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Abstract

This paper provides a philosophical assessment of leading theory-based, evidence-based and coherentist approaches to the definition and the measurement of well-being. It then builds on this assessment to articulate a reformed division of labor for the science of well-being and argues that this reformed division of labor can improve on the proffered approaches by combining the most plausible tenets of theory-based approaches with the most plausible tenets of coherentist approaches. This result does not *per se* exclude the possibility that theory-based and coherentist approaches may be independently improved or amended in the years to come. Still, together with the challenges that affect these approaches, it strengthens the case for combining the most plausible tenets of those approaches.

1. Introduction

Over the last two decades, much empirical and theoretical work across philosophy and the empirical sciences has been devoted to the definition and the measurement of well-being (e.g. Adler, 2011; Fleurbaey and Maniquet, 2011; Hausman, 2012). However, widespread disagreements remain regarding both the definition and the measurement of well-being (e.g. Adler and Fleurbaey, 2016; Fumagalli, 2021; Hausman, 2015). In particular, rather different positions are advocated about the issue of what role philosophical theories and empirical findings should respectively play in the science of well-being, i.e. the wide range of studies that aim to identify descriptively and normatively adequate definitions and measures of well-being. Three competing positions about this issue are especially prominent. First, theory-based approaches (henceforth, TBAs) prescribe a sharp division of labor whereby philosophers should provide general theories of well-being, whereas empirical scientists

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should develop measures of well-being grounded on philosophers' theories (e.g. Hassoun, 2019; Sumner, 1996; Van der Deijl, 2017a). Second, *evidence-based approaches* (henceforth, EBAs) hold that the science of well-being should be grounded on 'direct measures' of well-being and take 'as a prime objective the quantitative study of the determinants of well-being' (Layard, 2010, p. 535; also Frijters et al., 2020; Seaford, 2011). And third, *coherentist approaches* (henceforth, CAs) hold that researchers 'need to practice science and philosophy in a joined up manner' and that the science of well-being should work 'both from below – the existing empirical base – and from above – the relevant [philosophical] theories, and then synthesizing the two' (Alexandrova, 2017a, p. 155 and p. xlii; also Haybron and Tiberius, 2015; Hersch, 2020a).

The ongoing debate concerning the merits of these approaches has widespread implications not only for philosophical reflection concerning the definition and the measurement of well-being, but also for policy evaluation. For different approaches support dissimilar definitions and measures of well-being and frequently license dissimilar evaluations of policies' welfare implications (e.g. Adler, 2019; Fumagalli, 2016a; Hausman, 2020). In this paper, I provide a philosophical assessment of leading TBAs, EBAs and CAs. I then build on this assessment to articulate a reformed division of labor (henceforth, RDL) for the science of well-being and argue that RDL can improve on the proffered approaches by combining the most plausible tenets of TBAs with the most plausible tenets of CAs. This result does not per se exclude the possibility that TBAs and CAs may be independently improved or amended in the years to come. Still, together with the challenges that affect these approaches, it strengthens the case for combining the most plausible tenets of those approaches. The paper proceeds as follows. Section 2 outlines the main tenets of TBAs and explicates three major challenges faced by these approaches. Section 3 outlines the main tenets of EBAs and explicates three major challenges faced by these approaches. Section 4 outlines the main tenets of CAs and explicates three major challenges faced by these approaches. Section 5 outlines the main tenets of RDL and explicates both in what respects exactly RDL differs from the other approaches and how these differences enable RDL to successfully address the major challenges faced by TBAs.¹

¹ I expand on the main tenets of RDL in Section 5 (rather than here) since RDL builds on the philosophical assessment of the other approaches,

Before proceeding, three preliminary remarks are in order. First, I speak of 'well-being' and 'welfare' interchangeably to indicate what is non-instrumentally good for people (e.g. Griffin, 1986, part I; Haybron and Tiberius, 2015; Sumner, 1996, pp. 20-25). In doing so, I take theories of well-being to specify both which goods/experiences are non-instrumentally good for people and in virtue of what properties or features these goods/experiences are non-instrumentally good for people (e.g. Crisp, 2006a, ch. 4; Lin, 2017a; Woodard, 2013, on explanatory theories of well-being versus merely enumerative theories of well-being). Second, I predominantly target the prescriptive issue of what approaches to the science of well-being should be adopted rather than the *descriptive* issue of what approaches are (or have been) prevalently adopted. Still, I shall expand on this descriptive issue when descriptive considerations directly bear on the prescriptive issue I target. And third, different variants of TBAs, of EBAs and of CAs may be distinguished in the recent literature on the science of well-being. Still, as illustrated in Sections 2-4, the commonalities within each set of variants suffice to plausibly classify the involved variants as variants of the same (rather than distinct) approaches. In fact, several leading authors build on the tripartition between TBAs, EBAs and CAs in their contributions to the science of well-being (e.g. Alexandrova, 2017a; Hersch, 2020a). I shall differentiate between distinct variants of specific approaches when the differences between those variants directly bear on my philosophical assessment of such approaches.

2. Theory-Based Approaches

TBAs prescribe a sharp division of labor whereby philosophers should provide general theories of well-being and empirical scientists should develop measures of well-being grounded on philosophers' theories (e.g. Hassoun, 2019; Sumner, 1996; Van der Deijl, 2017a). On TBAs, philosophers should specify which goods/experiences enhance well-being and in virtue of what properties or features these goods/experiences enhance well-being, whereas empirical scientists should determine what factors are causally and statistically related to such goods/experiences. The idea is that the science of well-being should be grounded on the best available philosophical

and the main differences between RDL and those approaches are best explicated after outlining and assessing the main tenets of such approaches.

theories of well-being – i.e. the theories that most accurately track 'what we think or feel or know about well-being' (Sumner, 1996, p. 11) and most plausibly 'explain why well-being is good for the person who has it' (Tiberius, 2007, p. 373; also Kagan, 1992, p. 185) – and that 'the proper measure of well-being [...] will depend on traditionally philosophical [theories]' (Angner, 2011, p. 128). As Hassoun puts it, 'scientists should start from a well-justified theory of well-being and then try to operationalize it to arrive at a measure adequate for their purpose' (2019, p. 524; also Van der Deijl, 2017a, p. 229, claiming that 'clear constraint on the measurement of well-being can be derived from broadly shared philosophical views').²

TBAs have been widely endorsed by philosophers (e.g. Hassoun, 2019; Sumner, 1996; Van der Deijl, 2017a). Still, TBAs face a number of challenges. Below I expand on three major challenges in turn, namely: (2.1) the challenge from *theoretical disagreements*; (2.2) the challenge from *limited measurability*; and (2.3) the challenge from *contextualism*.

- (2.1) The challenge from theoretical disagreements proceeds as follows. Philosophers have developed many different theories of well-being, which sharply disagree regarding both which goods/experiences enhance well-being and in virtue of what properties or features these goods/experiences enhance well-being (e.g. Griffin, 1986, part I; Parfit, 1984, pp. 493-502, on the entrenched tripartition between mental state theories, preference satisfaction/desire fulfilment theories and objective list theories; also Lin, 2017b; Sobel, 1997, on the often-made contrast between subjectivist and objectivist theories). Moreover, philosophers have recurrently failed to overcome these disagreements, and no single general theory of well-being is in sight (e.g. Haybron and Tiberius, 2015; Hersch, 2020a). Regrettably, the challenge goes, such disagreements severely hamper the prospects of TBAs. For on TBAs, what constructs and
- On TBAs, the merits of different measures of well-being depend on what philosophical theory of well-being is correct, but what philosophical theory of well-being is correct does not depend on the merits of well-being measures (e.g. Van der Deijl, 2017a). This does not commit TBAs' proponents to the further claim that theoretical plausibility is the only criterion that bears on what constructs and measures of well-being should be adopted. In fact, various TBAs' proponents emphasize that several criteria besides theoretical plausibility bear on what constructs and measures of well-being should be adopted across policy contexts (e.g. Van der Deijl, 2018, on the extent to which influential constructs of well-being allow for intertemporal and interpersonal aggregations of welfare measurements).

measures of well-being should be adopted for specific purposes (e.g. policies' welfare evaluations) crucially depends on which philosophical theory of well-being is correct. And the science of well-being 'would never get off the ground' if it was held hostage to philosophers' attempts to resolve the disagreements between different theories of well-being (Alexandrova, 2017a, p. xxxviii). As Haybron and Tiberius put it, 'for thousands of years hedonists, Aristotelians, and many others have failed to generate any sort of consensus about the right view of well-being. [It would be] needlessly contentious for policymakers [to commit themselves to a] contested theoretical position' (2015, p. 718).

(2.2) The challenge from limited measurability proceeds as follows. On TBAs, what constructs and measures of well-being should be adopted in the science of well-being crucially depends on which philosophical theory of well-being is correct. However, 'it is no good to decide ahead of time from a philosopher's pedestal what well-being is' (Alexandrova, 2017b, p. 135). For empirical research is directly relevant to defining (as opposed to just measuring) wellbeing (e.g. Bishop, 2015, ch. 3), and to be an object of science, well-being 'may have to be made measurable even if it was not initially' (Alexandrova, 2017b, p. 135, italics added; also Layard, 2010). In particular, to be 'usable in the sciences', philosophical theories of well-being 'must be sensitive [...] to the practical constraints of measurement' (Alexandrova, 2017a, p. xxxi, italics added; also Frijters et al., 2020). Unfortunately, the challenge goes, philosophical theories of well-being are not sensitive to such practical constraints (e.g. Benjamin et al., 2017, on the difficulties inherent in reliably measuring mental states that, on mental state theories, enhance well-being; Heathwood, 2019, on the difficulties inherent in identifying the subset of desires whose fulfilment, on desire fulfilment theories, enhances well-being). In fact, philosophers have tended to develop increasingly abstract and intricate theories of well-being (e.g. Fabian, 2021; Hersch, 2020a). This tendency, in turn, makes it increasingly difficult to derive informative welfare evaluations from such theories and 'compromises the connection between theory and measurement' (Alexandrova, 2017a, p. 27; also Bishop, 2015, ch. 1-2, holding that philosophical theorizing about well-being has long insulated itself from empirical evidence).

(2.3) The *challenge from contextualism* proceeds as follows. Philosophical theories of well-being typically target *all-things-considered* evaluations of lives and take well-being to track what is good for people *overall*, all things considered (e.g. Hausman, 2015, ch. 6; Van der Deijl, 2021). However, the challenge goes, 'the meaning of well-

being is always indexed to a *context* [and] there is no single [concept which tracks] all and only instances of well-being' (Mitchell and Alexandrova, 2021, pp. 2422 and 2424, italics added). As a result, empirical studies of well-being 'rarely operate at the level of [a] general evaluation' and frequently aim to make 'context-specific judgments of well-being' (Alexandrova, 2012, p. 682, italics added). In fact, researchers often adopt different definitions of well-being depending on what kinds of people (e.g. children versus adults) and contexts (e.g. medical versus economic contexts) they target (e.g. Alexandrova, 2017a, ch. 1-2; Chater, 2020). This, in turn, challenges TBAs' proponents to specify which definitions of well-being should be adopted for specific purposes (e.g. policies' welfare evaluations). In particular, it counsels them to relinquish their aim to identify a single general theory of well-being and focus instead on 'contextual theorizing about what well-being amounts to in different circumstances' (Alexandrova, 2017a, p. xvi; also Mitchell and Alexandrova, 2021, p. 2430, claiming that philosophers' aim to identify a single general theory of well-being 'fails to recognise the conceptual complexity of well-being and the substantial epistemic uncertainty surrounding its identification and measurement').³

3. Evidence-Based Approaches

EBAs hold that the science of well-being should be grounded on 'direct measures' of well-being and take 'as a prime objective the quantitative study of the determinants of well-being' (Layard, 2010, p. 535, italics added; also Frijters et al., 2020; Seaford, 2011). On EBAs, empirical findings provide the basis for not only measuring, but also defining well-being, and the merits of well-being measures do not depend on what philosophical theory of well-being is correct (e.g. Bishop, 2015, ch.3; Diener et al., 2009; Kahneman and Krueger, 2006). The idea is to identify statistically significant correlations

In articulating the challenge from contextualism, prominent authors advocate the adoption of so-called mid-level theories of well-being, which mediate between the general philosophical theories of well-being they criticize and specific well-being measures by targeting 'the well-being of kinds of people [...] in kinds of circumstances' (Alexandrova, 2017a, p. xxxix). I do not expand on mid-level theories since one may advocate contextualism about well-being without endorsing mid-level theories. For a critical appraisal of mid-level theories, e.g. Lin (2018a). For a more favourable appraisal, e.g. Fabian (2021).

between various proffered well-being measures and putative welfare-relevant factors (e.g. Bok, 2010; Diener et al., 2018; Layard, 2005, on correlations between subjective well-being measures and factors such as money, health and happiness) and determine whether the proffered measures vary in ways that accord with researchers' predictions about these measures and the constructs targeted by such measures (e.g. Frijters et al., 2020; also Alexandrova and Haybron, 2016; Stone, 2019, on so-called construct validation).

In recent years, several leading empirical scientists have advocated EBAs (e.g. Frijters et al., 2020; Layard, 2010; Seaford, 2011). Still, EBAs face a number of challenges. Below I expand on three major challenges in turn, namely: (3.1) the challenge from *measurement divergences*; (3.2) the challenge from *uninformativeness*; and (3.3) the challenge from *conceptual thickness*. For each challenge, I examine and rebut various ways in which the proponents of EBAs may attempt to defend EBAs against such challenge.⁴

(3.1) The challenge from measurement divergences proceeds as follows. Measurements of well-being can vary remarkably depending on what methods one uses to measure well-being (e.g. Benjamin et al., 2020, on divergences between physiological measurements and individuals' reports of the same hedonic experiences; also Alexandrova, 2005, on divergences between momentary and retrospective measurements of subjective well-being). Significant measurement divergences can be identified not only in cases where researchers target distinct well-being constructs (e.g. Tiberius, 2004, on divergences between measurements of subjective well-being and measurements of psychological well-being; also Margolis et al., 2021, on divergences between measurements of hedonic well-being and measurements of eudaimonic well-being), but also in cases where researchers target the same well-being constructs (e.g. Fumagalli, 2019, on divergences between measurements of subjective well-being; Haybron, 2008, ch. 5, on divergences between measurements of life satisfaction; Martela

Additional challenges have been raised regarding the mathematical and statistical properties of specific measures of well-being advocated by EBAs' proponents. To give one example, many psychologists rely on subjective well-being measurements as if they are linear, but only show such measurements to be ordinal (e.g. Michell, 2009). This lack of rigor, in turn, casts doubt on the accuracy and the reliability of related measurements (e.g. Wodak, 2019, for a critical appraisal of Kahneman's measurements of objective happiness). I mention these additional challenges in passing since the three major challenges I examine target EBAs in general rather than the mathematical and statistical properties of specific measures of well-being advocated by EBAs' proponents.

and Sheldon, 2019, on divergences between measurements of eudaimonic well-being). The existing divergences do not exclude that EBAs' proponents may be able to discriminate between particular measures, but challenge EBAs' proponents to specify on what grounds they purport to discriminate between competing measures. For both empirical measurements of well-being and policies' welfare evaluations significantly vary depending on what measure one adopts (e.g. Adler, 2019; Bernheim, 2016; Manzini and Mariotti, 2014, for illustrations). Regrettably, EBAs' proponents have hitherto failed to address this justificatory challenge (e.g. Hausman, 2020; Singh and Alexandrova, 2020; also Frijters et al., 2020, p. 140 and p. 160, conceding that in many cases 'the question of which is the best measure remains largely open' and it remains unclear how to 'use the many conflicting [measures] to inform policy').

A proponent of EBAs may object that despite the existing divergences between the proffered measurements of well-being, forthcoming improvements in measurement methods, observational instruments and experimental designs will soon enable empirical scientists to discriminate between competing measures of well-being and overcome the existing measurement divergences (e.g. Diener et al., 2018; Frijters et al., 2020). This objection correctly notes that various measurement divergences will likely be overcome thanks to forthcoming improvements in the measurement of well-being. However, appealing to forthcoming improvements in the measurement of well-being does not enable EBAs' proponents to address the challenge from measurement divergences. For although some measurement divergences arise from limitations inherent in the employed measurement methods, observational instruments and experimental designs (e.g. Fumagalli, 2013; Van der Deijl, 2017b, on various methods' failure to capture how individuals' tendency to adapt to affects and circumstances can alter their own hedonic evaluations), other measurement divergences relate to the supposed properties of the specific *constructs* targeted by researchers (e.g. Fumagalli, 2019; Haybron, 2005, on widespread divergences as to whether subjective well-being tracks only psycho-physical feelings or also tracks individuals' evaluative/normative attitudes regarding such feelings). And these latter divergences are likely to persist in spite of the ongoing improvements in measurement methods, observational instruments and experimental designs. More generally, it remains hard to see how EBAs' proponents may address the challenge from measurement divergences without relying on philosophical theories of well-being. For researchers 'need some prior, conceptually

coherent account of what well-being is in order to know whether [they] are measuring it correctly' (Mitchell and Alexandrova, 2021, p. 2428). And many empirical studies of the causes and the correlates of well-being 'depend essentially on philosophical presuppositions [...] about the nature of well-being' when it comes to establishing how the findings they obtain relate to well-being (Angner, 2016, p. 500; also Fumagalli, 2021).

(3.2) The challenge from uninformativeness proceeds as follows. Suppose, for the sake of argument, that EBAs' proponents are able to identify statistically significant correlations between various proffered measures of well-being and putative welfare-relevant factors. Assume further that they can establish the construct validity of the proffered measures. Even so, normative presuppositions are required to demarcate which correlations point to welfare-relevant factors (e.g. Angner, 2011; Fletcher, 2012). And construct validation cannot per se establish that the constructs targeted by EBAs have the evaluative significance required to substantiate the normative claims about well-being and the policies' welfare evaluations grounded on such constructs (e.g. Alexandrova, 2005, on momentbased hedonic satisfaction). Unfortunately, EBAs' proponents frequently presuppose (rather than show) that the constructs they target have such evaluative significance (e.g. Alexandrova and Haybron, 2016, against leading proponents of so-called positive and negative affect schedules). Moreover, EBAs' proponents commonly validate their measures against empirical findings while ignoring or disregarding normative considerations (e.g. Alexandrova, 2017a, ch. 6; Baril, 2021). This, in turn, severely constrains EBAs' informativeness. In particular, it hampers the ability of EBAs' proponents to track well-being as well-being is conceptualized and valued by the subjects they target (e.g. Fabian, 2018; Fleurbaey, 2012).

To give one example, consider Kahneman and Krueger's proposal to ground policies' welfare evaluations on the so-called U-index, which measures 'the proportion of time that people spend in an unpleasant state, and [does not require] a cardinal conception of individuals' feelings' (2006, p. 4). Despite its proponents' ambitions, this index is not plausibly taken to reliably track individuals' well-being as well-being is conceptualized and valued by individuals. For very few individuals conceive and value their own well-being simply as the accumulation of pleasant (versus unpleasant) states (e.g. Haybron, 2013; Kelman, 2005). Moreover, the proponents of the U-index have hitherto failed to clarify how exactly such index relates to individuals' well-being (e.g. Kahneman and Krueger, 2006, p. 22, for the generic claim that the U-index tracks 'an

important feature of society's well-being'; also Fumagalli, 2013, for critical discussion). This lack of specificity, in turn, casts doubt on the proffered calls to ground policies' welfare evaluations on such index (e.g. Fumagalli, 2019; Prinzing, 2021, for a critical appraisal of other calls to ground policies' welfare evaluations on hedonic indices).

A proponent of EBAs may object that empirical scientists have developed various methods to track well-being as well-being is conceptualized and valued by the subjects they target. In particular, she may maintain that empirical scientists can already provide informative first-person measurements of well-being that are based on individuals' evaluations of their own well-being (e.g. Diener et al., 2018; Layard, 2010). However, it is dubious that individuals' well-being can be reliably inferred from the proffered first-person measurements of wellbeing. The problem is not just that the response categories on which individuals' reports are based are insufficiently fine-grained (e.g. Fleurbaey and Blanchet, 2013, ch. 5) or that the available studies provide no guarantee that individuals use response scales comparably (e.g. Fumagalli, 2013). Rather, the main concern is that individuals' reports of well-being crucially depend on the evaluative standards that individuals adopt to assess their own subjective experiences. This dependence, together with the fact that individuals' evaluative standards vary across individuals and situations in ways that are difficult to monitor (e.g. Van der Deijl, 2017b, on cases of hedonic adaptation; Haybron, 2007, on the dependence of individuals' reports on their own expectations concerning how they ought or are likely to feel in specific circumstances), casts doubt on the prospects of empirical scientists' attempts to ground reliable inferences about individuals' well-being on the basis of first-person measurements of well-being (e.g. Fumagalli, 2019).5

⁵ A proponent of EBAs may further object that empirical scientists can ground reliable inferences about individuals' well-being by triangulating first-person measurements of well-being with independent third-person measurements of neuro-psychological magnitudes that can be plausibly taken to reliably track individuals' well-being (e.g. Berridge and Kringelbach, 2011; Kong et al., 2018, on putative cases where empirical evidence about various neural markers yields information about subjective well-being). Empirical scientists can often obtain significant epistemic benefits by triangulating independent sources of evidence about their phenomena of interest (e.g. Fumagalli, 2016b; Kuorikoski and Marchionni, 2016). However, empirical scientists currently lack sufficiently detailed accounts of how the neuro-psychological magnitudes they target relate to individuals' well-being to be able to ground reliable inferences about well-being on

(3.3) The challenge from conceptual thickness proceeds as follows. EBAs' proponents often infer that their measures reliably track individuals' well-being from the fact that these measures enhance the value of specific descriptive indices (e.g. Frijters et al., 2020, p. 137, who infer that 'subjective well-being corresponds to [...] emotional expression' after reporting 'a strong positive correlation between well-being scores and emotional expressions'). Still, one cannot justifiably infer that a measure reliably tracks individuals' well-being from the sole fact that this measure enhances the value of specific descriptive indices. This inferential constraint stems not only from the possibility (highlighted by the challenge from uninformativeness) that the constructs targeted by a given measure may significantly differ from well-being, but also from the fact that well-being itself is a thick (rather than purely descriptive) concept. The idea is that well-being 'denotes a state of the world that is intrinsically, and not merely instrumentally, valuable' (Alexandrova, 2012, p. 679), and that when we attribute well-being to people, we 'also mean to say that they have something worth having' (Tiberius, 2013, p. 217; also Tiberius and Hall, 2010). Therefore, justifiably inferring that measures which enhance the value of specific descriptive indices reliably track well-being requires one to specify how exactly such indices map on states of the world that are 'intrinsically valuable' and on goods/experiences that are 'worth having' for individuals. Regrettably, the reliance of EBAs' proponents on purely descriptive indices severely hampers their ability to address this justificatory challenge (e.g. Angner, 2011; Fumagalli, 2021). In fact, various authors note that since 'the concept of well-being is evaluative [...] to abstain from evaluation would be to [...] abandon the goal of investigating human well-being scientifically' (Prinzing, 2021, p. 293; also Margolis et al., 2021, pp. 402–403, holding that 'to endorse a measure of well-being is to take a philosophical stand. [...] There is no such thing as a value-free measure of [well-being]').

third-person measurements of such magnitudes (e.g. Adler, 2013; Ingelström and Van der Deijl, 2021). Moreover, the best available neuro-psychological findings cast doubt on the prospects of empirical scientists' attempts to develop such accounts (e.g. Fumagalli, 2013, for a critique of several authors' assumption that neatly demarcated neuro-psychological substrates reliably track well-being across individuals and choice situations; also Fumagalli, 2019, on the dependence of various third-person measurements of well-being on first-person measurements of well-being).

A proponent of EBAs may object that although several inferences from descriptive indices to normative claims about well-being are controversial, empirical scientists can ground reliable inferences about well-being on quantitative measures of empirical constructs (e.g. Bok, 2010, ch. 7, on welfare-related inferences grounded on quantitative measures of health; also Layard, 2005, ch. 3-5, on welfare-related inferences grounded on quantitative measures of happiness). However, pace EBAs, even those inferences rest on normative presuppositions about the targeted empirical constructs and the relationship between such constructs and well-being (e.g. Hausman, 2015, ch. 3; Teira, 2020, on the normative presuppositions underlying entrenched conceptualizations of health and the relationship that these conceptualizations posit between health and well-being; also Barrotta, 2008; Van der Rijt, 2013, on the normative presuppositions underlying entrenched conceptualizations of happiness and the relationship that these conceptualizations posit between happiness and well-being). And the dependence of such inferences on normative presuppositions, in turn, severely hampers the ability of EBAs' proponents to address the challenge from conceptual thickness.

To illustrate this, consider empirical scientists' attempts to ground reliable inferences about well-being on quantitative measures of happiness. A number of views have been advocated about the conditions under which happiness is plausibly regarded as intrinsically valuable (e.g. Nozick, 1989, requiring that happiness be supported by objective facts that give the involved individuals sufficient reason to be happy; Sumner, 1996, ch. 6, requiring that happiness be autonomous in the sense of not being caused by manipulation or coercion and being grounded on the involved individuals' values; Hill, 2002, requiring that happiness be deserved by the involved individuals). Moreover, empirical scientists frequently lack the information required to establish whether the conditions under which happiness is plausibly regarded as intrinsically valuable hold in concrete policy applications (e.g. Bond and Lang, 2019; Van der Rijt, 2013). And establishing whether such conditions hold in concrete policy applications typically requires empirical scientists to rely on normative presuppositions (e.g. Sumner, 1996, ch. 6, on the normative presuppositions required to establish whether happiness is autonomous; also Phillips et al., 2014, on various ways in which individuals' ascriptions of happiness to others depend on their own evaluations of others' desert).6

⁶ A proponent of EBAs may further object that empirical scientists can ground reliable inferences about individuals' well-being without having to

4. Coherentist Approaches

CAs hold that researchers 'need to practice science and philosophy in a joined up manner' and that the science of well-being should work 'both from below - the existing empirical base - and from above the relevant [philosophical] theories, and then synthesizing the two' (Alexandrova, 2017a, p. 155 and p. xlii, italics added; also Hersch, 2020a; Tiberius, 2013). On CAs, philosophical theories of well-being need to be relevant to well-being science as it is currently practised, and philosophy neither is 'in the driver's seat' - as prescribed by TBAs – nor is 'purely a passenger' – as prescribed by EBAs (Alexandrova, 2017a, p. xxxvii). The idea is that defining and measuring well-being are co-dependent and iterative tasks (e.g. Tal, 2017), and that the science of well-being should be grounded on a reflective equilibrium between the best available philosophical theories and the best available empirical findings (e.g. Alexandrova, 2017a, ch. 3; also Tiberius, 2006, p. 497, claiming that we should 'aim for coherence among our considered judgments, principles, and scientific theories [of well-being]'). As Hersch puts it, 'we cannot independently answer the question of "what is well-being?" and the question of "what counts as a measurement of well-being?" [...] To make progress in the science of well-being [we have to] coordinate between well-being theories and well-being measures' (2020a, p. 2 and p. 7; also Haybron and Tiberius, 2015).

CAs have been recently advocated by several prominent authors at the interface between philosophy and various empirical sciences (e.g. Alexandrova, 2017a, on psychology; Chater, 2020, on economics). Still, CAs face a number of challenges. Below I expand on three major challenges in turn, namely: (4.1) the challenge from *underdetermination*; (4.2) the challenge from *disciplinary conflicts*; and (4.3) the challenge from *theory indispensability*. For each challenge, I examine

rely on normative presuppositions by defining well-being in terms of empirical constructs such as pleasure and positive affect (e.g. Bishop, 2015, ch. 3). However, the proffered attempts to define well-being in terms of these empirical constructs fail to explicate in what sense exactly well-being is 'intrinsically valuable' and 'something worth having' (e.g. Fumagalli, 2019; Tiberius, 2013). Moreover, most of the available definitions of empirical constructs such as pleasure and positive affect rest, at least implicitly, on normative presuppositions (e.g. Crisp, 2006b; Heathwood, 2006, on debates as to whether pleasure involves just individuals' feelings or also their evaluative/normative attitudes regarding such feelings).

and rebut various ways in which the proponents of CAs may attempt to defend CAs against such challenge.

(4.1) The challenge from underdetermination proceeds as follows. CAs aim to provide definitions and measures of well-being that fit the best available philosophical theories and the best available empirical findings. This aim is commendable (e.g. Alexandrova, 2017a, ch. 2, for insightful criticisms of so-called 'vending machine' views, according to which philosophers alone offer ready-to-use definitions and measures of well-being). However, CAs face severe underdetermination challenges when it comes to specifying exactly which philosophical theories and empirical findings should be adopted for defining and measuring well-being. For multiple combinations of philosophical theories and empirical findings may be adopted, and different combinations frequently support dissimilar definitions and measures of well-being (Sections 2-3). Moreover, CAs' proponents have hitherto failed to provide informative criteria for discriminating between competing combinations of philosophical theories and empirical findings (e.g. how many philosophical theories of well-being should researchers draw on in their attempts to reach reflective equilibrium? How frequently should they collect and revise the relevant empirical findings? And by means of what methods should they attempt to solve trade-offs and divergences between the available theories and findings?). In fact, distinct proponents of CAs sharply disagree regarding both what combinations of theories and findings should be adopted for defining and measuring wellbeing and what criteria should be used to discriminate between competing combinations of theories and findings (e.g. Hersch, 2020a, p. 20, claiming that 'none' of the proffered versions of CAs besides the one he advocates 'get us the type of coherentism we need').

A proponent of CAs may object that CAs are not *the only* approach to the science of well-being which faces underdetermination challenges. In particular, she may maintain that all the proffered approaches to the science of well-being face underdetermination challenges. This objection correctly notes that all the proffered approaches to the science of well-being face underdetermination challenges (e.g. Section 2 on the challenge from theoretical disagreements faced by TBAs; Section 3 on the challenge from measurement divergences faced by EBAs). However, pointing to the underdetermination challenges faced by other approaches does not *per se* enable CAs' proponents to address the challenge from underdetermination. For in the case of CAs, the choice of the relevant definitions and measures of well-being is underdetermined by *both* the available

theories *and* the available findings. And CAs are vulnerable to especially severe underdetermination challenges.

To illustrate this, consider again how the crucial dependence of various well-being measurements on the evaluative standards individuals adopt to assess their own subjective experiences hampers researchers' ability to ground reliable inferences about individuals' well-being (e.g. Section 3.2 on first-person well-being measurements). This calibration problem is especially pressing for the proponents of CAs. For without properly calibrated measures, empirical findings do not enable researchers to ground reliable inferences about the constructs they target (e.g. Ingelström and Van der Deijl, 2021; Tal, 2019). And these inferential difficulties, in turn, hamper researchers' ability to reach reflective equilibrium between philosophical theories and empirical findings (e.g. Fumagalli, 2013, on studies where the proffered empirical findings track several goods/ experiences that on most theories of well-being do not count as welfare-enhancing; also Fumagalli, 2019, on studies where the proffered empirical findings track a relatively narrow subset of the goods/ experiences that on most theories of well-being count as welfareenhancing).⁷

(4.2) The challenge from disciplinary conflicts proceeds as follows. Suppose, for the sake of argument, that CAs' proponents reach agreement on which philosophical theories and empirical findings should be adopted for defining and measuring well-being. This agreement helps CAs' proponents constrain the search for adequate definitions and measures of well-being, but does not per se enable CAs' proponents to identify descriptively and normatively adequate definitions and measures of well-being. For in many cases, the available philosophical theories and empirical findings respectively provide conflicting insights concerning the merits of specific definitions and measures of well-being. And the practitioners of different disciplines frequently

A proponent of CAs may further object that researchers' determination of which philosophical theories and empirical findings should be adopted for defining and measuring well-being typically takes place in specific practical contexts and that researchers can adequately address underdetermination concerns in such contexts (e.g. Mitchell and Alexandrova, 2021; Tiberius, 2007). I shall expand on the difficulties involved in adequately addressing underdetermination concerns in specific practical contexts in Section 5.3. For now, I note that even if researchers were able to adequately address underdetermination concerns in some specific practical contexts, this would not exempt researchers from the need to address the underdetermination concerns that frequently arise across distinct practical contexts.

advocate conflicting definitions and measures of well-being (e.g. Angner, 2011; Hausman, 2012, ch. 9-10, on several conflicts between the measures of well-being that are advocated by leading economists and psychologists respectively). As a result, the mere fact that some definition or measure of well-being fits the theories and the findings entrenched in some specific discipline (e.g. psychology) falls short of indicating that such definition or measure fits the theories and the findings entrenched in other disciplines (e.g. social sciences). These disciplinary conflicts, in turn, challenge CAs' proponents to explicate by means of what criteria they purport to resolve the existing divergences between the available theories and findings. In particular, they cast doubt on the prospects of CAs' attempts to reach cross-disciplinary reflective equilibrium between philosophical theories and empirical findings (e.g. which criteria should researchers use to choose among multiple candidate reflective equilibria? How frequently should they update and possibly revise their choices of reflective equilibria? And by means of what criteria should they attempt to solve disagreements about these issues?).

A proponent of CAs may object that CAs do not require that researchers reach reflective equilibrium across all the disciplines involved in the science of well-being and allow that the practitioners of different disciplines achieve different (and possibly conflicting) reflective equilibria. In particular, she may maintain that since the practitioners of different disciplines frequently presuppose dissimilar theories of well-being and often rely on distinct sets of empirical findings about well-being, it is to be expected that they reach different (and possibly conflicting) reflective equilibria between theories and findings. However, the issue targeted by the challenge from disciplinary conflicts is not simply whether the existence of multiple (and possibly conflicting) reflective equilibria is to be expected, but rather whether researchers can ground descriptively and normatively adequate definitions and measures of well-being on a multiplicity of (possibly conflicting) reflective equilibria. And the proponents of CAs have hitherto failed to demonstrate that researchers can ground descriptively and normatively adequate definitions and measures of well-being on a multiplicity of (possibly conflicting) reflective equilibria.

To be sure, various putative reflective equilibria between theories and findings have been recently proposed across specific areas of research (e.g. Tiberius, 2018, ch. 2-4, on putative equilibria between preference satisfaction theories of well-being and empirical findings about well-being in psychology; Besser-Jones, 2014, ch. 1-2, on

putative equilibria between Aristotelian theories of well-being and empirical findings about well-being in psychology). However, pointing to these putative reflective equilibria does not *per se* enable CAs' proponents to address the challenge from disciplinary conflicts. For the availability of multiple conflicting reflective equilibria across disciplines challenges CAs' proponents to give reasons to think that cross-disciplinary reflective equilibria are within reach or at least specify what criteria should be adopted to alleviate the conflicts between the available equilibria. And the determination of what criteria should be adopted to alleviate such conflicts is, in many cases, itself contested (e.g. Fumagalli, 2021). In particular, it remains unclear on what basis researchers should resolve disagreements about what criteria to adopt and how to interpret or implement such criteria.

By way of illustration, consider Tiberius' plausible claim that philosophical theories of well-being 'ought to be compatible with psychological research on well-being' and 'should have [...] application to the real world' (2006, p. 497; also Tiberius, 2018, ch. 1-2). Researchers may agree with this claim, yet sharply disagree on how exactly conflicts between philosophical theories of well-being and psychological research on well-being should be resolved and how exactly philosophical theories should be applied to 'the real world' (e.g. Bishop, 2015, ch. 1-3; also Sections 2-4 on the dissimilar relevance that the proponents of TBAs, EBAs and CAs respectively ascribe to philosophical theories and psychological findings). And these disagreements, in turn, cast doubt on researchers' ability to ground descriptively and normatively adequate definitions and measures of well-being on a multiplicity of (possibly conflicting) reflective equilibria.

(4.3) The challenge from theory indispensability proceeds as follows. CAs' proponents frequently draw on former coherentist proposals for defining and measuring physical magnitudes (e.g. Chang, 2004, ch. 5, on temperature; van Fraassen, 2012, on mass) in their calls to adopt CAs (e.g. Alexandrova, 2017b; Hersch, 2020a). These appeals to previous episodes in the history of science highlight the potential of coherentist approaches to inform the definition and the measurement of physical magnitudes, but do not substantiate the proffered calls for CAs. In particular, it is dubious that former coherentist proposals for defining and measuring physical magnitudes provide CAs' proponents with an informative and reliable basis for defining and measuring well-being. For as explicated in Section 3.3 (and as noted by leading proponents of CAs), well-being is a thick concept rather than a purely physical magnitude. And in studying thick concepts

such as well-being, normative presuppositions are required to establish that the constructs targeted by researchers have the evaluative significance that researchers ascribe to them. The worry is not just that well-being has a normative valence that is lacked by physical magnitudes such as temperature and mass. Rather, the main concern is that – pace leading CAs' claim that philosophy neither is 'in the driver's seat' nor is 'purely a passenger' (Alexandrova, 2017a, p. xxxvii) – philosophical theories of well-being justifiably play an indispensable role in the science of well-being and that scientists who lack descriptively and normatively adequate philosophical theories of well-being often 'use the wrong measures for the wrong purposes [or even] fail to measure what matters' (Hassoun, 2019, p. 524; also Fumagalli, 2021).

A proponent of CAs may object that the challenge from theory indispensability does not cast doubt on CAs since several proffered versions of CAs allow that 'philosophers can play an important role in shaping future well-being research and its application to policy' (Tiberius, 2006, p. 494, italics added; also Alexandrova, 2017a, p. xiii, claiming that the science of well-being 'makes philosophical bets in every step of the way: concept formation, method choice, confirmation procedures'). This objection points to a similarity between the best available versions of CAs and the approaches to the science of well-being that ascribe an indispensable role to philosophical theories of well-being (e.g. Section 2 on TBAs; also Section 5 on RDL). Still, the issue targeted by the challenge from theory indispensability is not simply whether 'philosophers can play an important role' in the science of well-being, but rather whether researchers can determine how well-being is most plausibly defined and measured without grounding their proposals on philosophical theories of well-being. In this respect, it is telling that when it comes to determining how well-being is most plausibly defined and measured in controversial cases (e.g. think of the issue whether welfare is enhanced by the satisfaction of morally questionable preferences), leading proponents of CAs ground their proposals on philosophical theories of well-being rather than on a reflective equilibrium between philosophical theories and empirical findings, as CAs would prescribe (e.g. Hersch, 2020b; also Alexandrova, 2017a, p. xxxvii, claiming that 'no choice of a given construct of well-being is intelligent and justified without a theory underpinning it, and building such theories is a distinctly philosophical exercise'). This, in turn, makes it pressing for CAs' proponents to explicate how exactly the CAs they advocate differ from and improve on the TBAs they criticize and call to replace.

5. Reformed Division of Labor

As illustrated in Sections 2-4, TBAs, EBAs and CAs are vulnerable to several major challenges. In this section, I build on Sections 2-4's assessment of these approaches to articulate a *reformed division of labor* (henceforth, RDL) for the science of well-being and argue that RDL can improve on those approaches by combining the most plausible tenets of TBAs with the most plausible tenets of CAs. This result does not *per se* exclude the possibility that TBAs and CAs may be independently improved or amended in the years to come. Still, together with the challenges that affect these approaches, it strengthens the case for combining the most plausible tenets of those approaches.

RDL agrees with TBAs' call for a division of labor whereby philosophers should provide general theories of well-being and empirical scientists should develop measures of well-being grounded on philosophers' theories. In particular, RDL retains TBAs' main tenet that what constructs and measures should be adopted in the science of well-being crucially depends on what philosophical theories of well-being are correct. At the same time, RDL agrees with EBAs and CAs that the challenge from theoretical disagreements, the challenge from measurability and the challenge from contextualism (Section 2) cast doubt on the proffered versions of TBAs. To address these challenges, RDL combines the most plausible tenets of TBAs with the most plausible tenets of CAs. In particular, RDL modifies the division of labor advocated by TBAs in three substantial respects advocated by CAs. More specifically, RDL agrees with CAs that philosophical theories of well-being need to be relevant to wellbeing science as it is currently practised, that researchers should aim to provide definitions and measures of well-being that fit the best available philosophical theories and the best available empirical findings, and that researchers may occasionally have to rely on multiple theories of well-being to ground informative evaluations of policies' welfare implications.

In points 5.1-5.3 below, I outline in what respects exactly RDL differs from TBAs, EBAs and CAs and explicate how these differences enable RDL to successfully address the three major challenges faced by TBAs. In doing so, I shall occasionally mention EBAs and CAs taken collectively (rather than each of these two approaches taken individually) for reasons of expository convenience. This is not meant to indicate that RDL is equally distant from EBAs and CAs. In fact, as I illustrate below, the modifications RDL implements in TBAs bring RDL significantly closer to CAs than to EBAs. In this

perspective, RDL may be regarded as a mid-way position between the best available TBAs and the best available CAs.

- (5.1) Challenge from theoretical disagreements. RDL agrees with EBAs and CAs that philosophical theories of well-being often disagree regarding what goods/experiences enhance well-being (Section 2.1). Still, RDL rejects EBAs' and CAs' claim that the science of wellbeing 'would never get off the ground' unless philosophers resolved the disagreements between different theories (Alexandrova, 2017a, p. xxxviii; also Haybron and Tiberius, 2015, p. 718). For in spite of these disagreements, the best available philosophical theories agree on whether a number of goods/experiences enhance wellbeing (e.g. Van der Deijl, 2017a, on leading theories' agreement that health reliably tends to enhance well-being). Pace TBAs, this agreement does not per se enable philosophers to identify a single general theory of well-being. For as leading proponents of TBAs concede (e.g. Van der Deijl, 2021), the agreement between different philosophical theories often holds only at a fairly abstract level. Hence, different authors may nominally agree that specific goods/experiences enhance well-being, yet disagree on how these goods/experiences are most aptly defined and in virtue of what properties or features such goods/experiences enhance well-being (e.g. DeVito, 2000, on disagreements concerning how health is most aptly defined and in virtue of what properties or features health is plausibly regarded as welfare-enhancing). Still, the agreement between the best available philosophical theories often enables researchers to significantly constrain the set of plausible constructs and measures of well-being and reach agreement regarding several policies' welfare evaluations (e.g. Fletcher, 2021; Fumagalli, 2021, for various illustrations in the public policy domain). In this respect, leading proponents of EBAs and CAs seem to significantly overestimate both the degree of disagreement between the best available philosophical theories of well-being and the degree of agreement between such theories that is required to get the science of well-being 'off the ground'.⁸
- A critic of RDL may object that some proponents of CAs acknowledge that the agreement between the best available philosophical theories often enables researchers to significantly constrain the set of plausible constructs and measures of well-being and reach agreement regarding several policies' welfare evaluations (e.g. Hersch, 2020b). This acknowledgement, however, stands in tension with the same authors' insistence that 'we cannot independently answer the question of "what is well-being?" and the question of "what counts as a measurement of well-being?" [and that] to make progress in the science of well-being [we have to] coordinate between well-being theories and well-being measures' (Hersch, 2020a, p. 2 and p. 7).

A critic of RDL may object that philosophical theories' agreement on whether a number of goods/experiences enhance well-being does not per se enable researchers to significantly constrain the set of plausible constructs and measures of well-being and reach agreement regarding several policies' welfare evaluations because philosophical theories frequently disagree about the properties or features in virtue of which the relevant goods/experiences enhance well-being (e.g. Haybron and Tiberius, 2015). This objection correctly notes that philosophical theories frequently disagree about the properties or features in virtue of which specific goods/experiences enhance well-being. Still, these disagreements do not prevent the proponents of different philosophical theories from significantly constraining the set of plausible constructs and measures of well-being and reaching agreement regarding several policies' welfare evaluations.

To illustrate this, consider the disagreements between mental state theories and preference satisfaction theories about the properties or features in virtue of which health tends to enhance individuals' well-being. Mental state theories take health to enhance individuals' well-being to the extent that health makes individuals experience mental states that such theories regard as welfare-enhancing (e.g. pleasure). For their part, preference satisfaction theories take health to enhance individuals' well-being to the extent that individuals have actual, informed or ideal preferences for health. This difference points to a significant disagreement between mental state theories and preference satisfaction theories. For on preference satisfaction theories, individuals' preferences count as satisfied if the state of affairs targeted by these preferences obtains (e.g. Sobel, 1994). And preference satisfaction in this sense neither has to involve specific mental states nor enhances well-being in virtue of such mental states (e.g.

The tripartition between actual, informed and ideal preferences relates to the following common tripartition between actual, informed and ideal preference satisfaction theories of well-being. Actual preference satisfaction theories take individuals to be well-off to the extent that the preferences that individuals happen to have are satisfied (e.g. Gul and Pesendorfer, 2008). For their part, informed preference satisfaction theories take individuals to be well-off to the extent that they satisfy their own informed preferences, i.e. the preferences they can form on the basis of accurate information concerning the options they face (e.g. Griffin, 1986, part I). Still differently, ideal preference satisfaction theories take individuals to be well-off to the extent that they satisfy their own ideal preferences, i.e. the preferences they would have 'if they had complete information, unlimited cognitive abilities, and no lack of self-control' (Sunstein and Thaler, 2003, p. 1162; also Section 5.2 for discussion).

Hausman and McPherson, 2009). Even so, this disagreement does not prevent the proponents of mental state theories and preference satisfaction theories from agreeing on whether health reliably enhances well-being in the policy applications they target (e.g. Savulescu, 2009; Teira, 2020). In fact, the proponents of different theories frequently agree on various conditions under which specific goods/experiences (e.g. health) can be plausibly taken to enhance well-being in the policy applications they target (e.g. Kagan, 1994; Taylor, 2005, on cases where several theories agree that only those goods/experiences that directly affect individuals' lives can be plausibly taken to enhance individuals' well-being).

A critic of RDL may object that since goods/experiences such as health manifest themselves differently in different contexts (e.g. clinical psychology, preference satisfaction analysis, life satisfaction analysis), different theories' agreement on whether goods/experiences such as health reliably enhance well-being in specific policy applications does not per se enable the proponents of different theories to agree on how well-being in general should be defined and measured. This objection casts doubt on the prospects of TBAs' attempts to ground the science of well-being on a single general theory of wellbeing, but does not bear against RDL. For as noted above, RDL allows that researchers may occasionally have to rely on multiple theories of well-being to ground informative evaluations of policies' welfare implications. A critic of RDL may further object that appealing to multiple theories of well-being does not per se enable RDL to address the challenge from theoretical disagreements since the proponents of different theories frequently disagree about the relative contributions that different goods/experiences provide to well-being (e.g. think of disagreements concerning health's and happiness' relative contributions to well-being). This objection correctly notes that disagreements about the relative contributions that different goods/ experiences provide to well-being may significantly complicate attempts to assess the welfare implications of policies that involve systematic trade-offs between the relevant goods/experiences (e.g. think of policies that involve systematic trade-offs between health and happiness). Still, those disagreements do not selectively bear against RDL rather than other approaches to the science of well-being. In fact, there are reasons to think that RDL is better equipped than other approaches to deal with such disagreements (e.g. Section 4.1-4.2 on related challenges faced by CAs; also Tiberius, 2013, p. 226, claiming that, pace EBAs, 'how to weight the different components of well-being [is not] something that can be settled purely empirically').

(5.2) Challenge from measurability. RDL agrees with EBAs and CAs that to be 'usable in the sciences', philosophical theories of well-being 'must be sensitive [...] to the practical constraints of measurement' (Alexandrova, 2017a, p. xxxi, italics added; also Frijters et al., 2020) and that researchers may justifiably discriminate between distinct constructs and measures of well-being in terms of their measurability (Section 2.2). Still, RDL rejects EBAs' and CAs' claims that empirical research is directly relevant to defining (as opposed to just measuring) well-being (e.g. Bishop, 2015, ch. 3) and that well-being 'may have to be made measurable even if it was not initially' (Alexandrova, 2017b, p. 135, italics added; also Layard, 2010). For what well-being is most plausibly taken to consist in is not the same issue as what constructs and measures are most conveniently adopted for specific purposes (e.g. evaluating policies' welfare implications). And on RDL, measurability considerations may inform researchers' assessment of different constructs and measures, but do not directly bear on what well-being is most plausibly taken to consist in. To be sure, RDL grants that 'how we use concepts such as 'well-being' [reveals our] cares and commitments' and so may bear on 'philosophical theorizing about these concepts' (Tiberius, 2013, pp. 222-23; also Section 2 on TBAs' requirement that theories of well-being track what people 'think or feel or know about well-being'). Even so, RDL denies that measurability considerations directly bear on the plausibility of philosophical theories of well-being.

A critic of RDL may object that although measurability considerations do not directly bear on the plausibility of philosophical theories of well-being, measurability considerations directly determine which philosophical theories should be adopted in the science of well-being (e.g. Tiberius, 2007, p. 386, claiming that 'a normative theory of prudential value that has no practical application is not an adequate theory'). This objection correctly notes that if most of the goods/experiences that some theory takes to be welfare-enhancing cannot be reliably measured, this will significantly hamper this theory's potential to ground informative evaluations of policies' welfare implications. However, one may consistently agree that what theories should be adopted in the science of well-being frequently depends on measurability considerations, yet deny that measurability considerations directly determine which philosophical theories should be adopted in the science of well-being (e.g. Fumagalli, 2021; also Baril, 2021, p. 261 and p. 263, holding that although 'well-being as philosophers conceive of it is not something that can easily be measured', researchers should aim to 'measure well-being as philosophers

conceive of it'). In fact, it is dubious that measurability considerations directly determine which philosophical theories should be adopted in the science of well-being.

To illustrate this, consider how measurability considerations bear on the justifiability of adopting actual, informed or ideal preference satisfaction theories of well-being to assess policies' welfare implications. Researchers often lack the information required to identify individuals' ideal preferences (e.g. Fumagalli, 2016a). Moreover, various criteria have been proposed to identify individuals' ideal preferences, and different criteria single out different subsets of preferences as ideal (e.g. Sobel, 2009). As a result, ideal preference satisfaction theories rarely ground informative evaluations of policies' welfare implications. This, however, by no means entails that measurability considerations directly determine whether researchers should adopt actual, informed or ideal preference satisfaction theories to assess policies' welfare implications.

To see this, compare actual and informed preference satisfaction theories. Actual preference satisfaction theories typically fare better than informed preference satisfaction theories in terms of measurability. For individuals' actual preferences are typically easier to identify than individuals' informed preferences (e.g. Van der Deijl, 2018). Even so, actual preference satisfaction theories are widely regarded as significantly less plausible than informed preference satisfaction theories. For individuals' actual preferences are frequently based on inaccurate or false information about choice options (e.g. Hausman, 2011) and often track factors that seem prudentially irrelevant (e.g. Kahneman, 2003, on frames) or even detract from what most theories regard as individuals' welfare (e.g. Harsanyi, 1982, on antisocial preferences). Now, the mere fact that actual preference satisfaction theories typically fare better than informed preference satisfaction theories in terms of measurability by no means implies that researchers should adopt actual (rather than informed) preference satisfaction theories. For in many cases, criteria such as theoretical plausibility justifiably trump measurability considerations in determining whether researchers should adopt actual or informed preference satisfaction theories. In fact, measurability considerations do not seem to directly determine whether researchers should adopt actual or informed preference satisfaction theories even in those cases where measurability considerations trump other criteria such as theoretical plausibility. For both measurability and many of those criteria (including theoretical plausibility) are plausibly taken to come in degrees. And informed preference satisfaction theories often fare sufficiently well in terms of measurability and such criteria to justify

adopting informed (rather than actual) preference satisfaction theories even if the former fare less well than the latter in terms of measurability (e.g. Bernheim, 2016; Manzini and Mariotti, 2014, for illustrations).¹⁰

(5.3) Challenge from contextualism. RDL agrees with EBAs and CAs that researchers adopt a variety of well-being constructs and measures and that researchers may occasionally have to rely on multiple theories of well-being to ground informative evaluations of policies' welfare implications (Section 2.3). Still, RDL rejects EBAs' and CAs' contextualist claims that 'the meaning of well-being is always indexed to a context' and that well-being itself has dissimilar definitions depending on what kinds of people and contexts one targets (Mitchell and Alexandrova, 2021, p. 2424, italics added; also Alexandrova, 2017a, ch. 1-2; Chater, 2020). There are at least two grounds on which RDL rejects these contextualist claims. First, one may consistently hold that the justifiability of adopting specific well-being constructs and measures varies significantly across people and contexts (e.g. Ryff et al., 2021), yet deny that what well-being *itself* is varies significantly across people and contexts (e.g. Fletcher, 2013). In particular, observed contextual variations in the proffered welfare evaluations and measurements can be plausibly accounted for without endorsing contextualism about well-being (e.g. Hawkins, 2019; also Fletcher, 2019, on the possibility to account for observed contextual variations in welfare evaluations and measurements by pointing to researchers' focus on different 'aspects' of a context-invariant notion of well-being). And second, the availability of contextual notions of well-being does not exempt researchers from the need to identify more general, cross-contextual notions of well-being.

To see this, consider recent calls to ground policies' welfare evaluations on contextual notions of 'child well-being' (e.g. Alexandrova,

The illustrations in the main text do not imply that researchers should generally adopt informed (rather than actual or ideal) preference satisfaction theories in the science of well-being. For what theories are justifiably adopted in the science of well-being may depend on various criteria besides how these theories fare in terms of measurability and theoretical plausibility (e.g. Elliott, 2017; Khosrowi, 2019, on various trade-offs between the epistemic and non-epistemic values involved in assessing uncertain policy-relevant hypotheses). I mention these additional criteria in passing since my claim that measurability considerations do not directly determine which philosophical theories should be adopted in the science of well-being holds irrespective of what view one advocates about such additional criteria.

2017a, ch. 3). These contextual notions may be used to ground informative evaluations of various policies' welfare implications (e.g. think of some children-related policies). Still, researchers are often unable to identify descriptively and normatively adequate definitions and measures of child well-being without taking a position on how more general, cross-contextual notions of well-being should be defined (e.g. Lin, 2018a). In this respect, it would be of limited import to object that cross-contextual notions of well-being are 'best understood as a conjunction or disjunction of different contextual well-being constructs [to which they do not add] any substantive conceptual content' (Mitchell and Alexandrova, 2021, p. 2427). For contextualists have hitherto failed to demonstrate that cross-contextual notions of well-being are 'best understood' as a mere conjunction or disjunction of contextual well-being constructs. And the contextual notions of well-being targeted by researchers frequently lack the evaluative significance required to substantiate the normative claims about well-being and the policies' welfare evaluations grounded on such notions (e.g. Fletcher, 2019, on contextualists' difficulty to establish in virtue of what properties or features various contextual notions are plausibly regarded as notions of well-being rather than some other concept).

A critic of RDL may object that although the availability of contextual notions of well-being does not exempt researchers from the need to identify cross-contextual notions of well-being, the crosscontextual notions of well-being figuring in RDL need to be indexed to a context if researchers are to ground plausible normative claims about well-being and reliable policies' welfare evaluations on such notions (e.g. Mitchell and Alexandrova, 2021, p. 2425, holding that well-being concepts 'only make sense when used with particular people, in appropriate contexts'). The idea would be that cross-contextual notions of well-being do 'not enable [researchers] to make well-being ascriptions in practice [without] additional substantive conceptual content' (Mitchell and Alexandrova, 2021, p. 2426) and that 'there will be people to whom [such conceptual content] doesn't apply' (Tiberius, 2013, p. 229). This objection correctly notes that the justifiability of policies that aim to enhance individuals' well-being may crucially rest on the extent to which these policies respect individuals' autonomy and welfare evaluations (e.g. Fabian and Pykett, 2022; Fumagalli, 2016a, on cases where violations of individuals' autonomy undermine the justifiability of welfare-enhancing policies; also Alexandrova and Fabian, 2022; Singh and Alexandrova, 2020, for an informative critique of technocratic approaches to well-being public policy). Still, the objection does not

selectively bear against RDL rather than other approaches to the science of well-being. For concerns about the extent to which policies respect individuals' autonomy and welfare evaluations do not affect RDL more than other approaches to the science of well-being (e.g. when policies target large population segments, respecting the autonomy and the welfare evaluations of all the involved individuals can be prohibitively complicated no matter what approach to the science of well-being one advocates). In fact, there are reasons to think that RDL is better equipped than other approaches to deal with such concerns.

To illustrate this, consider situations where researchers have reasons to think that the welfare evaluations put forward by the individuals they target fail to reliably track individuals' own well-being (e.g. Nussbaum, 2000, ch. 2; Sen, 1985, on situations where oppressed and marginalized individuals who have adapted to oppressed and marginalized circumstances claim not to regard goods/experiences such as autonomy and freedom as welfare enhancing). In these situations, the cross-contextual notions of well-being figuring in RDL can effectively help researchers assess, compare and (occasionally) correct the welfare evaluations put forward by the individuals they target (e.g. Hawkins, 2019). Moreover, it is dubious that contextual notions of well-being can perform this important role as effectively as cross-contextual notions of well-being. For enabling researchers to assess, compare and (occasionally) correct the welfare evaluations put forward by the individuals they target would require contextualists to provide clear specifications of how exactly kinds of people and contexts are to be defined and how exactly such kinds and contexts are related. And contextualists have hitherto failed to provide such specifications (e.g. Fletcher, 2021). This, in turn, greatly constrains contextualists' ability to help researchers assess, compare and (occasionally) correct the welfare evaluations put forward by the individuals they target (e.g. Lin, 2018b, on the risk that contextualism about well-being may lead to an unruly proliferation of contextual notions of well-being). 11

A critic of RDL may further object that 'contextualism does not imply an arbitrary proliferation of well-being concepts' and 'does not commit [researchers to posit] absurdly fine-grained and trivial' well-being concepts (Alexandrova, 2017a, p. 24). However, while providing some examples of 'absurdly fine-grained and trivial' well-being concepts (e.g. Alexandrova, 2017a, p. 24, on 'left foot in November well-being'), contextualists have not specified informative and detailed criteria for establishing whether or not a given well-being concept is 'absurdly fine-grained and trivial' and how to resolve disagreements about this issue. Moreover, contextualists should provide clear specifications of how exactly kinds of people

6. Conclusion

Over the last two decades, competing TBAs, EBAs and CAs to the definition and the measurement of well-being have been advocated in the literature across philosophy and the empirical sciences. These approaches have become highly prominent among philosophers and empirical scientists. Still, none of those approaches – as they currently stand – provides a descriptively and normatively adequate foundation for the science of well-being. The RDL articulated in this paper can improve on the proffered approaches by combining the most plausible tenets of TBAs with the most plausible tenets of CAs. This result does not *per se* exclude the possibility that TBAs and CAs may be independently improved or amended in the years to come. Still, together with the challenges that affect these approaches, it strengthens the case for combining the most plausible tenets of those approaches.¹²

References

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and contexts are to be defined and how exactly such kinds and contexts are related if they are to counter the risk that contextualism about well-being may lead to an unruly proliferation of contextual notions of well-being.

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