



Relational equality for extended minds

Matilda Carter¹ 

Received: 26 July 2024 / Accepted: 22 August 2025
© The Author(s) 2025

Abstract

This paper deals with the impact of the extended mind thesis on relational egalitarianism: the now-dominant view on (the politically relevant form of) equality within contemporary political philosophy. If proponents of the extended mind thesis are right, I argue, persons have two core interests that arise from their relationships with elements of the external environment: an interest in an environment supportive of cognition and an interest in extended mental authenticity. Acknowledging this requires relational egalitarians to be *spatially-conscious*, giving these interests due weight wherever they are engaged. This will not always change their conclusions, but there are a range of cases in which this form of relational egalitarianism yields unique insights. In this paper, I examine three: the relationship between landlords and tenants, cloud software and tech ecosystems, and forced transfers for dementia care.

Keywords Justice · Relational egalitarianism · Dementia · Personhood · Authenticity · Extended mind

1 Introduction

If proponents of the extended mind thesis are right, our minds extend beyond our physical brains. As this would have profound implications for the way we understand cognition, it is unsurprising that an extensive body of secondary literature has emerged within the philosophy of mind. What is more surprising, however, is the comparatively scarce amount of work on the view's *normative* implications. If, as Andy Clark and David Chalmers put it, “[c]ognitive processes ain’t (all) in the

✉ Matilda Carter
matilda.carter@glasgow.ac.uk

¹ University of Glasgow, Glasgow, UK

head”,¹ then the human being who makes moral claims on others (and on whom moral claims are made) is constructed differently from how most moral and political philosophers have assumed. And it seems highly unlikely that this difference would have no significant impact on their theories and prescriptions. Those of us minded to agree with Clark and Chalmers, therefore, have work to do.

In this spirit, this paper deals with the impact of the extended mind thesis on relational egalitarianism: the now-dominant view on (the politically relevant form of) equality within contemporary political philosophy. I start by outlining two interests of the human being implied by the extended mind thesis: (i) an interest in an environment supportive of cognition and (ii) an interest in extended mental authenticity. The relational egalitarian who accepts the extended mind thesis as true, I go on to demonstrate, must be sensitive to these because they are *core interests* – interests, that is, that are universally shared and fundamental to *who we are*. Sensitivity to these interests in turn entails sensitivity to questions about *space*: about how it is organised, about who has the power to reorganise it, and about the ways in which it mediates our social relations with one another. They must, in other words, adopt a relational egalitarianism that is *spatially-conscious*, in the sense that it requires us to relate to one another in ways that demonstrate respect for our equal status as bearers of core, spatially-related interests. Such a view will be recognisable to any relational egalitarian, but it will yield unique insights in a range of cases. In the final section, I consider three such cases: the relationship between landlords and tenants, cloud software and tech ecosystems, and forced transfers for dementia care.

2 Two claims, two interests

The extended mind thesis, as initially proposed by Clark and Chalmers, involves two key claims. The first can be termed a claim of *cognitive support*: humans rely on elements of the external environment to support their cognition, often enabling them to carry out more complicated processes than they could accomplish without.² The second is a claim of *genuine cognitive extension*: sometimes a human can be so deeply integrated with an element of the external environment that we can rightly think of it as a part of their mind.³ In this section, I explore both, highlighting two interests held by all of us that are implied by each in turn.

2.1 The interest in an environment supportive of cognition

The cognitive support claim is virtually irrefutable. In writing this paper I am making use of a number of cognition-supporting extracranial elements, including a computer, a word processing software package, and a searchable notetaking system. Perhaps there are some philosophers who can form article-length philosophical arguments entirely within their own heads, such that all these extracranial elements do is provide

¹ Clark and Chalmers (1998).

² Clark and Chalmers, “The Extended Mind”: 8–12.

³ Clark and Chalmers, “The Extended Mind”: 12–16.

a means of recording them – but I am certainly not one of them. Instead, I develop my arguments by typing them out; I read back through them and reflect on how they might be improved; and often I store them in an unfinished state to (one day!) return to with fresh eyes. This, I take it, is a kind of relationship with elements of the external environment that is abundant: from calendars used to store more appointments than intracranial memory could ever hold, to musical instruments and technologies that facilitate composition, arrangement, and production.

The first claim of the extended mind thesis, in other words, points to phenomena that are ordinary and near-universal features of human life. But, far from being unremarkable, they are also of fundamental importance to our pursuits and our projects. My life would fare substantially worse should the cognition-supporting artefacts I've mentioned be damaged, while it would fare substantially better were they updated or improved. My access to them, in this respect, places high on a list among all “those things in which [I have] a stake” – among my interests, on Joel Feinberg's influential account.⁴ This is so, because it is the sort of thing in which I have something to gain, and something to lose – at least, as I will argue in this subsection, insofar as it enables me to strive towards ends I value.

Though I confess I feel *particularly strongly* invested in access to these extracranial elements, I am not the only person who finds themselves in such relationships. In a large range of cases, it is *self-evident* that a person's life will go worse when they cannot carry out cognitive processes and go better when they can. So, in turn, their lives will go better in an environment that supplies them with elements that support those processes, and worse in an environment that lacks that support (or contains extracranial elements that actively dampen them). Here there is a straightforward line from observed phenomena to generalised interest: one that is appealingly neat for the political philosopher interested in the implications of the extended mind thesis.

There are, however, problems. The thought that one's life *always* goes better when one can carry out *all* cognitive processes holds up poorly in a significant range of cases. For example, there is a well-evidenced link between the cognitive processes involved in rumination and symptoms of depression and anxiety.⁵ Suicidal ideation is also supported by cognitive processes: the successful carrying out of which rarely (if ever) make a person's life go better. And even those processes that typically do improve our lives, like remembering, do not always seem to do so. It is not obvious that a person's life will be genuinely improved by being able to remember severely traumatic experiences, for instance.⁶

⁴Feinberg (1984).

⁵See.

Olatunji et al. (2013).

Zhou et al. (2020).

Kovács et al. (2020).

⁶There is a common misapprehension about post-traumatic stress disorder: that its symptoms arise due to a temporary inability to remember the event(s) that caused it. According to the most recent version of the American Psychiatric Association's Diagnostic and Statistical Manual, however, intrusion symptoms related to the memory of the psychiatric event are one of the key diagnostic criteria for the condition. The relationship between memory and PTSD symptoms is, in this sense, best understood in terms of

Now, we might think that there is a difference between a *general* interest in being able to successfully carry out cognitive functions, on the one hand, and a universal interest in being able to carry out any and all cognitive functions at any and all times, on the other. Save for the most ardent nihilists, most of us think that we have a fundamental interest in life. But that does not mean that it is *always*, all things considered, in a person's interests to continue living. Where it entails enduring continuous torture or ceaseless, agonising pain, for instance, the matter is at the very least up for debate.⁷ Similarly, we might think that we can consistently hold both that we generally do have an interest in being able to successfully carry out cognitive processes, and that, all things considered, there are circumstances in which a person's life would go better if they were not able to successfully carry *some of them* out.

To the extent that we rely on our cognitive processes to meet our basic needs, as well as in forming and pursuing our projects, the idea that a person's life *tends* to go better when their general level of functioning is improved might seem plausible. For those of us perennially frustrated by our deficiencies in focus, memory, and other intellectual capacities, this is a thought that possesses significant force. Even at the general level, however, it is still not clear that successes and failures in cognitive functioning directly map onto how well a life is going – especially not from the perspective of the person living it. Though it is by no means a universal phenomenon, many people look back wistfully at the simplicity of their childhood perceptions of the world: a simplicity afforded to them, in no small part, by a lack of sophistication in cognitive functioning. And indeed, there is compelling evidence that suggests a link between high levels of general intelligence and increased risks of developing psychological disorders in adulthood,⁸ speaking to the wisdom of the phrase 'blissful ignorance'.

Nevertheless, it does seem clear that our lives *can* go better when at least *some* of our cognitive processes are successfully carried out (and worse when they are impeded). While it sometimes causes minor irritations, the fact that living with dyspraxia impairs my ability to visualise directions or the layout of buildings is of little consequence in my self-evaluation of how my life is going, such that any sudden improvements in this area are likely to be of limited (if any) value. Improvements in my ability to focus or engage in philosophical reasoning, on the other hand, would certainly make my life go better, because those involve cognitive processes that are inextricably tied to things I value more broadly. Likewise, for persons who prize their ability to retain new information, it does not seem unreasonable to suggest that the development of dementia would make them worse off, but nor does it to suggest that this effect would not be so pronounced in the absence of values of this kind. What matters, in other words, is whether one is successful in using those cognitive processes that are *conducive to pursuing one's values and achieving one's aims*.

incomplete and intrusive remembering, rather than the inability to remember. [See: American Psychiatric Association (2022)]

⁷ It is too strong a claim to say that agonising pain is sufficient to defeat a general interest in living, given the way pain and suffering can come apart. For more on this idea, see: Coninx (2024).

⁸ Karpinski et al. (2018).

In the light of this, it seems unlikely that we have an interest in being supplied with extracranial elements that indiscriminately enhance our cognition. But where such elements provide the right kind of support – support, that is, that is targeted at the right cognitive processes – it seems obvious that it is in our interests to be supplied with them. My life is greatly improved by the support to my memory provided by the availability of calendar and reminder applications that sync across my devices. This is not just because I value attending appointments and completing time-sensitive tasks, but also because these artefacts lessen my cognitive load, freeing up time and energy that I can use elsewhere. My life was temporarily worsened when I misjudged a walk through a doorway and smashed the face of my smartwatch against its frame, thereby removing from my environment an important part of that memory-supporting system.⁹ Very little changed in terms of how my life was going, by contrast, when the short-lived social networking site Bebo shut down, even though its erasure from the internet represented a significant environmental impediment to my ability to remember the things I posted on social media as an adolescent. Each of these examples deals with the same set of cognitive processes – those connected with my memory – but their relationship with how my life is faring differs according to their role in supporting things I value. So it is not in *enhancement* that I have an interest, but in having my cognition supported where I am using it to strive towards ends I value.

Such an understanding of the value of cognition-supporting external elements also helps to make sense of cases of rumination and suicidal ideation. An environment that indiscriminately enhances the processes involved in rumination only makes a person's life go better, based on the evidence of its effects, if they genuinely value living with increased levels of depression and anxiety. Indiscriminate environmental support for suicidal ideation, likewise, cannot make a person's life go better unless regular contemplation of ending their own life is related to their values and aims in this kind of way. Both circumstances, though not impossible, are very unlikely, and so most of us do not have an interest in the environment being so organised.

There is, in sum, an interest we all share, implied by the first claim of the extended mind thesis, in an environment that *supports* our cognition, but it is not an interest in one that indiscriminately *enhances* it. Where the pursuit of values and achievement of aims is at stake, the first claim of the extended mind thesis implies that a person's life will go better when the environment supplies them with extracranial resources they can draw on to improve their cognition, and worse when it does not. That this is the case, however, does not speak to a general interest in successfully carrying out cognitive functions, but to the instrumental value of carrying out *specific* processes in the presence of values and aims. In short, it is an interest in having an environment that *can* support our cognition, when doing so helps pursue our aims and realise our values.¹⁰

⁹ My life would also be greatly improved by any dyspraxia-friendly innovations to the design of doors!

¹⁰ Note that merely having the interest says nothing of its relative weight or the legitimacy of any particular claim made upon it. While, as I go on to argue in Sect. 2, this is a core interest, so always relatively weighty, the impact of its recognition on our deliberations will vary depending on contextual factors. My thanks to an anonymous reviewer for pushing me on this.

2.2 The interest in extended mental authenticity

In contrast to the claim of cognitive support, the claim of genuine cognitive extension is much more controversial. To accept it, we must accept that there are instances in which there is not just extracranial *support* for cognitive processes, but that those extracranial elements are constituent parts of a person's *mind*. Objections raised to this thought in the secondary literature include Fred Adams and Ken Aizawa's allegation that Clark and Chalmers are labouring under a "coupling-constitution fallacy" – one that wrongly labels something 'cognitive' if it is attached to a cognitive agent¹¹ – and Robert Rupert's view that intra- and extra-cranial states are so different that any account of the mind that elides them lacks the explanatory value required by cognitive science.¹²

Now, it is very easy to overstate here. Though, in principle, it is possible for an extracranial element to meet it, the threshold for deep integration is set quite high. In a more recent clarification, Clark emphasises that for an element to be genuinely considered a part of a person's mind: (i) it must be reliably and typically invoked, (ii) any information retrieved from it must "be more or less automatically endorsed", and (iii) any information contained in it needs to be accessible as and when required.¹³ And while the objections to the claim of genuine cognitive extension are not *directly* about how frequently it occurs, these restrictions mean it is much rarer, and therefore less destabilising, than critics of Clark and Chalmers sometimes suggest. Nevertheless, if we accept that such extracranial elements of the mind can *in principle* exist (and especially if we accept that they actually *do*), then there will be profound implications – not just for philosophy of mind and cognitive science, but also for the way we think about our interests. While I will not argue here that we have an interest in forming such connections, in this subsection I will defend the view that, where they exist, they entail an interest in extended mental authenticity.

One reason for thinking we cannot have an interest in forming relations that genuinely extend our minds is that doing so makes us more *vulnerable*. If my mind is solely contained within my skull, then to protect it I need only protect the physical matter of my brain – and much of that work is done by the skull itself! But if it is distributed across deeply integrated extracranial elements, then I have to protect them as well. I am, therefore, exposed to risks of harm not shared by those who have (sensibly) refrained from such integration: including theft, adverse modification, and destruction. Indeed, J. Adam Carter and S. Orestis Palermos have argued that accepting the extended mind thesis as correct would require us to extend our conception of personal assault so as to include intentional damage towards deeply integrated technological artefacts like smartphones and laptops.¹⁴

Of course, just because it is risky to distribute your mind into extracranial elements does not mean it always makes your life worse to do so. Consider Otto: Clark and Chalmers' (fictional) case study of a man living with Alzheimer's disease using a

¹¹ Adams and Aizawa (2010).

¹² Robert D. Rupert (2004).

¹³ Clark (2010).

¹⁴ Carter and Palermos (2016).

notebook to store important addresses in place of his diminished intracranial memory.¹⁵ Were notebooks not widely available, Otto's life would certainly fare worse, at least insofar as he genuinely values being able to recall those addresses, so it seems like it is in his interests to deeply pair with one. But all of this is explained by the first interest – in an environment supportive of cognition – not in an independent, general interest in deeply integrating with extracranial artefacts. That explanation, moreover, is specific to this case; a proliferation of technologies that made deep integration easier and more popular could just as easily *set that interest back* – a point compellingly illustrated in an episode of the sci-fi anthology series *Black Mirror*.

In “The Entire History of You”, we are presented with a future in which it has become commonplace for persons to have a ‘grain’ implanted in their brains to record their audio-visual experiences, affording them the ability to rewatch their memories: both in private and projected onto screens for others to watch. Such technology, as the story demonstrates, would risk greatly enhancing our capacities to ruminate, while diminishing those we need to remain connected to our present experiences and to process grief. Moreover, because we may be pressurised or forced to display memories to others, it would also expose us to privacy risks not present with purely intracranial memories, thereby greatly diminishing our ability to carry out those cognitive functions necessary to maintain a boundary between our public and private identities.

When Liam, the protagonist who has become obsessive and distraught over the possibility that his wife has been unfaithful, removes his grain using a razor blade and tweezers, he removes a deeply integrated extracranial artefact and impairs his ability to carry out cognitive processes associated with memory. We can nevertheless understand this act, in so far as the enhanced cognition enabled by this device has demonstrably made his life go worse, as an attempt to alter his external environment in such a way that it provides better support to those cognitive functions related to his aims and values. We can understand it, in other words, as a destruction of part of his mind *that is in his interests*.

That the second claim of the extended mind thesis does not establish an unqualified interest in deep integration, however, does not mean that we have no widely shared interests that are specifically connected with it. Each of the cases discussed illustrates that we certainly have a stake in what happens *after genuine cognitive extension has occurred* (even if it would have been better for us had it not). Though it does not make sense to think that all of the inhabitants of the near-future world depicted in “The Entire History of You” had an interest in implanting the grain technology in their brains, they certainly had interests in ensuring that, once implanted, it was not maliciously compromised. Likewise, if our relationships with our present-day devices meet the conditions of deep integration, such that they are rightly considered parts of our minds, then Carter and Palermos are right to say our concept of personal assault should be extended to include them, because our lives will clearly go worse if they are stolen, destroyed, or manipulated.

The interest in an environment supportive of cognition covers some of this, but there are considerations here other than a narrow understanding of what advances or sets backs our projects, values, and aims. Unlike mere cognitive supports, deeply

¹⁵ Clark and Chalmers, “The Extended Mind,” : 12–16.

integrated external elements directly invoke questions of personal identity and the boundaries of the self. Were someone to compromise the applications and cloud services on which I daily rely, I would certainly have diminished cognition and certainly feel violated by the act. Destroying Otto's notebook, by contrast, involves the destruction of something that is genuinely a part of his mind, and therefore genuinely part of *who he is*. Even if we are pretty sure that Otto's life would have gone better if he had not acquired his notebook, depriving him of it threatens his ability to live a life that *is his own*. Insofar as he has an interest in that, then he has an interest in protecting the notebook from interference.

This notion that our lives go better when we are self-directed – driven by values and aims that are in some sense true to ourselves – is one that is deep-rooted in political philosophy, especially within the Western canon. As John Christman rightly points out, it often undergirds claims about the value of *autonomy*, where it is argued that “autonomy means not only being able to act effectively on one's desires, but also that such desires, values, or other springs of action are truly the agent's own.”¹⁶ Less often discussed is the idea that this concept of *authenticity* can be of fundamental value *independently* of the role it plays in supporting other capacities: that without it, as Charles Taylor puts it, “I miss the point of my life, I miss what being human is for *me*”.¹⁷ This is crucial, however, because it speaks to the sense in which it matters for us, in terms of how well our lives are faring, independently of whether or not that sense of self-directedness is paired with the kind of rational capacities that some conceptions of autonomy demand.¹⁸

Christman, in fleshing out the relationship between authenticity and autonomy, provides us with an account of what it means for a particular mental element to be authentic: that it is non-alienating. Specifically, it must not be something its bearer, on reflection across a variety of circumstances, would wish to deeply repudiate.¹⁹ If we pair this with the notion that authenticity is independently valuable, then we can use it to establish an interest in mental authenticity: one that holds that our lives go better when we can draw on non-alienating mental elements to pursue our values and aims, and worse when we are plagued by those we wish to deeply repudiate. A person who carries around the insults and criticisms of their emotionally abusive partner would be, we can reasonably assume, deeply alienated from those intrusive mental elements upon reflection across a variety of circumstances: specifically those scenarios in which the partner is not present. They are worse off, in this respect, for possessing those mental elements, and would be better off in their absence: not just because they are likely to be harmful to well-being, but because they are alien elements that diminish the victim's ability to be self-directed. Indeed, even in cases in which inauthentic elements are not obviously harmful or those that are authentic are, there still seems to be something morally troubling about them. There is no obvious harm involved in the possession of a preference for strawberry over chocolate ice-

¹⁶ Christman (2009).

¹⁷ Taylor (1991),

29

¹⁸ For more on conceptions of autonomy, see: Colburn (2010).

¹⁹ Christman (2009).

cream, yet if such a preference were implanted by a skilled hypnotist in a person who would be deeply alienated from it upon reflection, there would seem to be a threat to valued parts of their identity. Likewise, if this hypnotist implanted a disgust for the smell of cigarettes in a person who strongly and authentically identified with smoking, the reduction in harm caused by their reduction in smoking would not invalidate the sense that their life, in an important way, had been affected for the worse.²⁰

If we accept the second, more controversial claim of the extended mind thesis, then this is an interest that ranges over both intra- and extra-cranial mental elements. In other words, Otto does not just have an interest in the contents of his head being non-alienating, but also in his notebook (and its contents) not being or becoming something he wishes to deeply repudiate. So, he would fare much worse were a saboteur to make mischievous modifications that stimulated such deep alienation, and he would better off where any such alienating contents to be removed.²¹ Just as the first claim straightforwardly implies an interest in an environment supportive of cognition, then, the second implies an interest in *extended mental authenticity*.

3 Extended mind, relational egalitarianism, and the core interests of the person

These two interests – in an environment support of cognition and in extended mental authenticity – are significant, because they are directly related to claims that, as Rupert points out when urging caution against accepting the extended mind thesis, “significantly change our conception of persons.”²² Each of us has a plethora of interests of varying weight, whose importance for moral and political reasoning can vary according to context. I have an interest in the quality of writing exhibited on the long-running science fiction series *Doctor Who*, but in most circumstances this is an interest that is of such low weight as to be practically irrelevant. Because personhood is typically taken to be a signifier of moral equality, by contrast, interests that we have *qua* being persons are not like this.²³ These *core* interests, such as interests in life and physical security, are foundational to who we are, such that they are nearly always relevant, and of high importance.²⁴ So, in remaking our understanding of per-

²⁰These thought experiments are adapted from Christman’s own reflections of the status of mental elements implanted by a skilled hypnotist. See: Christman (2009).

²¹Christman’s account of authenticity, unmodified, might not be suitable for determining the authenticity of the mental elements of people living with dementia, due to some performance criteria that are implied to be embedded within it. I have argued that these can be reasonably easily removed to enable a wider application of the alienation test, however, in previous work. See: Carter (2022).

²²Rupert, “Challenges to the Hypothesis of Extended Cognition,” 390.

²³The moral equality of persons, in the words of Ronald Dworkin, is so widely accepted that it represents “a kind of plateau in political argument”. See: Dworkin (1983).

²⁴The list of core interests can be cashed out in a number of different ways, depending on the how personhood is conceived. One account that captures much of what might be called ‘the standard view’ comes from George Sher, who argues we all have an interest in “(1) remaining alive long enough to realize various aims, (2) being free to form, revise, and pursue [our] intentions in accordance with (what [we view] as) [our] strongest reasons, (3) having the various things (health, resources, security, the cooperation of others)

sonhood through the claims of cognitive support and genuine cognitive extension,²⁵ the extended mind thesis imbues interests that are directly implied by them with this special, morally weighty character.

For the relational egalitarian, a remaking of personhood requires a rethinking of what it means for us to relate to one another as equals. This is especially true of what Christian Schemmel terms “justice-based relational egalitarians”, who view the theory’s prescriptions as demands of *justice*, rather than appeals to an independently valuable social ideal.²⁶ For Elizabeth Anderson, to see justice in this way is to think of it in terms of the “duties of others to pay due regard to individuals’ interests”, such that a judgment of injustice is “essentially expressible as a complaint addressed to an agent, who is held accountable to the person making the complaint, about that agent’s failure to comply with valid demands that the agent serve or pay due regard to the interests of the claimant.”²⁷ In light of the core interests it implies we all share, the extended mind thesis has significant implications for this relational approach to justice, in the sense that it will substantially influence what it means to say we have paid this due regard to one another in a wide range of circumstances.²⁸

Exploring other contributions of relational egalitarian scholars helps in clarifying the impact these core interests make. Consider Samuel Scheffler’s promising concept of an “egalitarian deliberative constraint”, which he pitches as an illustrative model of equal relations between two parties. “If you and I have an egalitarian relationship,” he states, “then I have a standing disposition to treat your strong interests as playing just as significant a role as mine in constraining our decisions and influencing what we will do.” This might not always mean that each person’s interests are equally fulfilled by every decision they make, but it does require each party to, in Scheffler’s words, “attend with equal urgency and determination to the comparable interests of each of them.”²⁹ Because our core interests are so weighty and nearly always relevant, they will very often be engaged by such deliberations, and will always count as “strong” interests wherever they are. Moreover, because they are foundational to who we are as persons, and because our personhood entails that we are morally equal to one another, they will always be of comparable importance for both parties to the egalitarian deliberative constraint wherever they are engaged by a deliberation to a comparable extent. So, if the interest in an environment supportive of cognition and the interest in extended mental authenticity count among our core interests, then, they will play a key role in shaping our relations with one another wherever we practise Scheffler’s deliberative constraint.

One important way in which the impact of these core interests will manifest is as a demand to consider the *spatial* dimensions of our deliberations; we will need to

that [we need] to pursue [our] plans successfully, and (4) actually being successful in accomplishing [our] aims.” See: Sher (2014).

²⁵ For more on the relationship between the extended mind thesis and personhood, see: Carter (2024).

²⁶ Schemmel (2015).

²⁷ Anderson (2010).

²⁸ For more on the relationship between conceptions of personhood and Anderson’s interpersonal approach to justification, see: Carter (2025a).

²⁹ Scheffler (2015).

attend to the way our actions might shape the space around us to the benefit of each of our interests in an environment supportive of cognition, and to take seriously the demand to protect any existing relationships of deep integration with extracranial objects that may be affected by them. This might not mean that these interests are advanced or protected from frustration equally every time, but it will mean that the relationship over time must be characterised by mutual *recognition respect*, in the terms used by Stephen Darwall, for the fact that both parties are equal bearers of these core interests that range over the external environment, such that treating them with their due weight means treating them as *equally* weighty wherever they are comparably engaged.³⁰

Now, there is notoriously little agreement among relational egalitarians on what the society of equals would look like if achieved – agreement, that is, on the *positive* argument relational egalitarians should make. And so not all will agree with the way Scheffler has modelled the egalitarian relationship; indeed, though I think he gets much of it right, my exploration of it here does not equate to an endorsement of it. There is, however, little disagreement about the sorts of ways of relating that are categorically *ruled out* by the demand that we relate to one another as equals. Paradigm, intolerable hierarchies are *always* incompatible with relational egalitarianism, including those that are oppressive and dominating. Such social inequalities essentially violate the demand that we show due regard to one another's interests, because they all involve a failure to respect the moral equality of persons.

If relational egalitarians accept the extended mind thesis, thereby accepting its remaking of what the core interests of persons are, then there will be instances of oppression and domination to which they must be opposed that concern the configuration of physical space, the processes that shape it, and the cultural structures that determine what it is and who it is for. Some of these may already be identifiable as instances of injustice on standard accounts, but even where this is the case, the spatially-conscious kind of relational egalitarianism that acceptance of the extended mind thesis requires offers unique insights about why these ways of relating amount to domination and oppression: insights, that is, about how they unacceptably frustrate the core interests of the person in an environment supportive of cognition and in extended mental authenticity. This can be illustrated by examining the way the theory deals with three distinct cases that at the very least involve relationships of cognitive support and, under certain circumstances, can involve genuine cognitive extension of the kind Clark and Chalmers envisage. These are: the relationship between landlords and their tenants, contemporary trends in software and computing, and the practice of forced care transfers.

3.1 Landlords and tenants

If any elements of the external environment are important for our cognition, then our homes certainly rank highly among them. As Cara Nine argues, these do not just act as repositories of various cognition-supporting artefacts we have amassed but can

³⁰ Stephen L. Darwall (1977).

also themselves act as “complex objects of the extended mind”.³¹ A person cannot be ejected from their home, then resettled in a new one, without any risk to their extended mental system, even if they have lost none of their external props along the way. This is something that many of those who have had to engage in the stressful and burdensome process of moving home will understand. While some may never feel it as acutely as I or others of a similar disposition do, there is a sense of impairment to one’s ability to think clearly that tends to outlast the actual moving process, often taking years to be fully overcome. The *configuration* of objects within a space, such that it better supports our authentic ways of living matters as well as the objects themselves, such that we rely on and may even deeply pair with the home *as a whole* – as a *home space*. Though the depth of our integration can vary significantly, at least some minimal degree of reliance on the home space to support our cognition is inevitable. This is so because, as Nine argues, humans cannot help but to engage in *niche construction*: a term she borrows from evolutionary biology that describes “the process whereby organisms modify their own environments in such a way that the changes become a necessary part of the explanation of the nature of the organism or population, and its adaptive success.”³²

It follows, then, that the interest in an environment supportive of cognition is *always* engaged in any deliberation about courses of action that will affect a person’s relationship with their home, while the interest in extended mental authenticity can be so engaged where deep integration of the kind Clark and Chalmers envisage exists. There will be many cases in which recognition of this will affect the way relational egalitarians approach the core normative questions, but one area of contemporary importance that is particularly impacted is the relationship between landlords and tenants. That such relationships can take an exploitative or dominating form will not be news to relational egalitarians: insufficient legal protections for tenants, extortionate rents, and poor regulatory standards are all the sorts of things that theorists who care about the quality of the relations we share with each other ought to oppose. Nevertheless, understanding the interests that are at stake helps us to understand why the relationship *itself* ought always to be treated with suspicion.

Consider what it means to rent a home from a landlord. However well protected from arbitrary evictions or intrusive inspections they are, a tenant does not *own* the home. They do not own, that is, the space that acts as a container for their cognition-supporting artefacts and in which they are constructing a niche. Now, as Katy Wells has pointed out, sometimes the nature of a rental relationship is, by choice of the renter, too short-term for personal investment in the rented object to occur – consider here student accommodation or holiday lets. She also rightly points out that there are plausible, anti-consumerist reasons for thinking it is a *good thing* to try to limit such investment.³³

It is of course not obvious, moreover, that constructing a home space relies on ownership, nor that we always do need total freedom to alter our home environments in order to do so. And deeply pairing with the home space, such that it meets Clark

³¹ Nine (2017).

³² Nine, “The Wrong of Displacement”, 245.

³³ Wells (2019).

and Chalmers' criteria of reliable use, automatic endorsement, and accessibility as and when required, becoming a genuine component of an extended mind, is a process that creates vulnerabilities to injustice (such as destruction or deprivation) that would not exist in its absence.³⁴ Certain forms of relating to the home space, therefore, would seem to be undesirable from the vantage point of relational equality.

Nevertheless, there are egalitarian reasons to be troubled by the fact that a renter is dependent on a disposition to offer up homes for rent in order for them to *access* a space that both protects cognition-supporting artefacts and inevitably will become at least a complex object of at least some minimal level of cognitive *support*, if not a deeply paired extracranial part of the mind. This is a sort of relationship that already places the renter in a position of asymmetric dependence – activating concerns about domination – and whose character is made more alarming by the involvement of profit-seeking.

To the extent that the renter–landlord relationship, because of the deep interest of the renter in an environment supportive of cognition, is characterised by the “transfer of energies” (through the extraction of rent) from a group with lower, dependent status (renters), to a group with higher, powerful status (landlords), in such a way that that status gap between them is maintained (by depriving renters of the means to acquire property and providing landlords with the means to keep hold of, improve, or even add to their portfolios), it is an archetypal example of oppression by *exploitation*, under Iris Marion Young's influential framework.³⁵ Consequently, where a standard account of relational egalitarianism might be able to accommodate profit-seeking rental relationships that are properly constrained by domination-inhibiting legal protections and regulations, a spatially-conscious approach, because it recognises that our relationships with our homes *always* engage at least some of our core interests, would have much more difficulty. Indeed, because of relational egalitarian concerns about exploitation, it may be the case that its spatially-conscious variant would have to oppose *all* forms of profit-driven landlordism as oppressive, such that it could only accept rental homes as just where offered on a social or non-profit basis.³⁶

3.2 Cloud software and tech ecosystems

Another area where a spatially-conscious relational egalitarianism yields important insights concerns a shift in our relationships with technology that has sometimes been neglected within political philosophy. When personal computers and other internet-

³⁴ As Mirko Farina and Andrea Lavazza point out, genuine cognitive extension raises distinct ethical questions from mere embeddedness. While I do not advance an argument in favour of the stronger claim of the extended mind thesis here, it suffices to say that, if such extension can actually occur, then the landscape for egalitarian analysis will change significantly wherever it has. Farina and Lavazza (2022).

³⁵ Iris M. Young (1990).

³⁶ A full elaboration of this point is beyond the scope of this paper. It suffices to say that a relational egalitarian who is spatially-conscious would not be satisfied by standard regulations on profit-driven rental relationships over homes. This is because the concerns about exploitation cannot be ameliorated simply through limiting the scale of extraction involved: wherever there is an intolerable status gap maintained by the efforts of those on the sharpest end of it, the relationship is pro tanto objectionable to a relational egalitarian.

enabled devices first started creeping into every corner of our lives, they were offered to us by technology companies in a substantively different way from that to which we have become accustomed. Once upon a time, if you owned a device you *owned* it. Software was offered as a discrete, complete package, that required no ongoing fee to retain access and that was not reliant on regular updates to function. And data – including the kind of organisational documents upon which we were beginning to rely to support our cognition – was stored *on device* or on removable, physical media. In this sense, after the initial acquisition of the cognition-supporting artefacts they sold, there was little in the way of an ongoing relationship of dependence on technology companies.

This is something of an oversimplification, but it is important to set out this picture to understand a broader trend. Major technology companies in the present day typically offer key pieces of software as a *service*, rather than a product: think here of Microsoft's Office 365 suite or Adobe's Photoshop. Access to these software packages, which will very often mean continued access to artefacts that support our cognition, is therefore dependent on an ongoing fee-paying relationship with the relevant company. Not only does this put the interest in an environment supportive of cognition at risk of frustration for those who lose the ability to pay, but it also makes users reliant on the continued financial health of the company in question, as bankruptcy may mean the software package disappears. And if these software packages have been deeply paired with, the interest in extended mental authenticity will be engaged and at risk of frustration too.

This is not just a theoretical risk: in April 2025, the mobile phone company LG announced it was shutting down its software upgrade services for all of its models, putting users at risk of being unable to download default applications or install important security upgrades if they failed to do so before the deadline.³⁷ Of course there will be a perfectly reasonable explanation for this: one that points to the decline in demand for the products LG offers, and the much larger user base possessed by their rivals. But such an explanation would not obviate the central worry. Companies like LG have produced powerful cognition-supporting products upon which their users have come to rely; that there are relatively few users who will be seriously impacted by the withdrawal of integral software services does not lessen the extent of the interest frustration they will experience.

Parallel to the trend towards software as service, many manufacturers of computers and other internet-enabled devices have encouraged users to subscribe to cloud storage models to accommodate an increased demand for readily accessible data: think here of Apple's iCloud or Microsoft's OneDrive. While increasing ease of access and, in some circumstances, decreasing the cost of backing up large numbers of files accrued over time, this has led to the propagation of a similar sort of relationship: we are dependent on these manufacturers to look after our data, to allow us to continue accessing it, and to maintain the viability of their business model so that the cloud service is not swiftly withdrawn. So, once again, at least one of the interests I have been discussing here (if not always both) is engaged and at risk of frustration.

³⁷ Chris Hall (2025).

To be clear, a standard account of relational egalitarianism will have much to say about the power tech companies wield and the structure of our economic system that enables them to accrue it. What a spatially-conscious relational egalitarianism is especially useful for, however, is identifying the injustices involved with an added degree of diagnostic precision. Without proper regulation, these relationships are dominating on any standard account; software providers and computer manufacturers are empowered to arbitrarily interfere in the lives of their users without being forced to track their interests. But if we understand that core interests that are intrinsically tied to our personhood are always at stake here, we will have a better understanding of the severity of the injustice and a clearer idea of the kind of policy initiatives that are needed to rectify it.

It may be that software as service and cloud storage ecosystems are incompatible with a society of equals. Or it may be that relational egalitarianism demands that the servers that support these systems are held in public hands, rather than by private companies, such that this asymmetric power relation is counterbalanced by democratic control. What is clear is that mere regulation that involves compensation for loss of access or the withdrawal of software, which may be enough to prevent the relationship from being dominating on a standard account, may not be sufficient to obviate injustice on a spatially-conscious relational egalitarianism, because of the depth of the vulnerability and the severity of the risks to core interests that are involved. It is not just, in other words, that these tech models risk setting back interests related to particular projects, or more basic interests that can be fulfilled in other ways, but that the relationships with technology they underpin are intimately connected to who we are as persons, such that it is our very core interests that are under threat.

3.3 Forced transfers for dementia care

Clark and Chalmers's initial statement of the extended mind thesis, through the case of Otto, highlighted the particularly important relationships that people living with dementia often forge with aspects of the external environment. Because dementia, of all kinds, involves progressive cognitive decline, all people living with the condition will experience a deterioration of the intracranial cognitive resources that, by necessity, increases the importance of any extracranial supports or deeply paired elements they have for the pursuit of their valued ends. In solo-authored work, Clark has pointed this out himself, highlighting a case of a group of patients at a memory clinic in St Louis, Missouri who were able to continue living independently, in defiance of clinical expectations, because of how effectively they had organised their home spaces to support and compensate for their diminished intracranial cognition.³⁸

It seems reasonable to suggest, especially given that Otto's relationship with his notebook is presented by Clark and Chalmers as the *archetypal* deeply paired extracranial element, that people living with dementia are more likely to have the kind of relationship with their home space that engages the interest in extended mental authenticity. And if that is the case, then there are many aspects of our practices towards people living with dementia that will need to be reviewed under a spatially-

³⁸ Clark (2003).

conscious relational egalitarianism – not the least, the common practice in my home country of the United Kingdom of forcing them out of their own homes for the purposes of care.

A standard account of relational egalitarianism will be able to identify risks of domination in care systems that enable arbitrary forced care transfers, and it may be able to point out ways in which social structures that enable them to occur oppress people living with dementia.³⁹ What a spatially-conscious relational egalitarianism provides us with, however, is an understanding of how much is at stake in a forced care transfer, such that our relative weighting that we give a person living with dementia's interests when deliberating about how to deliver care – especially in a resource-scarce context – may be much more favourable to that person than we might have initially assumed. Removing a person living with dementia from a home they have deeply paired with, especially by force, is something that strikes at the very core of who they are. It does not just set back project-related interests or disrupt well-being but risks their core interest in the authenticity of their mental elements. This might not mean that policies that enable such transfers would be categorically ruled out in a relational egalitarian society, but it will mean a high justificatory bar to be cleared and a system of stringent checks on the power of decisionmakers to ensure that bar has been met.

4 Conclusion

In this paper I have explored the implications of the extended mind thesis, if we accept it as true, for relational egalitarianism: a dominant view within contemporary political philosophy. I have set out two interests that are implied by each key claim of the thesis respectively: an interest in an environment supportive of cognition and an interest in extended mental authenticity. I have argued that, because the thesis involves a significant reconceptualization of the person, these are properly understood as *core* interests, such that they are frequently engaged and always of significant importance when they are. I have then set out how a spatially-conscious relational egalitarianism, sensitive to these core interests, might yield novel insights using three example cases: the relationship between landlords and tenants, the provision of software as a service and cloud storage ecosystems, and the forced transfer of a person living with dementia for care. The standard view of relational egalitarianism is not incapable of capturing aspects of the risks of injustices in these cases, but a spatially-conscious approach, as I have shown, is distinctively diagnostically precise, and offers a distinct view on how these risks are to be weighted in our deliberations about courses of action.

Acknowledgements I thank my colleagues at the University of Glasgow for the many conversations we have had that helped me to shape this research. I also thank the attendees of the 2024 Ilkley Colloquium on Medical Ethics for their helpful comments on some of the ideas developed here.

Funding This research was supported by a British Academy Postdoctoral Fellowship.

³⁹ I have discussed this at length elsewhere. See, especially: Carter (2025a).

Declarations

Conflicts of interests I declare that I have no conflict of interest.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Adams, F., & Aizawa, K. (2010). Defending the bounds of cognition. In R. Menary (Ed.), *The extended mind* (pp. 67–80). The MIT Press.
- American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders (Fifth Edition Text Revision ed.)*. American Psychiatric Association Publishing.
- Anderson, E. (2010). The fundamental disagreement between luck egalitarians and relational egalitarians. *Canadian Journal of Philosophy*, 40(1), 1–23.
- Carter, J. A., & Palermos, S. O. (2016). Is having your computer compromised a personal assault? The ethics of extended cognition. *Journal of the American Philosophical Association*, 2(4), 542–560.
- Carter, M. (2022). Advance directives: The principle of determining authenticity. *The Hastings Center Report*, 52(1), 32–41.
- Carter, M. (2025a). On the quality of relational justice. *Analytic Philosophy*. <https://doi.org/10.1111/philb.12367>
- Carter, M. (2024). The person as environmentally integrated. *Journal of Ethics and Social Philosophy*, 28(1), 53–82.
- Carter, M. (2025b). *Relating to people living with dementia as equals: Towards social justice in dementia care*. Cambridge University Press.
- Christman, J. (2009). *The politics of persons: Individual autonomy and socio-historical selves*. Cambridge University Press.
- Clark, A. (2010). Memento's revenge. In R. Menary (Ed.), *The extended mind* (pp. 40–66). The MIT Press.
- Clark, A. (2003). *Natural-born cyborgs: Minds, technologies, and the future of human intelligence*. Oxford University Press.
- Clark, A., & Chalmers, D. (1998). The extended mind. *Analysis*, 58(1), 7–19.
- Colburn, B. (2010). *Autonomy and liberalism*. Routledge.
- Coninx, S. (2024). Pain philosophy: Recent debates and future challenges. *Philosophy Compass*, 19(4), e12981. <https://doi.org/10.1111/phc3.12981>
- Darwall, S. L. (1977). Two kinds of respect. *Ethics*, 88(1), 36–49.
- Dworkin, R. (1983). Comment on Narveson: In defense of equality. *Social Philosophy & Policy*, 1(1), 24–40.
- Farina, M., & Lavazza, A. (2022). Incorporation, transparency and cognitive extension: Why the distinction between embedded and extended might be more important to ethics than to metaphysics. *Philosophy & Technology*, 35(10). <https://doi.org/10.1007/s1334>
- Feinberg, J. (1984). *Harm to others*. Oxford University Press.
- Hall, C. LG makes a surprising smartphone decision that'll affect all users. T3. Last modified April 30, 2025. <https://www.t3.com/tech/android-phones/lg-makes-a-surprising-smartphone-decision-thatll-affect-all-users>
- Karpinski, R. I., Kolb, A. M. K., Tetreault, N. A., & Borowski, T. B. (2018). High intelligence: A risk factor for psychological and physiological overexcitabilities. *Intelligence*, 66, 8–23.

- Kovács, L. N., Takacs, Z. K., Tóth, Z., Simon, E., Schmelowszky, Á., & Kökönyi, G. (2020). Rumination in major depressive and bipolar disorder - a meta-analysis. *Journal of Affective Disorders*, 276, 1131–1141.
- Nine, C. (2017). The wrong of displacement: The home as extended mind. *The Journal of Political Philosophy*, 26(2), 240–257.
- Olatunji, B. O., Naragon-Gainey, K., & Wolitzky-Taylor, K. B. (2013). Supplemental material for specificity of rumination in anxiety and depression: A multimodal meta-analysis. *Clinical Psychology Science & Practice*, 20, 225–257.
- Rupert, R. D. (2004). Challenges to the hypothesis of extended cognition. *The Journal of Philosophy*, 101(8), 389–428.
- Scheffler, S. (2015). The practice of equality. In C. Fourie, F. Schuppert, & I. Wallimann-Helmer (Eds.), *Social equality: On what it means to be equals* (pp. 21–41). Oxford University Press.
- Schemmel, C. (2015). Social equality - or just justice? In C. Fourie, F. Schuppert, and I. Wallimann-Helmer (Eds.), *Social equality: On what it means to be equals* (pp. 146–164). Oxford University Press.
- Sher, G. (2014). *Equality for inequalities*. Cambridge: Cambridge University Press.
- Taylor, C. (1991). *The ethics authenticity*. Harvard University Press.
- Wells, K. (2019). Renting personal goods. *Social Theory and Practice*, 45(1), 127–148.
- Young, I. M. (1990). *Justice and the politics of difference*. Princeton University Press.
- Zhou, H.-X., Chen, X., Shen, Y.-Q., Li, L., Chen, N.-X., Zhu, Z.-C., Castellanos, F. X., & Yan, C.-G. (2020). Rumination and the default mode network: Meta-analysis of brain imaging studies and implications for depression. *Neuroimage*, 206, 116287.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.