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How Darwin can help Post-Structuralists Maintain that Apartheid was Unconditionally Unjust

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Abstract
Generally, we want certain ethical claims to be unconditionally true. One such claim is "Apartheid was unjust". In this paper, I discuss a group of South African post-structuralist philosophers who call their view Critical Complexity (CC). Because of post-structuralism's radical contextualism, CCists can only claim that things are 'as if' Apartheid was unjust. They cannot claim that Apartheid was unconditionally unjust. Many will find this unsatisfying. I argue that a naturalised or Darwinian notion of rationality can help CCists (and perhaps post-structuralists in general) in this regard. This kind of rationality is what has come to be known as embodied rationality. We employ embodied rationality when navigating the ecological and social domains. It has, though, been co-opted for navigating the ethical domain. We can, then, claim that Apartheid was unconditionally unjust because it is embodied rational to do so. This does not involve embracing the kind of Cartesian rationality that CCists rightly reject.

Keywords Apartheid · Jacques Derrida · Post-structuralism · Ecological rationality · Embodied rationality · Gerd Gigerenzer

1 Introduction

For many post-structuralists, to act *is* to act ethically. This claim is maintained in the contemporary literature by a South African collective who call their view Critical Complexity (CC). CC has been notably developed in Paul Cilliers' (1998) *Complexity and Post-Modernism* and Minka Woermann's (2016) *Bridging Post-Structuralism and Complexity* (see also Hurst 2010; Preiser 2012; Human 2016). CCists uniquely

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draw on both complexity theory and Derrida's post-structural semantics to argue that acting in the face of complexity[1] (found in, e.g., social and semantic systems) is unavoidably ethical. This is because complexity renders our actional observations, models, predictions, and decisions vague and uncertain. There is no formula – no algorithm or set of rules – for action. We have to make *choices*, and choice-making introduces *responsibility*. In other words, it introduces ethics.

CC has some *prima facie* appeal. We are not automata constrained by rules, mechanisms, or rationality. Instead, we are free, volitional deciders in our actional endeavours. How we do and should engage in and with our (complex) world is up to *us*. That said, my goal in this paper is to argue that CCists face a thorny problem. Despite their outwardly inspiring account, there is a tension at the heart of their view:

> TENSION
> On the one hand, CCists maintain that norms (ethical or otherwise) are indubitably context-*dependent*.
> On the other hand, CCists hold to certain ostensibly context-*independent* norms (e.g., that Apartheid was unjust).

In an attempt to resolve TENSION, CCists state that norms can have a *provisional* status. As Cilliers puts it, we can act "as if" certain norms hold context independently (2016a; see also Woermann and Cilliers 2012). These are norms that have been incorporated in what Cilliers calls "stable" and "long-lived" domains of human discourse (Cilliers 2016b; see also Derrida 1988).

I will use the case of Apartheid to argue that CC's notion of provisional norms[2] is unhelpful. CC's 'as if' ethics comes across as a kind of pretend or make-believe ethics. There is really no fact of the matter when it comes to right versus wrong or just versus unjust. We can only say that things are *as if* this were the case. Many will, I take it, find this unsatisfying. We do not want to say that things are 'as if' Apartheid was unjust. We want to say that Apartheid was *unconditionally* (i.e. absolutely and unequivocally) unjust, and we want to do so in a way that does not allow for any contextual wiggle room. We also do not want to entertain that there might be modal contexts where Apartheid *is* or *could be* just. And, we want our decisions and actions to function in a way that blocks such an outcome.

I take capital 'A' 'Apartheid' to denote the constitutionalised racist system enforced in South Africa circa 1948–1994. Small 'a' 'apartheid' denotes general (doctrinal or institutionalised) racism that resembles Apartheid. Cilliers (2016c) questions if and when there is a distinction between Apartheid and apartheid (see also McClintock and Nixon 1986; Fulela 2008). For the purposes of this paper, I will, though, assume that there is such a distinction. Following Derrida (1985), I will only discuss capital 'A' Apartheid here.

[1] An intuitive and simple definition of 'complex system' will suffice here. Following Richardson and Cilliers' conception, a complex system is "a system that is comprised of a large number of entities that display a high level of nonlinear interactivity" (2001: 8, emphasis removed). See however Ladyman and Wiesner (2020) for a detailed exploration of possible definitions.

[2] I take it that norms can apply to the past (even if their 'ought' element does not have direct normative force anymore).

Note upfront that my discussion does not centre around what CCists (as people) think or believe. I am, instead, concerned with what is contained in their writings and with the logical consequences thereof. I am also not claiming that CCists will necessarily accept my argument. They might well reject it. Nonetheless, they clearly recognise TENSION.[3] Indeed, CC's 'as if' ethics appears specifically designed to overcome TENSION. I contend that, if one accepts this tension, then a kind of Darwinian rationality comes into play as a viable option. I am, however, not claiming that the individuals making up the group called "CC" will actually accept my argument. I am, instead, suggesting that they will (or should) accept it if they care about theoretical consistency and coherence.

Note also that I will be assuming that Apartheid was unjust. CCists will agree with this claim. Those who do not think that Apartheid was unjust will not find this paper interesting. The question at hand is, though, whether such a claim holds context-dependently or context-independently. I will argue that CC is unavoidably committed to the former. For those who want the latter to be the case, the question becomes which context-independent constraint (principle, standard, or criterion) can justify a claim like "Apartheid was unconditionally unjust"?

I will argue that rationality can serve as such a constraint. This is not the austere kind of Cartesian rationality that CC positions itself against (Sect. 2). It is, instead, a kind of rationality that seems to get the best out of both context dependence and context independence. This is a naturalised or Darwinian kind of rationality, one that has come to be known as embodied rationality. It does not descend upon us from on high. Instead, it has emerged bottom-up during the course of our evolutionary history. Embodied rationality evolved in human beings as a tool (or heuristic) for navigating ecological and social domains. It has, though, been co-opted for navigating the ethical domain. I will argue that we can, then, maintain that a claim like "Apartheid was unconditionally unjust" holds context independently because it is embodied rational to do so.

Note that I do not wish to imply that CCists support Apartheid or that they wish to bring it about again. That said, my argument does suggest that CCists cannot, on pain of dilemma, claim that Apartheid was unconditionally unjust. They also cannot decisively argue against anyone who claims that there are contexts where reviving Apartheid would be just.

CC is seldom mentioned in the literature on the relationships between ethics, complexity, and action. This is surprising given the view's unique approach to the subject. My critique should, therefore, make a novel contribution to the debate. Although my focus is on CC, my argument should have import for any ethical theory drawing motivation from Derridean post-structuralism (and perhaps even contextualist ethics in general). Anyone who claims that ethical norms are indubitably context-dependent but things are 'as if' those norms are context-independent potentially faces a similar dilemma.[4]

[3] The same seems to apply to Derrida. Derrida wrote pages and pages trying to find a way to somehow incorporate some notion of conditionality into his general view. As far as I can tell, this mostly involved redefining 'conditional' in terms of 'longevity' (as in Cilliers' notion of "long-lived" mentioned above).

[4] The same applies to talk of "quasi-rational", "quasi-context-independent", or the like.

In Sect. 2 of this paper, I explicate CC. I focus specifically on CCists' claims about the relationship between ethics, complexity, and action. In Sect. 3, I discuss the case of Apartheid. I also discuss Derrida and Cilliers' views on the matter, specifically their grapplings with the context-dependence versus context-independence problem at hand. In Sect. 4, I highlight the tension in CC (TENSION). I also argue that CCists' attendant efforts to circumvent this problem are unsuccessful. In Sect. 5, I suggest a possible way forward. To cogently claim that Apartheid was unconditionally unjust we can maintain that our ethical norms are constrained by a Darwinian or embodied kind of rationality. In Sect. 6, I detail how embodied rationality relates to (a) CC's radically contextualist ethics and (b) the kind of Cartesian rationality that CCists (rightly, I think) reject. In Sect. 7, I engage with some anticipated objections, specifically the worry that embodied rationality is itself context-dependent.

2 CC: An Ethics of Complexity

The purpose of this section is to outline CC's post-structural take on ethics, complexity, and action. This exposition premises my critique in Sect. 3.

Complex systems can be physical, chemical, biological, ecological, social, institutional, linguistic, mathematical, or ethical. According to Cilliers, most attempts to model complex systems fail because they do "not pay enough attention to the radically contingent nature of a complex system" (2016b: 85; see also Woermann and Preiser 2019). Moreover, CC "makes no claim for objectivity" (Woermann and Cilliers 2012: 450; see also Preiser and Cilliers 2010). There are no rational criteria or imperative norms that determine our interactions with, interventions on, or navigations in our complex world.

CC positions itself against what Cilliers calls "the analytic approach" (AA). On AA's account, the structure or behaviour of complex systems can (in principle or practice) be reduced to some simple algorithm or deterministic rules. We can then putatively act on or in complex systems by following such an algorithm or by tracking such rules (see van der Merwe and Broadbent forthcoming for more). CC identifies AA with a Cartesian style of rationality – a rationality Woermann (2016) calls "strong" or "modernist" rationality. Here, rationality is supposed to serve as an infallible, yet epistemically accessible, guide to decision-making and action. In contrast to "a 'postmodern' form of rationality", Cartesian rationality is "based on universal principles" (Cilliers 1998: 145). CC aims to dispel the Cartesian dream that the "world can be made rationally transparent and can yield objective and universal knowledge" (Woermann 2016: 88; see also Cilliers 2000). Instead, when faced with the world's complexity, our decisions and actions are inescapably arational.[5]

There is, of course, ongoing discussion about the nature of rationality. Prominent views include reliabilism (Goldman 1979), evidentialism (Conee and Feldman

[5] There are some important philosophical and psychological writings on arationality, specifically the topic of how and why human beings believe in arational ways (see notably Gendler 2011; Holroyd 2012; Brownstein and Saul 2016; Mandelbaum 2019; Porot and Mandelbaum 2020). Unfortunately, engaging with this literature at length is outside the scope of this paper. The physiology, psychology, and/or causes of arationality (and irrationality) are not my direct concern here.

2004), and Bayesian rationality (Ramsey 1926; Titelbaum 2012). These views are not obviously either Cartesian or radically contextual. CCists are not clear about who is supposed to subscribe to the Cartesian rationality they target (other than Descartes, of course). Cilliers (1998) does, however, consider Chomsky, Fodor, Searle, and Habermas to be exemplars of AA because they purportedly reduce the behaviour of complex semantic or linguistic systems to formal rules. Given that CCists associate AA with Cartesian rationality, we can infer that they consider these scholars to be advocates for the latter. According to Woermann, critical realists (e.g. Mingers 2006; López and Potter 2011) subscribe to the kind of "strong rationality" that CCists reject. Critical realists, she says,

> argue that there are good rational grounds for believing that one theory gives a better account of reality than another… [P]ostmodernists and post-structuralists do not endorse the critical realist faith in rationality as the ultimate vehicle via which to navigate between good and bad theories (Woermann 2016: 4).

Post-structuralists maintain that scientific theories (like ethical theories) are *both* in practice and in principle situated social constructions. For critical realists, scientific theories can in practice be socially constructed, but there is, in principle, a rational way to discern if and when a theory is mapping onto an objective reality 'out there' (Woermann 2016: 4–5).

In any event, my goal is not to debate whether Chomsky, Fodor, Searle, Habermas, and critical realists fit CCists' description of Cartesian rationality. I will simply take Cartesian rationality to be the kind of austere rationality that CCists position their view against.[6] This is a kind of rationality that purports to unwavering epistemic transparency, objectivity, and/or universality (see van der Merwe 2022 for more).

For CCists, rationality (or any similar purported constraint) is radically overdetermined by the world's complexity; and "it is these overdeterminations that generate freedom…" (Woermann and Cilliers 2012: 455). However, with freedom comes *responsibility*. CC calls on us to acknowledge and engage with this responsibility (Cilliers 1998 Ch. 7, 2005; Hurst 2010; Preiser and Cilliers 2010; Woermann and Cilliers 2012; Woermann 2016 Chs. 4–6; Preiser and Woermann 2019; see also Derrida 2002a). It "serves to focus attention on the normativity that any serious engagement with complexity implies" (Woermann 2016: 3).

Decision-making and consequent actions are, thus, unavoidably ethical in nature; "failure to acknowledge the complexity of a certain situation is not merely a *technical* error, it is also an *ethical* one" (Cilliers 2005: 256, original emphasis). To model and navigate the world, we have to reduce its complexity to some degree, but then

> we have to make *choices*. Normative issues are, therefore, intertwined with our very understanding of complexity. Ethical considerations are not to be entertained as something supplementing our dealings with [complex] systems. They

[6] This is because my focus here is on CCists' ethical commitments related to Apartheid. Although engaging with the broader debate about rationality would be interesting, it is outside the scope of this paper. I will simply contrast CC to Cartesian (or AA-style) rationality because that is what CCists do.

> are always already part of what we do (Cilliers 2005: 264, original emphasis; see also Woermann and Preiser 2019).

Thus, epistemic incompleteness and provisionality putatively open up a space for us to intervene or act in complex systems in ethically appropriate ways.[7]

For CCists, there are no meta-narratives, meta-perspectives, meta-analyses, meta-judgements, or the like. We cannot appeal to some 'higher' principle to guide us. Like all else, rationality is inescapably indexed to some provisional and variable context. There are no fixed standards or guidelines for acting on or in complex systems. Following Derrida, privileging one narrative, perspective, constraint, or the like over another introduces a conceptual *hierarchy* – a hierarchy that post-structuralists are obliged to *deconstruct*.[8]

As mentioned in the introduction, CC enjoys some outward appeal. Its criticism of AA also appears convincing. By its very nature, complexity seems to rule out epistemic access to the kind of deterministic laws and/or Cartesian rationality that AA aspires to. Be that as it may, the following question naturally arises:

> If decisions and actions performed in the face of complexity are indubitably ethical, then what kind of ethics is supposed to inform such decisions and actions?

If ethical norms are, like all else, inescapably contextual, then different persons or communities will put forward different ethical norms. There will be different conceptions regarding the truth or falsity of ethical claims. "Apartheid was unjust" will only be true in certain contexts where certain ethical suppositions and conventions apply. There is no way to say that Apartheid was *unconditionally* unjust and that we should *never* make decisions or act in ways that will bring it about again.

The above highlights the problem at hand. CC does not provide a theoretical framework – it does not put forward some constraint – for establishing what is unconditionally just or unjust.[9] This is the crux of my negative argument – an argument I will flesh out in Sect. 4. Before doing so, I will discuss the case of Apartheid. This serves as a case study for demonstrating how TENSION applies to CC (and possibly to contextualist ethics in general).

[7] Although not post-structuralists, Pitts-Taylor (2016), Rima Fritz (2017), and James Basu (2019) have recently put forward similar theses. They argue that ethical considerations should (strongly) inform our non-ethical (i.e. epistemic) beliefs. If so, then one's conception of rationality will be 'ethically loaded'. Although not my direct concern here, my general argument might have implications for those who hold such a view.

[8] Roughly, deconstruction involves identifying and then disrupting (i.e. collapsing or perhaps reversing) hierarchies (conceptual or otherwise) due to their exclusionary and oppressive nature (see Culler 1982; Derrida 1982; Cilliers 2005; Hurst 2010; Human and Cilliers 2013; Woermann 2016: 100–104).

[9] This problem applies to radically contextualist views more broadly. As an anonymous reviewer pointed out, those who endorse radical contextualism do so in a way that is not contextual. Radical contextualism involves a commitment to the idea that radical contextualism is true in all contexts. If it is not true in all contexts, then radical contextualism is false (see also van der Merwe 2022, 2023).

3 The case of Apartheid

I will not give a historical or detailed exegesis of Apartheid. I will assume that the reader is familiar enough with the event (if that is the right word) (see, however, Dubow 2014 for an overview).

Both Derrida and Cilliers have written about Apartheid, and both naturally claim that it was[10] unjust. For Derrida, Apartheid was "the essence of evil, the worst, the essence at its very worst – as if there were something like a racism par excellence, the most racist of racisms" (1985: 291). Cilliers (2016c) is, likewise, explicit that Apartheid was "evil", an "abomination". As both Derrida and CCists recognise, the challenge is how to render such resolute ethical convictions compatible with post-structuralism's contextualist nature.

3.1 Derrida on Apartheid

For Derrida, claims like "Apartheid was unjust" can be true because they occur within what he calls a "firm" context ("neither absolutely solid [*fenneté*] nor entirely closed [*fenneture*]…") (1988: 151; see also 1986). This context is "very stable and very determined", even if it is not completely stable and completely determined (Derrida 1988: 151). The claim "Apartheid was unjust" is true given that it occurs in an axiological and linguistic context where certain situated "deontological (or if you prefer, ethical-political) rules of discussion" apply (Derrida 1988: 151; see also 1986). This context is the domain or tradition of human ethical dialogue. Derrida calls this the "ethics of discourse".

Although ethically contextualist, Derrida insists that his view does not amount to ethical relativism. "Apartheid was unjust" is true relative to a context, but it is a context that should be taken seriously given its longevity and utility as a domain of discourse. Certain discourses occur in "a context which is extremely vast, old, powerfully established, stabilized or rooted in a network of conventions (for instance, those of language) and yet still remains a context" (Derrida 1988: 136; see also Cilliers 2016c: 157–164). We might say that some contexts carry more normative weight given their longevity.

The problem is that this seems to suggest that the longest-lived human traditions are correct. This would make beliefs (ethical or otherwise) related to, say, animism or vitalism true simply because they have been around since humans first evolved (Peoples et al. 2016).[11] Also, Derrida cannot explain which constraints (do or should) apply and why certain constraints apply in some contexts while others do not. The nature and source of the relevant constraints remain mysterious. *Why* exactly was Apartheid unjust rather than just? Derrida seems unable to answer because his radical contextualism forbids him from articulating any judgemental or criterial – i.e. context-independent – constraints on ethical judgements, decisions, actions, or the like.

[10] Derrida was writing at the time of Apartheid, but I will continue to use the past tense.

[11] Another problem is that this view seems to render learning and new knowledge impossible since any new claim or belief will be part of a very short-lived tradition.

3.2 CCists on Apartheid

At times, CCists recognise a tension in concurrently advocating for radical contextualism about ethical norms *and* that some ethical norms are supposed to apply across contexts. Cilliers (2016a) calls this tension the "impossibility of justice" (Derrida [1992] calls it the "aporia of justice"). Echoing TENSION, the impossibility of justice involves grappling with the following problem:

> Conventionally, ethical convictions are either (a) determined by some context-independent constraint (e.g. rationality) *or* (b) relativised to specific individuals', communities', or cultures' contextual choices.

Option (a) contradicts post-structuralism's taboo on meta-contexts, while Option (b) blocks us from cogently asserting that Apartheid was unconditionally unjust.

Cilliers solution is to embrace the impossibility of justice; that is, to embrace the dilemma entailed in TENSION. Cilliers proposes "entering into this dilemma"; we have to "accept both sides of it" (2016a: 188). Ethics is "aporetic" (Cilliers 2016a: 187); it can be "both ideal *and* practical" (Cilliers 2016a: 189, original emphasis). In other words, it can be both context-dependent *and* context-independent. We can appeal to context-independent ethical norms, but we do so in a "provisional" way (Cilliers 1998, 2016a). Ethics then becomes what Derrida (1992, 2002b) calls "quasi-transcendental" (see also Cilliers et al.'s 2016 interview with Derrida).[12] Here, we assert ethical claims "as if [they are] universally valid" (Cilliers 2004: 189). We subscribe to ethical rules "as if they were universal rules" (even if they are not genuinely universal) (Cilliers 1998: 139; see also Hurst 2010; Preiser and Cilliers 2010; Woermann and Cilliers 2012; Woermann 2016).[13]

Like Derrida, CCists insist that the above does not lead to ethical relativism (Cilliers 2005; Human 2016; Woermann 2016: 106–107). Ethical norms are indexed to individual contexts, but – as with Derrida's "firm" contexts – some contexts are more "long-lived" than others (Cilliers 2016c). In sum, the claim "Apartheid was unjust" can, for pragmatic purposes, be considered 'as if' true and therefore *provisionally* context-independent.

4 The Problem: Is 'as if' good Enough?

In this section, I argue that CC's 'as if' ethics is unhelpful in establishing the unconditionality of claims like "Apartheid was unjust".

One wonders what it means to make ethical decisions 'as if' they were universally valid. How exactly is an 'as if' ethics supposed to work? Standardly, we either

[12] Derrida refers to that which is 'quasi-' as the "logical-rhetorical fiction of 'as if'" (2002b: 353). See Woermann (2013) for detail (she does, however, express some scepticism about Derrida's quasi-transcendental ethics).

[13] Adorno (2004) likewise argues that we should act "as if" certain things exist and "as if" certain claims are true.

believe in and are committed to some ethical norm being universally valid or we are not. We either think that Apartheid was unjust regardless of context or we think it was only unjust given the context in which it occurred.[14] Yet, on CC's account, it seems that we are supposed to commit to one kind of ethics (the context-dependent kind) but pay lip service to another kind (the context-independent kind). Not only does such a move seem Moore paradoxical,[15] but it also strikes me as a kind of pretend or make-believe ethics (or, worse, a counterfeit or duplicitous ethics).

The problem is salient in the following quote. Cilliers states that Apartheid "was, and remains, evil under any name, and deserves 'unconditional' rejection" (2016c: 161). Note the scare quotes around "unconditional". Cilliers must insert scare quotes here because of post-structuralism's radical contextualism (viz. radical conditionalism). One cannot *unconditionally* reject Apartheid; it is only 'as if' one does so.

It strikes me that ethics is too important a domain of inquiry and mode of discourse for us to engage with it in an 'as if' (or quasi-transcendental) manner. As Cilliers notes, the issue of Apartheid "was, and is, too important not to be taken seriously" (2016c: 163). The problem is that CC's approach does not seem to adequately accommodate this sentiment. Many of us will want to say that Apartheid was unconditionally unjust (*sans* scare quotes). We do not want to say that things are *as if* Apartheid was unjust. We want to say that Apartheid was unjust *full stop*. We also want to say that, given this injustice, we should make decisions and act in ways that *never* bring Apartheid about again (regardless of the complexity that might be involved).

Derrida does, at times, suggest that ethical terms – notably 'justice' – are not like other linguistic terms. He states: "[J]ustice has nothing to do with the production of a consistent set of systemic propositions" (Derrida in Cilliers et al. 2016: 176; see also Woermann 2016: 68). Justice "transcends" rational discourse, knowledge, and metaphysics. It is the outcome of a kind of ethical *compulsion* – a kind of arational disposition – that we experience in the face of injustices like Apartheid. This compulsion or "demand" (as Derrida [1993] puts it) takes the form of a call to justice (or a call to "duty"). We are impelled to take *responsibility* – to act ethically. Although 'justice' introduces a hierarchy of sorts (between just and unjust), it is putatively not *deconstructable* in the way that other hierarchies are supposed to be. Rather, "[j]ustice is deconstructive. It is in the name of justice that we deconstruct" (Derrida in Cilliers et al. 2016: 175).

For Derrida, the source or origin of our ethical compulsions is ineffable. We can only describe it as "infinite", "mystical", or "divine" (Derrida 1992; see also Cilliers et al. 2016). Justice is "an energy, or a pulse, a drive" (Derrida in Cilliers et al. 2016: 175).[16] As before, this is outwardly inspiring, but (as before) we are left in the dark regarding what sort of justice Derrida is alluding to. Obviously, different individu-

[14] Some White South Africans still believe (and will state in private) that Apartheid was a good idea badly implemented.

[15] Moore (1993) noticed that there appears to be a pragmatic (rather than a logical) contradiction involved in asserting "p and I do not believe that p" (see Williams 2015 for detail). In the context of our discussion, it is Moore paradoxical to assert "Apartheid was unjust and I do not believe that Apartheid was unjust". See also van der Merwe (2021, 2022).

[16] Here, I read Derrida as intimating at the kind of Jewish mysticism that one finds throughout the work of Emmanuel Levinas (who Derrida often cited as an inspiration).

als, communities, or cultures have different ideas regarding what constitutes justice. Derrida rejects relativism, but he cannot tell us why certain things are just while others are unjust. As before, appealing to the longevity of some or other conception of justice is unhelpful (Sect. 3.1).

In any event, CCists do not follow Derrida in appealing to the mystical or the divine. In fact, Cilliers (1998: 12) is explicit that his view should not be confused with mysticism. Derrida's mystical notion of justice, says Cilliers (2004), cannot make sense of our corporeal ethical actions and interactions because it is beyond our epistemic grasp. Instead, justice should be understood as "achieving and maintaining nonexploitative relationships among the members of a society without destroying the differences which constitute the society" (Cilliers 2004: 19). Further, "to make a responsible judgment – whether it be in law, science or art – would involve at least… respecting otherness and difference as values in themselves" (Cilliers 1998: 139).

Cilliers thus develops what he calls an "ethics of complexity". This is an ethics that ostensibly centres around stipulative and context-independent norms related to nonexploitation and respect for otherness and difference. The problem is that Cilliers simply asserts the definition of justice quoted in the previous paragraph. And, he does not express it in context-dependent terms. As before, we are not told why we should understand ethics this way rather than some other way (in terms of retribution and revenge, perhaps) (see also Kunneman's [2010] criticism of Cilliers' view). We need some argument for why 'justice' should be understood in CC-style terms. Making such an argument would, however, be dilemmic. As mentioned, CCists cannot appeal to any meta-concept like rationality (or perhaps the divine) to defend a universal notion of justice.

In their writings, CCists put forward a very specific kind of ethics, one that centres around countering racism and inequality, uplifting minorities, and advancing feminist values. Yet, it is mysterious how and why they have arrived at this particular ethical framework. Beyond simply asserting as much, CCists cannot seemingly defend their preferred view against rival views in any dialectically rigorous manner.

As a way forward, I now outline one way for CCists to claim that Apartheid was unconditionally unjust.[17] This will involve invoking the Darwinian notion of embodied rationality.

5 A Naturalised Conception of Rationality

Given the above, it seems that CCists must choose between the following two options:

1. Forego context-independent ethical norms (even 'as if' ones) and maintain that all ethical norms are indubitably conditional or context-dependent.
2. Forego post-structuralism's radical contextualism and accept that certain ethical norms can and should be asserted unconditionally or context-independently.

[17] As stated in the introduction, I recognise that CCists might well reject embodied rationality. I am not (descriptively) predicting that they will accept what I have to say. I am instead (normatively) urging that they do if they want their general view to be consistent and cogent.

Option 1 would render CC a version of full-blown ethical relativism. CCists are adamant that their view does not amount to ethical relativism, and I therefore presume that they will not find Option 1 appealing. Among other things, Option 1 would mean that "Apartheid was unjust" in only true relative to certain contexts.

In this section, I argue that CCists can embrace Option 2 if they make some (relatively innocuous but beneficial) amendments to their post-structuralist ethics. This will involve advancing a Darwinian kind of rationality, one that can constrain ethical norms. Such a rationality aims for a middle way of sorts between Cartesian (or transcendent) rationality and post-structuralist-style radical contextualism.

Many non-post-structuralist philosophers will agree that rationality plays a crucial (even necessary) role in our ethical deliberations and conclusions. What is controversial is the *nature* of rationality. Does it come to us 'from on high'? Or, is it something we construct? One of my goals in this section is to suggest answers to these questions, specifically as they relate to ethical questions like "Was Apartheid unconditionally unjust?"

I contend that the rationality we employ in the ethical domain is an exaptation of the rationality we employ in the ecological and social domains. This idea is not new. In *The Descent of Man* (1981), Darwin speaks of a "moral sense" in human beings (but not in what he referred to as the "lower animals"). This moral sense emerged out of general mammalian "instincts" primarily related to social interactions.[18,19]

5.1 Darwin's Moral Sense

Darwin wrote about the role of reason (or rationality) in the evolution of the (human) moral sense from (animal) instincts:[20]

> Although man… has no special instincts to tell him how to aid his fellow-men, he still has the impulse, and with his improved intellectual faculties would naturally be much guided in this respect by reason and experience (1981: 86).

Further,

> the social instincts, which must have been acquired by man in a very crude state, and probably even by his early ape-like progenitors, still give the impulse to many of his best actions… [A]s the feelings of love and sympathy and the power of self-command become strengthened by habit, and as the power of reasoning becomes clearer so that man can appreciate the justice of the judgments of his fellow-men, he will feel himself impelled, independently of any pleasure or pain felt at the moment, to certain lines of conduct (Darwin 1981: 86).

[18] Frans de Waal (1996) talks of "proto-morality" in animals (a kind of dispositional – but underdeveloped – Darwinian moral sense). We have certain natural moral tendencies due to the existence of proto-morality in the common ancestor we share with other primates. These tendencies have, though, been harnessed into a moral system through cultural development.

[19] I will take the terms 'ethical' and 'moral' to be synonyms for the purposes of this paper.

[20] Catherine Wilson (2010) provides an informative overview of Darwin's ethics. She also discusses his ambivalent (though sometimes offensive) views on race and gender.

Darwin rejected the idea that self-interest is the primary driver of human motivation and behaviour. Instead, he considers moral behaviour to be satisfying in and of itself. Moral behaviour makes us happy (in the utilitarian sense). However, as Darwin noted, we can also be selfish and sometimes our interests will conflict.[21] Rationality comes along with human beings' "intellectual powers" and is employed when we must negotiate conflicting interests and guide our actions in ways that better both our own and our community's well-being.

Several scholars have continued to think about morality in Darwinian terms.[22] Notable are E. O. Wilson (1978), Peter Singer (1981), Philippa Foot (2001), Frans de Waal (2006), Richard Joyce (2006), Sharon Street (2006), Michael Tomasello (2016), and Steven Pinker (2021).[23] Pinker discusses the close links between human evolution, ethics, and rationality in his recent book *Rationality: What It Is*, *Why It Is Scarce*, *Why It Matters*. Echoing Darwin, he writes:

> Evolution… works on populations, not individuals, so a rational animal must be part of a community, with all the social ties that impel it to cooperate, protect itself, and mate. Reasoners in real life must be corporeal and communal, which means that self-interest and sociality are part of the package of rationality. And with self-interest and sociality comes the implication we call morality… And morality does not sit apart from reason but falls out of it as soon as the members of a self-interested social species impartially deal with the conflicting and overlapping desires among themselves (Pinker 2021: 41).

Here, Pinker intimates at a necessary connection between human evolution, ethics, and rationality (or reason). These three things are understood as being intimately entwined in human life. We are social creatures who must accommodate both communal interests and our individual goals and desires. We employ rationality (we utilise reasoning) in attempting to find a balance between these two desiderata. Individuals must appeal to some set of norms to find such a balance. This process then naturally takes on an ethical character.

5.2 Ecological Rationality and Embodied Rationality

The notion of embodied rationality is an extension of Gerd Gigerenzer's much-discussed ecological rationality. In this section (and in Sect. 6), I argue that embodied rationality can be applied to the problem at hand: How to maintain that Apartheid

[21] Darwin thought that moral virtues like courage, sympathy, and loyalty could give one social group a competitive advantage during conflict with other groups. Then, such "social and moral qualities would tend slowly to advance and be diffused throughout the world" (Darwin 1981: 163; see also Shermer 2004).

[22] What I have in mind here is scholars who emphasise evolutionary history and processes when attempting to make sense of our moral judgements, actions, and the like. There are, of course, several versions of this general approach, and they are, at some level, going to be incommensurable. It is, however, not my intention to engage at length with the various versions of the general Darwinian (or evolutionary or naturalised) ethical approach. Thank you to an anonymous reviewer for stressing this point.

[23] See also the discussions in de Waal et al. (2006). See Thagard (2022) for a recent criticism of Darwin's views on morality.

was unconditionally unjust without invoking either Cartesian rationality or radical contextualism.

For Gigerenzer, "humans and other animals rely on *heuristics* to achieve their goals in situations of uncertainty" (2021: 1 emphasis added). Ecological rationality "differs from axiomatic [Cartesian] rationality, which asks whether humans conform to logical principles" (Gigerenzer 2021: 1). Heuristics are reasoning "tools"; they are "fast and frugal" rules-of-thumb of the sort we should expect imperfect biological beings to employ during decision-making (see also van der Merwe and Broadbent forthcoming). Heuristics involve an instrumental kind of rationality in that they are goal-oriented: If you want to achieve goal G, then employ strategy S because S has worked in the past to achieve goals like G. (It will become clear why an instrumental kind of rationality need not entail the ethical relativism we are trying to avoid.)

Reasoning heuristics are similar to what Leda Cosmides and John Tooby call "reasoning instincts". Reasoning instincts "make certain kinds of inferences just as easy, effortless, and 'natural' to humans as spinning a web is to a spider or building a dam is to a beaver" (Cosmides and Tooby 1994: 330). Reasoning instincts involve a fallible and adaptive form of Darwinian reasoning. We follow intuitive rules-of-thumb of the kind that proved useful to our ancestors in navigating their ecological and social environments (see also Kenrick and Griskevicius 2013; Mercier and Sperber 2017; Pinker 2021; Mastrogiorgio et al. 2022; van der Merwe 2022; van der Merwe and Broadbent forthcoming).[24]

If we apply Darwin's (and Pinker's) notion of an evolved moral sense to Gigerenzer's and Cosmides and Tooby's conception of rationality, then we can say that embodied rationality (viz. reasoning heuristics or reasoning instincts) have been extended from the ecological and social domains to the ethical domain. The embodied rationality that our ancestors employed (and that we still employ) in navigating ecological and social environments has been co-opted – it is an exaptation – for navigating our ethical environment.[25] We employ our evolved cognitive capacities to negotiate obstacles and discern pathways for achieving our goals in the ecological and social domain. This also applies in the ethical domain. Successful ethical discourse and decision-making involves employing those same cognitive faculties to consider various logical arguments and to navigate various competing interests and views to attain some relevant goal, such as securing the (unconditional) truth of a claim like "Apartheid was unjust".

[24] I am citing several evolutionary psychologists in this section. Note that this is not because I think that we should only pay attention to evolutionary psychology or that post-structuralists should embrace evolutionary psychology. My thesis is centred around Gerd Gigerenzer's notion of ecological (or embodied) rationality, and his view aligns well with evolutionary psychology (specifically when it comes to the role of goal attainment). There are, of course, other notable voices in the debate around the evolution of morality (I listed some of them in Sect. 5.1).

[25] The phylogenetic and neurological details of how exactly this occurred is a question for evolutionary biology and cognitive neuroscience (some of the authors I have cited in this section do, though, put forward some viable hypotheses).

6 Applying Embodied Rationality to CC's Dilemma

One of post-structuralism's 'founding fathers' Jean-François Lyotard (1988) maintained that neither the desire for nor the value of justice can be defended on rational grounds. I am arguing that this need not be the case.

In this section, I contend that the notion of embodied rationality can capture the best of both (a) post-structuralist radical contextualism and (b) Cartesian top-down rationality. If so, then it might help to ease TENSION.

6.1 Embodied Rationality and CC's Radical Contextualism

Embodied rationality incorporates a degree of contextualism. Given its biological (i.e. kludgy) nature, embodied rationality is fallibilistic. It is not a failsafe guide to navigating our ethical (or ecological or social) domains. Yet, it also does not involve a post-structural kind of contextualism where we can only say that things are as 'as if' Apartheid was unjust. Embodied rationality can constrain (or perhaps ground) the claim "Apartheid was unjust". This is because it is the kind of rationality that human beings employ when successfully navigating the ethical domain. As a certain kind of biological species, we have evolved a certain way of reasoning (viz. embodied rationality). There are no actual contexts where Apartheid could be just because human beings do not employ a rationality that permits such a scenario (I return to this counterfactual motif in Sect. 7).

Although many White South Africans believed (and some still believe) that Apartheid was just, my claim is that their belief was (or is) not embodied rational (or any kind of rational really). This is because a discriminatory and oppressive system like Apartheid does not align with the egalitarian ethics a naturalised or Darwinian kind of rationality promotes (Sect. 5.1). It does not align with the kind of rationality that an evolved social biological species like ours will utilise in the ethical domain. Over time, human beings (qua social species) have developed a certain kind of natural rational ethics – an embodied kind – and this ethics does not accommodate events like Apartheid.

As Darwin noted, the moral sense is constituted by instincts (or impulses) of compassion, sympathy, and loyalty for other human beings (see Wilson 2010).[26] And, these were clearly lacking in the enforcement of Apartheid. We can, then, say that it is embodied rational to claim that Apartheid was unjust. This claim is *conditional* on – it is constrained by – embodied rationality.[27] It follows that, if we want to act morally (as I assume most of us do), and, if we want to act rationally (as I assume most of us do), then we should not make decisions or act in ways that might bring Apartheid about again.

[26] Although the moral sense initially only applied to in-groups, it spread to apply to humanity in general (recall footnote 21).

[27] Note that I am not claiming that we can derive a definitive set of ethical claims from human evolution. My primary concern is with an appeal to a suitable sort of rationality. In principle, employing this rationality might lead us to such a set of ethical claims. In any event, if there is a claim that we can count as definitive, then it is the claim "Apartheid was unconditionally unjust". Thank you to an anonymous reviewer for pressing me on this point.

6.2 Embodied Rationality and Cartesian Rationality

It should be clear that embodied rationality does not resemble Cartesian rationality (or what Gigerenzer called "axiomatic rationality" [Sect. 5.2]). As mentioned in Sect. 2, CCists take Cartesian rationality to be an infallible, yet epistemically accessible, guide to decision-making and action. For Woermann, Cartesian rationality implies that we "make decisions based on reasonable principles and calculations, and the trajectory from decision to outcome is viewed in terms of a linear causality" (2010: 126). This is not embodied rationality. As mentioned, embodied rationality is a biological (i.e. fallible and kludgy) kind of rationality. As suggested in the previous section, it can, nonetheless, constrain (or principle or ground) ethical decision-making and actions (I discuss this claim further in the next section).

Embodied rationality is not something that transcends our evolutionary endowment. It is not something extrinsic we can point to and say "There is the principle that determines ethical decisions and actions" (in the way that Kantians might do with the categorical imperative). Instead, we can only say that, *given human beings' specific evolutionary history and specific way of reasoning*, Apartheid was unconditionally unjust (I will discuss why this is not just a version of CC-style contextualism in the next section). Anything else falls outside embodied rationality's scope. This is not due to a kind of reasoning employed in a long-lived tradition among other traditions. Rather, it is due to the reasoning employed in the *only* human tradition (our evolutionary genealogy).[28]

Likewise, for Darwin, moral reasoning is not something extra-natural or extra-biological. Instead, it is part of our evolutionary endowment. Elion Schwartz explains that, for Darwin,

> moral behaviour was embodied in the nature of the species, and not imposed on the natural world as something foreign to it… Humans are not sacrificing their natures when they act morally; they are responding to them (2009: 11).

The idea that moral reasoning comes 'from within' (bottom-up), rather than from 'on high' (top-down) is a core feature of embodied rationality. This seems largely compatible with (at least most of) the general post-structuralist view.

7 Objections: Embodied Rationality and Ethical Contextualism

In this section, I engage with two important and interrelated objections to my thesis:

[28] It is important to recognise that there are different theories about, and interpretations of, biological evolution. Lynn Margulis (Margulis and Sagan 2002) and Jerry Fodor (Fodor and Piattelli-Palmarini 2011) have notably advanced non-standard views. I am not sure if my thesis commits me to any one specific interpretation of evolutionary biology. That said, I will generally take what seems to (currently) be textbook evolutionary biology (e.g. Coyne and Orr 2004; Herron and Freeman 2021) to describe how we evolved.

1. On my view, the truth of the claim "Apartheid is unjust" seems to depend on what human subjects believe (i.e. it is conditional on a human rational sense, disposition, or judgment). This makes it a contextualist view (much like CC). If so, then I am committed to the view that those who tolerated Apartheid in the past correctly believed that it was just (or at least not morally wrong).
2. My view seems to be relativistic in that the truth of the claim "Apartheid is unjust" is relative to facts about human evolution.

I will reply to these objections in turn.

7.1 Reply to Objection 1

My claim is stronger than that "Apartheid is unjust" depends on what human subjects believe. Presumably, we are free to believe whatever we choose. Yet, this changes when rationality comes into play (even if it is the embodied kind). We are not free to *rationally* believe whatever we choose. So, in a sense, my view depends on human beliefs, but those beliefs are markedly constrained by rationality (even if it is the embodied kind). This is, then, not a contextualist view (of the CC sort). As stated in Sect. 6.2, embodied rationality relates to our "*specific* evolutionary history and *specific* way of reasoning". It does not relate to any old evolutionary history or way of reasoning.

Those who tolerated Apartheid in the past were not subscribing to a different but equally legitimate kind of embodied rationality. There is, in principle, only one way for actual rather than conceptually possible human beings to be embodied rational in any given terrestrial scenario requiring ethical decision-making and/or action. Tolerance (or support for or the infliction) of Apartheid was (or is) discontinuous with the kind of evolved moral sense (or instinct) discussed in Sect. 5. Those who tolerated Apartheid in the past were, therefore, irrational (or, at best, but less likely, arational).

What is key to remember is that (putting Putnamian or Lewisian possible worlds aside) human beings only have *one* evolutionary history. During this evolutionary process, we developed a certain kind of rationality, which works in conjunction with our moral sense. Apartheid violates this kind of rationality and therefore our moral sense. This is how embodied rationality can be context-independent. Chimps, prior Homo species, aliens, AIs, or humans on Twin Earth might have a different kind of rationality and therefore a different moral sense. Such 'beings' would likely have a different evolutionary history and therefore a different way of reasoning.[29] But, I am not concerned with cases like those here (I do not think that post-structuralists are either). Embodied rationality only applies to *us* (humans on real Earth). Apartheid was, after all, an actual human event, one that occurred in this world. There is, then, a standard of rationality that applies across (non-modal) anthropic contexts. Embodied rationality can suitably constrain (actual rather than otherwordly) human ethical

[29] These beings would also have a definition of 'just' (or 'good' or the like) that is wholly different from ours. They would, therefore, have a different conception of what ethical evaluations are in the first place. So, if they said "Apartheid was just", they would speak a language that we do not understand; there would be radical indeterminacy of translation. Street makes a similar point when comparing human morality to the (proto)morality of other terrestrial animals (2006: 119–121).

considerations and actions. It is in this sense that the notion of embodied rationality contains the best of both Cartesian rationality and CC-style contextualism. Embodied rationality is conditional across possible worlds but unconditional in this world. It is not universal *simpliciter*, but it applies universally to actual human beings.

As such, embodied rationality cannot prescribe an absolute or necessary and sufficient ethics. Perhaps there is some logically possible world where Apartheid was just. I am, though, not sure what such a world would look like. I doubt whether the 'moral' agents in that world would, in fact, be human beings. Arguably, a species that evolved an ethics where Apartheid was (or is or could be) just would not be our species. The term 'moral' in that possible world would have a different meaning – it would be associated with a different concept – from the one that we know and care about. There also cannot be future contexts (in this world) where Apartheid will be just because embodied rationality would not be operant in such contexts.

In this sense, embodied rationality forms our ethical judgements and practices, but it is not transcendent in the Cartesian sense. It transcends the actual situated scenarios that humans find themselves in, but it does not transcend (a) our (single) evolutionary history or (b) our (single) general Darwinian endowment (vis-à-vis our evolved rationality and moral sense). Embodied rationality is contingent on our evolutionary history, but we only have one such evolutionary history. My argument would fail if there were different actual (rather than conceivable) evolutionary lineages of human moral agents.[30]

7.2 Reply to Objection 2

Much of my previous response relates to this objection. My view does, indeed, entail that the truth of the claim "Apartheid is unjust" is relative to facts about human evolution. But, the term 'relative' is misleading here. My view is only relativistic if we invoke possible worlds. If we are talking about this world, then my view is non-relativistic. This is because there is (at least in principle) only one set of facts about (actual) human evolution.[31]

Some might wonder whether the Darwinian ethics I am suggesting represents a form of moral realism or anti-realism. I am not sure what the answer is here. It is, perhaps, somewhere in the middle. Street (2006) has notably discussed how natural selection relates to realism versus anti-realism about value. Although I have not engaged directly with the philosophical debate around value per se, Street's discussion might be relevant to the topic of this paper. She considers realism to entail the claim "there are at least some evaluative facts or truths that hold independently of all our evaluative attitudes" (Street 2006: 110). In this sense, my view is anti-realist because there are no facts or truths 'dangling' 'out there'. There are no facts or truths related to *human* ethical decision-making and action that are independent of human beings.

[30] I am assuming that different human groups (perhaps races) have not evolved different reasoning capabilities or moral senses (in this world). This should be relatively uncontroversial.

[31] As before, I am assuming that textbook evolutionary biology is correct (recall fn. 28).

According to Street, "stance-independence" is realism's defining feature – a feature that anti-realism cannot accommodate. She writes:

> According to realists, the truth that Hitler was morally depraved holds independently of any stance that we (or Hitler) might take toward that truth, whether now or upon reflection (2006: 111).

As before, my view is then anti-realist. It is dependent on the stance of human beings. But, as stressed, these are actual human beings on this earth. There is, then, a sense in which I am advocating for stance-independence (and therefore realism). This is because there is only one correct stance when it comes to claims like "Apartheid was unjust" (or "Hitler was morally depraved").

My view is not stance- or context-dependent in the pluralistic (or relativistic or post-structural) way that the term "stance-dependence" often implies. I am not entertaining the idea that different (actual) individuals or groups can hold conflicting, but equally justified, ethical views. Given that I am only concerned with anthropic ethics in this world, I can confidently say that "Apartheid was *stance-independently* (or unconditionally) unjust" because that is the *only* embodied rational option (in this world).

I think that post-structuralists can adopt such a view with 'minimal mutilation' to their existing general philosophical framework. They can maintain that Apartheid was unconditionally unjust without invoking the kind of Cartesian rationality that they (rightly) reject.

8 Conclusion

I have highlighted a dilemma (TENSION) in CC's ethical framework. CCists state that all ethical norms are radically context-dependent, but they also stipulate certain supposedly context-independent ethical norms. CCist's solution is to introduce the notion of an 'as if' ethics. All ethical norms are radically context-dependent, but we make *as if* they are context-independent. I argued that this move is unhelpful. We do not want to say that things are only as if Apartheid was unjust.

As a way forward, I introduced a natural Darwinian kind of rationality, specifically what has come to be called embodied rationality. We employ embodied rationality to navigate the ecological and social domains. In our fairly recent evolutionary history, it has, however, been co-opted for navigating the ethical domain. Embodied rationality does not advocate for either Cartesian rationality or radical contextualism. Instead, it seems to be capable of drawing from the best of both.

Further detail is required regarding how exactly embodied rationality determines what is just or unjust in any given context. Such a positive account is part of work in progress. My primary goal here has been to demonstrate that those holding to an 'as if' ethics (and perhaps any post-structuralist or contextualist ethics) can appeal to a suitably non-Cartesian notion of rationality. This allows claims like "Apartheid was unjust" to be unconditionally (i.e. absolutely, unequivocally, and context- or stance-independently) true (in this world).

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