




Empathy & Literature

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Abstract

There is a long tradition in philosophy and literary theory defending the view that engagement with literature promotes readers' empathy. Until the last century, few of the empirical claims adduced in that tradition were investigated experimentally. Recent work in psychology and neuropsychology has now shed new light on the interplay of empathy and literature. This article surveys the experimental findings, addressing three central questions: What is it to read empathically? Does reading make us more empathic? What characteristics of literature, if any, affect readers' empathy? While experimental studies have delivered no conclusive answers to these questions, it has exposed their psychological complexity and constructed a more nuanced picture of the diverse ways in which literature interacts with our empathic capacities.

Keywords

empathy, imagination, fiction, literature, narrativity, theory of mind, altruism

Thanks to Levi's precise and vivid writing...I have been shown how it feels like to live in constant fear for my life. I have been made to understand what it means to be exposed, naked, to the biting cold of Polish winter....I have seen "the crude glare of the searchlight and the well-known profile of the gallows" and bodies wriggling horribly on the end of the rope..... Even in my safe warm house, I have come to some kind of understanding of what it may have been like to walk in Levi's unmatched, broken wooden shoes. He...brings us the gift of empathy.

Sam Jordison on Primo Levi's *If This Is a Man* (*The Guardian* 09 July 2019)

When I think about how I understand my role as citizen...the most important set of understandings that I bring to that position of citizen, the most important stuff I've learned I think I've learned from novels. It has to do with empathy.

Barack Obama, interview (*New York Review of Books*, 28 November 2014)

Do literary works confer on their readers a deeper understanding of the experiences they recount? If so, what, if anything, does that understanding owe to our ability to respond empathically to literary characters and events? Does exposure to literature, or literature of the right sort, promote the moral and civic virtues? Can being better readers really make us better people?

Long before the emergence of experimental psychology, philosophers and other armchair theorists attested to the transformative powers of literature. Perhaps the first to do so explicitly was Plato, who credited it with the ability to corrupt moral character, warning that

[I]n regard to the emotions . . . and all the appetites and pains and pleasures of the soul . . . poetic imitation . . . waters and fosters these feelings when what we ought to do is to dry them up, and it establishes them as our rulers when they ought to be ruled, to the end that we may be better and happier men instead of worse and more miserable ones. (Republic, 606d1–7)

Plato's infamous complaint was that literary narratives undermine the mastery of reason: they are *too* effective at engaging our passions and steering our behaviour, often against our better judgement. Subsequent theorists, however, more often have seen the affective efficacy of literature as a force for the good, arguing that, *inter alia*, it has the power to reveal psychological universals and effect emotional catharsis (Aristotle), to prompt divine revelation (Augustine), to promote the natural virtues (Hume), to combat egocentrism (Smith), to develop sympathetic social bonds (Mill), and even to sublimate humanity's destructive psychic forces (Freud). Sam Jordison is in good company

in holding that Levi's narrative of suffering possesses a special epistemic value, conferring on the reader "some kind of understanding" of experiences that would otherwise be unimaginable.¹

It is natural to suppose further that, as Jordison claims, the improving powers of literature are owed in some part to readers' natural capacity for empathy. Philosopher Jenefer Robinson has argued that we respond empathically to characters and events in novels, plays and films in "basically the same way" as we respond empathically to people and events in real life (2010, 71). Likewise, Gregory Currie avers that the empathic processes stimulated by fiction are "are of a piece with those involved in genuine cases of empathy" (1997, 68). Martha Nussbaum has taken the thesis a step further, proposing that empathic engagement with literary authors such as Henry James and Joyce Carol Oates can make us more compassionate and tolerant individuals and "better world citizens" (1997, 90). Steven Pinker – a psychologist tempted at times to philosophical speculations – accords to storytelling and narrative art an expansion of our moral sensibilities to "other clans, other tribes, and other races," allowing us to project ourselves imaginatively "into the lives of people of different times and places and races," who might "otherwise seem subhuman" (2004, 48).

These are impressive claims. They are also, in part, empirical claims about the workings of human psychology. Yet it is only in the last few decades that experimental psychologists have attempted to investigate the interactions of empathy and literature in any systematic way. This article argues that their investigations have delivered no conclusive answers to the questions posed above, nor have they identified any clear, causal pathways leading either from literariness to empathy or from literary empathy to moral virtue. As in other arenas of experimental aesthetics, studies have been burdened by definitional inconsistencies, ambiguous hypotheses, overdetermined results, lack of demographic diversity, and reliance on self-report instruments. Nonetheless, progress has been genuine and valuable: the philosophical intuition that literature can elicit empathic engagement has gained some intriguing evidential support, and we are now better placed to appreciate the complexities of the larger landscape of literary experience. This article will traverse some of that landscape and the studies that have helped to shape it. I proceed in three parts, each part speaking to a key question:

1. Transforming the reader: what is it to read empathically?
2. Correlations and causes: does reading make us more empathic?
3. Fictionality, Narrativity and Literariness: what elicits readers' empathy?

Transforming the Reader: What Is It to Read Empathically?

If the 1960s and early 1970s were years of cultural rebellion, they were also a period of cultural revision: schools were desegregated, affirmative action became official policy by executive order, abortion was legalized, women flocked to the workforce, and the Civil Rights Act was passed, prohibiting discrimination on the basis of race, sexuality or gender. It is unsurprising that in this atmosphere of social and political change, social scientists and educators turned their attention to the question of how best to cultivate public attitudes and values in keeping with new policies and legislation. This was the context in which psychologists first began in earnest to probe the efficacy of narratives as an instrument of moral education.

Readers, it was hypothesized, could be primed by literary texts to respond in more pro-social ways to "outsider" groups such as Afro-descendent Americans (e.g., Litcher and Johnson, 1969; Schwartz, 1972; Zucaro, 1972), Native Americans, (Tauran, 1967) the handicapped (Beardsley, 1979) and even, in medical education, the comatose (Heldsworth, 1968). Numerous studies probed whether and how the attitudes of American school children and university students might be influenced by exposure to stories, poems, memoirs and novels of outsider experience. Most of these studies showed significant attitudinal changes to outgroup members: exposed subjects repeatedly delivered more positive portrayals and evaluations than controls. Such findings were, in turn, enthusiastically embraced by beleaguered humanities educators as evidence that literature could make us more understanding, more sympathetic, and more tolerant. Confidence in the transformative potential of literary texts began to inform public policy and practices, promoting early-literacy programmes, revising prison educational curricula, and, in clinical psychology, inspiring various literature-focussed approaches such as bibliotherapy, therapeutic writing, and poetry therapy.

As evidence for any specific connection between empathy and literature, however, this research raised more questions than it answered. To mention a few:

- The study populations were almost all comprised of school-aged children and adolescents. Are adult readers equally susceptible to literary influences?
- The study populations were drawn from – and the research often implemented within – educational institutions. Subjects in these contexts are positioned in the role of learners, and learners are typically motivated to discern and demonstrate a prescribed understanding of presented materials – inviting observer effects and social desirability biases. How might readers' responses to narratives differ when reading is motivated in other ways, e.g., for the pleasure and

entertainment they afford, or by a desire to be better informed?

- The presented narratives varied from simple, journalistic profiles to high-culture poetry and literary fiction. How, if at all, do the style, quality, genre (fiction vs non-fiction), and the perceived source of the text (newspapers, textbooks, memoirs, novels) affect readers' responses?
- A variety of self-report instruments (including verbal interview) were used to measure attitudinal change. Self-report measures can be revealing and are often indispensable in research probing subjects' lived, first-personal experience. However, behavioural and physiological measures can indicate responses at variance with self-reported ones, and this is particularly common when the target responses implicate subjects' self-evaluations. It is now well-known, moreover, that implicit measures of evaluative (and specifically moral) attitudes have proven to be better predictors of real-life action than explicit ones (e.g., Perugini & Leone, 2009). How much confidence should we place in the accuracy of the study self-reports, associated as they were with politically and morally sensitive self-evaluations involving prejudice, intolerance, and social exclusion?

Apart from these methodological concerns, it is unclear whether *empathy*, specifically, contributed anything at all to participants' more positive portrayals and evaluations of outgroup members. That inference is undermined by two considerations highlighted in subsequent research.

First, while changes in the valence of readers' moral attitudes may in some cases be owed to genuine enhancements of awareness and sensitivity, in others they are better explained by simple observational learning: readers acquire morally positive and negative attitudes when, for instance, a story character is rewarded or punished for her actions, and young readers and children are particularly susceptible to such effects (Black & Barnes, 2021; Johnson et al., 2013a; Mumper & Gerrig, 2019). As Wimmer points out, "if such a pattern of reward is absorbed blindly, without attaining insight into principles of ethical conduct, readers could just as well acquire morally negative attitudes and behaviours when a story character is rewarded for a morally negative action or punished for a morally positive one" (Wimmer et al., 2021, 231). Attitudinal and evaluative shifts driven by observational learning of this kind will have little or nothing to do with empathy. Next, let us assume that study participants were not blindly absorbing patterns of reward and punishment, and that their reading experience did in some way yield insight into principles of ethical conduct. A second question remains: what, if anything, did their empathic responses contribute to that insight? An answer to this question, of course, turns in part on what one takes empathy to be.

The term *empathy* has been employed in very different ways by different theorists. It entered the English lexicon only a little more than a century ago, but even in that brief lifespan its meaning has mutated significantly.² In the psychological literature, vague and inconsistent definitions have too often stirred the mischief of mistaking (mere) terminological disputes for factual ones.³ M.H. Davis, for example, initially defined empathy as "the notion of responsiveness to the experiences of another"—a characterisation so unhappily broad as to include everything from contagious crying in new-borns to complex acts of altruism, or even to hostile and aversive interpersonal responses (Davis, 1980:3). Daniel Batson, too, initially defined empathy as a mental process "involving vicarious other-focused emotions, including feelings of sympathy, compassion, tenderness and the like" (Batson & Shaw 1991, 113)—a definition which arguably conflates empathy with the altruistic motivations to which it sometimes gives rise.

Recent decades, however, have seen a welcome convergence in the psychological literature. Empathy now more often, if not always, designates what is sometimes called *affective empathy*: the first-personal experience of affective states (including emotions, motivations and visceral sensations) in response to observations (perceptual or otherwise, veridical or non-veridical) of natural manifestations or second-order representations of those states in another, while maintaining awareness of self and other as distinct subjects of experience (e.g., Busselle & Bilandzic 2009; Coplan 2004; Decety 2015, Denham 2000, 2015, 2017, 2021; Mar & Oatley 2008; Mar et al. 2011).⁴ This conception respects the important distinction between affective responsiveness and *mindreading* or *theory of mind* (ToM)—often misleadingly labelled 'cognitive empathy'. ToM is the capacity to accurately attribute mental states to others, most often intentional states with representational content such as beliefs, desires, and intentions. As such, ToM allows us to make others' actions intelligible; we exercise it in explaining and predicting their behaviour. Affective empathy may also represent others' intentional states, but it does so in a different mode, such that the empathizer not only represents, but also *shares* in another's target states: it is an experiential as well as a representational capacity. When we affectively empathize, we not only identify and individuate another's affective mental states (emotions, moods, motivations sensations, etc.) but do so by instantiating some of their first-personal experiential character.

ToM and affective empathy so understood are distinguishable capacities, and not only at the conceptual level: although they interact, a plethora of experimental evidence testifies to their distinctness at both the functional and neurophysiological levels (Blair 2006; Decety et al. 2013; Smith 2006). Moreover, affective empathy emerges by way of a different, and more basic developmental pathway, rooted in our hard-wired propensity to mirror or resonate with our conspecifics affective states, initially through motor mimicry. Newborns,

for instance, spontaneously mimic the facial musculature of their caregiver's expressions from only a few hours after birth (Hoffman, 2001). Such motor mimicry is pre-reflective and non-referential: the mimicking subject does not exercise voluntary control over his motor state, nor is he typically consciously aware of its occurrence or its source. Nonetheless, motor empathy plays an important role in the development of affective empathy and inter-personal emotion regulation in the first few months of life; at the neurological level, the causal pathways between motor and affective responses are bi-directional (Hoffman, 2008). Motor mimicry persists throughout our lives, serving as the psychophysiological foundation of *empathic resonance* – an innate propensity to reflect or mirror features of others' behaviour (especially facial expressions) and experiential states (especially the affective states). Resonance is vividly illustrated by Hume's analogy between our responses to one another's sentiments and the sympathetic vibrating of strings on a violin: when one string is plucked or bowed, it directly causes a vibration in the others (Hume, 1739/1975). Like motor mimicry, empathic resonance is automatic and non-referential. As Hoffman observes, resonance (in his terms, "emotional contagion") is "passive, involuntary, and based on surface cues; it requires little cognitive processing or awareness that the source is [someone else]" (Hoffman, 2008, 441). Unlike mature affective empathy, resonance is not yet a representational state (save in the attenuated sense of representing the resonating subject's own condition). Nonetheless, it is key to the developmental trajectory of our capacity to echo, first-personally, the inner lives of others.

The distinction between first-personal and other-personal representations of experiential states is essential to affective empathy's motivating force: a solely conceptual or propositional representation of another's pains and pleasures, however detailed and accurate, does not constitute affective empathy, and indeed requires no affective engagement whatever. Affective empathy, by contrast, delivers what I elsewhere have called a *subjective conception*—a conception as from the first-personal perspective of the experiencing subject (Denham 2011, 1996, 2011). If one represents another's pain by way of affective empathy—as when Jordison imagined Primo Levi's pain on being "exposed, naked, to the biting cold of Polish winter" – then one's own experience must feature some of the target state's phenomenology: its qualitative and motivational characteristics. To some degree, it is itself painful.

These refinements to the concept of empathy have yielded a better understanding of empathy itself, as well as inspiring more nuanced and discriminating instruments by which to measure its role in readers' responses. The *Interpersonal Reactivity Index* (Davis, 1983), for instance, is designed to evaluate four sub-scales of dispositional empathy: perspective-taking (a component of ToM or cognitive empathy), empathic concern (involving affective empathy),

personal distress, and fantasy or imaginative *tracking*.⁵ Self-report measures of situational empathy, moreover, have been combined in recent years with a range of behavioural, psychophysiological and neurological ones (e.g., the *Mind in the Eyes* test, the *Interpersonal Perception Test*, skin conductance, heart rate, and fMRI observations).⁶ In consequence, it has become possible to probe readers' specifically empathic responses and to identify different aspects of elicited empathy in ways that were unavailable—both conceptually and experimentally—in the early days of the psychology of literature. While far from perfect, these tools have left psychologists better placed to investigate the complex interactions of literature, empathy, and morality. Let us now take a closer look at what evidence has – and has not – been delivered for literature's transformative powers.

Correlations and Causes: Does Reading Make Us More Empathic?

The only effect I ardently long to produce by my writings, is that those who read them should be better able to imagine and to feel the pains and the joys of those who differ from them in everything but the broad fact of being struggling, erring human creatures.

George Eliot, 'The Natural History of German Life' (Eliot: 1856, 54)

What would readers' responses to Eliot's novels need to be like for her "ardent longing" to be fulfilled? And what would her novels need to be like to provoke those responses? One of the successes of experimental psychology of literature has been to disentangle several distinct aspects of reader's responses and, correlatively, to identify the efficacy of distinct features of what we call literature. While research has yet to deliver settled answers to these two questions, considerable evidence has accumulated relevant to both. I review that evidence in this section and the next.

For readers to satisfy Eliot's hopes, they would arguably need to be engaged by her writing in a way that commands their attention and deeply engages their imagination and emotions—they would need to be absorbed or, as many theorists now say, transported into her texts. Reader transportation occurs when persons "become emotionally involved, immersed, or carried away imaginatively in a story"; it involves not only affective immersion but the imaginative tracking of sense-based descriptions and a text's explicit and implicit evaluative attitudes (Oatley, 2016, 618–28; see Green, 2021). As a psychological construct, transportation is somewhat ill-defined, and its proper measurement is disputed. However, in experimental contexts it is no longer just a metaphor for finding a text captivating; it is conceptualized as a distinct experiential response to narratives in which attention, imagery, and emotions are integrated (Gerrig 1993; Green & Brock 2000, 701; see also Nell 1988).⁷ Moreover, it is a phenomenon familiar to almost every reader, or at least every reader of extended narratives such as short stories, novels, and epic poems.

The experimental evidence suggests at least one reason why any author with Eliot's stated ambition should want her writing to transport its readers: individuals who are more transported are "more likely to adopt story-consistent beliefs, attitudes, and behaviors" (Green, 2021, 87; Green & Brock, 2000). So, for example, a thoroughly transported reader of *Middlemarch* may be more receptive to sceptical beliefs about marriage as a route to untroubled happiness, or more likely to doubt the moral authority of public figures, or more motivated to resist bourgeois social conventions. That said, Eliot does not (in the passage offered) long for psychological and behavioural reforms of these kinds, but at improvements in her readers understanding—specifically, their ability "to imagine and to feel the pains and the joys of those who differ from them." She arguably hopes to enhance her readers' empathy in both its cognitive (the imagining) and affective (vicarious feeling) dimensions. Moreover, she hopes that their empathy will reach to persons different from themselves. Unlike the characters we encounter in, e.g., Jane Austen's texts, Eliot's characters were very unlike her readers in that most profound and English 'differences': social class – a somewhat tyrannical categorization involving family genesis, education, verbal accent and vocabulary, economic status and social authority.

Can literature, or at least some literature, do all of that? Experimental studies in the last three decades offer some reason for cautious optimism. One influential study by Mar and colleagues used the Reading the Mind in the Eyes Test/RMET and the Interpersonal Perception Test (IPT) to compare the empathic ability of those who regularly read fiction—those with high life-time exposure to it—with those who did not (Mar, Oatley, Dela Paz & Peterson, 2006).⁸ Exposure to fiction reading was assessed by the Author Recognition Test (ART) : a list of names, some of authors and some of non-authors (Stanovich, West & Harrison, 1995).⁹ They found a significant effect for the RMET: the more fiction people read, the better they were at identifying the imaged emotions. There was also a 5% effect for the IPT – just below significance. Given that the RMET is most commonly seen as a measure of mentalizing or cognitive empathy, these results (which survived replication) indicated a correlation between lifelong fiction-reading and dispositional or trait accuracy of cognitive empathy. While an intriguing finding, it tells us nothing about the direction of causality: does fiction reading cause readers to be more empathic, or are more empathic readers drawn to fiction reading? As the researchers themselves later acknowledged, "the relation between fiction and empathy might be explained by individual differences. That is, certain traits may predict greater enjoyment of fiction, and also better empathic accuracy" (Mar et al., 2009, 408). In an attempt to rule out these competing hypotheses, the researchers ran a second study in which they statistically controlled for the personality characteristic of 'Openness' from the Big Five Personality Test (chosen as "the most consistent" correlate

of dispositional empathy). They also controlled for participants' gender and "tendency to be drawn into stories" (as measured by the IRI Fantasy sub-scale) (Mar et al., 2009, 1). Even after controlling for these variables, fiction exposure still predicted stronger performance on the RMET.

These findings seem to be good news for Eliot's literary ambitions, but they fall well short of predicting their success for at least two reasons. First, one may doubt how well controlling for the Big Five Openness trait really rules out (as Mar and colleagues claimed) the unwelcome hypothesis that higher-empathy personalities are drawn to fiction reading. Even supposing that particular hypothesis was discredited, the correlations may be owed to other, unidentified confounders, e.g., the reading habits of more empathic parents or siblings or teachers. Secondly, while performance on the RMET and the IPT provides evidence of a correlation between fiction reading and ToM, neither is a reliable measure of *affective* empathy. This matters: in the absence of such affective engagement, claims that in fiction reading we "simulate" the inner lives of its characters or "inhabit" their worlds are extravagant. (Oatley, 2017, 265). Yet many researchers are undeterred. Oatley, for example, confidently avers that "a critical component of the understanding of others that derives from fiction is that rather than simply making observer-based personality judgements about others from their behaviour, as we often do in the day-to-day world, we can come to know others from the inside....a fundamental process here is empathy: feeling with another person." (Oatley, 2017, 265).

In light of these uncertainties, two further questions must be addressed. Does exposure to fiction on its own, as an independent variable, cause positive gains in readers' attunement to others' experience? And does it do so in part by engaging readers' affective empathy?

In 2013, the prestigious journal *Science* published a study by Kidd and Castano claiming to deliver on both questions. The authors also claimed to show, to boot, that "highly literary," critically acclaimed fictional literature has greater efficacy than both popular fiction and non-fiction in promoting empathy. Their study comprised five experiments using what they presented as measures of "cognitive theory of mind/TOM" and "affective theory of mind/TOM" to compare responses to both literary fiction (e.g., PEN-O.Henry prize-winners and National Book Award finalists) versus non-fiction and literary fiction versus popular fiction (e.g., John Grisham, Danielle Steele). Their findings, they reported, were that "reading literary fiction led to better performance on tests of affective ToM and cognitive ToM (experiments 4 and 5) compared with reading nonfiction... or nothing at all.... [R]eading literary fiction temporarily enhances ToM." More broadly, they concluded that "ToM may be influenced by engagement with works of art" (Kidd & Castano, 2013, 377). These results immediately caught the attention of the popular media, producing eye-catching newspaper and magazine headlines, e.g., "Reading Literary

Fiction Improves Empathy” (*Guardian*, 8th October 2013) and “Reading Literature Makes Us Smarter and Nicer” (*Time* 3 June 2013). Was the excitement merited?

The size and diversity of Kidd & Castano’s study populations were disappointing: they were relatively small (N = between 70 and 120) and were drawn from a relatively select category of New York City University students. Nonetheless, their results did deliver some evidence relevant to my first question above—that is, causal evidence of direct, if temporary, positive effects of reading fiction on theory of mind, regarded as a constituent of or even synonymous with cognitive empathy.

With respect to affective empathy, however, the study in fact had little to offer. The authors’ behavioural measures of empathy were the RMET and the Yoni Task, in which subjects select on the basis of visual and linguistic cues which of four images a central animation character (called Yoni or John) is thinking of or wants. Unfortunately, virtually all specialist researchers regard both tasks as measuring very basic mentalizing skills which are considered predominantly cognitive; they test subjects’ accuracy at *attributing* emotions, rather than their subjective *experiencing* of emotional responses. (Koopman & Hakemulder, 2015). As the creators of the RMET cautioned, emotion attribution is only an initial stage of empathy: “it does not include the second stage: inferring the [experiential] content of that mental state” (Baron-Cohen et al., 2001, 241). Worse yet, later attempts to replicate Kidd and Castano’s results in studies with larger populations repeatedly failed to show any significant effects of literary fiction reading on empathy at all (Panero et al., 2016; Samur, Tops & Koole, 2018).¹⁰

Fortunately, experimental investigation of literature and empathy has escalated in recent years: in the decade since Kidd and Castano’s study it has featured in more than 500 published studies and over 30 books. Two extensive meta-analyses have targeted research on the relationship between narrative reading and *social cognition*—that is, “how people make sense of other people and themselves in order to coordinate with their social worlds” (Fiske & Taylor, 2013, 16). The first of these, by Mumper and Gerrig (2017), aggregated correlations between measures of lifetime reading habits for both fiction and nonfiction with measures of empathy and theory of mind. Their definition of *theory of mind* paralleled what I have here termed mind-reading or cognitive empathy; their definition of *empathy* referred to the average of the empathic concern and the perspective taking subscales of the Interpersonal Reactivity Index (Davis, 1983). Analysing 36 studies they found, overall, a small but statistically significant improvement in social-cognitive performance (theory of mind and empathy combined) for fiction reading compared to either no reading or non-fiction reading.

The other meta-analysis (Dodell-Feder & Tamir, 2018) has examined experimental causal evidence in 14 studies, probing the question, “does fiction reading *causally*

improve social cognition?” *Social cognition* was, again, understood to include both cognitive and affective capacities, which the authors termed *mentalizing* and *experience sharing*, respectively. The former was defined as “the process by which we attribute and reason about the mental and emotional states of others (e.g., ToM, mind reading, perspective-taking, social perception, cognitive empathy),” and the latter as “one’s ability or tendency to share the internal affective experience of others (e.g., affective empathy, emotional contagion)” (Dodell-Feder & Tamir, 2018, 1715). Their analysis supported a causal view of fiction’s effect on overall social-cognitive ability; although the effect was marginal, it reached statistical significance. They concluded that the reason fiction reading is correlated with social-cognitive ability because fiction reading causally improves social cognition. It is worth noting, however, that roughly three-quarters of the effects analysed related to behavioural measures of mentalizing/ToM (with a preponderance of RMET measures), and only about a quarter to experience sharing/affective empathy (all by self-report).

The news is encouraging, then, for a positive answer to my first question: evidence is gathering for a causal relation between fictional narratives and attunement to others. However, for my second question regarding their effects on affective empathy, specifically, much less evidence is available, and what exists is less favourable. Indeed, many studies have sought but failed to find any “fiction effect” for specifically affective empathy at all (Mar et al. 2006, 2009; Djikic et al. 2013).

So is it time to put paid to Eliot’s hope that by reading narratives we can come to *feel* “the pains and joys” of those who differ from us? Not yet, for several reasons.

First, we should bear in mind the evidence of everyday experience. Feeling empathic concern for the characters presented *in* a story is an ubiquitous phenomenon; readers (and cinema-goers) regularly weep, cower, tremble and laugh, tracking and mirroring experientially the within-story characters—as Sam Jordison did when reading Primo Levi’s memoir. To deny that we respond empathically to the *personae* in narratives is almost to deny a platitude, for most of us have experienced that much first-hand. What experimental evidence has not confirmed is whether that phenomenon has any transferrable efficacy, as it were, affecting our responses to our conspecifics more generally. It would be somewhat surprising, however, if the exercise of tracking the inner lives of narrative characters and events, and often feeling deeply moved by them, had *no* effect beyond the moment.

Secondly, the absence of evidence for is not evidence of an absence, and affective states by their nature are elusive. Detecting and measuring them is methodologically challenging in ways that detecting and measuring ToM is not: ToM is most often evaluated indirectly by probing the *abilities* it confers (as in the RMET and IPT), taking accuracy of beliefs and judgements as evidence of sub-personal

processes. Indeed, cognitive empathy as a construct is often defined in functional terms, as a set of abilities. By contrast, affective empathy is manifested in first-personal, subjective states, the phenomenology of which is only available introspectively, when it is available at all - which it often is not, at least if one allows (controversially) that not all affective states are conscious ones. Certainly, inner experience is not reliably revealed in outer behaviour, and while affective empathy may motivate certain behavioural dispositions—for instance, helping and other pro-social behaviours – these also occur via other pathways. In sum, we should not leap to the conclusion that the paucity of evidence, at least in this case, has even come close to defeating the hypothesis.

Thirdly, there have been a handful of experimental studies which successfully found a positive effect of narrative exposure on affective empathy. Two of the most impressive in this respect explored the interaction of fiction reading, transportation, and affective empathy. The first, a study by Johnson (2012) found effects of two kinds: self-reported empathic concern for a within-story character and observed pro-social/helping behaviour (picking up pens dropped by a confederate). These effects were both independent of trait empathy. Johnson found further that greater transportation by the participant was more strongly correlated with both. A subsequent study (2013) indicated that greater transportation was also correlated with positive changes in beliefs and attitudes toward out-groups: the story he used promoted concern for Muslims and a negative account of prejudice.

Transportation again interacted with affective empathy in two influential studies by Bal and Velkamp (2013). The authors predicted that when people read fiction and are emotionally transported into the story, they become more empathic. The authors found that even a week later reading a fictional text versus a newspaper article matched for topic and valence caused an increase in self-reported affective empathy (measured by Davis's IRI) – but *only* for those participants who felt emotionally transported into the story (measured by the Busselle & Bilandzic 2009 scale). In fact, low or no transportation subjects who read non-fiction actually showed a reduction in empathy!

The interaction of transportation and story-induced affective empathy has been echoed in several other studies (see, e.g., Stansfield & Bunce, 2014). It is probably incautious, however, to leap to the conclusion that transportation *causes* affective empathy, given that for any one event to cause another, the two must be conceptually and empirically individuated. While most transportation theorists take it to denote a psychological event type distinct from empathy, even a cursory look at the self-report items on transportation scales and those on empathy measures such as the IRI suggest otherwise. It is almost inevitable that a reader who reports that s/he was for instance, “completely engaged” with the narrative, that s/he “felt s/he was a part of the story,” and that s/he “felt s/he was ‘there’” while reading the story will also score more highly on self-reported, story-

induced empathy with its characters. Surely being transported by or absorbed in a narrative just *is*, in no small part, a matter of resonating emotionally with its characters and events. The measures of each need better to distinguish between the experience of transitioning into a narrative world and character-specific responses such as empathy and identification. It is doubtful, however, that this can be achieved with enough precision to support causal claims of great interest. (Keen, 2007)

A fourth reason to remain hopeful about narrative's transferrable positive effect on affective empathy is that narratives have long been used successfully as instruments of “empathy induction” in Batson's research exploring the empathy-altruism hypothesis. The basic hypothesis is that empathic emotion predicts altruistic motivation, where *altruism* is defined as a motivational state with the ultimate goal of increasing another's welfare (Batson, 2010). While discussion of the interaction of narrative-induced empathy and altruism is beyond the scope of this essay, it is noteworthy that Batson relied on basic narrative descriptions and narrative-implicating questionnaires to induce empathy in his study participants. His methodology effectively assumed what experimental studies have struggled to prove: that affective, empathic concern is promoted by narratives delivering a profile of a specific “character's” circumstances and affective experience. To be sure, the study narratives were far from literary and were presented as fact, rather than fiction. The point, however, is that they were effective. Perhaps narrativity alone, even in very simple and artless forms, has the power to transform how we resonate with others.

A final reason to be optimistic that Eliot's novels can move her readers to feel others' “pains and joys” is suggested by neuroscientific evidence. Neuroimaging studies have found that when people hear a vivid description of a conspecific experiencing certain emotions (as they do when reading narratives), the neural networks that activate are the same as those activated when they experience the emotion type themselves (Gallese, 2011). It has long been known that when one perceptually observes another's actions and displays of emotion, this activates “mirror” neurological activity in oneself. We know, too, that this effect is sustained with video and audio proxies. Only recently, however, has research begun to explore the efficacy of linguistic descriptions of affective states—much of it inspired by the ambition of artificially creating more empathic (seeming) “conversational agents”: chatbots able to communicate and inculcate emotions and motivations through words alone. It is perhaps not too far-fetched to describe the agenda as the creation of “literary” chatbots. As one AI researcher has put it, “we...aim at improving current chatbots with the addition of natural emotions...[W]e intend to distinguish fine-grained emotion differences between words in order to better understand emotion expressions in sentences. Our approach

infuses fine-grained emotion content...to make the dialog more emotionally resonant” (Chang & Hsing, 2021, 1).

Whatever one may think about the research objective, exploration of how words shape our inner lives stands to yield a better understanding of how literature has, for almost three millennia, succeeded in allowing humanity to be “more emotionally resonant.”

Fictionality, Narrativity and Literariness: What Elicits Readers’ Empathy?

There is a *prima facie* and general correlation between artistic merit and the ability to engage the personality at a deep level. The fact that Sophoclean tragedy inspires compassion for human suffering and the fact that it is great and powerful poetry are not independent facts: it is the poetic excellence that conveys compassion to the spectator, cutting through the habits of the everyday. (Nussbaum 2001, p. 433)

In numerous publications spanning more than two decades, Martha Nussbaum has promoted not only the view that the literariness of a text contributes importantly to its compassion-inducing capacities, but that fictional literature, in particular, empathically engages the reader or spectator (Nussbaum, 1987, 1990, 1995, 1998, 2001, 2010). Most of these publications, moreover, uncritically assume that these effects on social cognition contribute directly to gains in moral sensitivity and pro-social motivations, despite ample evidence that they can also undermine epistemic reliability and serve nefarious purposes, such as manipulation and deceit (e.g., Bloom, 2016; Breithaupt, 2018; Bubandt & Willerslev, 2015).

Is Nussbaum’s confidence in the special, communicative powers of fiction justified? The evidence from psychology is not encouraging. Dodell-Feder and Tamir’s (2018) meta-analysis examined gains in empathy and ToM across fiction, non-fiction and no-reading groups, synthesizing a total of 53 effect sizes drawn from fourteen studies. Significant improvements were found only for fiction compared to no-reading subjects, indicating that fictionality in itself makes little or no independent contribution. Research at the neuropsychological level, however, is not wholly unpromising. A study by Altmann et al. used fMRI observations to examine the neurocognitive effects of reading short narratives labelled as “fact” or “fiction.” (Altmann et al., 2014). Reading in the factual condition activated neural patterns associated with an action-based reconstruction of the events in the text through a ‘past-oriented’ process, eliciting autobiographical memory retrieval. By contrast, subjects in the fiction condition exhibited patterns associated with hypothetical imaginings, responding to events in the stories as possibilities that might have occurred, and imaginatively reconstructing hypothetical scenarios. The authors describe this as a “constructive simulation” of possible past or future events. Moreover, this process appeared to be especially attuned to the motives behind a protagonist’s action, consonant with others’ findings that “large parts of the

fiction-activation pattern... have been associated previously with social and moral reasoning”. (2014, 22)

These results lend some support to the idea that fiction promotes a distinctive kind of deep, first-personal engagement with social cognition. Mar and Oatley’s influential Simulation Model, for instance, proposes that fictions invite us to imaginatively simulate interactions with others, and are “unique in providing a model of what could happen” as opposed to what has happened (Mar & Oatley, 2008, 175). In support of that model, there is good evidence that fiction elicits heightened transportation over non-fiction, even across subjects who normally prefer the latter (Oatley, 2017, 261). The possible reasons for these enhanced transportative effects are many, and will be familiar to literary theorists. For instance, fictional narratives have the liberty of describing events as from the subjective, first-personal points of view of its characters, in a way that factual narrative cannot (save perhaps through interview and third-party reports). In keeping with this “licensed subjectivity,” fictions also enjoy a freer hand at describing first-personal sensory, affective, motivational, and interpersonal experiences; details of such content are a natural way of constructing the internal perspective fictions often adopt. Additionally, readers are powerless to affect the outcome of a fictional narrative through their own actions; therefore, one common motivation for resisting transportation and remaining distant from characters is eliminated, namely, a felt obligation to intervene (Bal & Veltkamp, 2013).

These factors taken together may well explain why fiction encourages heightened imaginative engagement. Nonetheless, it is one thing to find oneself transported into a story and quite another to be made more empathetic by it, let alone in ways that translate into real-world, social interactions. The question of whether fictionality enhances reader empathy will require study designs which clearly distinguish it from the broader category of *narrativity* or *story telling*, in which a sequence of events transitions over time from an initial state to subsequent states or outcomes, relating earlier and later ones across causal pathways. Fictionality and narrativity are orthogonal concepts: histories, biographies, and journalistic accounts are all non-fictional narratives, as opposed to expository texts which aim rather to inform, instruct, explain, argue or simply record. Unfortunately, the distinction between fiction and narrative has been overlooked in almost all relevant studies. Instead, researchers have compared fiction with expository non-fiction (e.g., Black & Barnes, 2015; Johnson et al., 2013b) or compared literary and popular fiction (Kidd et al., 2016; Kidd & Castano, 2019).¹¹

This lacuna in the research matters, for it may well be narrativity, not fictionality, doing the work of engaging us emotionally, prompting vivid, first-personal simulations, influencing our judgements and shaping our moral motivations. Two recent experiments by Wimmer et al. (2021) specifically set out to test that hypothesis by comparing the

effects of reading narrative fiction, narrative non-fiction and expository non-fiction on social and moral cognition, using a battery of self-report, explicit and implicit indicators. The first experiment assessed multiple outcomes after a single, short reading assignment. Results failed to reveal any differences between the three reading conditions on either social or moral cognition. The second experiment randomly assigned subjects to read an entire book over seven days, and employed a longitudinal design, assessing variables before, immediately and one week after reading. Again, results failed to show any significant differences.

What, then, of literariness? Are texts of acknowledged “poetic excellence” more effective at inspiring empathy for our conspecifics than popular, but aesthetically undistinguished ones, such as the novels of John Grisham or Danielle Steele? One immediate challenge is to define the *literary* in a way which reliably distinguishes it from non-literary genres. Studies by experimental psychologists have often simply deferred to institutional authority, counting as literary any works awarded Nobel or Pulitzer prizes, or those featuring in a recognized canon of acclaimed, high-culture texts. Unfortunately, this approach yields an unhelpful menu of wildly diverse linguistic characteristics and stylistic features, e.g., positioning Proust alongside Hemingway and DeLillo.

Literary theorists have delivered more reflective approaches, conceptualizing literariness as a combination of the aesthetic and the unconventional, with an emphasis on ‘foregrounding’ – the use of textual features (vocabulary, grammar, imagery, structure) which depart from ordinary language (Miall & Kuiken, 1994, 1998; Mukarovsky, 1976). They have also noted that no consensus on the definition of literariness is required to appreciate several theoretical reasons for thinking it relevant to social cognition generally, and empathy in particular. As Koopman points out, “literary texts, with their ‘gaps’, polyphony and often ambiguous and more complex characters, will give readers complex psychological schemas to figure out, deviating schemas that we meet with less frequently outside literature...Hence, literary texts could give readers a greater challenge for their theory of mind, and consequently a better training of the faculties involved” (2015, 7; see Hakemulder, 2000; Kidd & Castano, 2013; Mar & Oatley, 2008).

These are all good reasons for supposing that literariness *should* matter, as Nussbaum says, to “engaging the human personality.” As yet, however, they remain unsupported by experimental evidence; the Kidd and Castano 2013 study discussed in this article’s Introduction is the only causal, empirical study to show that literary narratives excel over popular ones at enhancing empathic ability. Attempts to replicate those findings have repeatedly failed. Most recently, a 2018 study by Samur and colleagues used “the same literary texts in the reading manipulation; the same mentalising task; and the same kind of participant samples” (Samur et al.,

2018, 1). Unfortunately, in none of the experiments did reading literary fiction have any effect on mentalising relative to control conditions. It is noteworthy, however, that the one finding this study *did* successfully replicate was that overall, lifespan familiarity with narratives, assessed by the Author Recognition Test, correlated positively with enhanced social cognition. To that extent, the value of narrativity—of interacting through our practices of story-telling—remains unchallenged.

Conclusion

The foregoing survey of experimental research on empathy and literature may seem to yield more questions than answers. Its findings are fragmented and inconclusive, and offer no ready directives to humanities educators, policy-makers, or the friends of fine literature. The evidence, as it stands, does little to vindicate the compelling intuition that imaginative, sophisticated, and creative exercises of language stand to make us more appreciative readers and more sensitive moral agents. Or it does not *yet* do that: if there is a clear lesson to be learned from our experimental investigations into empathy and literature, it is that both are exceptionally complex constructs, the diverse components of which we are only beginning to disentangle. The project of understanding how they interact is no less ambitious, and no less important for that.


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Notes

1. In a similar vein, I have argued that there are dimensions of subjective (including moral) experience that are best captured by traditional literary devices such as metaphor, simile and allegory, and that in this respect literary works perform a distinctive and ethically valuable epistemic role (Denham, 2000, 2015).
2. ‘Empathy’ was introduced by Titchener (1909) as his translation of the German *Einfihlung* - literally “in-feeling.” In philosophical literature, the term ‘sympathy’ previously identified the process of mirroring or resonating with the sentiments or passions—the pains and pleasures—of conspecifics.
3. In literary theory, too, the concept of empathy is underdetermined. Burke et al (2016) point out that its meaning is elucidated in terms of a wide variety of distinct processes and states, including simulation (e.g. Caracciolo, 2014), enactment (e.g. Kuzmičová, 2012), and intercorporeity (Gallese & Wojciehowski, 2011). The authors comment that

- “empathy thus broadly conceived encompasses any vicarious experiences in the reader’s embodied mind that are contingent upon the embodied experiences of fictional characters” (Burke et al., 2016, 5).
4. My preferred label is *empathic attunement*, denoting a psychological process rather than a state. Specifically, empathic attunement is a process in which (a) a subject conceives of (represents in thought) another’s experiential state, the conception being typically elicited by observing or remembering or imagining the other or a representation (auditory, visual or linguistic) of the other; (b) the subject’s occurrent state reflects and simulates constituents of the content and phenomenological character of the target experience (or what he takes that experience to be), and (c) the subject regards his experiential state(s) as referring to and informing him of the other’s experience (Denham, 2021, 202-203). See also De Vignemont and Singer, 2006, 435).
 5. The IRI is one of the most widely used instruments in studies of readers’ situational and dispositional or trait empathy. It comprises 28 self-report items comprising four subscales of 7 items each, answered on a 5-point Likert scale. As Davis describes the subscales, they are: Perspective Taking – the tendency to spontaneously adopt the psychological point of view of others; Fantasy – taps respondents’ tendencies to transpose themselves imaginatively into the feelings and actions of fictitious characters in books, movies, and plays; Empathic Concern – assesses “other-oriented” feelings of sympathy and concern for unfortunate others; Personal Distress – measures “self-oriented” feelings of personal anxiety and unease in tense interpersonal settings. The subscales of Perspective Taking and Fantasy target ToM, while Empathic Concern targets affective empathy as well as altruistic or others-welfare motivation (Davis, 1983).
 6. The Reading the Mind in the Eyes Task (RMET) (Baron-Cohen et al., 2001) is a set of 36 photographs of people’s eyes (as if seen through a letter box). To take the test, people choose for each photograph from four descriptors, for instance, *joking*, *flustered*, *desire*, *convinced*. The RMET is widely recognized as a reliable instrument for measurement of situational and dispositional ToM.
 7. The most commonly used instruments to measure transportation is Green and Brock’s 15-item self-report *Transportation Scale/TS* (2000) and shorter, six-item version, *Transportation-Scale Short Form/TS-SF* devised by Appel et al. (2014).
 8. The Interpersonal Perception test (Archer & Costanzo, 1993), is a set of 15 video clips of ordinary people interacting together. A person taking the test has to answer a question about what is going on among the participants in each of the clips.
 9. The number of authors recognized in ART lists has been extensively validated as a proxy measure for reading frequency and kinds of reading people do, as independently assessed by diary and behavioural methods. Mar et al modified Stanovich and colleagues’ lists to separate writers of fiction from those of non-fiction. (Oatley, 2017, 270)
 10. Note, however, that a replication by Kuijck et al. (2018) yielded results consistent with those of Kidd and Castano (2013).
 11. An exception to note is Koopman and Hakemulder’s study (2015) comparing effects (for social cognition, moral cognition and pro-sociality) of *both* fictional and non-fictional narratives about grief to the effects of expository accounts. The study relied on self-report questionnaires to evaluate social and moral cognition and a behavioural test for pro-sociality.
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