White Paper in Response to the Scottish Government Consultation for the Wellbeing and Sustainable Development Bill

Defining Well-Being

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1. About the Cogito Epistemology Research Centre

The Cogito Epistemology Research Centre at the University of Glasgow (https://www.cogito-glasgow.com) is a leading research centre internationally in philosophy. Cogito's 60+ researchers specialise a range of themes connected with well-being¹, with several major research projects that

¹ Cogito is leading the European Consortium for Knowledge and Information Research (ECKIR http://www.knowledge-consortium.com), it is hosting the British Society for the Theory of Knowledge, it is part of the world-wide Social Epistemology Network, and the European Epistemology Network.

explore various dimensions of well-being², and how to best promote well-being (intellectual, cognitive, and emotional), especially in socially and epistemically non-ideal environments.³

In what follows, we outline several of our recent research results related to well-being; these results offer guidance for defining well-being in a way that is both philosophically rigorous and informed by science.

2. Introduction and Research Context

The question, 'What is wellbeing? What does it consist in?' is important to answer in a clear and principled way. Without a conceptual grip on what well-being consists in, it is difficult to bring about policies that reliably promote well-being as opposed to merely intend to do so (Huppert 2017; Stewart-Brown 2013). In this way, defining well-being in a satisfactory way is of societal concern. It is also theoretically valuable (Fletcher 2016): understanding what well-being consists in offers us a clear perspective to prioritise certain considerations over others in our lives, and to bring the task of balancing competing considerations under better intellectual control.

Attempts to define well-being have typically taken one of three shapes in mainstream well-being research: *hedonist theories* (J.S. Mill 1861/1998; Bramble 2016; Crisp 2006), *desire-based theories*

² Dimensions of Wellbeing (https://www.dimensionsofwellbeing.org funded by Therme Group and the University of Glasgow; PIs Professor Mona Simion and Professor Christoph Kelp): investigating the nature of wellbeing; Knowledge-Lab: Knowledge-First Social Epistemology (https://www.knowledgelab-research.com funded by the European Research Council (grant agreement 948356 - KnowledgeLab); PI Professor Mona Simion (Glasgow)): investigating ways of acquiring knowledge and rational belief from social sources (the testimony of others, disagreement, groups, mass media). Evidence: Knowledge and Understanding (https://www.cogito-glasgow.com/evidence-knowledgeunderstanding funded by the Swiss National Science Foundation; PIs: Professor Christoph Kelp (Glasgow), Professor Anne Meylan (Zurich): investigating the nature and normativity of evidence. Digital Knowledge (https://www.digitalknowledge.org funded by the Arts and Humanities Research Council, UKRI; PI: Dr. Adam Carter (Glasgow), Co-I Professor Jesper Kallestrup (Aberdeen): investigating knowledge acquisition in digital environments. Expanding Autonomy: Scaffolded, Embedded, and Distributed (funded by the Arts and Humanities Research Council, UKRI; PI: Professor Neil Levy (Oxford) and Dr. Adam Carter (Glasgow): investigating autonomous belief formation in digital environments. KnowSoc (funded by the European Research Council; PI Professor Christoph Kelp (Glasgow), Co-Is Professor Mona Simion (Glasgow), Dr. Adam Carter (Glasgow), Professor Esa Diaz Leon (Barcelona), Professor Thomas Grundman (Cologne), Professor Sven Bernecker (Cologne and UC Irvine), Professor Anandi Hattiangadi (Stockholm), Professor Frank Hofmann (Luxembourg), Professor Rene Van Woundenberg (Amsterdam), Professor Mikkel Gerken (Southern Denmark), Professor Jesper Kallestrup (Aberdeen): investigating knowledge acquisition in social settings.

³ A Virtue Epistemology of Trust (http://trust-well.com funded by the Leverhulme Trust; PI Dr. Adam Carter, Co-Is Professor Mona Simion and Professor Christoph Kelp (Glasgow)): investigating the nature of rational trust and trustworthiness.

(e.g., Heathwood 2006; 2015; Sobel 2016), and *objective theories* (e.g., Hurka 1996; Bradford 2015).

Hedonism answers the question of what well-being consist in with: 'The greatest balance of pleasure over pain'. (Mill 1861/1998). This view, attractive among some camps of utilitarianism moral theory (Sidgwick 1908/1981; Goodin 1995), faces known objections. To use a well-known example, a life plugged in to an experience machine (Nozick 2013) is in some way defective regardless of the hedonistic quality of experience the machine provides. This suggest that wellbeing is about more than just experiencing pleasure.

A different approach to defining well-being adverts to the concept of desire satisfaction rather than of pleasure quality. To a first approximation, on desire-fulfilment views, something promotes your well-being to the extent that it is good for you; it is good for you to the extent that bringing it about fulfils your desires. If you desire helping others, or fulfilling your potential, then your well-being on this view consisting in your bringing about these things, regardless of considerations to do with pleasure. This approach also faces a straightforward line of objection: we sometimes desire things that are bad, indeed, bad *for* us; and bringing these things about is not conducive to our well-being. The most well-known version of this objection is Parfit's (1984) case of the addict: if the desire-fulfilment theory of well-being is correct, then we can't make sense of how an addict's giving in to their desires and promoting their well-being would ever come apart.

A limitation of both hedonistic theories of well-being and desire-based theories of well-being is that it seems both the experience of pleasure and the satisfaction of desires can come apart from what it is for us to live well, viz., to flourish.

A third category of approaches to defining well-being — objective list theory — is sourced in Aristotle's theory of *eudaimonia* (human flourishing). The objective list theorists define well-being with reference to an objective list of successes are constitutive of our wellbeing: knowledge, love, physical health, good social interactions, moral thoughts and actions etc. An advantage of this approach is that it begins with the concept of human flourishing, rather than with other goods the attainment of which might only sometimes align with it. A disadvantage of at least existing objective list theories is they have thus far lacked a principled answer to the question of *what justifies including one item or another on such an objective list*. What determines what goes on the list and what is left off? Even if objective list theories have in-principle advantages over hedonistic and desire-fulfilment theories, an objective theory is not yet a suitable definition of well-being, not one

that is theoretically robust. Consider that, without a principled sense of what items are constitutive of well-being and what are not, objective list theories are open for manipulation in the public sphere; they might be tailored to interests. This is a worry that has long faced WD Ross's (1930/2002) list of seven prima facie duties: fidelity; reparation; gratitude; justice; beneficence; non-maleficence; and self-improvement. One notable practical barrier to this list of prima facie duties as one that can defensibly guide policy is that it offers no principled explanation for why these particular seven duties, rather than others, are the ones on the list. Any viable objective list theory of well-being will similarly need to be *principled* in a way that, e.g., Ross's ad hoc list of prima facie duties is not. It must not only identify something that well-being consists in, but account for *why* it consists in what is identified.

3. Objective well-being: some functionalist definitions

Against the above background, Cogito researchers have developed a broadly Aristotelian, multidimensional conception of wellbeing (Simion & Willard-Kyle 2024) grounded in the nature and normativity of biological functions. Human systems serve etiological cognitive, emotive, moral, social, and physical functions, which, in turn, generate biological norms for proper functioning (Millikan 1989). Your heart, for instance, has the etiological function to pump blood in your circulatory system. On the etiological theory of functions, that is because hearts pumped blood successfully in your ancestors, which lead to their survival, and which, in turn, explains the continuous existence of hearts. Because this function contributes to the explanation of why hearts continue to exist, it generates norms for what it is for a heart to be a properly functioning heart: it is for it to work in the way in which, in normal environmental conditions, it reliably enough fulfils its function (in the case of the heart, beat a particular rate) (Graham 2014).

All human capacities afford a similar functionalist unpacking (Kelp 2023). Since the human system has several capacities, it will only be properly functioning as a whole – and thereby instantiate wellbeing – insofar as all these capacities are properly functioning – i.e. working in the way that reliably leads to function fulfilment in normal environmental conditions (Kelp and Simion 2021; Simion 2019, 2024; Kelp 2018a; Simion 2024).

Outright wellbeing, it is argued, arises when these norms are met across all dimensions to a contextually determined sufficiency threshold. Our results suggest the following template definitions of degrees of wellbeing and correct wellbeing attributions (where φ functions are the functions corresponding to the relevant capacities of the system; in the case of human systems, these will be: physical, emotive, cognitive, social, and moral functions):

Definition 1: Maximal Wellbeing: A subject S instantiates full wellbeing if and only if one instantiates maximal φ proper functioning for all φ functions.

Definition 2: Degrees of Wellbeing: The degree of wellbeing instantiated by a subject S is a function of the distance from maximal φ proper functioning for all φ functions: the closer one approximates maximal φ proper functioning for all φ functions, the higher one's degree of wellbeing *simpliciter*.

Definition 3: Attributions of Outright Wellbeing: "S instantiates wellbeing" is true in context c if and only if S approximates maximal φ proper functioning for all φ functions closely enough to surpass a threshold determined by c.

These set of definitions fall within the objective list tradition; maximal well-being, degrees of well-being, and outright well-being, on this view, are cashed out principally in terms of proper functioning. However, the identification of well-being with proper functioning in this way is principled rather than ad hoc: the normative claims in this package of definitions are grounded in facts about what kinds of things we are, what suite of capacities we in fact possess, and what these capacities do when functioning properly. Thus, at the heart of the view, is that intuitive idea that what counts as good for us depends on what kinds of things we are, and so on how we (normally) function.

This functionalist approach to well-being not only offers a non-arbitrary way to develop an objective set of well-being definitions. It also has the power to explain the kind of things we should want a theory of well-being to explain, and which other accounts are going to struggle to explain.

Here it will be worth considering an illustrative example. To this end, take as a starting point datum that cognitive flexibility typically decreases with age (Wecker et al. 2005). Adults who become less cognitively flexible with age are performing just as we'd expect them to. And so, on one hand, we want to be able to attribute cognitive wellbeing to older adults who are (relative to a reference class consisting of all humans) cognitively inflexible: the system is properly functioning *for that age group*. However, inflexible thinking is dangerous and can lead people to act against theirs and others' interests. And so, on the other hand, we want to explain why, e.g., dogmatism is a problematic (Kelly 2008; Fricker 2006), and so why it makes sense to attempt to increase cognitive flexibility *even if* one is properly functioning for their age group.

A solution to this puzzle turns out to be available in an elegant way on the view proposed, which allows for a distinguish between cognitive vs. epistemic proper functioning. On the proposal, we define "True Attributions of Outright Cognitive Wellbeing" (TAOCW) (a special case of Definition 3) as "S instantiates cognitive wellbeing" is true in context c if and only if S approximates maximal cognitive proper functioning closely enough to surpass a threshold on degrees of cognitive wellbeing determined by c. A prediction of TAOCW is that decreases in cognitive flexibility due to age are proper cognitive functioning.

So TAOCW accommodates one thing we wanted to explain: which is that we can attribute cognitive wellbeing to older adults despite cognitive inflexibility. But the addressing the puzzle requires also accounting for why it might still be good for such individuals to attempt to work on overcoming cognitive inflexibility.

Here is where countenancing the distinction between cognitive and epistemic function matters. Consider now a separate instance of Definition 3: "True Attributions of Outright Epistemic Wellbeing" (TAOEW) on which "S instantiates epistemic wellbeing" is true in context c if and only if S approximates maximal epistemic proper functioning closely enough to surpass a threshold on degrees of epistemic wellbeing determined by c. With reference to TAOEW, we can explain why decreases in cognitive flexibility due to age are epistemic malfunctions, even when these same decreases in cognitive flexibility due to age count as proper cognitive functioning. On (TAOEW), proper epistemic functioning (even if not proper cognitive functioning) requires that cognitive capacities are working in the way that reliably generates knowledge in normal conditions (Kelp and Simion 2020; Kelp 2018a). Generating knowledge in normal conditions requires evidential uptake and update on available evidence (Kelp and Simion 2021). Dogmatically avoiding evidence, for example, or being unwilling or inflexible enough to revisiting old evidence critically when new evidence calls for it, lead us away from knowledge; when they do so, they are not fulfilling their epistemic function. In this respect, increase in dogmatism, even if compatible with cognitive well-being, may be correspond with a decrease of epistemic wellbeing. The fact that our proposal explains away the above apparent puzzle is principled, and it is a virtue of the view. The advantage further generalises to other assessments of well-being in terms of φ -proper functioning.

4. Cognitive well-being

While the above set of well-being definitions in §3 are applicable to well-being generally (and are sensitive to dimensions in human well-being that track different capacities and functions),

researchers at Cogito have produced an extensive body of work on specifically epistemic well-being (Kelp 2013; Simion, Carter, and Kelp 2020; Simion 2021b; Willard-Kyle 2023a; Carter 2022; Carter and Gordon 2014; Belkoniene 2023), which (in §3) we described as well-being in connection with the generation of knowledge in normal conditions.

Defining epistemic well-being is important in epistemology, the philosophical theory of knowledge (Carter and Littlejohn 2021). Within epistemology there is disagreement about what epistemic well-being consists in (David 2001; Kvanvig 2003; Pritchard 2009; Simion and Kelp 2016; Carter and Jarvis 2012; Willard-Kyle 2023b); our Centre has shown (e.g., Kelp 2018b; Simion 2021) the theoretical limitations of views that either fail to construe epistemic well-being in terms of knowledge (Conee and Feldman 2004), or which otherwise downplay the role of knowledge in epistemic well-being (Kvanvig 2003).

The motivations for defining epistemic well-being in a viable way are not only theoretical, but also of societal concern (Lynch 2016; Boghossian 2007). We are currently facing a global information crisis that the Secretary-General of the World Health Organization has declared an 'infodemic' (Zarocostas 2020). This is an *epistemological crisis* - a crisis of ignorance that affects our personal and societal wellbeing (Solomon et al. 2020; Cinelli et al. 2020), as well as the stability of our democracies (Rovetta et al. 2022), and which has been rendered abruptly even more acute by the fast development of LLMs (De Angelis et al. 2023). Urgently needed is epistemological research that rigorously addressing the underlying causes of the threats misinformation poses to our epistemic well-being, not only its symptoms. Cogito researchers are presently collaborating with UK government and the UKRI to use evidence-based research about epistemic well-being to better shape policy for media regulation and internet strategy in the coming decades.

Two key results about epistemic well-being that have been developed in different ways by researchers in our centre concern i) *epistemic access*; and ii) *disinformation*. During much of the 20th century and early 21st century, the prevailing view of epistemic well-being adverted to the concept of *epistemic access* – viz., to reasons that are available to you by reflection in support of your beliefs. This position is called *epistemic internalism* (Steup 1999; Conee and Feldman 2004; 1998). Epistemic well-being, on the internalist model, consists in the capacity to support your beliefs with reasons on reflection. While possessing reflectively accessible reasons is valuable epistemically, it is not the full story of epistemic well-being (Fratantonio 2019; Simion 2021a). We might have coherent, mutually supporting beliefs (Lycan 2012), but be woefully misinformed; consider, for instance, conspiracy theorists whose beliefs are mutually self-supporting (Cassam

2019). A theory of epistemic well-being that is up to the task of guiding policy in the age of an infodemic needs to be not only incompatible with ruling conspiracy theories in as instances of epistemic well-being, but positively designed to preclude them as counting as such.

Over the past five years alone, Cogito researchers have pioneered multipole strands of *epistemic externalism* on which epistemic well-being is (in short) understood in terms of believing knowledgeably, where believing knowledgeably is not merely a matter of believing truly and possessing good reflectively accessible reasons, but a matter of believing truly in a way that results from the right kinds of reliable processes (Kelp and Simion 2021; Simion 2024; Kelp 2021; Carter 2023d). The insight that cognitive well-being is a matter of manifesting good, knowledge-conductive traits and processes more so than reflective awareness not only has been shown to get theoretical results, but the view of epistemic well-being has additional social advantages, as it is useful in explaining why certain kinds of discourse patterns involve epistemic injustice (Simion 2021a).

Secondly, regarding the risks *disinformation* poses to epistemic well-being: a research initiative at Cogito which is at the forefront of multiple of our active externally funded grants (from the ERC, AHRC, and Leverhulme trust) is to better understand how disinformation spreads and how to exercise competence at detecting it (Carter 2023a).

To this end, it is critical to have a clear view of the nature of disinformation; a key finding by researchers at Cogito is that extant approaches to disinformation fail to appreciate ways in which ignorance can be generated through the dissemination of true information via misleading implicature (Simion 2023). Our cutting-edge results on disinformation have informed several of our ongoing efforts to address challenges to epistemic well-being that are sourced in epistemically polluted environments.

5. Well-being and technology

One virtue of well-being definitions 1-3 in §3 was that they are built to be able to explain different dimensions of human well-being – cognitive, moral, epistemic, etc. – and with reference to different capacities humans have with different functions.

Increasingly in an age of AI, and especially given the advent of LLMs, questions of wellbeing are often pursued alongside observations about the ways that AI is shaping whether our lives are going better or worse (Carter 2023b). Two distinct lines of well-being questions have emerged in recent literature: one concerns how to understand whether and to what extent relying on AI and immersing ourselves in technology is actually good for our own well-being. A second line of inquiry centres on the question of whether various kinds of agency ascriptions are applicable to AI, and by extension, how thinly our conception of the subjects of well-being should extend.

Cogito researchers have made recent gains on both of these questions (Simion 2022; Alfano, Carter, and Cheong 2018; Kelp 2014). In the former case, researchers at Cogito have developed a theory of the conditions under which outsourcing cognitive tasks to technology undermines (or is compatible with) well-being relevant achievement (Gordon 2022b) and authenticity (Gordon 2022a). In the latter case, researchers at Cogito have extended the functionalist approach to norms that underpins the definition of well-being in §3 to AI (cf., Simion and Kelp 2023; Carter 2023) and have offered a new framework for digital knowledge (Carter 2023b).

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