

This is an the introductory chapter to *A Philosophy for the Science of Well-being* by Anna Alexandrova forthcoming with Oxford University Press in 2017. Please cite the published version.

Fitting Science To Values And Values To Science

Denying the importance of philosophy to science is just as wrong as insisting on its constant and unavoidable relevance. The first extreme fails because science, today an enterprise separated from philosophy, nevertheless makes philosophical bets in every step of the way: concept formation, method choice, confirmation procedures, etc. The second extreme – and this is a less familiar point – amounts to a failure to learn from history of science. ‘Getting over’ a philosophical debate, leaving it unsolved and moving on, has been crucial to the production of knowledge at many junctures. In this book I set sail between these two rocks. I want to show which philosophy is indispensable and which can be safely ignored. Not in general, but only for one important corner of today’s social and medical science – *the science of well-being*.

I use this expression as an umbrella term for all research whose goal, at least in part, is a systematic and empirical study of well-being. Typically it goes under the names of quality of life or happiness studies, positive or hedonic psychology, studies of subjective well-being, of life satisfaction, of flourishing, and of welfare. Some of these scientists would be happy to stand under this umbrella and to this extent the category I propose already exists and reflects the way many conceive of their work. Indeed *Science of well-being* is the name of a 2003 Royal Society Discussion Meeting whose goal was to encourage this research, already flourishing in North America, in the UK.¹

But I also mean the umbrella to cover projects that are *implicitly* about well-being even if scientists themselves do not use this term. For example, when medical researchers study the so called ‘patient-reported outcomes’ (or PROs), or when economists study material welfare, they sometimes distance themselves from the term ‘well-being’. They may do so because patient-reported effectiveness of treatment or consumption, are allegedly narrower, less demanding and more tractable states than well-being. But sometimes this separation from well-being is a poorly veiled attempt to weasel out of the hard questions. Effectiveness to what end? Consumption for the sake of what? It is hard to see how PROs or consumption can be defined without some reference to

¹ This meeting resulted in an eponymous influential Huppert et al 2005 volume.

² Some example are in Seligman 2004, Chapter 2; Seligman and Csikszentmihalyi 2000. Kahneman and Krueger 2006, Frey 2008.

well-being. For these indicators to be valuable they must bear the right relation to well-being, even if they do not capture the whole of it. So even when well-being is not the direct object of study, it is still a value in which the studies of many other concepts bottom out. Definitions of health often refer to well-being to pick out particular areas of human functioning; norms of rationality acquire their status as normative in part because they suit human pursuits, of which the pursuit of well-being is surely one; economic growth, sustainability, resilience, human capital, all have the shape that they do in part because they are supposed to bear on well-being. Indeed the deepest challenges across social science and political and moral theory are often implicitly about well-being. How to organize public science? How to relieve suffering? And, of course, how to live?

Thus my term 'science of well-being' is sometimes the actors' category and sometimes not. But it is the category I postulate because these projects, as we shall see, raise very similar question. It may sometimes be difficult to say precisely whether a given project is or is not part of the science of well-being. My strategy in this book is to concentrate on rather obvious cases – when well-being or something very close to is treated as an object of empirical knowledge – but it is likely that what I say about these obvious cases would also hold for less obvious ones.

So this book is about well-being as an object of science: how science should define well-being, how it should measure it, and the role of philosophy in all this. Philosophers of science, along with historians and sociologists of science, study how knowledge is and should be produced, whether we can trust it and how we come to do so. As we shall see shortly there is now a fully fledged science of well-being. A philosophy of this science is an account of how it is possible, and where and why this knowledge succeeds and fails.

But a philosophy of this particular science needs to be special in one respect. Sometimes a scientific concept has a *value* element in its content: it not only describes but also judges and guides. That's when science and philosophy are entangled in a further way than usual: not just metaphysics and epistemology enter, but moral philosophy too. One cannot classify a policy or an outcome as well-being enhancing by merely stating empirical facts or reporting opinions. For any standard or method of measurement of well-being is already a claim about the appropriateness of an action or state in the light of some assumed value.

These features of my project – to comment on a science, but a science laden with judgments about good life – lead me to seek out ears of two audiences. My first conceit is to address the scientists of well-being and those who use this science: as a philosopher of this science I can speak to how to study well-being better and what users should expect from this knowledge. As part of this goal I show that

definitions and measures of well-being require substantive and often controversial assumptions that are sometimes hidden behind apparently neutral and technical facts or avoided altogether, all in the name of preserving objectivity. This is wrong epistemically and morally. The science of well-being is better off when its values are well-articulated and defended, as I show possible.

My other conceit is to speak to my fellow philosophers. It is no good clamoring for a greater attention to philosophy if philosophy does not have much to offer. In my view moral philosophy today – a major academic project that proclaims to be studying well-being – could be offering a lot more than it actually does. Philosophers of well-being spend more resources than appropriate chiseling out theories of well-being immune to counterexamples and at too abstract of a level. That’s an exercise that science can safely ignore. Instead progress will come from a different kind of work – contextual theorizing about what well-being amounts to in different circumstances that individuals and communities face.

So this book is a proposal for reform in both directions: the science of well-being should never pretend to do without philosophy and philosophy should get its act together and provide usable tools for science. The rest of this introduction gives an overview of the science in question and previews the arguments I make in later chapters.

The past and the present

A history of this science is yet to be written. Although I will not offer one, it is fair to start by acknowledging that well-being has long featured in scientific projects, sometimes as a background motivation, sometimes as an object of knowledge. Today’s enthusiasts paint the science of well-being as radically new, path-breaking or revolutionary. Its creation myths usually represent the scientists of the past as not caring about well-being or not having the proper tools to study it, while today we have both tools and the good sense to do so.² Without discounting this pioneering spirit, we should nevertheless not overestimate the novelty of the enterprise.

For starters, concern with human well-being is at the very root of modern social science. The earliest mentions of the phrase ‘*science sociale*’ in revolutionary France take place in the context of justifying and furthering the ideals of justice and democracy. In 1798, Jean-Jacques-Regis Cambacérès, a statesman and the author of the Napoleonic Code, in his ‘Discours sur la science sociale’ explicitly identified social science with the means of securing happiness (*bonheur*) for all (Sonenscher 2009). Social science thus began its life as a form of knowledge

² Some example are in Seligman 2004, Chapter 2; Seligman and Csikszentmihalyi 2000. Kahneman and Krueger 2006, Frey 2008.

devoted officially to the advancement of well-being. Though the precise conceptions of social science differed, its founders in the Enlightenment and nineteenth century France, Scotland and England – Jeremy Bentham, Adam Smith, Nicolas de Condorcet, James and John Stuart Mill, Auguste Comte, Karl Marx – all conceived of social science as central in the project of bringing about happiness, relieving suffering, liberating, furthering progress. And so they shaped the subject matter and the methodologies of the new sciences in part to serve this goal. Psychology would help us measure and predict changes in happiness, sociology to advance society to the next more perfect stage of development, political economy to document how we live and to predict the macro-consequences of the individual actions, be they in pursuit of happiness or not.

In the twentieth century behaviorist concerns with unobservability of mental states have purged the language of happiness from social science. Or so the traditional story goes. But the story does not show that well-being fell off the agenda. In economics, happiness got replaced with ‘welfare’ measured apsychologically but nevertheless measured and studied by means of analyses of consumption and efficiency. A concern with subjective experience is not particularly new either. Attempts to conceptualize and measure subjective well-being were live from about 1920s in the applied fields surrounding psychology, such as marital and education sciences, and in the social indicators movement of the 1970s (Angner 2011a). Outside the quantitative tradition, humanistic psychology as practiced by Carl Rogers, Abraham Maslow and the therapists inspired by psychoanalysis, took flourishing, happiness and self-actualization as central to their thinking and their work. Finally, the central place of well-being in the medical sciences, nowadays evident in the proliferation of PROs, is reflected in the 1946 World Health Organization’s definition of health as "a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity".³

Most recently well-being entered the agenda of social sciences with the discussions of the so called Easterlin Paradox. Formulated by American economist Richard Easterlin in the 1970s the paradox juxtaposes two facts. The first fact is that at any given time and within any country income predicts self-reported happiness. The second fact is that over time as income increases happiness does not correspondingly do so. Easterlin hypothesized that beyond a certain minimum people judge their happiness by their relative rather than absolute income and this idea spurred a great deal of research on the relationship between objective circumstances and life evaluation, satiation points beyond which money makes no difference, as well as on the psychology of

³ World Health Organization 1948.

happiness judgments. For several decades Easterlin Paradox served the role of justifying the policy relevance of the sciences of well-being – after all if happiness stalls as income grows, focusing on economic growth to the exclusion of other goods seems wrong. Many articles, books, and grant applications to study well-being started by citing Easterlin’s landmark study. This equilibrium is now somewhat shaken, as the new data brought out forcefully by economists Betsey Stevenson and Justin Wolfers, appear to undermine the second fact – increase in absolute income does after all predict the increases in subjective well-being over time. If income is a fine long-term predictor of happiness, what policy role is there for indicators of subjective well-being? The enthusiasts are undaunted for several reasons. First, Stevenson and Wolfers rely on indicators focused on satisfaction with life relative to other possible lives, rather than on measures of emotional well-being. The latter does not track income as well. Secondly, income only predicts subjective well-being in conjunction with other social factors such as health, social support, freedom, etc. The apparent demise of the Easterlin Paradox is unlikely to undermine policy excitement around well-being research. Third, even if on average absolute income and subjective well-being rise and fall together, there are still striking cases of divergence, for example, the steady growth of GDP coupled with a steady fall in life satisfaction in Egypt and Tunisia during the Arab Spring.⁴

So a history of this enterprise will be a history of the involvement of scientific knowledge in the projects of social and political improvement and governance. It will also be a story of growth of measurement and of quantification of phenomena that were previously thought to be private, idiosyncratic, unmeasurable. These are the themes of historiographies of recent social and psychological sciences (Porter 1995, Rose 1990, 1998) and they are readily visible in today’s widespread institutionalization of this science.

This institutionalization is hard to overstate. Well-being science now boasts of professional societies, specialized journals, research institutes, and publications in prime venues such as *Science*.⁵ There is also the sheer quantity: ‘well-being’ and its cognates regularly top the lists of keywords in scientific abstracts⁶, and

⁴ Easterlin 1974 is the original study, Stevenson and Wolfers 2008 is the critique denying the paradox, Clark et al 2012 presents the state of the art, OECD 2013 and Adler and Seligman 2016 defend continued relevance of subjective well-being.

⁵ For societies see The International Society for Quality of Life Studies, International Positive Psychology Association. For journals see the Journal of Happiness Studies, International Journal of Wellbeing, Applied Research in Quality of Life, Applied Psychology: Health and Well-being, Social Indicators Research, Journal of Positive Psychology. For high profile publications see Layard 2010, Kahneman et al 2004b.

⁶ Well-being was the second most popular keyword in all psychology articles cited in the Social Science Citation Index and the Science Citation Index between 1998 and 2005 (Zack and Maley 2007).

'well-being' alone brings up over five million entries on PubMed, which is twice as many as 'cancer'.

The normal science of well-being

Going along with the institutional there is an intellectual maturity. Today's science of well-being has fairly settled goals and methodologies, and increasingly settled empirical facts. These goals, methodologies and facts are regularly publicized in reviews of latest findings.⁷ Thomas Kuhn's notion of 'normal science' naturally suggests itself. For Kuhn normal science started when fundamental philosophical disagreements ended and paradigm-based puzzle solving began (Kuhn 1962). I do not wish to debate whether the science of well-being has a paradigm in a sense that is defensible or fitting to Kuhn's intentions. But I will nevertheless introduce this field by enumerating its commonly shared commitments and in this sense I will speak of a normal science of well-being. This way of introducing the object of my discussion – by focusing on its intellectual rather than material activities, and on the shared, rather than controversial ones – is not uniquely right, I am happy to admit, but it fits my purpose, as will become clear shortly.

But before I can start, in addition to the idea of a normal science, I need also an idea of a social science. The science of well-being is pursued by sociologists, economists, psychologists, anthropologists, medical, legal, business and social work scholars – i.e. mostly social scientists. Now philosophies of social sciences have traditionally fallen in two camps. The first camp advocated a kind of *exceptionalism*. *Interpretivists*, the exceptionalists par excellence, insisted that social science has a distinct goal of understanding human action by the method of interpretation which may well not allow for a great deal of generalizable knowledge. The second camp – *naturalists* – emphasized the continuity of social with the natural sciences, emphasizing the search for laws and causal explanations.⁸ Recently, philosophers and historians of science noted that natural sciences are too diverse to have a monolithic method. Indeed the many observations of the *disunity of science* that have grown through the 1980s and 1990s should already doom this way of carving up naturalism from interpretivism. Perhaps the real debate, as Daniel Steel claims, is about whether or not generalizable causal knowledge can be attained and used for the betterment of human lives, with interpretivists arguing that it cannot be and that instead we should just attempt to represent the human condition in all its varieties and complexities (Steel 2010).

⁷ Chicago psychologist Ed Diener is undoubtedly the most prolific writer of such field-defining review articles. The latest are Diener 2012, Diener et al (in press).

⁸ Little 1991 is a representative textbook. Taylor 1971 is a classic twentieth century exceptionalist manifesto from a tradition going back to German Idealism. More recent discussions and textbooks have largely moved on from this debate (Guala 2007, Risjord 2014).

Whether or not the science of well-being falls under the naturalist or the interpretivist ideal depends entirely on how the options are carved out. It is possible to make naturalism so inclusive that only utter skeptics would end up as interpretivists. But importantly, such a classification will turn out entirely beside the point for our case. We shall see that the five core commitments of the normal science of well-being of today have both naturalist and interpretivist features. I stress this mixture as a way of exposing the diversity of the enterprise.

Commitment 1: Well-being is valuable. A central tenet of naturalism from at least as early as John Stuart Mill's *System of Logic* is value freedom. A social science, just like natural science, should study empirical facts and relations between them. The choice of which facts to study will be value-driven, as Max Weber allowed, but this is consistent with leaving recommendations to policy makers.⁹ When the object of science has an apparently inescapable normative content, a naturalist would normally insist on separating the normative from the descriptive content, keeping only the latter as part of science and relegating the former to ethics and politics. I shall evaluate these proposals in detail in chapter 4, arguing that they are a bad idea. Now I will just point out that by and large the science of well-being does not follow the naturalist's advice: normative claims, albeit not always explicit and satisfying to philosophers, are part-and-parcel of the science of well-being.

One example is the debate about how to conceptualize and measure the well-being of a nation. It is motivated by a perceived failure of purely economic indicators such as the GDP and GNP to capture the state of communities. Among the inspirations are the Easterlin Paradox as well as Bhutan's pioneering Gross National Happiness Index. There is no shortage of academic opinions on the proper replacement, or complement, of these standard economic measures. Daniel Kahneman and Richard Layard among other psychologists and economists have advocated a hedonic measure – a nation is doing well to the extent that its populace has on average a favorable balance of positive over negative emotions (Kahneman et al 2004a, Layard 2005). Development economists typically favour measures based on consumption, access to resources and other objective indicators (Nussbaum and Sen 1993, Dasgupta 2001, Deaton 2016). Yet others opt for life satisfaction, a metric which, it is claimed, best reflects individuals' evaluation of life (Diener et al 2008). The opponents often do not hide their normative disagreements. George Loewenstein, an eminent

⁹"A scientific observer or reasoner, merely as such, is not an adviser for practice. His part is only to show that certain consequences follow from certain causes, and that to obtain certain ends, certain means are the most effectual. Whether the ends themselves are such as ought to be pursued, and if so, in what cases and to how great a length, it is no part of his business as a cultivator of science to decide, and science alone will never qualify him for the decision." (Mill 1882, Chapter 12 of Book VI).

economist who raises worries about the purely hedonic measures, entitles one of his contributions “That which makes life worthwhile” (Loewenstein 2009).

True, some research in this field can proceed relatively value-free – take a range of those emotions that people call positive, describe the causal network that surrounds them, do not say anything specific about their normative status. Here’s positive psychologist Martin Seligman taking that route in a *New York Times* interview:

My view of positive psychology is that it describes rather than prescribes what human beings do... I don’t want to mess with people’s values. I’m not saying it’s a good or a bad thing to want to win for its own sake. I’m just describing what lots of people do. One’s job as a therapist is not to change what people value, but given what they value, to make them better at it (reported in Tierney 2011).

No doubt that this is one route and scientists sometimes take it. But note two facts. Which emotions and activities to pick out as potentially relevant to well-being is not a value-neutral choice. This is true whether or not scientists demure from spelling out the relationship of these states to well-being. Secondly this supposedly modest route is not typical. Often scientists are more ambitious than this. They wish to know whether and which positive emotions are *good for us*: how they enable better functioning both at individual and community levels (Fredrickson 2001), but also whether they harm us sometimes (Gruber et al 2011). In referring to ‘better functioning’ and ‘harm’ these researchers presuppose a notion of well-being and this is where the substantive normative assumptions enter.

When making room for values in the definition of the object of study, the science of well-being is rejecting or at least amending a core commitment of value freedom, a thesis that Hugh Lacey called *neutrality*. According to it, scientific claims should neither presuppose nor support moral or other value judgments (Lacey 2005, 25-26). Though this does not prevent the science of well-being from being value free in other senses, its rejection of neutrality, even if not universal, is a notable and an anti-naturalist feature.

Commitment 2: Well-being claims are generalizable. A major goal of the science of well-being is the development of more or less general causal models of determinants and risk factors of well-being at biological, psychological, organizational and broader social levels. In embracing this goal, scientists apparently reject the idea that well-being is an idiosyncratic personal phenomenon that does not admit of population-level analysis. Instead the science of well-being operates on the assumption that the social world has causal

laws or at least generalizations that could play the role of laws. These laws do not need to apply to all humans at all times and places. They may hold only at the level of community or individuals in specific circumstances (to wit caretakers of the chronically ill, poor single mothers in the UK, refugees). The generalizations in question usually relate well-being to a socio-economic or psychological variable such as unemployment or a personality trait, or an activity such as volunteering or commuting. These generalizations are discovered empirically following qualitative or quantitative methods. The science of well-being at this point is a field, rather than a laboratory- or a model-based, science.

In pursuing this commitment the science of well-being rejects two pillars of interpretivism: that the social world is too complex (or too open, or too free, etc.) for any meaningful generalizations, and that social explanations should be couched primarily in terms of reasons not causes.

Of course, it is one thing to be committed to this goal and another actually to find such generalizations. Does the science of well-being have any successes to show?

One issue that has occupied researchers and captured public imagination is the stability, or lack thereof, of self-evaluations of well-being. In question is the alleged human ability to adapt, i.e. to regain previous levels of subjective well-being, to what seem huge changes in circumstances, such as winning the lottery, or losing mobility. To explain this effect some have proposed the *set point theory* – genes and early environment give us a range of happiness to which we invariably return after perturbations. A good example of progress in testing generalizations is the recent updating, even debunking, of these early claims. It turns out that adaptation has a fairly restricted domain and a variable pattern across people. Divorce, serious disability and unemployment are very hard to get over, while adaptation to the death of a spouse is long but doable (Lucas 2007).

What about causality? Although notoriously difficult to infer from observational data, standard techniques such as randomized controlled trials and instrumental variables are entering well-being research too. One recent randomized controlled trial examined the effect of job training and supplemented income on a group of poor single mothers in the UK. The findings are clear and unexpected: their subjective well-being has been lowered by greater professional expectations and greater earning power (Dorset and Oswald 2014).

Commitment 3: The experience of well-being matters. Philosophers may disagree on whether experience directly constitutes well-being (according to hedonists) or merely contributes to it contingently (according to others), but in the sciences the implicit consensus is that studying well-being requires studying experience. The search for causal generalizations coexists with genuine concern

with what well-being (or ill-being) *feels like* and how it is understood by the subjects. The classic interpretivist goal is understanding the meaning of actions, the content of experiences and inscribing those in “thick descriptions”. It is fair to ascribe to the science of well-being *some* form of such a commitment, though it is realized in very different methodologies.

On the quantitative end, this commitment takes the form of questionnaires or experience sampling. Formal questionnaires or scales, as we shall see later, is the main method for reconstructing and measuring various aspects of well-being using the reactions of subjects to the items comprising these scales. These questionnaires range from gauging a person’s feeling (“How anxious do you feel?”), to gauging their judgments (“Is your life going well according to your priorities?”), or their perception of facts deemed important (“Do you feel in control of your circumstances?”). They can be longer or shorter, structured or free, and administered through various media. Some well-known questionnaires include The Satisfaction With Life Scale (Diener et al 1985), Positive and Negative Affect Scale (Watson et al 1988), Nottingham Health Profile (Hunt et al 1981), which measure respectively life satisfaction, happiness and health-related quality of life.

Experience sampling, on the other hand, aims at detecting and recording the many facets of experience as it is happening. Going through their day, subjects get prompted by a beeper to rate themselves on a variety of positive and negative emotions, their quality, intensity etc. Out of these ratings there emerges a picture of how the person felt as time went on and their circumstances and activities changed. Recently, using this method Kahneman and his co-authors have studied the daily experience of Texas women who famously found taking care of children to be less pleasant than even housework (Kahneman et al 2004b).

On the qualitative side there are the old and trusted tools of anthropology and sociology. These include ethnographies and open interviews. Recent examples of explicitly ethnographic research on well-being include studies of refugees (Kopinak 1999), families on welfare (Chase-Landsdale et al 2003), intensive care nurses (Einarsdóttir 2012) and many more. With the rise of cross-cultural studies of well-being, these methods become all the more prominent and important, since it’s hard to interpret the meaning of responses to questionnaires without talking to people properly.¹⁰

Notably, even in projects far removed from the qualitative approaches – for example, inference by economists of preferences from choices– the latest

¹⁰ These themes are explored in Diener and Suh 2000, Camfield et al 2009).

methods have abandoned the skepticism about tapping human experience that characterizes the classic economic approach rooted only in behavior. There is growing recognition that only some preferences and only some choices can reveal what really matters to people, and that to detect these requires a host of psychological and cultural knowledge, and perhaps even talking to people.¹¹

Commitment 4: Well-being is measurable. “If you treasure it, measure it”, announced Sir Gus O’Donnell in his presentation *Well-being statistics: How will Whitehall respond?* delivered on November 2nd 2011 in front of the All-Party Parliamentary Group on Well-being Economics in Westminster. The ‘it’ was well-being. At the time he was an outgoing Cabinet Secretary, the highest official in the British Civil Service, and his speech underscored the embrace of the new science of well-being by the UK government. Central to this embrace is measurement. Measures of well-being were to be taken mainly by the Office of National Statistics of which we will hear in Chapter 4. But even more significantly the far less adventurous UK Treasury dominated mostly by trained economists agreed to mention subjective well-being in its official guide to cost-benefit analysis, the Green Book.

Unsurprisingly, the scientists – some of who revolve in these circles too – are equally confident in their ability to measure well-being. For them the question at this point is not whether well-being is measurable. Their bet is that it is, and the debate has moved on to the pluses and minuses of specific measures. The skeptical view – that well-being is not the sort of thing that can be measured – is still live, naturally among the critics of the science. I shall examine one such argument, by Dan Hausman, in Chapter 5. But I focus on it as a philosopher, because studying this skeptical position reveals fundamental assumptions of this science. It is, however, not an argument that worries many scientists. For them the measurement project is marching on, largely in accordance with the standard psychometric procedures for developing validating measures. These procedures, my focus in Chapter 6, produce large databases of already validated questionnaires and for those who insist on creating new ones, step-by-step instructions on how to do so.

When controversies arise, they do so in regard to specific measures, for example, judgments of overall satisfaction with life. There is a longstanding concern with their alleged fickleness: apparently finding a coin, or seeing a person in a wheelchair, or being reminded of the weather, can drastically change a person’s evaluation of their well-being. These effects spawned both explanations of how these judgments are formed (perhaps they are constructed on the spot and deeply susceptible to mood) and also attempts to probe their replicability. The

¹¹ See Appendix B section on the economic sciences.

latter, however, reveal that judgments of life satisfaction are far more robust than initially claimed, so much so that the weather/coin/wheelchair effects that so excited scholars and public just a few years ago, cannot be replicated (Lucas 2013). The context in which people are asked to judge their life satisfaction – what they are thinking at the time and in what circumstances – clearly affects this judgment. But whether these context effects make these measures unusable and uninformative is far less clear.¹² So their widespread use continues.

Measurement is a quintessentially naturalist ideal that goes hand-in-hand with Commitment 2 to produce general claims about well-being and with the quantitative wing of Commitment 3 to study subjective experience. Once well-being is treated as a measurable quantity it can be plugged into generalizations that describe how a given level of well-being as it is experienced depends on a given variable. What about the use of this knowledge?

Commitment 5: Well-being science has applications. It takes all four pillars of normal science to support the fifth. This enterprise wears its policy, medical, business, and activist aspirations on its sleeve. Well-being has become an economic resource and a business tool, a development reflected in the rise of ‘corporate wellness programs’, life coaches, consultancies, and an intense data-gathering effort about the emotional state of employees and consumers. On the activist side, well-being findings are often recruited to tell us what is wrong with the way middle class Westerners live and with what they value; from isolation, to consumerism, to the medicalization of grief and sadness. This is how a domesticated version of Buddhist techniques such as Mindfulness-Based Stress Reduction, entered both self-help, positive psychology and mainstream medicine.¹³ The science of well-being speaks to governments too, slotting itself naturally into evidence-based policy movement, endeavouring to show which policies, therapies, interventions and community arrangements most efficiently relieve suffering and improve the well-being of all concerned. The triumphs of the activist scientists include the establishment of well-being indices, systematic data gathering and reports, incorporation of mental health initiatives into schools, hospitals, armies, welfare systems, and many more other such plans.¹⁴

I have listed five commitments of the science of well-being. The last of them, policy hopes, has historic associations both with naturalists and, via critical

¹² The original findings are in Schwartz and Strack 1999, 1991. See Deaton and Stone 2016 for the latest evidence of context effects and Lucas et al 2016 for a defense.

¹³ For a critique of modern life from this point of view see Haybron 2008 chapter 12 among other places. For a classic of positive psychology see Seligman 2004. For a history of mindfulness in North America see Wilson 2014.

¹⁴ For the rise of official well-being statistics see Stiglitz et al 2009, Office of National Statistics (2012, 2013), Self et al 2012, OECD 2013, Kahneman et al 2004a. For their policy relevance see Diener et al 2008, Huppert et al 2003, Dolan and White 2007 among many others.

theory, interpretivists, so we have a draw: three points (generalizability, measurement, and policy aspirations) for naturalism and three points for interpretivism (value-ladenness, focus on lived experience, and policy hopes). In this sense the science of well-being is mixed. It has goals and methods typical of both interpretivist and naturalist ideals.

We could note further features of this mixedness. Mathematical modeling and the elaboration of abstract theory, so important to economics, physics and parts of biology, have not arrived to well-being. Empirical studies of large- and small-scale causal networks that are widespread in epidemiology, econometrics and climate science, are by contrast under way. The science of well-being inherited controlled experiments and psychophysical measurement from psychology, but these do not define it. Instead it is more explicit in its value-ladenness, more friendly to anthropological methods, and more humanist at least in its official aspirations.

This does not make the science of well-being unique. Health and climate science have mixed features too. Indeed the categories of social versus natural science, interpretivism versus naturalism, ideographic versus nomothetic methods, may or may not retain relevance for new hybrid disciplines such as this one. The philosophy of the science of well-being is not a branch of philosophy of social science, nor of philosophy of natural science for that matter. So what will it be?

An Agenda For Philosophy

This book's title promises *a*, rather than *the*, philosophy, so I shall start by mentioning some agendas I am not pursuing.

Mine is not an exercise in political theory. As Commitment 5 illustrates science of well-being is often driven by a kind of welfarism – a view that well-being should be a goal of public policy. I will not defend or criticize welfarism here, because strictly speaking the pursuit of knowledge about well-being does not depend on the truth of welfarism. But only 'strictly speaking'. In reality it is hard to imagine anyone bothering with this science if well-being was not a relevant policy consideration. So I assume that much and turn to the proper shape of such knowledge, without weighing in systematically on how this knowledge should be used by polities, democratic or otherwise.

I also disavow the goals of either debunking or vindicating this field wholesale. Critiques of sciences such as ours tend to expose them as tools of capitalism, of neoliberal state, of managerial control, a fad, etc. The enthusiasts, on the other

hand, see vision, humanity and empowerment.¹⁵ There is truth in each perspective, but the scope of the field as I delineate in the five commitments above is too wide and too inclusive to make either one or the other a plausible full story. There is no one way to generalize, to measure, to respect subjective experience, nor one way to practice well-being activism. Because of this diversity, neither debunking, nor defense, are appropriate. In places I shall help myself to ideas of each camp, but the moral case that properly considers the promises of this science against its dangers will be complex and I will not endeavour to present it fully.

Finally, mine is *a*, rather than *the*, philosophy in another sense. A comprehensive philosophy of this science would cover a great deal of territory just because it raises many of the very same questions as other field sciences: how to infer causes and to measure their magnitude, how to strike a balance between generality and specificity of theories, how to use first person reports, how to elicit phenomena without distorting them, how to confirm hypotheses without misusing statistics, etc. I will not discuss these worthy issues.

My gaze is selective, but also worthy. I set myself one question that no philosophy can ignore: *How can the science of well-being produce knowledge that is properly about well-being?* Since such knowledge would be laden with apt values, I shall refer to it as The Question of Value-Aptness.¹⁶

When a headline proclaims that a happy marriage requires a wife slimmer than the husband¹⁷, I need to know what these researchers mean by ‘happy marriage’ and whether it is indeed good for me, before I rein in my appetite. Less frivolously, much of the methodology of the science of well-being rides on how we answer The Question of Value Aptness. Three issues do in particular:

- (1) How well-being should be defined in a given scientific project.
- (2) How well-being should be measured.
- (3) How the science of well-being can retain objectivity in the face of values.

This is my, admittedly selective, agenda for a philosophy of the science of well-being. Each chapter in this book addresses some part of this agenda. But before I say more we need to see why The Question of Value Aptness is far more taxing than it seems.

¹⁵ For pessimism see Davies 2015, Rose 1990, 1998, Lazarus 2003. For optimism see note 2 and responses to Lazarus in a special issue of *Psychological Inquiry* 2003 (14/2).

¹⁶ The expression ‘value aptness’ was first voiced to me by Stephen John.

¹⁷ <http://www.telegraph.co.uk/news/8646930/Happiness-is-based-on-wife-being-slimmer-than-husband-according-to-study.html>

Here's an intuitive approach to value-aptness: The science of well-being is value-aptness to the extent that the value-laden concepts that feature in its claims are appropriately informed by the best existing normative theories – in this case normative theories of well-being. Unfortunately, this answer is not so much wrong as very uninformative. The hard part is to specify, first, what 'appropriately informed' means and, second, by which normative theories.

The philosophy of well-being as practiced today is a study of what makes a life or some part of it good for one. Philosophers in the analytic tradition call this value 'prudential', and distinguish it from moral, aesthetic, epistemic and other values. It is a pursuit with a much longer history, albeit a less public present, than the science of well-being. Because philosophers describe their goal as the articulation of theories of well-being, it is a natural place to turn for our value-aptness fix. Philosophers are interested in defining well-being, scientists in measuring it, so a division of labor suggests itself: Let the philosopher tell the scientist the values that the measures are supposed to capture.

Alas this proposal for a division of labor is doomed from the start. The science of well-being should not seek out philosopher-kings – the definitions of well-being usable in the sciences must be sensitive not only to the normative theories of the good life but also to the practical constraints of measurement and use of this knowledge. But the goals of theorizing about well-being in philosophy as it is currently practiced are not sensitive in this way.

Obstacles to Value-Aptness

Before we say any more we need a crucial three-way distinction between *theories*, *constructs* and *measures* of well-being. Very roughly, theories are the preoccupation of philosophers, constructs and measures of scientists. A theory of well-being is a study of well-being's essential properties, those that make it well-being rather than something else. Philosophers often do this by attempting to specify necessary and sufficient conditions for classifying a person as 'doing well'. The term 'construct', on the other hand, is used mostly by psychologists and is just another name for an attribute or a phenomenon, in our case the state of well-being in the subjects of a scientific study. Constructs are usually unobservable, but have various observable manifestations. For example, those who do well are less likely to commit suicide. Finally, measures are ways of eliciting the observable indicators of constructs. For example, a score on a questionnaire might be such an indicator. If this questionnaire is really good at detecting well-being it is said to be a valid measure of this construct.

Ideally, theories, constructs and measures should stand in the right relation to each other. Measures must reliably track constructs and our choice of constructs must be properly informed by theories. I alluded that the theories of well-being

from philosophy are not capable of properly guiding the development of constructs and measures in science. Why not?

We might be tempted to blame it on the simple fact that philosophers disagree about the nature of well-being. Over the last two millennia, they have proposed and developed several theories of well-being, most notably a number of variations on the original ancient proposals of eudaimonism and hedonism, plus several on the more recent desire-fulfillment view. Appendix A offers an overview of these theories. For now, we shall use a basic distinction between *subjectivists* and *objectivists*. Subjectivists insist that nothing can be good for you unless you desire or prefer, or endorse this good. The objectivists disagree: a loving relationship or positive emotions, for example, are good for you whether or not you want it. The main version of subjectivism takes well-being to consist in the fulfillment of a person's deepest and most important desires, goals or values. Most objectivists about well-being insist on the fulfillment of human nature or flourishing, adopting a version of eudaimonism going back to Aristotle and other Greeks. Some objectivists are hedonists for whom well-being consists in a life of positive experiences. Philosophers have naturally found counterexamples to each theory, i.e. made up scenarios which fit the theory but intuitively do not count as well-being (or the other way around). At this point, the philosophical literature on well-being is extensive and each of the major options have grown elaborate and intricate under the weight of counterexamples. However, there is no consensus: not on whether well-being is wholly subjective or not, not on what exact mental states are partially or wholly constitutive of it, and not on the level of those states that is necessary. Instead a variety of different answers to these questions coexist in the literature.

But deep philosophical debates in themselves should not stop the study of well-being in its tracks any more than the chasm between empiricists and rationalists about the nature of knowledge stops any other inquiry. Besides, the debates in philosophy of well-being are not normally about *which* goods are prudentially valuable but rather about the *reasons* why they are valuable. So philosophers might all easily agree that pleasant experience matters, success in personal projects matters, living within one's limits matters, and possibly more. This level of agreement could potentially be enough for answering the Question of Value-Aptness.

Rather, the real obstacle to value-aptness is that current philosophical theories are just not *about* the right thing. They are about a concept of well-being *in general, all things considered*, the sort of concept we use when we evaluate either a life as a whole or a period of life in all its prudential aspects. This is a very important context, but also a fairly narrow one.

Take the question: “How is Mo doing?” This question might be asked in two kinds of contexts: a general and a specific one. A general context considers Mo’s life as a whole, or his current state at a time all-things-considered. Say, Mo’s close friend asks him “how are you?” in that significant tone of voice in a heart-to-heart conversation, or “how did Mo’s life go?” at Mo’s funeral. This is a context in which we must take account of all the important things in his life (either up to then or as a whole), evaluate how he is doing or has done on each account, and then aggregate all the important elements to produce an overall judgment. This is what I mean by general evaluation. If, on the other hand, Mo hears “how are you?” from his family doctor on an annual checkup, the same question invoked a context-specific evaluation – are you feeling healthy? This would be a contextual evaluation – only a particular aspect of well-being is in question here. Contextual evaluations also aggregate some information, but not as much as general ones. Still there is a difference in degree.

Some scientists of well-being are interested in the all-things-considered well-being – positive psychologists write books on how to improve your life. But more often than not the sciences dwell in the contextual territory. Researchers ask how a person or a group of people are doing *given* their circumstances and *given* the special focus these researchers adopt. A therapist is interested in how her patient is recovering from depression; a social worker in whether her clients are managing to rebuild their lives after a crisis; a team of development economists in a community’s access to basic goods.

To use a starker example consider a toddler with Down’s Syndrome just adopted from an orphanage in some place very poor. An early intervention teacher who is called to evaluate the child’s state will likely focus on the following: Is he still extremely malnourished and weak? Still spends the day staring at the ceiling? Still exhibits orphanage behaviours? Or is he learning to trust people? Learning to explore and to play? The very fact that these questions about this child and not others are asked reveals that the teacher is engaged in a contextual, rather than general, evaluation. Only some aspects of his well-being count and others, for instance, whether he is trying to communicate as many toddlers do, are irrelevant for this context.

Philosophers have typically theorized only about the first kind of well-being – the agent’s overall all-things-considered well-being, not the second kind. If you are a hedonist philosopher, you take well-being to consist in *all* the pleasures. If you are a desire theorist, once you have identified the set of desires that are well-being relevant (see Appendix A on various restrictions), you identify well-being with the fulfillment of *all* these desires in their order of overall importance, etc. This generalist focus persists whether philosophers talk about *temporal well-being* (well-being at a specific point in time or a period) or *life well-being*. Even

those philosophers willing to entertain the idea that the notions of life and temporal well-being obey different rules¹⁸, theorize about the most general evaluation. Context is still absent, or rather it is present, but only the one general context.

Which is, of course, perfectly fine. There are virtues to focusing on all-things-considered well-being. It is the human condition! But this focus is not adapted to the Question of Value-Aptness because this question calls for translation from the general to contextual evaluation. The unique focus on general well-being puts the philosophical project at odds with the project of the sciences. It leaves current philosophical theories of well-being far less relevant for science. There aren't ready-made theories for scientists to take off the philosopher's shelf. For all their internal intricacy and sophistication, these theories aren't intricate and sophisticated enough to serve where help is most needed, i.e. the selection of constructs and measures. And the tragedy is not just philosophy's: for if there is no proper value-based justification for construct development, it follows there is no justification for the knowledge claims of the science of well-being. Everybody is worse off – philosophers, scientists, and the users of science.

This is why the Question of Value Aptness will not be settled merely by bringing existing philosophy into the picture. Rather we need to start practicing science and philosophy in a joined up manner.

Construct pluralism

Indeed when we look at the sciences of well-being we see a great variety of contextual definitions and measures. Psychology alone boasts three approaches to defining and measuring well-being, economics two, and projects in the policy and clinical sciences yet more. Some definitions represent only the subjective judgments of people about their own lives, others contain objective quality of life elements; some are based only on the subjects' affect or emotions, others on their cognitive judgments, etc. As a result, many different things get called 'well-being'. Constructs said to represent well-being in gerontology and medicine differ strikingly from those in development economics and child psychology; they can even differ substantially within different subfields of the same research area. What I call *construct pluralism* is a pervasive and manifest feature of the science of well-being, a fact I summarize in Table 1.

¹⁸ 'Temporal well-being' is the expression used by John Broome (Broome 2004 chapter 6), 'life well-being' is Shelley Kagan's (Kagan 1992). Velleman 1991 spells out the specialness of life well-being.

Table 1: Construct Pluralism

	(1) Theory	(2) Construct	(3) Measure
Psychological sciences	Hedonism	Average affect	Experience sampling, U-Index, Positive and Negative Affect Scale, SPANE, Subjective Happiness Scale, Affect Intensity measures
	Subjectivism	Subjective satisfaction	Satisfaction With Life Scale, Cantril Ladder, Domain Satisfaction
	Eudaimonism	Flourishing	PERMA, Psychological Well-being Index, Flourishing Scale, Warwick and Edinburgh Mental Wellbeing Scale
Economics	Preference Satisfaction	Preference Satisfaction	GDP, GNP, household income and consumption,
Development sciences	Objective list theory	Quality of Life	Human Development Index, Dasgupta's index,
Policy sciences	Pragmatic Subjectivism (Haybron and Tiberius 2015)	National Well-being	UK's Office of National Statistics Measure of National Well-being, Legatum Prosperity Index, Social Progress Index, OECD Better Life Index
Medical Sciences		Quality of Life under various medical conditions	Nottingham Health Profile, Sickness Impact Profile, World Health Organization Quality of Life, Health-Related Quality of Life, QUALEFFO
Child sciences		Child well-being	US Department of Health and Human Services Children's Bureau Child Well-being Measure (3 domains of assessment – family, education, mental health and physical needs); UNICEF's State of the World's Children, other indexes

Each row represents an area of science that uses a notion of well-being. The columns aim to give, respectively, a philosophical theory commonly assumed by this area of research (Column 1), the constructs built on the basis of this theory (Column 2) and the measures that are supposed to capture the construct (Column 3). Appendix B gives the necessary background and references. Notice that in some rows I left the theory column blank. Why? Because in these areas researchers use a context-specific, not a general, notion of well-being, and it is often not clear what philosophical theory is supposed to justify the choice of construct. But the problem is bigger than it looks. Why are there four different theories in the first four rows? Is each one of them equally necessary? Isn't there one correct theory of well-being?

Construct pluralism presents us with two tasks. The first is methodological: which of the many things called 'well-being' in the sciences is the correct construct to use and for which purpose? Any philosophy of the science of well-being worth its salt must come with recommendations for how researchers should choose their constructs. The second task is philosophical – to explain why science lives with pluralism while philosophers search for a single correct theory of well-being.

Of course the two tasks are related. Depending on whether and how construct pluralism is justified philosophically, the method for fitting constructs to projects will be different. Part I of this book tackles philosophy, while Part II examines the implications of this for the science. However, the philosophy is not in the driver's seat here. I take construct pluralism to pose a genuine objection to the philosophical status quo that proceeds on the assumption of there being a single correct theory of well-being. In chapter 1 and 2 I accordingly propose a revision of the philosophy of well-being. But philosophy is not purely a passenger either. 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. It just won't be the sort of theory that philosophers are used to.

A revision of philosophy

In Part I I develop a philosophical view called Well-being Variantism, according to which there is neither an all-purpose concept, nor an all-purpose theory, of well-being. Instead there are (a) several different concepts which are appropriately referred to as 'well-being', and (b) possibly also several substantive theories that describe the referent of these concepts in different contexts.

In Chapter 1 I explore the first thesis, borrowing ideas from epistemology about how claims and attributions of knowledge depend on context. I favor a version of contextualism according to which the semantic content of well-being expressions changes with the context in which it is asserted. In some contexts well-being means all-things-considered evaluation, in others a more limited judgments about certain specific conditions of life. This variability is not the full explanation for construct pluralism – their variety is also due to substantive disagreements about what well-being is and to pragmatic choices about what each research project is best positioned to measure. But instability of meaning is part of the story.

Contextualism is only about the content of well-being claims and in this sense a fairly tame thesis. By itself, it does not yet imply that there is no single usable substantive theory that regulates the referents of each contextual well-being notion. But construct pluralism could lead us to consider this stronger possibility too. In chapter 2, I articulate this second variantist thesis – that the master theory of well-being is not forthcoming, nor indeed is needed.

Such flirtation with pluralism will come as no surprise to many philosophers of science. They have learned to temper their expectations about the power of theories as opposed to more localized sources of knowledge such as models, mechanisms and instruments. I think philosophers of well-being should do likewise. On the standard view once common in philosophy of science, for any particular phenomenon in need of representation, a corresponding theory should be able to imply this phenomenon given certain assumptions. This is the *vending machine* view of theory, to borrow Nancy Cartwright's apt term. Chapter 2 argues that philosophical theories of well-being are not vending machines. We just do not have such powerful theories of well-being, and if we held the empirical study hostage to the vending machine view then such a study would never get off the ground. Instead the role of philosophical theory is different: it is to assemble a toolbox, again Cartwright's term, full of concepts that help in developing any number of constructs and measures.

Enter Mid-level Theories

How are scientists to choose the right construct of well-being for their project if not by relying on a master theory of well-being?

Call the standard philosophical theories of well-being – hedonism, subjectivism, and eudaimonism – The Big Three. The Big Three are *high* theories in that they are about persons in the broadest possible sense without any specific context. I propose to distinguish high theories from *mid-level* theories. Mid-level theories are about the well-being of *kinds* of people, often groups, in *kinds* of

circumstances: children, children in the welfare system, former child-soldiers, working mothers, caretakers of the ill, post-Brexit Britain, etc. These kinds can be as general or as specific as our scientific and policy projects require. Mid-level theories are about the conditions of actual flourishing of these kinds given their environments.

They are mid-level because they are in between the high Big Three and the very specific measures of well-being in practical and scientific contexts. To be sure, a mid-level theory depends on high theory, but the two do not fully share criteria of assessment. If the goal of a high theory is to systematize as many disparate judgments about well-being as possible into a maximally simple consistent and yet powerful set of propositions, a mid-level theory need not necessarily. It systematizes some, but also has goals of its own, most importantly to enable and guide social measurement and application.

Where do mid-level theories come from? Implicitly they already exist. It is an implicit mid-level theory that motivates specialists on child well-being to attend to play and attachment, while specialists on national well-being focus on the sustainable use of resources, to use two examples. But these theories are often not well-worked out and not well connected to measurement, policy goals or the Big Three. They need to be, for construct pluralism to be justified.

I conceive of the relationship between high theories, mid-level theories, constructs and measures to be as depicted in Figure 1:

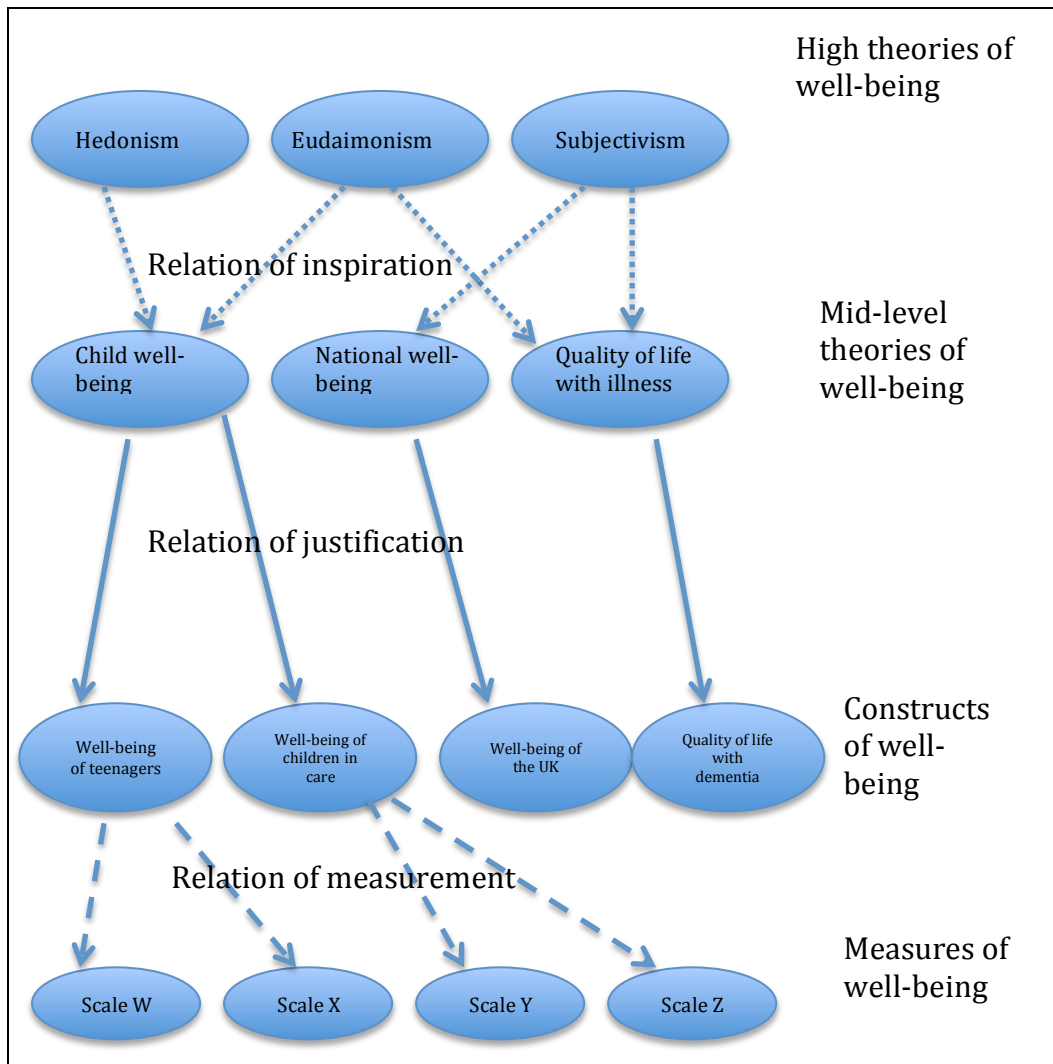


Figure 1: Mid-level theories of well-being.

High theories *inspire* mid-level ones by providing conceptual tools which enable the latter's formulation. Mid-level theories *justify* different constructs of well-being, whereas different scales enable *measurements* of the constructs. The arrows are different in each case because the relations are different. To inspire is not to justify and it is not to measure. Note also that a single high theory can inspire two different mid-level theories (or none at all). A single mid-level theory can justify several constructs and a single construct can be measured by several scales or not have a measure at all.

Mid-level, not high, theories occupy center-stage in my proposal. They enable the science of well-being to be value-apt, and they are a far more urgent task than another high theory no matter how intricate. This is not to say that the classic philosophical chestnuts about well-being are irrelevant to science. Is well-being just a mental state? Are some mental states more valuable than others? Can a knave fare well? These questions do regularly come up and sometimes the

application of scientific knowledge about well-being requires taking a stand in these controversies. But they are not relevant as often as the extent of the philosophers' attention to them seems to indicate. When they do arise they can rarely be resolved by appeal to high theories, but more often instead by appeal to an implicit mid-level theory, pragmatic considerations, or else by political means.

Putting philosophy to work

In Chapter 3 I show how a mid-level theory can be built. My collaborator on child well-being, a public health scientist Ramesh Raghavan, taught me that child well-being is an area of intensive scientific study and policy interest. The notion of 'best interests of the child' is central to welfare policy in many nations. Measures of child well-being range from the most basic (used by welfare agencies) to the more refined (used by UNICEF, charities, and child development specialists). Yet the theoretical question 'What is child well-being?' has so far received no rigorous answer from either scientists or philosophers. The existing theories of well-being, with the exception of hedonism, are about the ideal rational adult. And hedonism, which is about animals in general, poorly captures the importance of growth, exploration and development so unique to children.

Rather than being derived from general theories of well-being, child well-being needs a distinct substantive theory of its own, which can be used to build locally appropriate constructs. Such a theory needs to be based on empirical knowledge about children and their development, as well as on a philosophical conception of what it is to be a child. A high theory can serve as a constraint, but it does not imply a theory of child well-being. Putting together these various sources of knowledge I put together an account that sees child well-being as responsive to two demands: a forward-looking one that sees childhood as a step towards adulthood and a present-looking one on which childhood has value in and of itself.

Other neglected and much needed mid-level theories could be well-being for people with specific disabilities, traumas, or chronic illnesses, well-being of the displaced and the refugees, well-being of caretakers, and so on and so forth, however many social kinds might need a theory of well-being. Ideally a comprehensive philosophy for the science of well-being would include a map from contexts of research to corresponding mid-level theories and then to corresponding constructs. In this book I do not offer such a map simply because I do not know enough about the specific challenges and achievements that each of the different contexts bring. Building a mid-level theory of well-being is hard work as it involves working both from below – the existing empirical base – and from above – the relevant high theories, and then synthesizing the two as Chapter 3 illustrates. But I hope to lead by example. Mid-level theories are badly

needed and philosophers who are not averse to learning facts on the ground have the perfect set of skills to build them.

While Part I is concerned with answering one part of the Value Aptness question, that is the choice and justification of constructs of well-being, my variantism and mid-level theories do not in themselves provide an answer to whether these constructs can be legitimate objects of science. This is why in Part II I take up classic issues in philosophy of science – objectivity and measurement. Here I am concerned to show when and how constructs of well-being can be, not just well-grounded theoretically, but also obey constraints of scientific method.

Chapter 4 asks what is objectivity. Commitment 1 of our normal science notes various grades of value-ladenness in this enterprise. One of these grades – the use of normative assumptions in definition of well-being – raises a worry about objectivity of this science. Value freedom has been an important ideal dedicated to guarding science from bias and wishful thinking. I offer a conception of objectivity appropriate for this case and indeed other sciences that deal with normative concepts. Objectivity does not imply handing over decisions about values to policy makers and other users of the science. We should not try to eliminate the normativity so essential to the constructs and measures that the science of well-being uses. If value freedom requires this elimination, so much the worse for value freedom. I maintain that normativity in itself does not make the science of well-being dangerously political and ideological. Not unless this normativity is used to impose objectionable values on the unsuspecting users of this science. But it does not have to. To be objective the science of well-being has to be based on values that are out in the open and vetted by a deliberative process. This ideal is neither impossible, nor problematic. The science of well-being can and should strive to be objective in this sense.

But there is another sense of objectivity that this field aspires to, as does any other science – that is to measure what is really there. Whether well-being is measurable and how much we can trust the current measures is the focus on the last two chapters. In chapter 5 I discuss what I take to be the most compelling argument for skepticism about well-being science – that it aspires to measure something that is too diffuse, too personal, and inherently unmeasurable. Put forward recently by Dan Hausman this argument rejects the ‘normal’ modus operandi I sketched out earlier, proposing that none of the existing measures respects what to him is a non-negotiable feature of well-being. This feature is that well-being, no matter which of the Big Three you endorse, is a value that aggregates goods in a way that respects individual identity. This aggregation must be holistic and sensitive to values and circumstances and it is precisely this heterogeneity of well-being that any measure that purports to apply to masses of people is bound miss out.

I have a great deal of sympathy for Hausman's argument. Indeed I think it establishes convincingly that the science of well-being is unlikely to be a science of *individual* well-being in the all-things-considered sense that earlier I identified as the sense to which philosophers have been exclusively attending. Chapters 1 and 2, however, rejected this sense as unique and uniquely interesting. When it comes to contextual well-being which science often predicates of kinds rather than of individuals, Hausman's skepticism is less warranted.

In mounting this response I also appeal to an aspect of Hausman's case which is representative of other critics of the science of well-being – that is rejecting existing measures, be they questionnaires or indicators, on intuitive grounds. How could, such critique goes, questionnaires ever manage to capture this or that aspect of well-being? I take a dim view of such arguments. To show that a measure is invalid it is not enough to list plausible ways in which it might fail or even does fail on occasion. This is because measures of well-being go through a process of validation – most commonly psychometric validation. Since this process is supposed to ensure the validity of these measures, to criticize any measure effectively you must criticize this process.

Psychometric validation has been almost entirely ignored by philosophers of science. But no serious discussion of the science of well-being can afford to do so, which is why I devote the rest of Chapter 5 and the whole of Chapter 6 to reconstructing and evaluating the logic behind this enterprise. In my view psychometric validation is based largely on a sound principle that a measure should only be declared valid if its behaviour coheres with the background theory of the phenomenon which this measure tracks. It's the application of this principle that I find lacking. What counts as relevant background knowledge in psychometric validation is too narrow. True to its operationalist heritage the procedure excludes knowledge about values and relevant philosophical consideration about the nature of happiness, well-being, quality of life and related concepts. Too often and too mechanically psychometric procedures commit the sin of *theory avoidance*. Scientists are eager to validate their measures against empirical data, but not against philosophical theories, even when they are available. This theory-phobic attitude permeates the practice of the psychometric validation of questionnaires. Psychometrics thrives on the statistical analysis of existing questionnaire data and on checking the correlations with other known facts about well-being. While this approach is partially defensible, it outsources too much theory to statistics. A positive way to describe this status quo is as an understandable reaction to the paucity of usable mid-level theories – a status quo that I am keen to change. A less positive stance is to liken the worship of psychometric validation to technocratic expertise

taking over an issue that is in fact deeply political and moral. Whether a measure of well-being is valid should not be mainly a technical question.

I am optimistic though that the objections I raise are not fatal. There is nothing inherently wrong or impossible in the project that is the science of well-being, nor are there insurmountable obstacles to its improvement. This science does, however, call for a rethinking of what it takes to theorize about well-being and to measure it objectively. My intention is to offer such a rethinking.

A guide to readers

Different readers will engage with different parts of this book. Chapter 1 is as close as I get to discussing traditional themes that occupy philosophers in the so called core areas of analytic tradition. Readers uninterested in the mechanics of the arguments against a single concept of well-being can safely skip its mid-portions. Chapter 2 is a critique of a prevailing methodology in philosophy of well-being from the point of view of science and of philosophy of science. Chapter 3 on child well-being is again applied philosophy. My goal there is to speak to political theorists and social scientists interested in children. Chapters 4, 5, and 6 focus respectively on objectivity, measurability and psychometrics. The natural audience are scientists of well-being, philosophers of science, and the users of both. Throughout the book I make references to common trends and arguments in both philosophy of well-being and the relevant sciences. Readers who lack this background can refer to two appendices that summarize what I see as state of the art in those areas.