

Children's literature, cognitivism and neuroscience

Book or Report Section

Accepted Version

Lesnik-Oberstein, K. ORCID: <https://orcid.org/0000-0002-4970-0556> (2017) Children's literature, cognitivism and neuroscience. In: Dinter, S. and Schneider, R. (eds.) Transdisciplinary Perspectives on Childhood in Contemporary Britain: Literature, Media and Society. Studies in Childhood, 1700 to the Present. Routledge, London. ISBN 9781138232105 Available at <https://centaur.reading.ac.uk/69341/>

It is advisable to refer to the publisher's version if you intend to cite from the work. See [Guidance on citing](#).

Publisher: Routledge

All outputs in CentAUR are protected by Intellectual Property Rights law, including copyright law. Copyright and IPR is retained by the creators or other copyright holders. Terms and conditions for use of this material are defined in the [End User Agreement](#).

www.reading.ac.uk/centaur

CentAUR

Central Archive at the University of Reading

Reading's research outputs online

Children's Literature, Cognitivism and Neuroscience

Karín Lesnik-Oberstein

In much of the world, including Britain, the so-called 'neuro-turn' has in recent decades become a predominant narrative accounting for human emotions, cognition and behaviours.¹ The beginning of such an interest can – and has – been located at many different points, ranging from nineteenth-century ideas of heredity and phrenology, to Charles Darwin's writings in and of themselves, to developments in evolutionary psychology of which British geneticists Hilary Rose and Stephen Rose wrote in 2001 that they had "grown dramatically" "[o]ver the last ten years," (1) to American cultural and literary critic Jonathan Kramnick's observation that the "[a]cademic year 2008–2009 was something of a watershed moment for literary Darwinism"² (315) due to the twin publication of Denis Dutton's *The Art Instinct: Beauty, Pleasure, and Human Evolution* and Brian Boyd's *On the Origin of Stories: Evolution, Cognition, and Fiction*. Similarly, in a lead comment article in the English newspaper *The Observer* in 2013, a pre-eminent scientist and philosopher of science, Raymond Tallis, wrote that

[t]he grip of neuroscience on the academic and popular imagination is extraordinary. In recent decades, brain scientists have burst out of the laboratory into the public forum. They are everywhere, analysing and explaining every aspect of our humanity, mobilising their expertise to instruct economists, criminologists, educationalists, theologians, literary critics, social scientists and even politicians. (2013, 31)

Tallis adds: "It does, however, make you wonder why the pronouncements of neuroscientists command such a quantity of air-time and even credence" (ibid.). Tallis goes on in his article to explain how deeply scientifically dubious the many and wide-ranging claims of

neuroscience and brain-imaging are, but he continues to struggle to understand the popularity and persistence of those claims in contemporary Britain.

I will in this chapter be exploring ways of accounting for the power of the neuro-turn narratives in contemporary Britain through drawing parallels between this widespread interest in cognitivist and neuroscientific approaches in evolutionary psychology and certain investments in childhood. My interest, unlike that of critics such as Tallis, lies primarily not just in analysing the problematic nature of the science that this kind of work claims, but in analysing what is at stake in such approaches. Specifically, I too am puzzled by the popularity of these kinds of claims when both the scientific and the philosophical frameworks they rest on are, at best, questionable and also not in any sense new or original, neither philosophically nor scientifically speaking. I argue here, following theorist Neil Cocks's formulation, that neuroscientific accounts of cognition recover and maintain thought as scan, brain and figure: an object of scrutiny and exchange.³ Therefore, these cognitivist and neuroscientific studies are about, as theorist Jacqueline Rose puts it in relation to childhood and children's literature specifically, "a conception of both the child and the world as knowable in a direct and unmediated way, a conception which places the innocence of the child and a primary state of language and/ or culture in a close and mutually dependent relationship" (9).

This chapter demonstrates, then, further implications of reading the child as *textuality* rather than constituting it as a 'merely' textual reflection or representation of a prior and primary sociological or anthropological entity. In these terms, my reading engages with how the child – as with the neuro-turn – is an instance of the capitalist insistence as it operates in Britain today on the object *as* object, even while the child also is made to police a capitalist market-place which is defined by the child's placement as outside that market. Both in discussing the child as

a produced object (and any object as produced) and in reading the child *as* text, the same drive is here for me at work, in, as Slavoj Žižek puts it, questioning “the properly fetishistic fascination of the ‘content’ supposedly hidden behind the form; the ‘secret’ to be unveiled through analysis is not the content hidden by the form (the form of commodities, the form of dreams) but, on the contrary, *the ‘secret’ of this form itself*” (2008, 3; emphasis in original). My interest then is not to ask, what is a child, but *why and how* the question ‘what is the child?’ persists. As part of this question, finally, I will go on to explain in this chapter also how and why children’s literature criticism must by definition continue either (advertently or inadvertently) to ignore or misread Jacqueline Rose’s famous arguments in her book *The Case of Peter Pan or: The Impossibility of Children’s Fiction*, just as neuroscientific accounts of cognition, whether or not in relation to literature specifically, must ignore or suppress the arguments of previous theorists of science (especially, although not only, feminist theorists of science) such as Donna Haraway.⁴

Rose, then, argued that children’s literature and its criticism are necessarily produced by one self-defined identity – adults – on behalf of a defined ‘other’ – the child. Rose reads the investment in childhood in these areas (and beyond) as the desire for a ‘real’ which defeats language and the unconscious in accessing self-identical objects, including the child defined as such:

Children’s fiction rests on the idea that there is a child who is simply there to be addressed and that speaking to it might be simple. [...] *Peter Pan* stands in our culture as a monument to the impossibility of its own claims – that it represents the child, speaks to and for children, addresses them as a group which is knowable and exists for the book, much as the book (so the claim runs) exists for them. [...] Children’s literature is impossible, not in the sense that it cannot be written (that would be nonsense), but that it hangs on an

impossibility of which it rarely ventures to speak. This is the impossible relation between adult and child. (1992, 1)

Rose made this argument now almost thirty years ago but David Rudd and Antony Pavlik, the editors of the 2010 special issue of the *Children's Literature Association Quarterly* to mark the twenty-fifth anniversary of the publication of *The Case of Peter Pan*, note that in children's literature studies still "references to Rose's work are, more often than not, *en passant*, and once made, the critic then proceeds as though it were 'business as usual'" (2010, 225). The special issue contributions themselves however, to my reading, also "then [proceed] as though it were 'business as usual,'" even where overtly claiming to be in agreement with Rose. Gabrielle Owen, for instance, writing on "Queer Theory Wrestles the 'Real' Child," understands Rose to be implying

a child who is moving, who escapes, and I want to suggest that this movement, this disappearing, is what happens when the child is depicted not as empty, but as a powerful, unpredictable, desiring agent. [...] This disappearing refers literally to the ways we fail to see what is powerful, sexual, or adult about the children around us [...] The idea of the child as memory and fantasy comes from psychoanalysis, [...] I believe Rose offers not only a theory of what happens in and around the idea of children's fiction, but a theory of how the stories we tell ourselves about what happens—or even, what *can* happen—so often operate independently of the lived reality right in front of us. [...] And thinking of *child* in the usual ways—where it functions as an empty category ready to be filled with our desires, projections, and disavowals—makes it impossible to really see either the child or ourselves. (2010, 256-7; emphasis in original)

I read here a different reading from my own not only of Rose's arguments about the child and of psychoanalysis, but also of what is at stake in the whole debate. Owen invokes Rose to *correct* misunderstandings about the child: it is "not [...] empty" but "a powerful, unpredictable, desiring agent" that can be seen as "fail[ed]" to be seen; this is the "lived reality right in front of us" which is recognisable as separate from "stories we tell ourselves," which make "it impossible to really see either the child or ourselves." In other words, "the child" and "ourselves" are already known to be *there* to be "really" seen, if only the stories did not get in the way; the "lived reality," moreover, is also separate from the "us" it is "right in front of" as the "ourselves" are separate from the "we" who tell them the stories.

There are three core issues at stake here for me: firstly, that Rose's arguments about the child are neither about a child as "actual" nor about a child as "fictional" or "ideal" and, in that sense, not about "the child" "as such" and, therefore, not about the possibility of "correcting" the child. Secondly, it is precisely the assumption of necessary, knowable, separations between "stories" and "lived reality," "the child" and "ourselves," and the "us" and "stories" and "lived reality" which constitute the "real" that Rose is putting into question. Finally, and as a necessary corollary to the first two issues, I argue here that the investments in the "real" which Rose reads through children's fiction are not about "just" children's fiction or childhood, but extend to any claims about the "real."

To explore further what is at stake in the child, I want to turn now to some further specific issues in readings of the child: readings which declare an overt interest in considering childhood and history, but which, at the same time, just as with children's literature criticism and with neuroscientific claims about science and literature, can be seen always already to know the child and history as a *content* which defeats a history as/ of difference. To draw out some of the

implications of this, I want to read closely as a typical example Paul Sharrad's "Turning the Screw Again: The Precocious Colonial Child in Henry James's Story." Sharrad starts his article by asking two questions to which the voluminous scholarship on Henry James's *The Turn of the Screw* has seemingly not paid full attention. First, from where does Flora learn her shocking language? Second, in a tale whose details are inspected from as many angles as critics can devise, what weight might we give to the Indian origin of the two children who provide an extra turn to the storytelling screw? My argument here is that a postcolonial reading of the text can provide us with answers. (2012, 1)

As with contemporary children's literature criticism, the child here has a language and an origin, for Flora has a "shocking language" which is "her[s]," although at the same time that language is learnt elsewhere; and the two children here are seen to have an "Indian origin" which may have "weight" and "provide an extra storytelling screw" despite not having hitherto been inspected by critics. Sharrad adds to his claims about Flora's language by arguing that the "'my dear' language that precocious Miles employs in more intimate moments with his governess is that of the rake seducing a maiden" (2012, 6). Sharrad combines these concerns about languages and origins in terms of the children having originally lived in India:

In *The Secret Garden*, the tyrannical Anglo-Indian Mistress Mary first appears swearing, calling her Ayah a 'Daughter of a Pig' for not responding immediately to her call (Burnett 7). This is a direct translation of a common invective picked up from the Indian parlance of Mary's servants and suggests an answer to the question of where Flora gets her bad language from. Mary, through her contact with wholesome English housekeepers and gardeners, is brought to a selfreflective civility (Phillips 177, 179, 187), at which point she loses some of her more "Indian" characteristics. But we recall that the dialect-speaking

Yorkshire folk in *The Secret Garden* are likened to ‘native’ Indians (Phillips 185), and that children raised abroad learned vernacular before English (McMaster 27). Bad language, then, takes on added meaning. From a postcolonial viewpoint, we can see the Master as a distant Prospero; the governess, perhaps, as a dangerously innocent Miranda; Miles as an Ariel killed for playing both sides; and Flora as a Caliban, hauled away cursing like a native (2012, 380-1). (9)

Language here, then, both belongs to the children but is not their own: Sharrad sees the language as being the voices of Miles and Flora, as although “[t]he most debated question of *The Turn of the Screw* so far has been whether or not the governess is delusional [...] it has been taken for granted in the story itself and amongst critics that Mrs Grose is a reliable figure, who, even if convinced by the governess, maintains a steady hold on reality” (2012, 8). Mrs Grose’s “steady hold on reality” means for Sharrad that no matter how delusional or convincing the governess may be, Mrs Grose can be relied upon to speak the truth, including the truth about the children’s language, which here amounts to the same thing as the children speaking themselves. Sharrad can read the children’s language as “bad” and ‘shocking” to the reliable Mrs Grose both because it is not English, adult and of a “low” class: he parallels Flora’s language to Mary’s swearing as a “direct translation of a common invective picked up from the Indian parlance of Mary’s servants” and “the children raised abroad learned vernacular.” For Sharrad this is what is at stake in the “added meaning:” that the inappropriate speaking of these children is not just about being “precocious,” but that it is about being raised originally in a non-English and lower-class environment. Moreover, that environment and its language is one Sharrad can identify and know from and as its reality too, a reality above and beyond what is included in the texts; as he

concludes: “[y]et it was these pagan, child-marrying underclasses, steeped in stories of divine sexual activities, who had daily contact with colonial children” (7).

The child (and the Indian and the servant) here is, then, constituted as a first-person narration which apparently requires no interpretation, but constitutes a pure communication of the self, albeit an inappropriately non-child self: here we have a representation which is not a representation *for* or *to* anyone. As theorist Sue Walsh argues in her analysis of the child and the animal:

[I]t is not the case that the construction of the ‘real object’ (the child/animal) somehow immune to the ‘corruption’ of language is something that is exclusive to children’s literature criticism and animal advocacy. It is something that occurs routinely in critical and philosophical positions that speak of ‘representation’, and of ‘ideology’ and in doing so root themselves in the presumed knowable ‘real.’ (2002, 162)

Following this inescapable logic of representation,⁵ Sharrad continues throughout his article to note critical propositions about complexities and ambiguities of interpretation in relation to James’s text, but, as with the child and the Indian, directly overcomes them all to retrieve a transparent and neutral reality or history nonetheless. For instance, as it is nowhere mentioned in “The Turn of the Screw” itself that the children lived in India, it is a stable and knowable history which supplies the argument that “prior to the systematizing of colonial administration that followed the 1857 Indian Mutiny it was common for East India Company soldiers to take mistresses and wives in India. So it is entirely probable that the children are not completely English” (2012, 3). Equally, through the claim that “[i]n line with James’s story, which will and will not “tell” [...], the brother may not have died or even lived in India, so a postcolonial scenario is just one more possibility amongst many” (3), James’s “not ‘tell[ing]’” is produced as

the repression of specific possibilities which nonetheless remain as possibility: this is a repression, therefore, which is known and overcome as such.

And indeed, throughout Sharrad's article, the child, the servant and the Indian are -- as Walsh's analysis explains -- necessarily preserved as a real that is beyond perspective (narration), or, to put it differently, implies that perspective is only ever partial; that there is always something that remains outside of it which is not itself subject to perspective. For Sharrad, therefore,

Miles—described suggestively as 'exquisite' (361)—'says things' to school mates he likes and is expelled as a result (James 392-3). If he has taken on some aspect of transgressive sexuality, whether that be simply knowing too much about sex of any kind, or tempting other boys into sexual 'perversity,' the colonial Indian origins of James's children provide a discursive context in which this makes sense and allow us to infer other elements of threat to the English status quo than mere accidental personal deviance. The governess says of Miles, 'they are not of your own sort' (James 354). It is primarily his colonial origins that make this true: Miles is not quite child or adult, not quite gentry but belonging to it, too exquisite to be simply masculine but too male to be seduced by his governess. Ultimately, he is not quite child and not quite 'white.' (2012, 8)

Miles and his transgressive sexuality are here assumed as prior to, and exceeding, perspective in being able to be known from his "saying things" and being "expelled as a result," just as they are excessive in being simultaneously prior and post-narration in being part of "a discursive context" which "makes sense" of what would otherwise be "merely accidental personal deviance." Without "the colonial Indian origins," Miles's saying would here not be able to be made "sense" of, and Miles's being of his "own sort" too is underpinned "primarily [by] his colonial origins."

The colonial is the source of inappropriate or perverse sexuality to the child as Miles has possibly “taken [it] on;” in other words, even in India it was not initially his. For Sharrad, then, Miles is a known uncertainty, where the uncertainty itself is further overcome by the certainty of the “colonial Indian origins.”

What is also entirely consistent within Sharrad’s position is his particular interpretation of Shoshana Felman’s article “Turning the Screw of Interpretation” ([1977] 1982), which the title of his own article so pointedly references. I can read Sharrad’s version of Felman as consistent with the misreadings of Jacqueline Rose in both the *Children’s Literature Association Quarterly* special issue as well as more widely in children’s literature criticism and elsewhere, and with the absence of Haraway from cognitivism and neuroscience in evolutionary psychology and literary studies. For Felman, Rose and Haraway’s arguments are closely connected in their adherence to reading perspective as *inescapable*. Indeed, this very argument is what is precisely at stake, of course, in “Turning the Screw of Interpretation.” For Sharrad,

Admitting Shoshana Felman’s thesis about the indeterminate nature of the text and of reading, we might suggest that one area that a psychoanalytic reading of James “understate, leave open” [sic] (Felman 119) in focusing on ghosts, madness and sexuality, is the *political* unconscious. In *The Turn of the Screw*, as in *The Secret Garden*, the country house can be read as a figure for British empire, and the Indian reference allows us to extend the metonym and read its master as an absentee colonial ruler [...]. (9)

For Sharrad and the critics he cites further, James’s “indeterminacy” and “open[ness]” can after all be determined and closed as much as the child, the Indian, the servant, sexuality and identity can be determined and closed. Indeterminacy here is, then, a lack of absolute certainty about a knowable truth, which can be tolerated through filling that lack with the known possibilities or

probabilities, including removing the indeterminacy altogether by ultimately settling on one of the known possibilities: here, that is “the *political* unconscious,” which is not about “ghosts, madness and sexuality” but about “the country house [...] as a figure for the British Empire.”

For Felman, crucially, this is precisely not the status of indeterminacy, the unconscious and sexuality. Instead, indeterminacy is that which remains irresolvable, because there is no view available from which any possibility can be seen as, after all, ‘correct;’ in this sense, this is what ‘perspective’ *is*:

‘The difficulty itself is the refuge from the vulgarity,’ writes James to H. G. Wells [...]

What is vulgar, then, is the ‘*imputed* vice,’ the ‘offered example,’ that is, the explicit, the specific, the unequivocal and immediately referential ‘illustration.’ *The vulgar is the literal* [...] because it *stops* the movement constitutive of meaning, because it blocks and interrupts the endless process of metaphorical substitution. ([1977] 1982, 106-7, emphasis in original)

What is centrally at stake here for both Rose and Felman is a certain reading of Freud; a reading elaborated by Felman throughout “Turning the Screw of Interpretation” and which Rose offers in *The Case of Peter Pan* in the first chapter, which starts by asserting that “We have been reading the wrong Freud to children” (12). This psychoanalysis is the psychoanalysis which resists the ‘vulgar’ and the ‘literal’ of which Felman writes through her reading of James:

The specific complication which, in Freud’s view, is inherent in human sexuality as such.

The question here is less that of the meaning *of* sexuality than that of a complex *relationship between sexuality and meaning*; a relationship which is not a simple *deviation* from literal meaning, but rather, a *problematization of literality as such*. ([1977] 1982, 110, emphasis in original)

In this sense, Sharrad's understanding of Felman's "psychoanalytic reading" as one which could identify and retrieve lack as a "*political* unconscious" separate from or other to an identifiable and known sexuality is still "reading the wrong Freud to children."

I will now consider how the neuroscience of evolutionary psychology in contemporary Britain too relies on the child and the object as "something that can be scrutinised and assessed," as described by journalist Zoe Williams in 2014 in the English newspaper *The Guardian*:

'Neuroscience can now explain why early conditions are so crucial,' wrote [English politicians] Graham Allen and Iain Duncan Smith in their 2010 collaboration, *Early Intervention: Good Parents, Great Kids, Better Citizens*. 'The more positive stimuli a baby is given, the more brain cells and synapses it will be able to develop.' Neuroscience is huge in early years policy. This week, in what's been characterised as the largest shake-up of family law in a generation, the 26-week time limit for adoption proceedings has come into force, much of it justified by the now-or-never urgency of this set of beliefs, that the first three years (or sometimes first 18 months) hardwire a baby's brain, either give it or deny it the capacity for a full life. This is the engine of what is known as the First Three Years movement, which has transfixed politicians from across the spectrum. Allen and Duncan Smith's report opened with an illustration of the 'normal child's' large brain and the shrivelled, walnut brain of the neglected child. (2014)

In her new, 1992 introduction to the reprint of *The Case of Peter Pan*, "The Return of Peter Pan," Rose argues that "Peter Pan, it seems, always provokes a crisis of precedence because of the tension between his eternal repetition and his status as a 'once and for all'" (x). This repetition which both must and yet cannot be read as such finds yet another return in Jonathan Gottschall's 2012 book, *The Storytelling Animal: How Stories Make Us Human*, where, in line

with the numerous claims in contemporary Britain about the evolutionary embeddedness of ‘story’ (and related aspects) in the human brain,⁶ he claims that

Science *can* help explain why stories [...] have such power over us. *The Storytelling Animal* is about the way explorers from the sciences and humanities are using new tools, new ways of thinking, to open up the vast terra incognita of Neverland. [...] It’s about deep patterns in the happy mayhem of children’s make-believe and what they reveal about story’s pre-historic origins. [...] It’s about how a set of brain circuits – usually brilliant, sometimes buffoonish – force narrative structure on the chaos of our lives. [...] *Why* are humans addicted to Neverland? (2012, xvii, emphasis in original)

Peter Pan’s Neverland is both instantly recognised here as the “vast terra incognita” and the child too is the repetition which is instantly known as such. Neverland’s *appropriateness* as “terra incognita” lies in its already being vulnerable to “open[ing] up” by the “new tools” and “new ways of thinking” of the “explorers from the sciences and humanities,” just as the “happy mayhem of children’s make-believe” *constitutes* the “deep patterns” which provide the revelation of ‘story’s pre-historic origins.” Moreover, it is the literary text *Peter Pan* which for Gottschall provides the origin – Neverland – upon which the new tools and thought will come to act to “open [it] up;” Neverland is always already known to be there as the secret to be “opened,” just as children’s literature and the child are always already there as the secret to be opened, the mystery to be resolved. And although the brain circuits have to “force” “narrative structure on the chaos of our lives,” nevertheless “humans” are “addicted to” Neverland: chaos resists narrative structure but the human, which does not have Neverland, constantly knows and craves it as a supplement to itself; humans, then, know the story of story before they have story, as they have also made that story they know they do not have but are, after all, addicted to.

A “confusion of tongues”⁷ here is absolute: children’s literature is here what “humans” are “addicted to,” because it is about “deep patterns in the happy mayhem of children’s make-believe,” which in turn “reveal” something “about story’s pre-historic origins.” The child, in other words, is here, as it always must be, the origin for both its own origin and that of the entirety of the “human,” but designated as such by another, beside or outside any of this; neither child nor human, past nor present, real nor make-believe, science nor literature, neither brain circuit nor chaotic life nor narrative structure, but able to anticipate and recognise them all. As with Gabrielle Owen’s child, story, and lived reality in children’s literature studies, Gottschall’s brain can simultaneously know about the “chaos of our lives” which is outside itself, whilst at the same time having “circuits” which impose a narrative structure upon that chaos: a binocular vision maintained by the brain both of itself and that which lies outside itself absolutely. In other words, which brain can know that the brain knows what it is claimed forcibly to prevent itself from being able to know?

Owen and Gottschall’s assumed separations between story, history, the child and lived experience or the chaos of our lives also underpin the mirror neuron research⁸ which in turn is made to underpin many claims in evolutionary psychology (and the literary criticism which engages with it) about the overcoming of a fundamentally assumed separation between a ‘self’ and an ‘other,’ whether these are assigned as ‘human’ and ‘animal,’ ‘adult’ and ‘child,’ ‘non-autistic’ and ‘autistic,’⁹ or ‘reader’ and ‘story.’ We can read this already in one of the earliest articles on mirror neurons, Gallese et al.’s “Action Recognition in the Premotor Cortex”:

We describe here the properties of a newly discovered set of F5 neurons (‘mirror neurons’, $n = 92$) all of which became active both when the monkey performed a given action and when it observed a similar action performed by the experimenter. Mirror neurons, in order

to be visually triggered, required an interaction between the agent of the action and the object of it. The sight of the agent alone or of the object alone (three-dimensional objects, food) were ineffective. Hand and the mouth were by far the most effective agents. The actions most represented among those activating mirror neurons were grasping, manipulating and placing. (1996, 593)

“Mirror neurons” are “visually triggered,” but under a range of restrictions: firstly, the “given action” of both the monkey and the agent is seen to be “performed” by each *as such*, so that both monkey and experimenter, and the observer of both, already have isolated and matched a set of intentional repetitions as what is deemed to be significant; secondly, “the sight of the agent alone or of the object alone were ineffective.” Nevertheless, it is already known to both the experimenters and, according to them, also to the monkey, that what is there to be “observed” is an “agent” or an “object,” even when “alone.” In other words, although an “object” here is alternately defined as “three-dimensional objects, food,” an “agent” must here then, according to the neuroscientists, be identified by the monkey as being neither “three dimensional” nor “food.” It is this distinction between agent-ness and object-ness which allows for the central cause of neural action to be isolated as the *seeing* of “an interaction between the agent of the action and the object of it:” it is, therefore, “interaction” which must be *visible as such*, and where further there must be an assumed, neurologically significant, difference between “action” and “vision;” where seeing or observation do not count as actions.¹⁰ Both causality and intentionality can be seen here as *a priori* invoked by Gallese et al. to support their interpretation of mirror-neuron activity.¹¹

There are subsequently several slippages in these matters too, for “[h]and and the mouth were by far the most effective agents,” although it had previously been stated that “the sight of

an agent alone [... was] ineffective” with respect to “effectivity” (that is, presumably, making the neurons active), the agent apparently *can* after all be seen “alone,” separated out from within the interaction with its object. It can further be noted that “hand and the mouth” here too are excluded from being defined as “three-dimensional objects, food.” Finally, there is a jump to the claim that “[t]he actions most represented among those activating mirror neurons were grasping, manipulating and placing,” where “actions” are already not just actions, but in shifting to being “represented” incorporate causality and intentionality. The claims made here, then, rest on assuming that the neurons innately know the difference between *different intentions* and, moreover, that intentionality and interaction can be *seen as such* in order to “visually trigger;” and, further, “visually trigger” *itself* is anyway already a reading of intention and cause. Several scientific critiques of mirror neuron research make different but complementary points to my analysis here: John Cartwright, for instance, in considering claims about mirror neurons and the origins of languages warns that

the strong interpretation of mirror neurons supplying instant meaning to the observer faces one enormous problem. If it is suggested that mirror neurons only fire when the movement of an arm is directed towards some meaningful action (the grasping of an object) and replicate this meaning instantly inside the head of an observer, and not when confronted by movement alone, such as a hand moving towards a non-existent object, how does the mirror system ‘know’ that the former is meaningful? In essence, if meaning is supposedly presented instantly in the brain, how can the system decide to be selective before the action is complete? (2008, 142)¹²

What is going on, then, with claims about the child and evolutionary psychology which repeat themselves and yet also repeatedly, now, claim their newness, their status as spontaneous and

unique discovery? What is going on with their insistence on the object; the child as object and the story as object? The first thing to note, perhaps, is that this very question can itself be seen as a repetition, as we have already been able to see in Rose's preface to the new edition of *The Case of Peter Pan*. I want to foreground here how evolutionary psychology and children's literature criticism are by no means lone voices, but part of a current broader, pervasive, anti-theoretical tendency in wider literary and scientific studies as Carlo Salzani, amongst others, has argued, in his review of leading "literary Darwinist" Joseph Carroll's book *Reading Human Nature*: "This *dialogue de sourds* extends far beyond the borders of literary Darwinism and characterizes the old opposition between natural sciences and humanities, which had an explosion – mainly in American academia – with the 'science Wars' of the 1990s [...], but still rages in the contemporary debate about the 'crisis of the humanities'" (2011).

We can also see this view quite a while before Salzani's comments in one of the classic texts to critique evolutionary psychology, Hilary and Stephen Rose's *Alas Poor Darwin: Arguments Against Evolutionary Psychology*, where they argue that the importance of their volume lies in "challenging what we feel has become one of the most pervasive of present-day intellectual myths [...] evolutionary psychology [...] a particularly Anglo-American phenomenon" (2001, 1). *Alas Poor Darwin* was first published in 2000 and yet here we are at present, with a burgeoning academic and popular industry in evolutionary psychology (including neuroimaging) still also in Britain, which, as Rose and Rose already then wrote "claims to explain all aspects of human behaviour, and thence culture and society, on the basis of universal features of human nature that found their final evolutionary form during the infancy of our species some 100-600,000 years ago" (1). I am not referring to Rose and Rose to invoke their scientific authority with respect to the correctness (or otherwise) of my own critique of evolutionary psychology, but

because they and I share a concern about the *violence* of the claims made by evolutionary psychologists, as there is also a violence in the claims made about the child as object. I read this violence not just in the insistence on the object, but also in the ignoring or repressing of the histories of fields of study, and of history as difference *tout court*, as I have discussed above and which Rose and Rose also claim in stating that they each: “separately felt that [evolutionary psychology] was making insupportable assertions which touched our own distinctive fields [sociology and biology]” (2001, 8). The rage against ‘theory’ of the literary Darwinists – but, significantly, not just the literary Darwinists – is precisely fired by the fact that they *all* understand theory somehow to ‘evaporate’ a natural, material, world; as Joseph Carroll argues, “poststructuralism yields causal primacy to language,” which for Carroll, as Salzani points out, means “it is incompatible with a ‘perspective in which “life,” self-replicating DNA, precedes thought, to say nothing of language”” (2011, quoting Carroll (2011), 78). Jonathan Kramnick quotes Brian Boyd as similarly asserting that “humans are not just cultural or textual phenomena but something more complex” (2012, 432).

I can trace the concern with the violence of this real also in another closely relevant volume of classic critique, this time of psychology more widely, Julian Henriques et al.’s *Changing the Subject: Psychology, Social Regulation and Subjectivity*. In the “Foreword” to the 1998 re-issue of the volume, the editors argue that “the problems involved in changing the subject have always been related to a deeper question about forms of emancipation and liberation, whether at the individual or the collective level” (2001a [2000], xviii). The *investments* of psychology as a discipline are here made visible; as Henriques et al. state:

[W]e assert the importance of modern psychology in producing many of the apparatuses of social regulation which affect the daily lives of all of us. However, unlike previous radical

critiques we do not argue that psychology is or has been a monolithic force of oppression and distortion which constrains and enchains individuals. Rather, we contend that psychology, because of its insertion in modern social practices, has helped to constitute the very form of modern individuality. Psychology is productive: it does not simply bias or distort or incarcerate helpless individuals in oppressive institutions. [...] It is by producing explanations as well as identifying problems that psychology contributes to specific political positions. ([2000] 2001b, 1)

For Henriques et al. a consequence of this position for “understanding and bringing about change” is that the “opposition of individual and society and therefore of individual and social change is a view of the social domain which we shall criticize,” (2001b, 2) including “the deconstruction of the taken-for-granted, common-sense facts about human beings and our lived experience [,which] involves prising apart the meanings and assumptions fused together in the ways we understand ourselves in order to see them as historically specific products, rather than timeless and incontrovertible given facts” ([2000] 2001b, 2).

Histories of history as *difference*, then, can be constituted as disrupting the real of childhood, experience, the body and materiality: everything which for children’s literature and evolutionary psychology not only is, but *must* be “the taken-for-granted, common-sense facts about human beings [...] timeless and incontrovertible.” Felman, Hilary Rose and Steven Rose, Jacqueline Rose and Henriques et al. each offer an analysis of the political and cultural moments which lead to their challenging of a current “taken for granted.” For Rose and Rose “[t]he last decades of the twentieth century have been a period of almost unprecedented social, economic and cultural turbulence [...] in this climate the search for new apparent certainties, something to cling to, has become urgent” (2001, 3). Differences and change

demand, as Felman writes, that “the reader be patient (i.e. refrain from repressing too soon); let him suspend, for a moment, his natural disbelief in the face of the foreign (cultural and theoretical) *style*,” ([1977] 1982b, 4; italics in original) and although I would not venture in turn myself to diagnose the history of my current moment, what I do propose through the readings in this chapter is that in several current areas of interest somehow such patience and suspension is in short supply, as exemplified in contemporary Britain above all by the insistence on what may be called “audit capitalism”¹³ and by the “Brexit” referendum vote on June 23rd 2016 for Britain to leave the European Union.

References

- Ainslie, Helen. 2011. “Perspectives and Community: Constructions of Autism and Childhood.” In *Children in Culture Revisited. Further Approaches to Childhood*, edited by Karín Lesnik-Oberstein, 90-107. Houndmills: Palgrave.
- Allen, Graham and Iain Duncan Smith. 2008. *Early Intervention: Good Parents, Great Kids, Better Citizens*. London: The Smith Institute.
- Bluhm, Robyn. 2013. “Self-Fulfilling Prophecies: The Influence of Gender Stereotypes on Functional Neuroimaging Research on Emotion.” *Hypatia* 28 (4): 870-86.
- Boyd, Brian. 2009. *On the Origin of Stories: Evolution, Cognition, and Fiction*. Cambridge, MASS.: Harvard University Press.
- Button, Katherine, John P. A. Ioannidis, Claire Mokrysz, Brian A. Nosek, Jonathan Flint, Emma S. J. Robinson, and Marcus R. Munafò. 2013. “Power Failure: Why Small Sample Size Undermines the Reliability of Neuroscience.” *Nature Reviews Neuroscience* 14: 365-76. doi:10.1038/nrn3475.

- Carroll, Joseph. 2011. *Reading Human Nature: Literary Darwinism in Theory and Practice* New York: SUNY Press.
- Cartwright, John. 2008. *Evolution and Human Behaviour. Darwinian Perspectives on Human Nature*, 2nd ed. Houndmills: Palgrave.
- Cocks, Neil. 2009. *Student-Centred: Education, Freedom and the Idea of Audience* (Ashby-de-la-Zouch: InkerMen Press.
- . Forthcoming 2017. *Higher Education Discourse and Deconstruction: Challenging the Case for Transparency and Objecthood*. Basingstoke: Palgrave.
- De Vos, Jan. 2016. *The Metamorphoses of the Brain – Neurologisation and its Discontents*. London: Palgrave.
- Dutton, Denis. 2009. *The Art Instinct: Beauty, Pleasure, and Human Evolution*. New York: Oxford University Press.
- Felman, Shoshana. (1977) 1982a. “Turning the Screw of Interpretation.” In *Literature and Psychoanalysis. The Question of Reading: Otherwise*, edited by Shoshana Felman, 94-208. Baltimore: The John Hopkins University Press.
- . (1977) 1982b. “Foreword to Yale French Studies Edition.” In *Literature and Psychoanalysis. The Question of Reading: Otherwise*, edited by Shoshana Felman, 4. Baltimore: The John Hopkins University Press.
- Ferenczi, Sándor. (1933) 1955. “Confusion of Tongues between Adults and Child.” In *Final Contributions to the Problems and Methods of Psychoanalysis*, edited by Michael Balint, translated by E. Mosbacher, 156-68. London: Hogarth Press.

- Ferrari, Pier Francesco, and Giacomo Rizzolatti. 2014. "Mirror Neurons: Fundamental Discoveries, Theoretical Perspectives and Clinical Implications." Special Issue of the *Philosophical Transactions of the Royal Society*, 369 (1644).
- Gallese, Vittorio, Luciano Fadiga, Leonardo Fogassi, and Giacomo Rizzolatti. 1996. "Action Recognition in the Premotor Cortex." *Brain* 119: 593-609.
- Gottschall, Jonathan. 2012. *The Storytelling Animal: How Stories Make Us Human*. New York: Houghton Mifflin Harcourt Publishing Company.
- Haraway, Donna Jeanne. 1989. *Primate Visions: Gender, Race, and Nature in the World of Modern Science*. New York and London: Routledge.
- Heyes, Cecilia. 2010. "Where Do Mirror Neurons Come From?" *Neuroscience & Biobehavioral Reviews* 34 (4): 575–83.
- Henriques, Julian, Wendy Hollway, Cathy Urwin, Couze Venn, and Valerie Walkerdine. (2000) 2001a. "Foreword," In *Changing the Subject: Psychology, Social Regulation and Subjectivity*, edited by Julian Henriques, Wendy Hollway, Cathy Urwin, Couze Venn, and Valerie Walkerdine, ix-xix. London: Vintage.
- . (2000) 2001b. "Introduction: The Point of Departure." In *Changing the Subject: Psychology, Social Regulation and Subjectivity* by Julian Henriques, Wendy Hollway, Cathy Urwin, Couze Venn, and Valerie Walkerdine, 1-9. London: Vintage.
- Karshan, Thomas 2009. "Evolutionary Criticism." *Essays in Criticism* LIX (4): 287-301.
- Kramnick, Jonathan. 2011. "Against Literary Darwinism." *Critical Inquiry* 37 (2): 315-47.
- . 2012. "Literary Studies and Science: A Reply to My Critics." *Critical Inquiry* 38 (2): 431-60.

- Lesnik-Oberstein, Karín. 1998. "Childhood and Textuality: Culture, History, Literature." In *Children in Culture: Approaches to Childhood*, edited by Karin Lesnik-Oberstein, 1-28. Houndmills: Palgrave.
- . 2000. "The Psychopathology of Everyday Children's Literature Criticism." *Cultural Critique* 45: 222-42.
- . 2010. "Childhood, Queer Theory, and Feminism." *Feminist Theory* 11 (3): 309-21.
- . 2011. "Introduction: Voice, Agency and the Child." In *Children in Culture, Revisited: Further Approaches to Childhood*, edited by Karín Lesnik-Oberstein, 1-18. Houndmills: Palgrave.
- . 2015. "Motherhood, Evolutionary Psychology and Mirror Neurons or: 'Grammar is Politics by Other Means.'" *Feminist Theory* 16 (2): 171-87.
- . 2016a. "The Object of Literature and Neuroscience." *Textual Practice*: 1-17. doi: <http://dx.doi.org/10.1080/0950236X.2016.1237989>.
- . 2016b. "Gender, Childhood and Children's Literature: the CIRCL Approach." *Asian Women* 32 (2): 1-26. doi: 10.14431/aw.2016.06.32.2.1.
- . 2016c. "Children's Literature: Sexual Identity, Gender and Childhood." *BREAC: A Digital Journal of Irish Studies*. <http://breac.nd.edu/articles/69168-childrens-literature-sexual-identity-gender-and-childhood/>.
- Leys, Ruth. 2011. "The Turn to Affect: A Critique." *Critical Inquiry* 37 (Spring): 434-72.
- . 2012. "'Both of Us Disgusted in My Insula': Mirror Neuron Theory and Emotional Empathy." *Nonsite.org* 5: 1-25. Accessed April 11, 2013. [http://nonsite.org/article/"both-of-us-disgusted-in-my-insula"-mirror-neuron-theory-and-emotional-empathy](http://nonsite.org/article/).

- McMaster, Graham. 1988. "Henry James and India: A Historical Reading of *The Turn of the Screw*." *Clio* 18: 23-40.
- Owen, Gabrielle. 2010. "Queer Theory Wrestles the 'Real' Child: Impossibility, Identity, and Language in Jacqueline Rose's *The Case of Peter Pan*." *Children's Literature Association Quarterly* 35 (3): 255-73.
- Parker, Ian. 2015. "The Function and Field of Speech and Language in Neoliberal Education." *Organization* 23 (4): 550 –66. doi: 10.1177/1350508415591235.
- Phillips, Gerry. 1993. "The Mem Sahib, the Worthy, the Rajah and His Minions: Some Reflections on the Class Politics of *The Secret Garden*." *The Lion and the Unicorn* 17 (2): 168-94.
- Rose, Hilary, and Stephen Rose. 2001. "Introduction." In *Alas Poor Darwin: Arguments Against Evolutionary Psychology*, edited by Hilary Rose and Stephen Rose, 1-14. London: Vintage.
- Rose, Jacqueline. (1986) 2005. *Sexuality in the Field of Vision*. London: Verso.
- . (1984) 1992. *The Case of Peter Pan of the Impossibility of Children's Fiction*. Philadelphia, PA: Pennsylvania University Press.
- . 1992. "The Return of Peter Pan." In *The Case of Peter Pan of the Impossibility of Children's Fiction*. Philadelphia, PA: Pennsylvania University Press, ix-xviii.
- Rudd, David, and Anthony Pavlik. 2010. "The (Im)Possibility of Children's Fiction: Rose Twenty-Five Years On." *Children's Literature Association Quarterly* 35 (3): 223-9.
- Salzani, Carlo. 2011. Review of *Reading Human Nature: Literary Darwinism in Theory and Practice*, by Joseph Carroll, *Bryn Mawr Review of Comparative Literature*, 9 (2). Accessed December 30, 2012.

<http://www.brynmawr.edu/bmrcl/BMRCLFall2011/Reading%20Human%20Nature,%20Literature%20after%20Darwin.htm>.

Sharrad, Paul. 2012. "Turning the Screw Again: The Precocious Colonial Child in Henry James's Story." *Postcolonial Text* 7 (3): 1-16.

Tallis, Raymond. 2013. "Think Brain Scans Can Reveal Our Innermost Thoughts? Think Again." *The Observer*, "Comment Section", June 2.

Walsh, Sue. 2002. "Child/Animal: It's the 'Real' Thing." In "Children in Literature," edited by Karín Lesnik-Oberstein, special issue, *The Yearbook of English Studies* 32: 151-62.

Williams, Zoe. 2014. "Is Misused Neuroscience Defining Early Years and Child Protection Policy?" *The Guardian*. Accessed on December 16, 2016.

<https://www.theguardian.com/education/2014/apr/26/misused-neuroscience-defining-child-protection-policy>.

Žižek, Slavoj. [1989] 2008. *The Sublime Object of Ideology*. London: Verso.

¹ See for a thorough and wide-ranging account of the 'neuro-turn' development and consequences: De Vos (2016).

² There have been heated debates about literary criticism that draws in evolutionary psychology (sometimes called "literary Darwinism"); see, for instance, Karshan (2009), Kramnick (2011) and Lesnik-Oberstein (2016a).

³ Cocks, unpublished manuscript, February 2012 (quoted by kind permission); Cocks's formulation here echoes Rose's critique of the child and the unconscious as not "something separate which can be scrutinised and assessed" (1992, 13). For Cocks's wider critique of cognitivism, neuroscience and evolutionary psychology see: Cocks (2009).

⁴ See for my previous arguments about the misreading or ignoring of Rose: Lesnik-Oberstein (2000, 2010, 2011, 2016b and 2016c) and for my further arguments around the ignoring of Haraway as well as a wider critique of neuroscience: Lesnik-Oberstein (2015, 2016a).

⁵ See for reviews of how different disciplines engage with the child: Lesnik-Oberstein (1998, 2011).

⁶ See for British examples of such claims about ‘story’ and related issues: Lesnik-Oberstein, 2016a.

⁷ I am quoting here the title of the article by the Hungarian psychoanalyst Sándor Ferenczi ([1933] 1955) which is also referred to by Rose in the sub-title of her third chapter of *The Case of Peter Pan* ([1984] 1992, 66 and 148, note 3).

⁸ The ongoing persistence of the British investment in ‘mirror neurons’ and their implications is reflected, for instance, in the 2014 publication of a special issue of the *Philosophical Transactions of the [English] Royal Society* on “Mirror Neurons,” compiled and edited by Ferrari and Rizzolatti or in the ongoing research at the University of Oxford by Heyes (2011).

⁹ See for a thorough critique of evolutionary psychology’s theories about autism: Ainslie (2011).

¹⁰ Not coincidentally, Chen herself is inspired in turn by Rose ([1986] 2005). My thanks to Dr YuKuan Chen for helping me to develop my reading of the mirror-neuron claims.

¹¹ For a thorough discussion of the centrality of intentionality to ideas of “affect” as well as a thorough wider critique of affect, see: Leys (2011).

¹² See for an excellent wider critique of the mirror neuron research from a related, but different perspective to my own: Leys (2012). Leys is also puzzled at the ongoing popularity of mirror neuron theories and their resistance to both scientific and theoretical critiques, but does not make this question the focus of her article, concluding only that “simply put, the network of

presuppositions and methods associated with the Basic Emotions View is too attractive and the laboratory methods too convenient to be given up” (6). For scientific critiques of neuroimaging research see, for instance: Button *et al.* (2013) and Bluhm (2013).

¹³ See for a thorough analysis of contemporary British “audit capitalism” particularly as it relates to education and childhood: Parker (2015) and Cocks (forthcoming 2017).