

Well-Being Coherentism

Gil Hersch

ABSTRACT

Philosophers of well-being have tended to adopt a foundationalist approach to the question of theory and measurement, according to which theories are conceptually prior to measures. By contrast, social scientists have tended to adopt operationalist commitments, according to which they develop and refine well-being measures independently of any philosophical foundation. Unfortunately, neither approach helps us overcome the problem of coordinating between how we characterize well-being and how we measure it. Instead, we should adopt a coherentist approach to well-being science.

- 1 *Introduction*
 - 2 *Coordinating Between Well-Being Theory and Measurement*
 - 3 *Philosophers' Well-Being Foundationalism*
 - 4 *Social Scientists' Well-Being Operationalism*
 - 5 *Turning to Coherentism*
 - 6 *Developing Well-Being Coherentism*
 - 7 *Conclusion*
-

1 Introduction

Philosophers have developed a wide range of philosophical theories of well-being, including hedonism, desire-fulfillment, objective list theories, the capabilities approach, perfectionism, and authentic happiness, among others. Likewise, social scientists have developed a variety of measures that might be thought of as measures of well-being. These include traditional economic measures, such as Gross Domestic Product (GDP) per capita, Subjective Well-Being (SWB) measures, such as questionnaires about how one evaluates her life as a whole, as well as capabilities-based measures such as the OECD's Better Life Index (BLI).

When developing these theories and measures with the goal of advancing well-being science, which, broadly understood, deals with the conceptualization, measurement, explanation, and evaluation of well-being, both philosophers and social scientists tend to work independently of one another.¹ On the one hand, some philosophers hope to create a theoretical foundation that social scientists can use as a base for their measures, a project that purportedly does not require philosophers to engage with the actual measures social scientists devise. On the other hand, social scientists hope to avoid difficult philosophical questions, and so tend to seek to develop and refine well-being measures independently of any particular philosophical foundation.²

However, to make progress in the science of well-being requires that we somehow coordinate between well-being theories and well-being measures. For philosophy to contribute to the advancement of the science of well-being, philosophical work must have some bearing on the way the science is done and on the development of well-being measures. On the other hand, for social scientific measures to be relevant to well-being science, we must have reason to view such measures as actually being measures of well-being simpliciter.³ The need of the philosopher to come up with theories that are relevant to well-being science, and the need of the social scientist to come up with measures that are relevant to well-being, makes it the case that we need to achieve some kind of coordination between theories and measures.

¹ There are exceptions to this generalization, some of which are discussed in §5. One notable exception worth mentioning is the work that was conducted as part of Dan Haybron's 'Happiness and Well-Being: Integrating Research Across the Disciplines' three-year, \$5.1 million project, that aimed at 'fostering dialogue and collaboration among well-being researchers across a wide range of disciplines, including the sciences, philosophy, and theology and religious studies' (<http://www.happinessandwellbeing.org>).

² Not all philosophical work on well-being is meant to bear on the science and measurement of well-being, and there are a variety of reasons philosophers are interested in well-being. We might care about hedonism because we are concerned with a good way to help our friend, not because we care about measuring well-being. Similarly, not all social scientific measures that might have some relevance to well-being must necessarily be used for measuring well-being. We might be interested in GDP solely because we care about the economy, not its effects on people's well-being.

³ In discussing 'well-being simpliciter' here and throughout the article I mean something akin to what most philosophers mean when they talk about well-being, and to what Alexandrova ([2017]) calls 'well-being all-things-considered'.

An approach that can help in fostering the requisite coordination in well-being science is coherentism. According to this approach, our focus should be on scientific progress that is achieved by honing in on a theory of well-being and on a measure of well-being in an iterative process through which we go back and forth between measures and theories. Adopting coherentism in the context of well-being science allows us to better coordinate between philosophical theories of well-being and potential social scientific measures of well-being in a way that can advance well-being science.

In §2, I introduce the problem of coordinating between well-being theory and measurement. In §3, I argue that philosophers of well-being have generally adopted a foundationalist approach to well-being that does not address the coordination problem. In §4, I criticize the general operationalist approach well-being social scientists have adopted for similarly failing to address the coordination problem. In §5, I introduce several approaches to well-being science that recognize a coordination problem and aim to address it. In §6, I present Chang's ([2008]) coherentism and discuss it in the context of well-being science. I conclude in §7.

2 Coordinating Between Well-Being Theory and Measurement

Philosophers of science distinguish between characterization and representation, or between theory and measure (Bradburn et al. [2017]; Chang [2004]; van der Deijl [2017]; van Fraassen [2008]). What theory best characterizes well-being is a separate (albeit related) question from how best to measure that characterization. For example, we might debate how to characterize well-being, by either appealing to a preference-satisfaction theory or by appealing to a mental-states theory of well-being. Even if we do not agree on which characterization is correct, we can still debate how to measure some particular way of characterizing well-being.

If one characterizes well-being as constituted by a person's mental states, it might seem reasonable to defend the use of SWB measures as a way of measuring well-being, because how an individual evaluates how well her life is going for her can seem directly related to her mental state. This intuitive connection is why Diener *et al.* ([2009]) argue that SWB measures are useful for well-being public policy. But it also seems reasonable to hold, as Kahneman does, that well-being, characterized as constituted by mental-states, is more appropriately measured in terms of objective happiness, or experienced utility (Kahneman uses the two interchangeably (Kahneman *et al.* [2004])).⁴

But we can also agree on a particular measure, for example SWB, while we disagree on what theory of well-being we take this measure to represent. Both Angner ([2011]) and Adler ([2013]) argue that it would be a mistake to appeal to a mental-states theory of well-being to defend the use of SWB measures because, in their view, well-being is not constituted by positive mental-states. Instead of defending the use of SWB measures by appealing to a mental-states theory of well-being, both Angner and Adler explore the possibility of defending SWB measures by appealing to a preference-satisfaction theory of well-being. Angner proposes that even if we accept that mental-states do not constitute well-being, SWB measures might still be useful measures of well-being characterized as constituted by preference-satisfaction, as long as we treat SWB measures as '(imperfect) indirect measures of well-being' (Angner [2011], p. 126). Adler argues, along similar lines, that one might try to defend the use of SWB measures by appealing to a

⁴ Kahneman takes experienced utility to be a summation of momentary utilities, which are represented 'exclusively by measures of the affective state of individuals at particular moments in time' (Kahneman [2000], p. 8). Since momentary utility takes self-reports of affective states at specific moments, it relies less on the subject's memory, and thus less susceptible to distortion.

preference-realization (PR) defense, according to which an individual's self-reported SWB is a defeasible indicator of her preference realization (or satisfaction).⁵

What Angner and Adler demonstrate is the potential for disentangling the claim that SWB measures are a good measure of well-being from a commitment to a mental-states theory of well-being. Instead, we might consider SWB measures to be good measures of well-being, even if we believe well-being is constituted by preference-satisfaction. It is helpful to conceptually disentangle what theory one uses to characterize well-being and how one measures a given characterization, since it can prevent the confusion that sometimes results in social scientists and philosophers talking past each other when arguing for and against different potential well-being theories and measures. As Angner and Adler demonstrate, conceptually, any measure of well-being can represent any theory we might use to characterize well-being.

Recognizing that this conceptual space between theory and measurement exists gives rise to what van Fraassen ([2008]), following Mach, calls the ‘problem of coordination’. The problem is that of a vicious circularity: to make theoretical assertions about well-being requires empirical content, and to obtain this empirical content requires establishing some measurement procedure. However, to establish a measurement procedure requires that we have a theoretical framework, and to construct this theoretical framework requires obtaining some empirical content.

Looking at a few historical cases (the history of the thermometer and the measurement of time) van Fraassen concludes that ‘[t]he questions *What counts as a measurement of (physical quantity) X?* and *What is (that physical quantity) X?* cannot be answered independently of each other’ [Italics in original] (van Fraassen [2008], p. 116).⁶ We need to appeal to whatever the answer

⁵ Adler subsequently rejects the preference-realization defense on the grounds that SWB surveys are inferior to stated-preference surveys.

⁶ See also (Tal [2013]) for a discussion of the problem.

is to one question in order to successfully answer the other question. In the context of well-being science, applied to the decidedly non-physical quantity of well-being, the problem is that while we can conceptually disentangle well-being theory from well-being measurement, we cannot independently answer the question of ‘*What is well-being?*’ and the question of ‘*What counts as a measurement of well-being?*’.

Just as it appears in the physical sciences, this coordination problem appears also in the well-being context. Advancing well-being science requires genuinely addressing this coordination problem between theory and measurement. We have theories of well-being and measures of well-being, but in the context of well-being science we must somehow coordinate between the two if we are to settle the question of ‘what is well-being?’ on the one hand, and the question of ‘how do we measure well-being?’ on the other.

However, as I argue in the next section, philosophers working on well-being science usually ignore the coordination problem and instead tend to adopt a foundationalist approach to well-being science. In §4, I argue that social scientists fare no better at addressing this problem, and instead generally adopt an operationalist approach to well-being measurement. In §5 and §6, I argue that by adopting a coherentist approach to well-being science (explicitly or implicitly), it is likely possible to successfully address the problem of coordination in the context of well-being science.

3 Philosophers’ Well-Being Foundationalism

Philosophers of well-being have tended to adopt a foundationalist approach to the question of theory and measurement, even if they have only done so implicitly. A foundationalist approach to well-being science means that one believes that there exists a hierarchical structure in which well-

being theories are more basic, and conceptually prior, to well-being measures (Foley [1998]). That theories are more basic than measures entails a sort of primacy, in which measurement depends on theory, but theory does not depend on measurement.⁷

This foundationalist approach manifests itself in the attitudes philosophers have adopted towards the problem of coordination in the context of well-being. Many philosophers are committed to a particular theory of well-being, often without regard to the question of measurement. There need not be anything problematic in and of itself with theorizing about well-being without aiming for it to serve as a foundation for well-being science. When, for example, Crisp ([2006]) defends a hedonic theory of well-being, or Hurka ([1993]) defends a perfectionist theory, they make philosophical arguments in favor of their chosen theory, and raise and rebut counterarguments and counterexamples that have nothing to do with measurement questions. However, if one is already committed to a particular theory of well-being, foundationalism is all too natural an approach to well-being science. After all, if one is sufficiently confident that they know what the correct theory of well-being is, it should seem obvious to them that they have a solid foundation on which to build up to a well-being measure. Indeed, most philosophers who work on well-being are committed to a particular theory of well-being, usually without reference to social scientific discussions of well-being measures.⁸

Even those philosophers who are not committed to a particular well-being theory tend to accept that if agreement were to be had on what the correct theory of well-being is, then it is

⁷ The way I describe foundationalism is reminiscent of the way apriorists think of axioms in economics, particularly Ludwig von Mises of the Austrian school of economics. For a good overview of apriorism in economics see (Lagueux [1998]). As Herfeld ([2019]) (citing (Lewin [1996])) succinctly puts it, apriorism is ‘the view that the fundamental axioms of economics are derived before, and independent of, any empirical observation—a view that had been prevalent in economics at the end of the nineteenth century’ (p. 52).

⁸ Bishop ([2015]) makes a similar criticism against what he calls the ‘philosophy first’ approach to well-being, which holds that the ‘philosophical study of the nature of well-being is logically prior to any scientific findings about well-being’ (p. 20). When we adopt a philosophy first approach in our engagement in well-being science it entails that philosophers can ignore the social scientists, while the social scientists cannot ignore the philosophers.

possible to answer the downstream question of how to measure well-being. Yet disagreements regarding theories of well-being have been going on since antiquity, with no end in sight. Consequently, a literature has emerged that attempts to get traction on the question of well-being measures and policies by generating theory-free or theory-neutral accounts that can then be used as a foundation for justifying well-being measure choice.⁹

One of Hausman's ([2012]) aims is to disconnect the justification for the use of utility as a well-being measure in welfare economics from any philosophical theory of well-being, by taking preference satisfaction to merely be evidence of well-being. According to Hausman's evidential account, 'preference-satisfaction can serve as evidence of well-being, regardless of what theory of welfare one accepts' (p. 88). Not only does it not matter what theory one accepts, according to Hausman, '[t]o reach conclusions [...] they do not need a philosophical *theory*' [emphasis in original] (p. 92). Hausman goes to great lengths to propose and defend his evidential account of preferences because he wishes to avoid the possibility that welfare economics relies on a mistaken theory of welfare. It is only because he is implicitly committed to foundationalism that Hausman must consider it necessary to find a way to defend the use of a well-being measure without appealing to a well-being theory.

In light of ongoing disagreement among philosophers regarding the nature of well-being, Haybron and Tiberius ([2015]) offer an account—pragmatic subjectivism—that is meant to escape the need to decide on a particular philosophical theory of well-being when deciding on well-being policy. That Haybron and Tiberius find a need for a theory-free account to defend well-being policy reveals their foundationalist commitments—one first commits to a well-being theory and then proceeds to measurement and policy. Haybron and Tiberius' pragmatic subjectivism is a

⁹ In some of my previous work I have also adopted such a foundationalism. See (Hersch 2015, 2020).

concerted effort to avoid the need to commit to a particular theory of well-being. They claim that '[p]ragmatic subjectivism is neutral with respect to theories of well-being—Aristotelian, hedonistic, preference satisfaction, etc.; it thus insulates policy from needing to take a stand on philosophical debates about the character of well-being' (p. 719).

Lastly, van der Deijl ([2017]) seeks to avoid problems that a foundationalist commitment leads to: 'Assuming that researchers would like to construct well-being measures on the basis of a thorough philosophical foundation, it is not clear which philosophical foundation they should use' (p. 210). Van der Deijl believes that '[i]t would be deeply undesirable if a well-being construct in scientific practice would rely on the plausibility of a highly contentious view in a philosophical debate' (pp. 214-5). As an alternative, he argues that well-being measures should at the very least accommodate two intuitions that underlie all major theories of well-being—what is good for someone is subject-dependent and that people face an epistemic limitation when it comes to knowing how well their life is going.

Hassoun ([2019; unpublished]) provides the most explicit endorsement of well-being foundationalism. While she does not explicitly discuss foundationalism, Hassoun discusses what, following (Cartwright [1999]), she calls the Vending-Machine view—the position that theories contain within themselves the resources to determine what constitutes successful measurement. When Hassoun argues in favor of a Limited Vending Machine view, according to which 'theories would be vending machines for some perhaps very limited domain and purpose' (Hassoun [2019], p. 522), she suggests that we should 'start with a full theory of the phenomenon for which we are trying to account and then try to model it' (p. 522). The motivation for this position stems from Hassoun's worry that 'scientists often do not understand what they are trying to do—they often do

not have a well-worked out theory at all—and, so, use the wrong measures for the wrong purposes, develop poor proxies, or simply fail to measure what matters’ (p. 524).¹⁰

Adopting foundationalist commitments entails a two-step approach to well-being science. First, either determine the correct theory of well-being or determine some theory-free account to circumvent the need to select a correct theory. Second, figure out which measure is the best representation of said theory. For the foundationalist approach the first step is entirely independent of the second. No insights regarding measures need to have any bearing on how one solves the first step. The foundational approach entails that philosophers can, for all intents and purposes, remain entirely ignorant of work that is conducted on well-being measurement in the social sciences.

One problem with adopting a foundationalist position in the context of well-being science is that in the current philosophical climate there is too much disagreement as to which well-being theory ought to serve as such a foundation. What philosophers offer social scientists is a wide array of choices as to what to treat as a foundation for their measures. Even if social scientists were to share such a foundationalist view (something I argue in the next section that they do not do), they would have too extensive a menu of options to choose from. This criticism would be addressed if philosophers were to come to some agreement on what the correct theory of well-being is. However, this lack of consensus reflects both the current state of philosophical investigation, and the state of things in the foreseeable future.

More importantly, such an approach to the science of well-being altogether ignores the problem of coordination that philosophers of science have made clear is an important issue that arises whenever one aims to develop scientific theories and measures. This approach implies that

¹⁰ I discuss Hassoun’s arguments against coherentism in §6.

empirical input is unnecessary when developing theories aimed at characterizing some concept. Foundationalism does not acknowledge that coordinating between theory and measurement poses any difficulties, nor does it acknowledge that overcoming the problem and coordinating between theory and measurement requires working from both directions simultaneously. Thus, when philosophers adopt a foundationalist approach to well-being, they do not even acknowledge the problem of coordination, much less attempt to overcome it.

Contrary to the foundationalist approach, a coherentist alternative does aim at addressing the problem of coordination, and I discuss it in §5. But before turning to well-being coherentism, in the next section I argue that while philosophers of well-being ignore the problem of coordination by adopting foundationalist commitments, social scientists ignore the problem of coordination by adopting their own operationalist commitments.

4 Social Scientists' Well-Being Operationalism

Philosophers of well-being are not the only ones that generally fail to address the problem of coordination. The flip side of the foundationalist commitments many philosophers of well-being hold can be thought of as an operationalist commitment held by well-being social scientists. According to Bridgman ([1927]), who coined the term, when adopting an operationalist approach ‘we mean by any concept nothing more than a set of operations; the concept is synonymous with the corresponding set of operations’ (p. 5). Expanding on this Bridgman writes:

In *principle* the operations by which length is measured should be *uniquely* specified. If we have more than one set of operations, we have more than one concept, and strictly there should be a separate name to correspond to each different set of operations (p. 10; [emphases original]).

Bridgman, however, was not as extreme as this claim might imply. Bridgman accepted that in practice we could use the same name for different concepts if they provided mutually consistent

results where they overlap. The important point, according to Chang ([2004]), is to remain cautious and avoid getting ‘into the sloppy habit of using one word for all sorts of different situations without checking for the required convergence in the overlapping domains’ (Chang [2004], p. 145).

Many well-being social scientists have taken to heart something like Bridgman’s lessons, since most work hard to use operationally well-defined concepts. A purely operationalist approach to well-being attributes to each measure its unique constructed characterization. We end up having a measure of well-being*, well-being**, well-being***, and so on, with no purported connection between these different measures and between these measures and well-being simpliciter. Indeed, many of the measures in the social scientific well-being literature can be thought as taking an operationalist approach, since usually social scientists do not purport to be measuring well-being simpliciter, but rather things that might be related to well-being in some way, like GDP, SWB, or other constructs.¹¹

For example, one can do serious work relating to the measurement of GDP without making any specific claims about how GDP relates to well-being. Most economists, when they are being careful, do not think that GDP is necessarily linked to well-being, and simply view GDP as only measuring economic production. As Nordhaus & Tobin ([1972]) succinctly put it: ‘GNP is not a measure of economic welfare [...] Economists all know that, and yet their everyday use of GNP as the standard measure of economic performance apparently conveys the impression that they are evangelistic workshippers [sic.] of GNP’ (p. 4). Once we construe GDP as an operationalization of well-being*, we are better able to see that the relationship between GDP and well-being simpliciter

¹¹ As will be discussed shortly, the claim here is that social scientists have adopted this kind of operationalist approach to well-being simpliciter, not to the more specific constructs such as SWB, for which they deeply care about the construct validity.

remains unspecified. Since those working on GDP do not purport to claim that GDP is a measure of well-being, we can understand what they are doing as adopting an operationalist approach to well-being.

Similarly, those working on SWB measures can simply view SWB measures as measuring subjective well-being, which need not be linked in any way to well-being simpliciter. O'Donnell *et al.* ([2014]) take this approach, when they say that ‘there remain differences about how to define “overall wellbeing”’ (p. 10). Instead of trying to tackle well-being, they focus on happiness and life satisfaction: ‘One solution is to use measures of subjective wellbeing (sometimes expressed as SWB) by which we mean the answers to questions about people’s happiness and satisfaction with their lives’.¹² This way, the nature of the relationship between SWB and well-being simpliciter remains unspecified. Without further argument, we can at most view SWB as representing well-being**, and we should think of those working on SWB as adopting an operationalist approach to well-being.

Lastly, Kahneman’s ‘objective happiness,’ which I discussed earlier, is objective in the sense that it is an aggregation, according to objective rules, of subjective experiences during short moments of time. On the relationship between objective happiness and well-being Kahneman writes:

The concept of objective happiness is not intended to stand on its own, and is proposed only as a necessary element of a theory of human well-being. A comprehensive account of well-being inevitably brings in philosophical considerations [...] and a moral conception of ‘the good life’ [...] (Kahneman [2000], p. 683)

Again, viewing objective happiness as an operationalization of well-being*** helps make clear the point that a purported relationship between objective happiness and well-being simpliciter

¹² O'Donnell *et al.* are not being entirely clear that this is all they are presuming to do, since they conclude by saying ‘So in this report we focus on subjective wellbeing – or what, for short, we shall often simply call “wellbeing”’ (p. 10). As a result, they seem to be implicitly assuming that well-being is constituted by life satisfaction, rather than avoiding taking a stand on the issue.

remains unspecified. Consequently, Kahneman can also be viewed as adopting an operationalist approach towards well-being.

The central aspect of this operationalist approach is that there is no need to make claims about the relationship between well-being*, well-being**, well-being***, and well-being simpliciter. The social scientists working on these different constructs can continue their work without taking a stand on the relationship between these different operationalizations themselves, and between them and ‘well-being simpliciter.’ There are valuable things researchers can learn about how GDP is affected by different policies, what SWB correlates with, or what effects an increase in objective happiness has on people’s behavior. Thus, an operationalist approach to well-being is not without merit.

It might seem that claiming that well-being scientists hold operationalist commitments is going too far. After all, the rich tradition of construct validation (CV) makes it the case that different measurement operationalizations are tested against each other to determine their reliability in measuring the construct they were intended to measure. Indeed, when discussing the subject Alexandrova ([2017]) writes that ‘Construct validation, I argue, follows a coherentist spirit according to which measures are valid to the extent that they cohere with theoretical and empirical knowledge about the states being measured’ (p. 109). But Alexandrova also later clarifies that while CV as an ideal is meant to cohere with theoretical knowledge, in practice the focus is almost exclusively on coherence between constructs. Alexandrova writes that construct validation ‘proceeds not so much in the absence of theory (for that it is impossible) as in willful ignorance of some theoretical knowledge even when it is available’ (pp. 129-30).

This coherence between constructs, or between different ways of getting at the same operationalization, is in any case something the Bridgeman identified and treated as part of his

operationalist account. While Bridgeman viewed a ‘pure’ operationalist approach as not requiring any form of construct validation, he did recognize that it should be used in scientific practice. While CV can be thought of as a coherentist project, what needs to cohere are the various different ways in which measures are constructed with one another, rather than the measure with a theory. For example, for SWB, different questions, such as ‘how happy were you yesterday?’ and ‘how satisfied are you with your life as a whole?’, should cohere. But SWB need not cohere with GDP, and if we accept Easterlin’s findings ([1974]), they clearly do not.¹³

Perhaps attributing an operationalist disposition to those who take CV seriously is too strong. Instead, it might be more appropriate to label such a disposition as conventionalist. According to Tal ([2013]), conventionalist views ‘admit a conventional, definition-like element to coordination, while resisting attempts to reduce the meaning of quantity terms to measurement operations’ (p. 1160). That CV is applied so widely in well-being science makes it clear that well-being scientists are not full-fledged operationalists, but rather recognize the need to validate their construct of choice by checking it against other constructs that are purported to measure the same or a similar thing. Conventionalism can be viewed as one step relaxed from pure operationalism, and in this sense I do not wish to claim that those constructing measures of well-being are extremist in their attitudes.

Usually, social scientists refrain from claiming that their measure is a measure of well-being simpliciter. That a variety of measures are meant to cohere among each other and with a particular construct, e.g. subjective well-being, is a way to avoid stronger claims regarding a relationship between SWB and well-being simpliciter. The downside of adopting this operationalist approach is that it tells us nothing useful about how to actually measure well-being

¹³ Whether Easterlin’s findings of a lack of correlation between income and happiness are correct is still under debate in the literature. For some discussion of this debate see (Hersch [2018a]).

simpliciter. Such an approach intentionally avoids taking any stand on the correct characterization of well-being. Operationalism, like foundationalism, not only fails to address the problem of coordination, it ignores it altogether.

5 Turning to Coherentism

Neither a foundationalist approach adopted by many philosophers of well-being, nor an operationalist approach adopted by many well-being social scientists do much to directly address, much less to overcome, the problem of coordinating between theory and measurement in well-being science. Both approaches focus only on one side of the issue, and thus completely ignore the coordination problem. Foundationalist philosophers only look at theory and ignore developments in measurement, and operationalist social scientists wish to avoid the philosophical murky waters by only addressing measurement questions. Neither allows for any significant learning from the other.

There is a promising alternative approach—well-being coherentism. Adopting a coherentist approach to well-being science enables us to acknowledge the coordination problem, and makes it possible to explore ways we might go about overcoming it. To restate the problem, we have independent work on both well-being theory and well-being measurement, yet we need a theory of well-being to be confident that our well-being measure is right and we need a well-being measure to verify and make use of our theory of well-being.

I am not the first to highlight the usefulness of adopting a coherentist approach to well-being science. Tiberius ([2013]) discusses well-being as a reflective equilibrium, Bishop ([2015]) describes what he calls the inclusive approach, and Alexandrova's ([2017]) well-being contextualism has some coherentist elements to it. Nevertheless, Tiberius focuses on coherence

between intuition and theory, Bishop aims only at coherence with a subset of well-being science—positive psychology, and one need not be a coherentist to adopt Alexandrova’s contextualism. Consequently, none get us the type of coherentism we need.

Tiberius ([2013]) discusses reflective equilibrium in the context of well-being in an attempt to coordinate between theories and intuitions. Tiberius describes this process:

This general schema describes what happens when we use the method of reflective equilibrium: (1) we start with a theory that purports to make sense of all the relevant considerations (the various intuitions, principles and background theories, i.e., the data); (2) considerations that conflict with this theory are presented as objections to the theory; and (3) we modify the theory to meet the objections, explain why the objections needn’t be heeded in the first place, or reject the theory entirely and start over. This process is repeated until we have answered all the objections and any further modification to the theory would result in conflict with other, more weighty considerations. (p. 320)

Tiberius explains that an iterative process is needed in order to avoid being either stuck with pre-reflective opinions about happiness on the one hand, or an arbitrary conception of happiness on the other (p. 319). Tiberius’ reflective equilibrium offers a model for the type of coherentism we are after, and she nicely emphasizes the need for an iterative process needed to generate coherence. However, the coherence she is after is between philosophical theories and people’s intuitions, rather than between philosophical theories of well-being and measures of well-being. While indeed aimed at coordination, it is not the coordination we are after here.

Bishop ([2015]) aims more directly at coordinating between well-being theory and well-being measurement in his defense of his network theory of well-being.¹⁴ Bishop criticizes the foundationalist approach to well-being science (what he calls the traditional ‘Philosophy First’ approach) for aiming to explain only our commonsense judgements about well-being. Instead, he proposes adopting an ‘inclusive approach’, according to which philosophers should use both

¹⁴ Bishop’s network theory of well-being views well-being as constituted by being in a positive causal network and having positive causal network fragments. Bishop’s is a philosophical theory of well-being which is explicitly meant to account both for some of our commonsense judgments and for the findings of positive psychology.

commonsense judgments and scientific findings regarding well-being as the evidential base for our philosophical theories of well-being.

One issue with Bishop's approach is that it seems to aim at providing an *a posteriori* philosophical theory that can justify a scientific research program, and it seems to do this in a way that does not require any additional engagement on the part of the social scientists. In effect, Bishop is proposing a kind of upside-down foundationalism, which we might view as 'psychology first', according to which a philosophical theory is only as good as its ability to justify the reigning psychological program. If the philosophical theory is meant to cohere with positive psychology, and that is where things stop, it is an incomplete coherentist project. Since Bishop's work is fairly recent, whether positive psychologists accept Bishop's claim that positive psychology is the study of the structure and dynamics of positive causal networks, and they organize their measurement to cohere with the network theory of well-being is yet to be seen.

More importantly, even if we grant that Bishop's theory of well-being coheres well with measurements in positive psychology, we have reason to be skeptical that it coheres with the multitude of measures that social scientists at large (not just positive psychologists) employ in the well-being context. Economists, whose work does not generally fall under the umbrella of positive psychology, are also hard at work at constructing well-being measures. Moreover, positive psychology tends to focus almost exclusively on subjective experience, which precludes those constructing measures that aim at objective elements that might be related to well-being, for example many of the dimensions that the OECD's Better Life Index explores (e.g. housing, health, education, income). A variety of measures that are thought to be relevant to well-being are developed and used in medicine, and a lot of work is done on capabilities measurement, which is also usually considered to be related to well-being. As a result, While Bishop's philosophical

theory of well-being might be superior to the alternatives with respect to its ability to cohere with some subset of well-being measures, it fails to capture all that it would require to genuinely be considered a complete well-being simpliciter theory.

This criticism leads us to Alexandrova's ([2017]) well-being contextualism. According to Alexandrova, both in science and everyday life "well-being" is often used for a context-specific rather than a general evaluation of a person's state' (p. 4). Consequently, she defends a contextualist view of well-being, according to which 'the content of well-being assertions needs to be indexed to specific circumstances (doctor's visit, poverty relief on country-wide scale, heart-to-heart conversation with a friend, etc)' (pp. 5-6). Alexandrova argues that philosophers should aim to come up with context specific concepts of well-being, concepts that will cohere well with both the actual measures used and the contextual usages of well-being in common language. To this end, she introduces the idea of mid-level theories, which stand between high-level theories (philosophical theories of well-being) and scientific constructs (and measures). These mid-level theories are theories of well-being in a particular context (for example, the well-being of children, the elderly, and the chronically ill), are narrow in their applicability, and aimed primarily at guiding scientific measurement.

Alexandrova's contextualist project can be viewed as constituting a first step in a broader coherentist project regarding well-being. However, one need not be a coherentist to adopt her contextualism. Well-being contextualism is independent of well-being coherentism, and one can be a foundationalist about well-being while also ascribing to contextualism.¹⁵ Indeed, some of the ways in which Alexandrova discusses her contextualism have some foundationalist elements.

¹⁵ I thank an anonymous reviewer for asking me to make this clearer.

In (Alexandrova [2017]), Alexandrova provides a schema that is meant to summarize the grounds on which a measure can be declared valid within the CV tradition. The first condition in this schema requires that ‘[Measure] M is inspired by a plausible theory of [construct] C. This theory should be articulated as fully as possible and defended against alternatives’ (p. 150). While Alexandrova claims that the coherentist spirit is preserved in this schema, she also goes on to write that ‘Condition 1 is now strengthened with *a requirement to start the process of construct delineation with a systematic exercise in analysis of the concept C represents*’ [emphasis added] (p. 150). Consequently, some have seen a foundationalist strain in Alexandrova’s work. As Hassoun ([2019]) makes clear (and (Alexandrova [2019]) confirms), we can grant that well-being varinantism (the view that there are multiple correct theories of well-being and a key element of Alexandrova’s contextualism) is true, without needing to commit to well-being coherentism. While it is possible to simultaneously hold both well-being contextualism and well-being coherentism as true, it is not necessary to be committed to coherentism in order to accept Alexandrova’s contextualism. Consequently, it would be wrong to label Alexandrova’s contextualism as a coherentist approach to begin with.

While Tiberius, Bishop, and Alexandrova provide accounts that touch on coherentism in well-being in different ways, none get us the type of coherentism we need to overcome the problem of coordination in well-being science. In the next section I turn to discuss what can be viewed as a useful coherentist approach to overcoming the problem of coordination in well-being science.

6 Developing Well-Being Coherentism

The most well-developed brand of coherentism in the literature is Chang's ([2004]).¹⁶ In this section I spell out some key elements of Chang's coherentist approach and explain how they can be adopted in the well-being context. I then use Alexandrova's ([2017]) contextualism to provide an example of how some coherentist iterative steps can be made in the context of well-being. Lastly, I address Hassoun's ([2019]; [unpublished]) concerns regarding coherentism.

What motivates Chang's coherentism is the goal of achieving scientific progress. For Chang, progress is achieved through a process of 'epistemic iteration', by which 'successive stages of knowledge, each building on the preceding one, are created in order to enhance the achievement of certain epistemic goals' (p. 45). This type of iteration is key for understanding how knowledge can improve without having a firm foundation.

Chang explains how the supposedly problematic circularity of a coherentist approach to scientific progress is anything but that. He does so in the context of temperature, explaining how a thermoscope, which can merely provide an ordinal scale of temperature, can be used to establish the reliability of a thermometer, which can provide a more useful cardinal scale. Of course, one may ask why rely on a thermoscope, to which Chang replies that it mostly agrees with the judgements we arrive at through our senses. By turning to a thermoscope, and ultimately to our senses, Chang employs a 'principle of respect', which recognizes that at each successive stage the current affirmed system of knowledge already embodies considerable achievement. While this

¹⁶ A similar coherentist approach can be found in van Fraassen's work. Van Fraassen claims that '[i]t is only if we try to understand coordination without locating ourselves either in the ahistorical "above" or the historical "within", but pretend to a "view from nowhere", that we set ourselves an impossible problem—or fall into metaphysical metaphors' (Van Fraassen [2008], p. 22). When the problem is considered at historical stages where there were already measuring procedures for certain other magnitudes taken as given then there isn't, according to van Fraassen, any problem of coordination when discussing measurement. But we find ourselves in a strange place with respect to van Fraassen's argument. While clearly, we are 'within' a historical stage regarding well-being measurement, it is less clear that we have other magnitudes that relate to well-being that we can take as given.

initial affirmation of an existing system of knowledge can be made naively, it need not be naïve. One can affirm an existing system of knowledge while still entertaining significant concerns that it is an imperfect system.¹⁷

Once we have reason to use a new system, we do so, and continue to move to new systems through an iterative process. In the case of temperature this means moving from senses, to a thermoscope, to a thermometer. This process represents progress through a spiral of self-improvement. The thermoscope adds an element of accuracy that our senses cannot supply (as well as correct cases in which our senses mislead us—one hand in cold water and one hand in warm water), and the thermometer adds an additional element of accuracy to that—establishing temperature fixed points and a numerical temperature scale.

While the epistemic iterations of the coherentist sound promising, they do not come with a guarantee of success. As Chang explains: ‘Of course, there is no guarantee that the method of epistemic iteration will always succeed [...] Whether that is possible is a contingent empirical question for each case’ (pp. 226-7). In the case of temperature, Henri Victor Regnault’s ‘minimalist overdetermination’ strategy succeed in picking out a unique thermometer, yet, as Chang tells us, ‘[l]ike all strategies, Regnault’s strategy worked only because it was applied in appropriate and fortunate circumstances’ (p. 96). Whether coherentism will be as fruitful in the case of well-being science as it has been for thermometry is yet to be seen.

Adopting Chang’s coherentist approach to well-being science helps us better see the coordination problem and how we might go about overcoming it. The problem is that we have independent work on both well-being theory and well-being measurement, but it is not clear how

¹⁷ Bishop ([2015]) defends a similar view to Chang’s principle of respect in his ‘inclusive approach’ when he argues for a basic assumption that people are ‘generally successful in talking about and identifying instances of well-being,’ even if they ‘make mistakes about well-being, even systemic ones’ (p. 15).

we coordinate between the two. Adopting a coherentist approach helps us see that each side of the issue can use the other to gain a better understanding of how to go about such coordination. We need a theory of well-being to justify and be confident our well-being measure is right, and we need a well-being measure to verify and make use of our theory of well-being.

In order to appreciate the usefulness of coherentism in the context of well-being science it is helpful to demonstrate a way we might work through the iterative process. I do so using Alexandrova's contextualism, as it is one of the more novel and promising approaches to well-being science in the recent literature.¹⁸ If, following Alexandrova, we commit to well-being contextualism, we no longer perceive well-being simpliciter as foundational to all well-being science. However, through a coherentist framework we can recognize that we have good reason to 'save' well-being simpliciter. A concept of well-being simpliciter allows us to make judgments when we need to compare between different contexts of well-being, and so it remains an appropriate focus in some indispensable contexts. This recognition gives us reason to continue in an iterative process that can partially save the concept of well-being simpliciter.

Decisions that pertain to the proper allocation of resources between different contexts for a particular group, such as health, education, defense, infrastructure, etc., require having a conception of how these different contexts compare with respect to their impact on a unified concept of well-being—that of well-being simpliciter. Decisions that must be made on allocating some goods between different groups, for example addressing the different accessibility needs of healthy adults, the elderly, young children, or people with disabilities, require considering and comparing across multiple well-being contexts. If one intends to allocate resources with some concern to how governmental policies impact individuals' well-being across contexts, we need

¹⁸ There are those who criticize Alexandrova's contextualism, and I make no attempt to defend it here. For criticisms of well-being variantism and contextualism, see (Fletcher [2019]; Hawkins [2019]; Rodogno [2015]).

some inter-contextual conception of well-being. Without such inter-contextual comparisons, some important policy decisions with respect to different aspects of well-being will be impossible to make in any reasoned manner. As a result, policy decisions with respect to well-being will be relegated to a secondary consideration, rather than remain focused only on well-being.

It is true that a lot of work can be done without reference to any well-being simpliciter context. When making policy decisions in the context of a narrow enough group (e.g. the ministry of health making some child-related decisions), a specific well-being context might be sufficient. However, there are many cases in which we might need to pit different well-being contexts against each other. Policy-makers must decide on budgetary tradeoffs and recognize that for any policy that promotes one context of well-being there is an opportunity cost with respect to another policy that could promote a different context of well-being. In order to make education decisions in such cases, some notion of well-being simpliciter is needed.

The iterative step that coherentism points us to is that in light of the less than all-encompassing target of theories of well-being simpliciter, the cohering measures need not cover well-being in every context. A measure of well-being simpliciter is only needed for those cases in which we need to compare between contexts of well-being. We can thus build on Alexandrova's contextualism, yet take an additional iterative step. Since the need for a concept of well-being simpliciter only arises for comparisons between well-being contexts, the corresponding measures need merely be constructed so as to capture well-being only at this general and coarse-grained level. Measures of well-being simpliciter need not have any direct application to the well-being of any individual person and only need to enable comparison between entire contexts of well-being. This substantially lowers the bar for what such a measure needs to accomplish to be a useful well-

being measure. It only needs to be useful for comparing between different measures of well-being in context.¹⁹

Whether developing such a well-being simpliciter measure for inter-contextual comparison is possible is, as Chang tells us, a contingent empirical question. However, through the coherentist iterative process we arrive at a novel suggestion for what it is that we might want a well-being measure to do, and hopefully this is something some measure can actually do.

There are those that push back on well-being coherentism, and Hassoun ([2019]; [unpublished]) offers the clearest arguments against it. Hassoun ([unpublished]) argues that ‘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’ (p. 2). She raises three types of problems that researchers may run into if they do not adopt such a foundationalist approach: ‘Researchers may 1) use the wrong measures for the wrong purposes, 2) select poor proxies, or 3) fail to measure an interesting phenomenon at all’ (p. 3). Nevertheless, coherentism can adequately deal with all three of these problems.

First, when Hassoun discusses the World Bank’s poverty measure, she correctly argues that for purposes of measuring how individuals in a population are doing rather than how the population on average is doing, their measure is inadequate. Thus, the purpose for which the measure is used matters. While a measure’s purpose matters, one need not be a foundationalist to overcome the problem of using the wrong measure for the wrong purpose. Hassoun’s criticism of the World Bank’s poverty measure for the purpose of figuring out how people in a population are doing can be made through a coherentist iterative process as well. One need not commit to any particular theory of poverty in order to accept the claim that only focusing on the mean does not

¹⁹ Moreover, as I argue in (Hersch, [2018b]), the domain of well-being public policy is narrower than that of well-being in general, lowering the bar even more.

tell us much regarding distribution. A measure that only provides data on average poverty within a population is obviously a poor measure for figuring out how individuals are faring. There is nothing in this criticism that privileges foundationalism over coherentism.

A similar response is available to the second potential pitfall Hassoun warns about—selecting poor proxies. Hassoun discusses the Human Poverty Index 1 (HPI1) as an example of a weighted amalgamation of three indicators. She criticizes the measure for not having a rationale for why poverty is a function of only those three things, nor a rationale for the weights assigned to each. But Hassoun makes this criticism without appealing to any particular theory herself. Consequently, the way Hassoun discusses this worry is actually representative of the way coherentism provides us tools to address it. For the HPI1, Hassoun exemplifies that when we try to go from a measure to a theory (in what can be considered an iterative process), we discover that there is no theory to support the measure. If we cannot then develop an appropriate theory, then we decide to either alter, or entirely discard, the HPI1 as a measure of poverty. Even if we do not start from a theory, a coherentist iterative process can prevent us from relying on a measure that does not represent any theory at all.²⁰

Hassoun's third worry, that researchers fail to measure an interesting phenomenon at all, seems less of a problem in the case of well-being. The different phenomena that Hassoun mentions (experienced happiness, retrospective evaluations, and affective states) all seem like interesting phenomena in their own right. How, and if at all, they connect to well-being is important insofar as we are interested in well-being. But even if these measures fail to connect to well-being, they are interesting and worthwhile objects of investigation.

²⁰ I do not take a stand on whether this is indeed the case with HPI1.

Well-being scientists do not need to go as far as to take a well-worked out theory of well-being as their foundation in order to avoid the problems Hassoun warns us about. An iterative process which goes back and forth between theory and measurement, adjusting each as they go along, can successfully avoid the potential pitfalls Hassoun discusses.

7 Conclusion

Practitioners of well-being science do not necessarily need to recognize themselves as adopting a foundationalist, operationalist, or coherentist approach to well-being science to do good work and advance the science. What approach researchers take and which approach is the most promising are derivative of actual practice, and asked from outside by philosophers, sociologists, and historians of science. Those figuring out how to articulate a theory of temperature and how to measure it have done so without reference to contemporary philosophers of science. However, well-being science is still not yet, to use Kuhn's ([1962]) terminology, a 'mature science'. Since well-being science is still undergoing a process of development, those looking from the outside in might be able to offer some insights that can be helpful to the practitioners themselves.

Coherentism appears to be a particularly fruitful approach when dealing with theories and measures that span different disciplines. This is the case in the context of well-being science. The theories discussed in this paper are philosophical ones, while the measures are devised in the social sciences. In the well-being context there is less of a natural back and forth between theories and measurement than if both were developed within a given disciplinary context. While not necessary to do so, consciously adopting a coherentist approach by practitioners themselves can be beneficial because thinking in coherentist terms requires both philosophers and scientists to take seriously the insights the other arrives at. This in itself might go a long way to generating a potentially

helpful interdisciplinary dialogue that can result in some interesting work and insights by both. Consequently, some of the analysis in this article can be broadened to a variety of scientific endeavors that span several disciplines.

It might turn out to be the case that with regard to well-being science, coherentism is a dead end. As promising it might seem to adopt well-being coherentism, it may turn out to be the case that we simply cannot make our philosophical theories of well-being cohere with our measures of well-being. Whether this is the case will only be made clear down the road. Not all scientific advances proceed along a coherentist route, and well-being science might turn out to be such a case. Nevertheless, because this debate has a real impact on people's lives through its effects on public policy, it is imperative that well-being science progress in a constructive manner. At least at this current juncture, coherentism seems more promising than either foundationalism or operationalism. Whether it fulfills its promise is yet to be seen.

Acknowledgements

This paper was significantly improved thanks to discussions and feedback from several individuals. I thank Tyler DesRoches, Nicole Hassoun, Karen Kovaka, Casey McCoy, Michael Moehler, Lydia Patton, Thomas Rowe, Daniel Wodak, and two anonymous referees for comments on earlier drafts. I also thank audiences at the 2018 Philosophy of Science Association Biennial Meeting, the 2019 PPE Society Meeting, the 2019 Israeli Society for the History and Philosophy of Science, and members of the Wake Forest University Eudaimonia Institute.

*Department of Philosophy
Virginia Tech
Blacksburg, VA, USA
hersch@vt.edu*

References

- Adler, M. D. [2013]: ‘Happiness Surveys and Public Policy: What’s the Use?’, *Duke Law Journal*, **62**, pp. 1509–601.
- Alexandrova, A. [2017]: *A Philosophy for the Science of Well-Being*, Oxford: Oxford University Press.
- . [2019]: ‘Reply to Hawkins, Hassoun, and Arneson’, *Res Philosophica*, **96/4**, pp. 537–44.
- Angner, E. [2011]: ‘Are Subjective Measures of Well-Being “Direct”?’’, *Australasian Journal of Philosophy*, **89/1**, pp. 115–30.
- Bishop, M. [2015]: *The Good Life; Unifying the Philosophy and Psychology of Well-Being*, Oxford: Oxford University Press.
- Bradburn, N. M., Cartwright, N., & Fuller, J. [2017]: ‘A Theory of Measurement’, in L. McClimans (ed.) *Measurement in Medicine*, London: Rowman & Littlefield, pp. 73–89.
- Bridgman, P. [1927]: *The Logic of Modern Physics*, New York: MacMillian Press.
- Cartwright, N. [1999]: *The Dappled World: A Study of the Boundaries of Science*, Cambridge: Cambridge University Press.
- Chang, H. [2004]: *Inventing Temperature: Measurement and Scientific Progress*, Oxford: Oxford University Press.
- Crisp, R. [2006]: *Reasons and the Good*, Oxford: Oxford University Press.
- van der Deijl, W. [2017]: ‘Are Measures of Well-Being Philosophically Adequate?’, *Philosophy of the Social Sciences*, **47/3**, pp. 209–34.
- Diener, E., Lucas, R. E., Schimmack, U., & Helliwell, J. [2009]: *Well-Being for Public Policy*, Oxford: Oxford University Press.
- Easterlin, R. A. [1974]: ‘Does Rapid Economic Growth Improve the Human Lot? Some

- Empirical Evidence’, *Nations and Households in Economic Growth*, **89**, pp. 89–125.
- Fletcher, G. [2019]: ‘Against Contextualism About Prudential Discourse’, *Philological Quarterly*, **69/277**, pp. 699–720.
- Foley, R. [1998]: ‘Epistemic Justification’. *Routledge Encyclopedia of Philosophy*, Routledge.
- van Fraassen, B. C. [2008]: *Scientific Representation*, Oxford: Oxford University Press.
- Hassoun, N. [2019]: ‘Thoughts on Philosophy and the Science of Well-Being’, *Res Philosophica*, **96/4**, pp. 521–8.
- . [unpublished]: *Measuring Well-being: Philosophy and the Science of Measurement*.
- Hausman, D. M. [2012]: *Preference, Value, Choice, and Welfare*, Cambridge: Cambridge University Press.
- Hawkins, J. [2019]: ‘Diversity of Meaning and the Value of a Concept: Comments on Anna Alexandrova’s a Philosophy for the Science of Well-Being’, *Res Philosophica*, **96/4**, pp. 529–35.
- Haybron, D., & Tiberius, V. [2015]: ‘Well-Being Policy: What Standard of Well-Being?’, *Journal of the American Philosophical Association*, **1/04**, pp. 712–33.
- Herfeld, C. [2019]: ‘Imagination Rather Than Observation in Econometrics: Ragnar Frisch’s Hypothetical Experiments as Thought Experiments’, *HOPOS*, **9/1**, pp. 35–74.
- Hersch, G. [2015]: ‘Can an Evidential Account Justify Relying On Preferences For Well-Being Policy?’, *Journal of Economic Methodology*, **22/3**, pp. 280–91.
- . [2018a]: ‘Ignoring Easterlin: Why Easterlin’s Correlation Findings Need Not Matter to Public Policy’, *Journal of Happiness Studies*, **19/8**, pp. 1–17.
- . [2018b]: ‘The Narrowed Domain of Disagreement For Well-Being Policy’, *Public Affairs Quarterly*, **32/1**, pp. 1–19.

- . [2020]: ‘No Theory-Free Lunches in Well-Being Policy’, *Philosophical Quarterly*, **70/278**, pp. 43-64.
- Hurka, T. [1993]: *Perfectionism*, Oxford, UK: Oxford University Press.
- Kahneman, D. [2000]: ‘Experienced Utility and Objective Happiness: A Moment-Based Approach’, in D. Kahneman & A. Tversky (eds), *Choices, Values and Frames*, Cambridge: Cambridge University Press.
- Kahneman, D., Krueger, A. B., Schkade, D., Schwarz, N., & Stone, A. [2004]: ‘Toward National Well-Being Accounts’, *American Economic Review: Papers & Proceedings*, **94/2**, pp. 429–34.
- Kuhn, T. S. [1962]: *The Structure of Scientific Revolutions*, Chicago: University of Chicago Press.
- Lagueux, M. [1998]: ‘Aapriorism’, in J.B. Davis, D.W. Hands, & U. Mäki (eds), *The Handbook of Economic Methodology*, Cheltenham: Edward Elgar Publishing, pp. 17–22.
- Lewin, S. B. [1996]: ‘Economics and Psychology: Lessons for Our Own Day from the Early Twentieth Century’, *Journal of Economic Literature*, **34/3**, pp. 1293–323.
- Nordhaus, W. D., & Tobin, J. [1972]: ‘Is Growth Obsolete?’, in W.D. Nordhaus & J. Tobin (eds), *Economic Research: Retrospect and Prospect Vol 5: Economic Growth*, National Bureau of Economic Research, pp. 1–80.
- O’Donnell, G., Deaton, A., Durand, M., Halpern, D., & Layard, R. [2014]: *Wellbeing and Policy*, Legatum Institute.
- Parfit, D. [1984]: *Reasons and Persons*, Oxford: Clarendon Press.
- Rodogno, R. [2015]: ‘Well-Being, Science, and Philosophy’, in J.H. Søraker, J.W. van der Rijt, J. de Boer, P.H. Wong, & P. Brey (eds), *Well-Being in Contemporary Society*, Springer, pp.

39–57.

Tal, E. [2013]: ‘Old and New Problems in Philosophy of Measurement’, *Philosophy Compass*, **12**, pp. 1159–73.

Woodard, C. [2013]: ‘Classifying Theories of Welfare’, *Philosophical Studies*, **165/3**, pp. 787–803.