrace, the pain of loss clearly expressed in their facial, vocal, and bodily movements. As my commentary indicates, by this point we have a very good handle on all the major characters and their interrelationships. According to the mindfeeling hypothesis, this richly developed context, along with the cues prompting mimicry and contagion present in the scene, solicits an empathic response. (The scene also represents an example of Plantinga's 'scene of empathy', albeit a relatively attenuated one, perhaps in line with its art film status.)

Lastly, in the final scene of the film, several shots from the opening sequence are repeated, but here they are extended, supplemented by other shots elaborating the situation, and placed at the fulcrum of a fully developed narrative. We now understand that the woman, Ana, has just been hit by a car, moments before she would have been reunited with Otto. The car collides with Ana as she crosses the road to the apartment, her attention fixed on the newspaper report of the crashed plane, in which she fears Otto may have perished. As she is thrown to the ground, the newspaper flies into the air; and in the cruelest of ironies, Otto arrives at the scene only seconds later. The embrace that we witness in the opening sequence is a fantasy of what would have happened had the accident not intervened; the glassy stare is the look of a dying person; the welling tears the sole sign of sentience; the reflection of Otto in Anna's eyes is created as he kneels by her stricken body. As with the scene of grieving, the mindfeeling hypothesis suggests that it is precisely the density of information available to us by this point that is likely to precipitate fully empathic imagining.

The friend of empathy has still another card to play. We mustn't confuse, the advocate insists, *occurrent* and *retrospective* empathy: that is, empathizing in the course of reading a novel or watching a movie, and empathizing after the fact, as we reflect on the experience of the novel or the film. Pretty much the entire recent debate on simulation and fiction has been geared to our occurrent experience of artworks, for obvious, and good, reasons. Our engagement with artworks is, or rather is assumed to be, at its most intense as we engage with them; the proof of the pudding lies in the

[44] Currie stresses the inferential role of imaginative simulation in (2003): 294.

perception of an artwork. Surely, though, we have to allow that artworks assume their significance within a wider frame of reference than that of our direct engagement with the artwork, even if it all necessarily begins within that timeframe. We come to realize things about artworks as we reflect on them after the fact—the significance of a line of dialogue suddenly comes to us; the connection between an early and a later scene drops into place. And while movies and stage plays are traditionally consumed in one continuous block, the narrative of a novel or a television drama is much more likely to be consumed in dispersed fashion, over days, weeks, or months, so occurrent engagement with the narrative alternates with retrospective and indeed *anticipatory* engagement with it. Rereading or reviewing a narrative adds another layer to this picture. My suggestion is that, if nothing else, empathy may be an important feature of our retrospective and anticipatory engagement with a narrative, rising up in the spaces between our occurrent engagement with it.

Finally, and by way of conclusion, the role(s) I am according to empathy in our experience of narrative works is sometimes deemed implausible, I suspect, because of some lingering, problematic, Cartesian assumptions concerning the operations of the mind. Those assumptions concern the *consciousness*, *singularity*, and *seriality* of the contents of the mind. To say that I might, as a part of my imaginative engagement with the final scene in *Lovers of the Arctic Circle*, empathize with Otto's grief, is not to say that that imagined grief necessarily dominates my consciousness at any point.[45] Nor is it to say that imagining Otto's grief 'from the inside' is the only activity undertaken by my mind at a given point in the course of viewing the scene. We know that the brain processes in parallel; there are limits to its processing capacities, but it is constantly in the business of processing many items simultaneously, in different ways.[46] So in arguing that I might empathize with Otto as he discovers Ana dying in the road, we should not cash that out in terms of Otto's grief bestriding my theatre of consciousness, loudly declaiming itself to the exclusion of all other mental operations; rather, we need to think in terms of 'a complex mosaic of simulations' taking place alongside other mental activities.[47] After all, we wouldn't think it odd to claim that at the same moment I am watching—and thus visually processing—the shot of the newspaper flying into the air in the final scene of *Lovers*, that I am also remembering that I have seen this image before, recalling in which part of the film it appeared, and working out how it fits into the causal, narrative sequence of the film as a whole. If we can countenance the mind doing all these sorts of things simultaneously, why wouldn't we countenance empathic

[45] Indeed, counterintuitive thought it may be, it is conceivable that empathic imagining's lower-level cousins, emotional contagion and affective mimicry, may occur without breaking through to consciousness at all. Given that we know that 'blindsight' exists, can we confidently close the door on the possibility of 'blind'—non-conscious—emotion?

[46] See, for example, Clark (2001): 40–1; and Daniel Dennett's conception of the mind as a 'locus of multiple, quasiindependent [sic] processing streams' (Clark (2001): 178), or 'multiple drafts' (Dennett (1991): ch. 5).

[47] Currie (2003): 297.

imagining as one, possibly subordinate, mental activity among many taking place? Just as, in the case of my self-focussed personal imagining, I never lose sight of the fact that I am actually in the living room and my son is safely playing behind me, even as I experience the queasy sensation of fear at the thought of an accident, so in the case of this fictional imagining, I never lose sight of the overall dramatic situation and the emotions of the various other characters, nor of the fact that I am watching a fiction, even as I empathize with Otto.[48]

[48] Thanks to audiences at the 2006 Fullerton 'Empathy' conference, the 2006 Society for Cognitive Studies of the Moving Image conference in Potsdam, and especially Amy Coplan, Peter Goldie, Margrethe Vaage, Patrick Vondereau, Dan Flory, Noël Carroll, Greg Currie, Susan Feagin, and Derek Matravers for helpful comments. Thanks also to Amy and Peter for the original invitation to the very generously hosted Fullerton conference. The tea bags have been strained, the soap long since dissolved, but I still use the Moleskin notebook.