

# A flexible map of flourishing: The dynamics and drivers of flourishing, well-being, health, and happiness

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**Abstract:** Concepts like flourishing, well-being, health, and happiness are of increasing interest across many fields, from psychology and medicine to politics and economics. However, these terms are used in diverse and contested ways, which makes it hard to find common ground and understanding. To attempt to help remedy the confusion, this paper offers an overarching conceptual “map” within which these concepts can be situated, thereby providing a common language and framework for their consideration. Moreover, while the overall configuration of this map is conceptually and logically stable, its specific elements are more flexible, particularly in terms of scalable granularity (allowing fine-grained differentiation of internal regions) and epistemological openness (allowing revisions in light of gains in knowledge). As such, the map can be adapted to suit different fields, and updated to accommodate advances in understanding. To that end, we clarify topics of investigation that are still in need of development, providing a roadmap for future research.

**Keywords:** flourishing; well-being; health; happiness

## 1. Constructing a map of flourishing

Recent decades have witnessed a surge of interest in interrelated concepts like flourishing, well-being, health, and happiness. Some of the concepts have, of course, always been central to fields like psychology and medicine, but are now key topics across various disciplines, from politics to economics. Such interest is reflected, for instance, in the World Happiness Report, edited by eminent economists (Helliwell et al., 2023), which since 2012 has used data from the Gallup World Poll to annually rank countries on self-reported life evaluation. However, these central terms have numerous meanings, and are used in contested and even conflicting ways, which makes it hard to find common ground (Barrington-Leigh, 2022). As such, this paper offers a multidimensional, multidisciplinary conceptual “map” within which these concepts can be situated, and moreover provides a common language to discuss them.

While its overall structure is conceptually and logically stable, the map also includes higher-level features which are more flexible. By analogy, imagine a city map: the core structure might be its overall shape (e.g., location of particular regions), upon which are layered emergent features like infrastructure and buildings. In our map, we suggest a certain flexibility regarding which features are included in any given instantiation. That is not to imply that the features are arbitrary or contingent, but rather that they can be adapted as needed. Specifically, the map has two kinds of flexibility. First, scalable granularity: with any area, as per Google Maps, one can zoom in to gain increasingly differentiated details as desired. Second, epistemological openness:

while the map here represents the most accurate survey we can manage at present, future scholarship may mean it needs updating/revising, which the map can accommodate.

This map will be built up by gradually introducing its constituent parts. We first introduce an ontological framework for conceptualizing humans-in-context, doing so by combining two different sets of ontological distinctions, thereby presenting the map's basic structure. The second section focuses on health and well-being – together with a host of closely-related concepts – to situate these as central terms in the map. Next, we see how one can zoom in to consider different types of health and well-being, focusing in particular on mental health and well-being – labelled broadly as “happiness” – as a case study of the internal differentiation allowed by the map. Finally, we expand out to discuss flourishing as an overarching concept, encompassing not only well-being, health, and happiness, but also the myriad factors which influence them. We conclude by suggesting future research directions, with the aim of refining the map further and the field generally.

There are two additional points we should note up front. First, this is a human-centred map. That is, we are considering here ways in which well-being, health, happiness, and flourishing can apply to human beings. However, this should not be taken to mean that we consider non-human worlds to be unimportant. On the contrary, none of the states we are considering here – well-being, health, happiness, or flourishing – would be possible for human beings without non-human worlds. Additionally, we believe non-human worlds are important in their own right, apart from their effects on human beings (Lomas, 2023b). For these reasons, it is crucial to understand the various ways in which the terms well-being, health, happiness, and flourishing may properly apply to different non-human worlds (and also how human-oriented and non-human-oriented uses of these terms are related), but that important work is beyond what we can accomplish in this paper.

The second point to note is that, in conceptualizing and labelling areas of the map, we have sought to precisely operationalize and define the key terms, aiming for a level of transparent and explicit articulation frequently missing from the literature. In constructing these definitions, our prerogative was fourfold: (1) to identify distinct conceptual roles for each construct, avoiding using terms ambiguously or interchangeably; (2) to therefore not simply define constructs in isolation, but provide a network of interlocking and mutually reinforcing definitions that together make sense and collectively provide an overarching “mosaic” of the entire conceptual territory spanned by these myriad words; (3) to arrive at definitions that reflect and honour how they are commonly used in the literature (in our reading of it); but also (4) to acknowledge that, despite (3), our definitions may not accord with *all* definitions in the literature, so should be applied judiciously to other sources (i.e., one should judge from the context whether the source is using a term in a different way). With that in mind, let's begin.

## 2. An ontological foundation

Before considering our central concepts, we first introduce an ontological framework within which these can be situated. This provides the core structure for the map we then build up over the paper. Many ontological models have been proposed for understanding human existence, most of which acknowledge it as multidimensional. Our overall framework combines *two* schemas: (a) the “WHO+” framework (VanderWeele & Lomas, 2022); and (b) the “LIFE” – Layered Integrated Framework Example – model (Lomas et al. 2015). These two models each identify *different* sets of ontological distinctions that are orthogonal to each other, and which when combined create a richly detailed structure for understanding human life.

We begin with the WHO+ framework, which is built upon the WHO's (1948) definition of health, namely "a state of complete physical, mental and social well-being, and not merely the absence of disease and infirmity." This definition recognises three main dimensions – physical, mental, and social – as does Engel's (1977) biopsychosocial model of health. Let's briefly clarify what we mean by these dimensions. In brief, physical means *one's existence as a physical being*, mental *one's existence as a mental being*, and social *one's existence as a social being*. In addition to these three, there are growing calls for recognition of a spiritual dimension (Larson, 1996; VanderWeele et al., 2021; Peng et al., 2022), namely *one's existence as a spiritual being*. The idea of the "spiritual" is complex and perhaps less well understood, so we should further say that by this we mean *aspects of existence interpreted as qualitatively extending beyond "ordinary" or "regular" experience, or pertaining to non-material reality, and often described using qualifiers like sacred, transcendent, higher, deeper, or divine*. Although some critics may suggest any experience construed as spiritual could be entirely accounted for in terms of mental, physical, and social dimensions, advocates for recognizing a spiritual dimension counter that it is genuinely distinct, and cannot be reduced to the WHO dimensions without omitting something crucial. This perspective dominates in many cultures, religions, and spiritual traditions globally, and is one with which we concur. We refer to the three WHO dimensions plus spirituality as the "WHO+" framework.

Despite the robustness of the WHO+ framework, however, alone it may not be sufficient to capture the nuances of the ontological terrain. Thus, our map can be further enriched by also bringing in a *different* ontological schema: Lomas et al.'s LIFE model. This identifies four main dimensions: subjective ("mind"); objective ("body"); intersubjective ("culture"); and interobjective ("society"). Crucially, these are distinct from and orthogonal to the WHO+ ones. The four dimensions in the LIFE model arise from a juxtaposition, pioneered by Wilber (2001), between two fundamental binaries: subjective-objective, and individual-collective. The former refers to the distinction between ontological subjectivity (i.e., *aspects of phenomena which exist and are perceived within consciousness, referred to generally as qualia*) and objectivity (i.e., *aspects of phenomena which exist as material objects or processes, such as neurophysiology*). The nature and interaction of these realms has been debated for centuries, often under the rubric of the "mind-body" problem. In some form, both realms are accepted by most thinkers (except strong materialist or idealist monists); however, their precise relationship is complex and contested. The dominant scientific approach is the "neural correlates of consciousness" paradigm (Fell, 2004), which examines associations between subjective mind states and objective brain states. However, the connection between these states remains poorly understood and is still, at some level, considered by most to be mysterious. In contrast to the relatively easy task of "just" tracing patterns of association, *explaining* their connection was famously called the "hard problem" of consciousness by Chalmers (1996). Mind states certainly seem to *depend* – "supervene" in philosophical terminology – on brain states for their existence. However, the brain might be better seen as the physiological architecture or mechanism by which mind is instantiated, rather than its cause per se (Lomas, Bartels, et al., 2022). In any case, the significance of this binary is that it is orthogonal to the WHO+ distinction between physical, mental, social, and spiritual dimensions: all four dimensions have both objective manifestations (i.e., physiological processes) and subjective manifestations (i.e., qualia). For example, a broken ankle is a physical issue, anxiety a mental issue, ostracism a social issue, and concerns about faith a spiritual issue; each of these issues has both objective elements (neurophysiological activation) and subjective elements (qualia) associated with them.

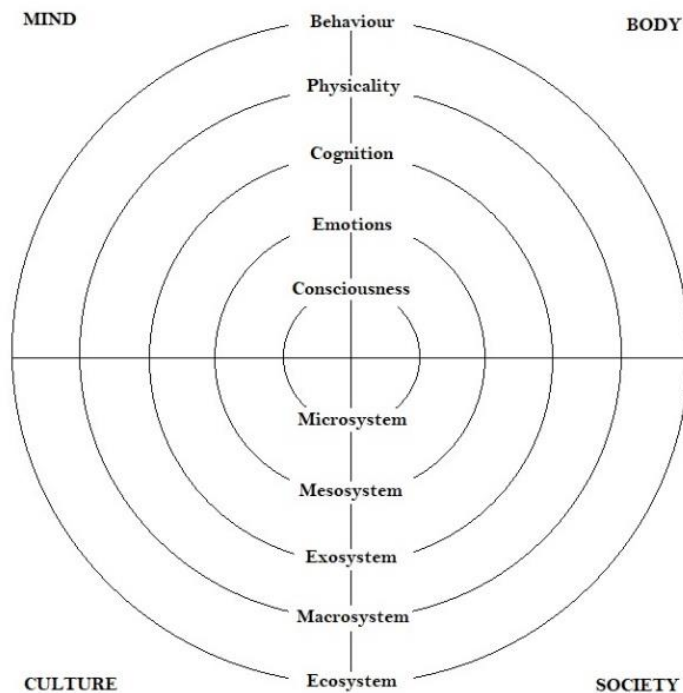
The LIFE model then intersects this subjective-objective binary with the individual-collective distinction. The latter concerns the recognition – articulated by the likes of Bakan (1966) – that

humans have two main modes of existence: agency (as autonomous self-contained beings), and communion (as also inextricably part of networks of other people and processes). Juxtaposing this with the subjective-objective binary creates a 2x2 matrix, illustrated in Figure 1. The top row covers the “standard” subjective-objective dichotomy (i.e., at the individual level), as outlined above. The bottom row applies this binary at the collective level. The mind exists in a collective way as an intersubjective phenomenon – labelled “culture” – i.e., a shared experiential horizon, featuring common ideas, values, even feelings. Likewise, the collective has an interobjective material reality – denoted “society” – which includes anything that is directly observable and quantifiable (in contrast to the more intangible dynamics of culture, which are less obviously observable and harder to quantify); at the level of a nation, for example, this ranges from its population and wealth to its geography and climate.

Having been founded upon these four ontological dimensions, the LIFE model then brings further nuance to the picture by stratifying the dimensions into layers. There are numerous ways of stratifying these layers – hence the word “example” in the model name – so the version offered here is just one potential configuration. The individual dimensions have been stratified into five levels: consciousness, emotions, cognitions, physicality, and behaviour. These are not separate or distinct, but overlap and intersect in complex ways (e.g., one can be conscious *of* one’s emotions). Nevertheless, differentiating them conceptually can be a useful heuristic, allowing us to survey the terrain with granularity. Note, too, that these levels straddle the subjective and objective dimensions, in that – per the neural correlates of consciousness paradigm – these have both subjective (qualia) and objective (physiological) aspects. For the collective dimensions, the LIFE model draws on Bronfenbrenner’s (1977) ecological systems theory. This identifies six nested levels in which people are situated: the person; the microsystem (their immediate social setting); the mesosystem (interaction between microsystems); the exosystem (the wider community in which microsystems are situated); the macrosystem (broader systems which impinge upon exosystems); and the chronosystem (how these systems change over time). The LIFE model incorporates the just middle four, since the person is represented by the upper dimensions of the LIFE model, and the chronosystem is implicit in the model as a whole (rather than as a distinct layer). It also adds the “ecosystem,” since all human systems are embedded in the wider natural world. Again, these levels straddle the subjective and objective dimensions, both having intersubjective (e.g., shared ideas) and interobjective (e.g., material systems) aspects.

Before moving on, we want to emphasise the point about flexibility that is central to our map. The four quadrants of the LIFE model are part of the map’s core structure, as are the four WHO+ dimensions. However, the *layers* of the LIFE model constitute higher level surface features, and are more flexible. The principle of scalable granularity means the dimensions need not necessarily be stratified into only five layers, and one could identify fewer or more layers as needed. To reiterate a point above, though, calling these layers “flexible” does not mean they are arbitrary or contingent. There may be many ways of “carving up” the dimensions, but one way or another, the phenomena represented above in Figure 1 will still need accounting for. However, per scalable granularity, they could be differentiated into finer-grained concepts (e.g., with consciousness, identifying modular forms of attention and awareness). We will see similar processes of scalable granularity in other sections. Having introduced an ontological model of the person-in-context, we now focus on the key topics of this paper, beginning with health and well-being – together with various closely-related terms – which serve as central concepts in the map.

Figure 1. The LIFE model



### 3. Well-being and health

At the heart of the map are the closely related notions of health and well-being. We might begin by noting that these concepts, and indeed all the related ones discussed here, are often not well defined in the literature. We can illustrate this by briefly considering variation in the conceptualization of well-being – serving as an indicative case-study in the kind of conceptual slipperiness one finds with these topics – but the same points apply to the other terms considered in this paper. When it comes to well-being, the many reviews of its definitions and conceptualizations – including Sumner (1996), Ereaut and Whiting (2008), White (2008), Dodge et al. (2012), Wassell and Dodge (2015), and Barrington-Leigh (2022) – invariably emphasise how elusive and contested the concept is. Reviewing trends in conceptualizations of well-being for the 2022 World Happiness Report, Barrington-Leigh (2022) suggests that while its use has risen sharply over recent years, it is “typically poorly defined,” despite having been embedded into policy and even law. Moreover, whenever it *is* clearly defined, these meanings tend to be limited to and applicable only in specific fields. In psychology, for example, a prominent construct is “subjective well-being,” which Diener et al. (1999) define as “a broad category of phenomena that includes people’s emotional responses, domain satisfactions, and global judgments of life satisfaction” (p. 277). However, from a cross-disciplinary perspective, this construct is narrow and field-specific, and the generic phrase “subjective well-being” – outside its specific use by psychologists – is ambiguous. For example, in other contexts, subjective well-being might refer to people’s subjective assessments of their overall physical condition, or their financial state, or a myriad of other considerations, and not merely their satisfaction with them, which would be distinct from Diener et al.’s psychologically-oriented construct.

As such, we aim to develop a common framework and language for understanding health and well-being – and related concepts – that could work across different fields, thus facilitating interdisciplinary conversations and collaborations. Indeed, despite the confusing picture generated by the kaleidoscope of definitions and conceptualizations, there are nevertheless many

common threads that suggest such a common language *is* feasible and within reach. Returning to the example of well-being, the first commonality is that nearly all definitions are multidimensional, and moreover are so in two different ways, involving (1) subjective versus objective, and (2) different realms of existence (per the WHO+ framework).

We will first consider the subjective-objective distinction, though we must already complicate the discussion by noting that these terms can be used in two subtly different ways, with Searle (1995) distinguishing between ontological and epistemological versions of them, as shown in Figure 2 below. The ontological distinction is the one involved in the LIFE model, with subjectivity pertaining to consciously-registered qualia and objectivity to their associated neurophysiological mechanisms. By contrast, in epistemological or evaluative terms, subjectivity implies personal preference whereas objectivity suggests some more impersonal standard. Somewhat confusingly, the ontological and epistemological uses of these terms can be orthogonal to each other: an epistemologically subjective personal preference, for example, can have aspects that are both ontologically subjective (i.e., qualia) and objective (i.e., associated neurophysiology); similarly, ontologically subjective qualia can have aspects that are epistemologically subjective (i.e., reflecting idiosyncratic personal preferences, such as the particular sights, sounds, smells, tastes, etc. an individual happens to enjoy) and others that are more objective (i.e., qualia that most people, and perhaps even all, could agree are intrinsically good/desirable or bad/undesirable on principle, such as feelings of love and hate respectively). Even more confusingly, although one can find both ontological and epistemological/evaluative uses of subjective and objective in the literature, scholars rarely explicitly clarify which version is meant, and one usually has to infer this from the context and usage. To be clear, our default here is to use subjective and objective in an ontological sense, as per the LIFE model, so if these terms appear without a qualifier, that is what we mean by them. Then, if we are referring to them in an epistemological-evaluative sense (as we do in the next paragraph), we will explicitly use this qualifier.

**Figure 2.** Ontological versus epistemological subjectivity and objectivity

	Subjective	Objective
Ontological	Qualia (i.e., conscious experience; the feeling of “what it is like to be” a given person)	Neurophysiological mechanisms (e.g., brain regions and processes associated with given mental states)
Epistemological-Evaluative	Personal preference (i.e., idiosyncratic likes and dislikes, values, etc.)	Intrinsic properties (e.g., phenomena that are universally agreed as in principle good or bad)

The epistemological subjective-objective distinction was brought to attention by, among others, Sumner (1996) in an influential overview of well-being definitions, which he suggested tended to fall into these two types. In brief, epistemologically subjective definitions are based on people’s own preferences, values, and experiences. An early and influential example is from Shin and Johnson (1978), who defined well-being as “a global assessment of a person’s quality of life according to his own chosen criteria” (p. 478). This definition is reflected in various constructs of life satisfaction or evaluation, such as Cantril’s (1965) Self-Anchoring Striving Scale, which is still widely used, including in the Gallup World Poll, which is the basis for the World Happiness Report (Helliwell et al., 2023). By contrast, epistemologically/evaluatively objective definitions assume well-being can be understood and assessed objectively – i.e., regardless of individual

subjective preferences – by gauging the presence of phenomena deemed universally constitutive of it. Such notions of objectivity may be understood by some as truly objective in some absolute sense, or may alternatively be understood by others in terms of near-universal positive evaluation within the human community. Many definitions, however, explicitly incorporate epistemologically subjective *and* objective dimensions. A report by the WHO (2013) on quality of life, for example, proposed that “well-being exists within two dimensions, a subjective and an objective one. It includes the life experience of an individual, but also the comparison of the life circumstances with social norms and values.”

Thus, it is common in the literature for well-being to apply to both epistemological subjectivity *and* objectivity. Intriguingly though, it seems rarer for it to apply to both *ontological* subjectivity and objectivity, and instead often seems to just imply ontological subjectivity (i.e., personal experience). This observation is helpful in our aim of defining well-being, and associated constructs, not in isolation, but within a network of interlocking and mutually reinforcing definitions that together make sense. In that respect, the place to begin is the relationship between well-being and health, given that these are often used in conjunction with one another – one commonly encounters the phrase “health and well-being” – in ways that suggest that *together* they capture different and complementary aspects of a common phenomenon. Defining these is tricky, because in contemporary discourse, one can find, (1) the terms used synonymously, (2) health presented as a subset of a broader notion of well-being, and vice versa, and (3) the terms partially overlapping, often in ways that are not well specified. However, in terms of our prerogative of identifying specific meanings, the most common distinction we can discern in the literature when “health and well-being” are applied to humans – even if scholars themselves do not explicitly invoke this binary – is in terms of ontological subjectivity versus objectivity. Whenever health and well-being are not used synonymously, well-being frequently seems to emphasize – as indicated above – subjective aspects of the person (i.e., how the person *feels*, whether physically or mentally), whereas health often denotes objective aspects of the person (i.e., how well a person's body and brain are functioning). By contrast, uses of health and well-being do not map neatly onto the *epistemological* subjective-objective distinction: it is not that health tends to signify epistemological objectivity and well-being epistemological subjectivity; rather, both epistemological objectivity and subjectivity can equally apply to both health and well-being. Thus, we suggest that a useful strategy for differentiating health and well-being is to distinguish them through the *ontological* subjective-objective binary.

Of course, not all scholars will agree with this distinction, and some may be able to identify specific usages where it does *not* obtain. In some definitions, for example, health and well-being each appear to cover both objective and subjective aspects of the person, as seen in the WHO's (1948) definition of health. Consequently, when approaching such existing definitions, readers must not automatically impose our subjective-objective distinction on them, but must use judgement in recognizing that health and well-being are potentially being used more interchangeably, covering both ontological objectivity and subjectivity. As noted above, our proposal is simply that when the two terms, health and well-being, are distinguished in human life, often health refers to the objective aspects and well-being to the subjective aspects, but once again we do acknowledge other uses of these words. Our prerogative is to offer as much clarity as possible and find precise meanings for these key terms, working creatively and flexibly with language to achieve this goal. One can consciously deploy words according to one's own sense of how they *can* work best, even if these usages occasionally differ from how they *have* sometimes

been used by other people. So, in summary, we will use health specifically to denote ontologically objective aspects of the person and well-being to emphasize subjective aspects.<sup>1</sup>

Having established this initial point of differentiation between health and well-being, we can now bring further specificity into how we operationalize these terms. Besides how they map onto the objectivity-subjectivity distinction, both health and well-being can have two subtly different roles in common discourse, denoting: (a) a continuum pertaining to how well a person is faring in life, and (b) desirable parts of that continuum. If a doctor says to a patient, “Tell me about your health,” or if a researcher is interested in assessing individual well-being, what is of interest here is meaning (a), which refers to how a person is faring on a continuum containing both desirable and undesirable states. But if a person says, “I’m grateful I have my health,” or a researcher concludes that an individual has attained notable well-being, what is of interest here is meaning (b), which refers to particular, desirable parts of the continuum. We can state these subtly different meanings using the same key words, defining (a) as *the quality of one’s personal state*, and (b) as *the relative attainment of a personal state of quality*. Our priority is with (b), so whenever we use either health or well-being, it is usually this second definition we have in mind (and if not, we will either make that explicit or the context will make it clear). Of course, one may encounter definitions in the literature which employ meaning (a), and an advantage of our dual definition framework is that it can easily accommodate these cases.

Let’s briefly clarify the words harnessed in these definitions. We deploy “state” to signify a condition or mode of being that is not permanent, but can vary widely in duration (from a fleeting emotion lasting seconds to a durable way of being that could even last for years). Additionally, we use the idea of “quality,” as deployed in notions of quality of life, a common framing in work on well-being (Nussbaum & Sen, 1993). This idea has further been influentially explored by Pirsig (1974), for whom it described a fundamental, irreducible sense of a phenomenon being good or valuable (Reeves & Bednar, 1994). A rough synonym of quality therefore might be “goodness” – not necessarily in a moral sense per se, but simply as an appraisal of value, excellence, and appreciation. In that respect, definition (a) essentially invokes the question, “How good is your life?”, while definition (b) may evoke the answer “Life is good.”

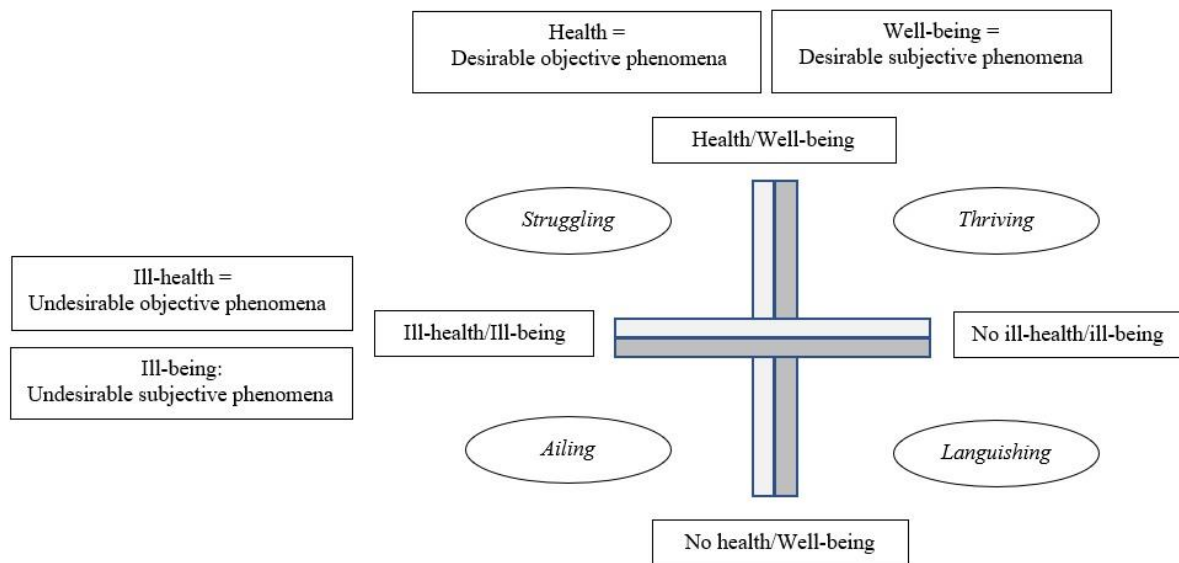
With these nuances in mind, we can now refine the definitions above further in terms of the distinction between health implying objectivity and well-being implying subjectivity. Thus, both (a) and (b) definitions – where (a) refers to a continuum, and (b) to desirable parts of that continuum – can be adapted to emphasize either objectivity for health or subjectivity for well-being. As such, health refers to (a) *the quality of one’s personal objective state*, or (b) *the relative attainment of a personal objective state of quality*, while well-being refers to (a) *the quality of one’s personal subjective state*, or (b) *the relative attainment of a personal subjective state of quality*. Again, when we use either term, our priority is with (b), so it is these second definitions we have in mind. In that regard, one can also use ill-health and ill-being for *undesirable* parts of these continua, contrasting health with ill-health and well-being with ill-being. Thus, adapting the (b) definitions to describe lack rather than attainment, ill-health can be construed as *the relative lack of a personal objective state of quality*, while ill-being can be construed as *the relative lack of a personal subjective state of quality*. These different usages are shown in Figure 3 below.

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<sup>1</sup> Using this formulation, strictly speaking the term “subjective well-being” would be a tautology, and the “subjective” would be redundant. However, the issue is a little more complicated when it comes to the construct of “subjective well-being” as developed by Diener and colleagues, as they generally seem to use “subjective” in an *epistemological/evaluative* sense (i.e., pertaining to personal preferences) rather than an ontological sense. This confusion arises because, as noted above, subjective and objective can be used in these two different ways, yet the specific sense in which they are deployed is often not specified.



**Figure 3.** Conceptual relationships between health and well-being



We should also consider the relationship between ill-health/ill-being and health/well-being. A common metaphor is a spectrum, spanning a negative and positive pole. In terms of the mental dimension, this was reflected in a comment by Maslow (1962) on the value of studying the positive territory: “It is as if Freud supplied us the sick half of psychology and we must now fill it out with the healthy half” (p. 5). This notion was further developed by Keyes (2002) in “The Mental Health Continuum: From Languishing to Flourishing in Life.” However, this metaphor has increasingly been recognised as flawed. To begin with, it is unidimensional, implying a person is in *either* negative or positive territory. However, as Keyes himself recognised, ill-health/ill-being and health/well-being are somewhat separate – physiologically, functionally, and experientially – and people can have aspects of both concurrently. Moreover, the spectrum implies that both ill-health/ill-being and health/well-being are singular, whereas there are many different forms of both; in the mental domain, for example, there are various types of both psychiatric disorders and forms of well-being, as we have sought to capture in a new Mental Illness-Health Matrix (Lomas & VanderWeele, 2023a). To reflect these nuances, Keyes (2005, 2014) developed a “dual continua” model, with *separate* spectra for mental ill-health/ill-being and health/well-being, which can be placed orthogonally to create a bivariate state space, with a horizontal ill-health/ill-being axis and a vertical health/well-being axis, as shown in Figure 4 (a few pages below). Note that although his model pertains to the mental dimension specifically, one could adapt it and its terminology to the other WHO+ dimensions – as discussed below – and to ill-health/ill-being and health/well-being generically.

The best option is being without ill-health/ill-being *and* positively excelling (top right), which Keyes (2002) described as “flourishing,” but we designate as “thriving” (since we use flourishing in a broader sense to encompass the person *and* their situational context, as discussed below). We could define this as *an optimal condition involving the relative attainment of personal states of quality, without also experiencing personal states lacking in quality*. Such thriving is preferable to being without ill-health/ill-being yet lacking health/well-being (bottom right), which we follow Keyes in calling “languishing”: *an ambivalent condition involving the relative lack of personal states of quality yet without also experiencing personal states lacking in quality*. Thriving is also preferable to experiencing health/well-being *and* ill-health/ill-being (top left), which we refer to as “struggling”: *an ambivalent condition involving the relative attainment of personal states of quality while also experiencing personal states lacking in quality*. In turn, both languishing and struggling are

preferable to the worst permutation of being ill while also not doing well (bottom left), which we label “ailing”: *an unwanted condition involving an absence of personal states of quality while also experiencing personal states lacking in quality.*

So far, we have been conceptualizing these constructs in generic terms. However, further nuance can be brought to our understanding of this terrain by applying these formulations to the four WHO+ dimensions of existence. This allows the terminology to serve as a common language across fields, which is useful given that academic attention to these different dimensions has tended to remain siloed and disconnected. Across the four dimensions, there has traditionally been stronger emphasis on the negative territory of ill-health/ill-being. This is the prerogative of fields like medicine and physiotherapy for physical ill-health/ill-being, psychiatry, psychotherapy, and clinical psychology for mental ill-health/ill-being, social work for aspects of social ill-health/ill-being, and theology, religion, philosophy, and spiritual practice for spiritual ill-health/ill-being. These fields do sometimes aim to push people into positive territory (health/well-being), but broadly tend to prioritise getting people towards at least a relative absence of ill-health/ill-being, as reflected in Freud’s remark that the goal of psychotherapy was generally limited to turning “hysterical misery into ordinary unhappiness” (Breuer & Freud, 1955, p. 308). However, with work by the likes of Keyes, it is increasingly appreciated that an absence of ill-health/ill-being is not the same as the active presence of health/well-being (Pawelski, 2013, 2016b). As such, disciplines are emerging to focus on this positive territory. Pioneers in that regard are humanistic and positive psychology, which have charted mental health/well-being in great detail. By comparison the other dimensions have received less attention to their positive realms, though inroads are being made. Physical health/well-being includes helping people cultivate healthy behaviours, and exploring the higher limits of human performance, characterised by fields like sports science. Social health/well-being is the focus of some aspects of public policy, education, and community organizing, featuring efforts to improve society. And spiritual health/well-being is being given more attention in some realms of theology, religion, philosophy, and spiritual practice.

Our map and its definitions allow these fields to find common ground by providing a shared language that can be tailored to the specific dimensions. Here we will use the mental dimension as an example, but the points made can equally be applied to the others. First, the definitions above can be adapted by inserting the relevant dimension as an adjective. So, in describing the continuum of the mental dimension – definition (a) of health and well-being – we can use “mental health” for its objective manifestations (*the quality of one’s personal objective mental state*), and “mental well-being” for its subjective manifestations (*the quality of one’s personal subjective mental state*). The negative realms of this territory are respectively “mental ill-health” (*the relative lack of a personal objective mental state of quality*) and “mental ill-being” (*the relative lack of a personal subjective mental state of quality*), while the positive realms – definition (b) of health and well-being – are “mental health” (*the relative attainment of a personal objective mental state of quality*) and “mental well-being” (*the relative attainment of a personal subjective mental state of quality*). One could also adapt the four permutations of ill-health/ill-being and health/well-being to refer to the mental dimension specifically; for instance, the optional condition of health/well-being and no ill-health/ill-being would be “mental thriving”: *an optimal condition involving the relative attainment of personal mental states of quality without also experiencing personal mental states lacking in quality.* Finally, if health/well-being were attained across *all* dimensions, this would constitute complete or total health/well-being. As such, “complete health” refers to (a) *the quality of one’s personal objective state across the physical, mental, social, and spiritual dimensions of existence*, and (b) *the relative attainment of a personal objective state of quality across the physical, mental, social, and spiritual*

dimensions of existence, while “complete well-being” refers to (a) the quality of one’s personal subjective state across the physical, mental, social, and spiritual dimensions of existence, and (b) the relative attainment of a personal subjective state of quality across the physical, mental, social, and spiritual dimensions of existence.

So, we have seen that the general definitions relating to health and well-being can be adapted specifically to the WHO+ dimensions of existence. Moreover, one can “zoom in” to gain a granular picture of these dimensions, as we illustrate next using the positive terrain of mental well-being, labelled broadly as “happiness.”

#### 4. Happiness

A particular strength of the map is its principle of scalable granularity, which allows one to zoom into any given dimension to differentiate that particular terrain in greater detail. As such, we need not only speak generically about mental ill-health/ill-being or health/well-being, but can identify different forms, and can moreover define these by adapting the definitions above still further. Regarding mental health/well-being, for example, we (Lomas & VanderWeele, 2023b) have proposed a provisional taxonomy featuring 16 different forms of happiness found in the literature. Although “happiness” is sometimes used only for select aspects of mental well-being (e.g., as somewhat synonymous with states such as pleasure), we use it more expansively as a broad label for the terrain as a whole (*the relative attainment of a personal subjective mental state of quality*). That said, it arguably does not cover the *entire* territory: happiness is arguably more properly understood as a desirable mental *experience* of quality, and there are aspects of mental well-being, like the mere possession of knowledge, which would constitute a state of quality (mental well-being), but would not ordinarily be described as happiness were it not also accompanied by some sort of desirable experience of that state.

While it is beyond our scope to fully elucidate and justify this taxonomy here, we will briefly summarise it as an example of the granularity permitted by our map. Moreover, happiness is sometimes used synonymously with well-being and flourishing, so there is value in differentiating these. In any case, as reiterated above, a strength of the map is that its components are flexible, so in a sense the *specific* forms of happiness are beside the point. Indeed, other authors could propose a *different* taxonomy of happiness, and it would likewise be accommodated by our map. As such, we encourage readers not to fixate here on the specific details of the taxonomy; the central point is the principle of differentiation within the four WHO+ dimensions, with both their negative and positive realms capable of similarly being deconstructed into fine-grained constituent elements (as for instance the DSM-5 does vis-à-vis mental ill-health/ill-being). Thus, our taxonomy of happiness is simply a useful illustration of this process.

It should be noted that, in defining happiness broadly as we do, it is not only an *affective* phenomenon, even if it is sometimes assumed or positioned to be one. Although some readers may prefer to view happiness more narrowly, there is great value in a more expansive view. Indeed, many states described as forms or aspects of happiness *do* include non-affective dimensions. The notion of being “happy with life,” for example, is more a cognitive or evaluative state, rather than principally an affective one. Of course, many mental states and processes are multidimensional, so have at least some affective component (e.g., a cognitive judgement might have an accompanying valence). But, of the forms of happiness in the taxonomy, many are not *primarily* affective, and some could even be seen as not notably including affect at all (e.g., “absorbed happiness”). However, as noted above, while happiness is broader than simply an affective state, it is still an imperfect label for overall mental health/well-being, which also encompasses other aspects of mental life that contribute to health/well-being, but could not be

construed as constituting happiness (even with an expanded definition of this term). For example, mental health/well-being may also involve the various faculties of the mind – attention, perception, memory, etc. – broadly “working well” (i.e., not only being relatively free of problems, but excelling to various degrees). However, insofar as the *experience* of mental well-being is concerned, “happiness” arguably does capture the relevant terrain.<sup>2</sup>

Recent decades have seen a surge of interest in this topic – spanning many fields, from biochemistry to economics, and above all psychology – which has greatly expanded our understanding. Most scholarship however has focused only on two main “types”: hedonic and eudaimonic. This distinction is often traced to Classical Greece, and especially Aristotle (1986), who disparagingly depicted the former as coarser forms of pleasure, and conversely valorised the latter as a deeper happiness arising through self-cultivation and virtue. This distinction has persisted to today, animating contemporary scholarship. However, as important as these two types are, scholars have begun to suggest they may not be exhaustive in covering the terrain of mental health/well-being, as for instance seen in recent work by Oishi and Westgate (2021) on people’s preference for a “psychologically rich” life, involving a complex and dynamic mixture of experiences and mental states. Moreover, even the two hedonic and eudaimonic domains encompass distinct subdomains, some of which our taxonomy separates into distinct forms. First, we extract from hedonic happiness the notion of “evaluative happiness,” and present this as a distinct form – as does the National Research Council (2013) – rather than the usual strategy of conflating it with hedonia. Second, while eudaimonia was originally used by Aristotle to refer to cultivation of character and virtue, in modern scholarship it has swelled to seemingly become a catch-all term for anything non-hedonic. However, we submit that several elements presently subsumed within eudaimonia warrant consideration as their own form, since they do not necessarily involve the cultivation of character and virtue. These include having meaning and purpose (which we call “meaningful happiness”), and accomplishment (“accomplished happiness”).

The wider context to our expanded taxonomy is the growing recognition that mental health/well-being research – and psychology more broadly – has historically been Western-centric, influenced by the cultural hegemony of the USA in particular in its understanding of human psychology. To that point, Henrich et al. (2010) influentially argued that nearly all psychological research has been conducted by and on people in contexts that are “WEIRD” (Western, Educated, Industrialized, Rich, and Democratic). At issue is that most of the world is not similarly WEIRD, which raises questions around the validity and universality of such work. The USA is relatively individualistic, for instance, and also valorises high arousal emotions, both of which are implicated in the predominant focus on hedonic happiness (Tsai et al., 2006). To that end, researchers increasingly appreciate the need for greater cross-cultural research – including on how happiness is experienced and conceptualized – within a broader movement towards more global forms of scholarship (Lomas, Williams et al., 2021; Lomas, 2022a). This shift is exemplified by a new “Global Wellbeing Initiative,” involving Gallup (Lambert et al., 2020; Lomas, Ishikawa, et al., 2022). Since 2005, the Gallup World Poll has assessed happiness, with its data the foundation for the World Happiness Report (Helliwell et al., 2023), which in turn shapes policy-making and public discourse alike. Until recently, the poll just used two main measures, both pertaining to what is often grouped in the hedonia domain (an item on life evaluation and several around positive and negative affect). However, in light of the critiques around Western-

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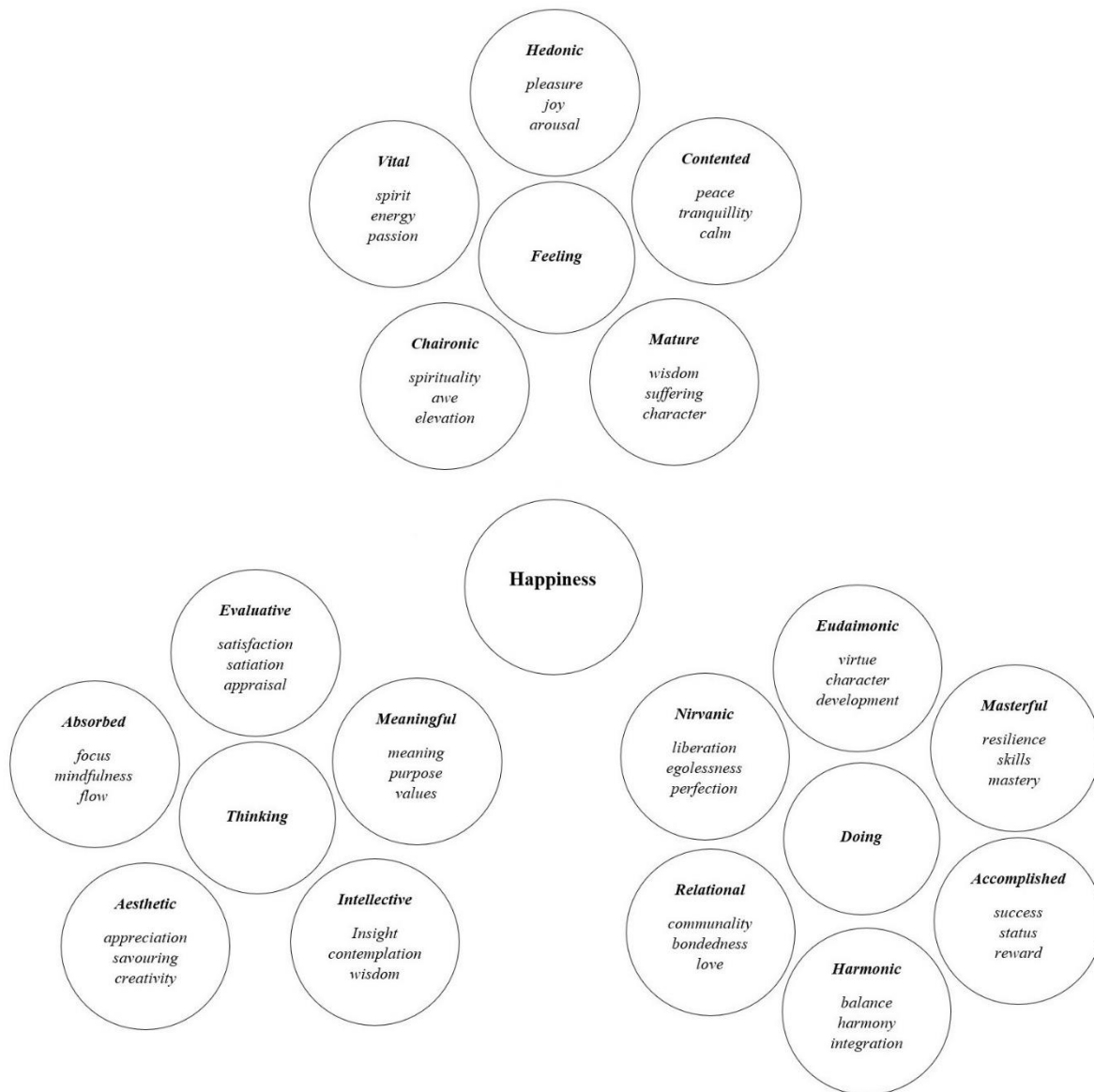
<sup>2</sup> We acknowledge that physical, social, and spiritual well-being are also implicated in happiness, and they no doubt occur in varying degrees in the forms of happiness we elucidate below. Nonetheless, we believe that happiness is most properly situated as a part of mental well-being.

centricity, Gallup has sought to identify perspectives on happiness associated with or emphasized by non-Western cultures to incorporate in the poll, with a particular focus on balance and harmony (Lomas, 2021). The first such items were piloted in 2020, including ones relating to four types below (eudaimonic, contented, harmonic, and relational), with the emergent analyses showing their importance to mental health/well-being (Lomas, Diego-Rosell, et al., 2022; Lomas, Lai, et al., 2022; Lomas, Diego-Rosell et al., 2023).

We therefore drew on this project, and other such scholarship, in developing our expanded taxonomy of happiness, which goes beyond the standard hedonic-eudaimonic binary to include 16 distinct types. To reiterate, it is beyond our scope here to provide a detailed elucidation and justification for this taxonomy. The point is simply to highlight the kind of granularity that is possible and indeed ideal within the map, serving as a case study in how its internal terrain (e.g., the various realms of the WHO+ dimensions) might be differentiated conceptually. To that point, as noted above, fields like clinical psychology and medicine have already charted the negative territory of the mental and physical dimensions respectively in great detail. Given the map's flexibility, however, it could help such fields include additional, detailed internal frameworks pertaining to their domains of expertise. By contrast, other domains – such as the positive territory of the physical, social, and spiritual dimensions – have not yet been similarly studied and differentiated in this kind of fine-grained way. As such, the analysis offered here in relation to happiness might provide an example for comparable analyses with respect to these other realms.

With that in mind, the list below briefly summarises the main types of happiness. To begin with, we can configure their labels using the concepts above. Thus, for example, one could refer separately to “hedonic mental health” (if emphasizing its objective aspect), “hedonic mental well-being” (if emphasizing its subjective aspects), or “hedonic mental health and well-being” (if emphasizing both). Realistically though, people are likely to just use “hedonic mental well-being” as a general label for this form. Moreover, one may find that, in practical terms, the adjective “mental” becomes left out as superfluous, since people generally interpret “hedonic” as a mental phenomenon; indeed, “hedonic well-being” is very common phrase in the literature (e.g., Baselmans & Bartels, 2018), as are phrases pertaining to other happiness forms, such as “evaluative well-being” (e.g., Qu, 2022). This kind of abridgement is fine; for many forms of ill-health/ill-being and health/well-being, it will be obvious which domain they pertain to, meaning that the dimension label may not need stating explicitly. In the physical realm, for instance, cardiovascular functioning is important, but it would suffice to refer to “cardiovascular health” or “cardiovascular well-being” say, rather than to “cardiovascular physical health” or “cardiovascular physical well-being.” We have sought to bring further conceptual order to the taxonomy by classifying types according to whether they *primarily* involve one of three types of experiential modality, as illustrated in Figure 4: feeling (types 1-5); thinking (6-10); and doing (11-16). Every form probably involves all three modalities in some way, as experience is generally multidimensional. Moreover, a given experience of happiness may well combine several types, as if distinct flavours combining to form a unique taste. Nevertheless, this classificatory approach is a useful heuristic.

Figure 4. A taxonomy of happiness



#### 4.1 "Feeling" types

1. *Hedonic*. These first five forms pertain primarily to feelings. The most widely studied form is what is sometimes called "hedonic" happiness. However, most research on so-called hedonic happiness not only includes what we would deem *proper* "hedonic happiness" (cf. National Research Council, 2013) – which mainly involves high arousal forms of positive affect, as captured by terms like pleasure or enjoyment – but also *evaluative* happiness, which is more cognitive and which we regard as a distinct form of happiness (as elucidated below). Hedonic happiness proper might thus be understood as primarily an affective phenomenon, specifically *the relative attainment of a personal subjective mental state of quality in relation to one's present emotions and feelings, with particular emphasis on higher arousal forms* (which differentiates it from contented happiness below).
2. *Contented*. Although hedonia ostensibly refers generically to all forms of positive affect, in practice, scholarship tends to emphasize *high* arousal forms, reflecting a comparable valorisation of such emotions in the West (Tsai et al., 2006). However, scholars are now paying more attention to *low* arousal positive emotional states (McManus et al., 2019),

such as calmness, peace, and tranquillity. Although these states have tended to receive greater attention and valorisation in Eastern cultures (Leu et al., 2011), hence being overlooked by Western-centric scholarship, the work by the Global Wellbeing Initiative and others indicates that such states are valued globally (Lomas, Diego-Rosell et al., 2023). While one could simply expand hedonia to accommodate these, we prefer to identify them as a distinct form of “contented happiness,” since this serves to better draw attention to their value and significance. As such, contented happiness might be understood as *the relative attainment of a personal subjective mental state of quality in relation to one’s present emotions and feelings, with particular emphasis on lower arousal forms.*

3. *Mature.* Contented happiness covers relatively “neutral” positive emotional states. However, some forms of happiness may not involve positive affect at all, and can even encompass *negatively* valenced states, as captured by the paradigm of “positive psychology 2.0” (Wong, 2011), also known as the field’s “second wave” (Lomas & Ivtzan, 2016). In that respect, Wong and Bowers (2019) proposed the notion of “mature happiness.” Drawing on traditions like Buddhism, they argue that suffering is inherent to the human condition, and cannot be eluded. However, they also harness the ideas of Frankl (1963), who showed that meaning and redemption can be found even amidst life’s difficulties, an idea likewise found in many Christian traditions. Such insights do not necessarily come easily though, but usually through hard-won experience, hence “mature.” Mature happiness might thus be conceived of as *the relative attainment of a personal subjective mental state of quality in relation to the way one has accepted, dealt with, and incorporated one’s suffering into one’s life.*
4. *Chaironic.* The arena of affective happiness is further expanded by another concept proposed by Wong (2011). Although hedonic happiness focuses on high arousal forms of positive affect, it arguably tends not to broach its *most* intense or significant forms (instead invoking less highly charged states like “enjoyment”). Thus, Wong proposed *chaironic* happiness, based on the Greek *chairō*, which has meanings like gladness, joy, and bliss, but also grace and blessing. Given these etymologies, this could be viewed as a form of “spiritual happiness,” with Wong defining it as “feeling blessed and fortunate because of a sense of awe, gratitude, and oneness with nature or God” (p. 70). This would overlap with the notion of spiritual *well-being*, yet there may be value in differentiating them: spiritual well-being could denote the *relationship* a person has with phenomena deemed sacred, whereas spiritual happiness centres on *the relative attainment of a personal subjective mental state of quality in relation to some kind of transcendent reality.*
5. *Vital.* Just as chaironic happiness intersects with spiritual well-being, vital happiness concerns the experience of physical well-being (while relational happiness below pertains to social well-being). The label derives from the intriguing notion of vitality, which although often associated with physical health and well-being is not *only* a physical phenomenon; indeed, it has been conceptualised by some theorists as a combination of energy and enthusiasm which pertains neither only to body or mind, but inter-fuses both (Lomas, Lee, et al., 2022). Thus, vital happiness might be viewed as *the relative attainment of a personal subjective mental state of quality in relation to one’s physical being.*

#### 4.2 “Thinking” types

6. *Evaluative.* These next five forms pertain primarily (though not *only*) to thinking. This first has often been conflated with hedonic happiness, as discussed above. However, we

suggest it is better regarded as a distinct form, since whereas hedonia is mainly affective, evaluative happiness is predominantly a *cognitive* phenomenon, usually framed in terms of a global judgement, and often specifically whether people are *satisfied* with their life, as captured most prominently by the Satisfaction with Life Scale (Diener et al., 1985). One might note that this form is frequently regarded as providing an overarching assessment of mental health/well-being in its entirety, hence Cantril's evaluative ladder being the basis for the World Happiness Report. However, while we would agree that a metric pertaining to this form, such as Cantril's ladder, probably is the single *best* measure of happiness (if one were required to just select one), we would suggest it does not cover *all* aspects of it. Indeed, new research by Nilsson et al. (2024) suggests that the ladder metaphor actually encourages people to think about ideas such as power, achievement, and success, and hence to evaluate their life in those terms. Nevertheless, whatever the nature and dynamics of such evaluation, this is still a key form of happiness, which we can define as *the relative attainment of a personal subjective mental state of quality in relation to appraising one's life, either as a whole, or in specific domains*.

7. *Meaningful*. The importance to well-being of having meaning and/or purpose in life is often understood through the lens of eudaimonic happiness. The most prominent model in that space is Ryff's (1989) theory of "psychological well-being," which features six dimensions: self-acceptance; positive relations; autonomy; environmental mastery; purpose in life; and personal growth. However, we prefer to reserve eudaimonia for the cultivation of character and virtue, as noted above and discussed below. While such cultivation can often generate meaning/purpose, these goals can also be found in ways that do not necessarily involve any such cultivation (perhaps such as supporting a sports team). As such, we favour differentiating this as a distinct form, involving *the relative attainment of a personal subjective mental state of quality in relation to one's meaning and purpose in life*.
8. *Intellective*. Towards the end of Aristotle's *Nicomachean Ethics*, he suggests the highest form of happiness comes from the highest exercise of virtue, namely theoretical study and understanding, or what might be called "contemplation." This suggests an intellective happiness wherein one finds satisfaction in the thoughtful contemplation or understanding of some great good, defined as *the relative attainment of a personal subjective mental state of quality in relation to one's intellectual or contemplative life*.
9. *Aesthetic*. While intellective happiness involves deep understanding of a valued object or idea, many people experience happiness simply through the perception of natural beauty or some object (Lomas, 2022b). Likewise, for millennia, humans have sought out experiences involving appreciation, and moreover have produced art forms that appeal, at least in part, to one's sensual perception (i.e., that are pleasing to perceive as their own end) (Pawelski, 2022). While appreciation of art often does involve both perceptual and intellective elements, we might conceive of aesthetic happiness as *the relative attainment of a personal subjective mental state of quality in relation to one's sensual perceptions*.
10. *Absorbed*. The fifth and final form of happiness relating to thinking uses the latter term in its broadest sense, referring to cognition in general. Specifically, this concerns the way *attention* modalities are deployed, creating experiences referred to by terms like absorption, engagement, and flow (Csikszentmihalyi, 2013). Absorbed happiness might thus be viewed as *the relative attainment of a personal subjective mental state of quality in relation to one's attentional engagement*.



### 4.3 “Doing” types

11. *Eudaimonic*. The final six forms are primarily about “doing,” of which the most well-studied is eudaimonia. As noted above, this has tended to become an umbrella for all aspects of happiness that are *not* hedonic. However, we prefer to use the term more narrowly to refer to self-development (i.e., cultivation of character and virtue), since this more closely aligns with how it was usually conceptualized in classical Greek philosophy where the concept originated (e.g., Aristotle described it as the “activity of the soul in accordance with virtue”). Thus, we might define it as *the relative attainment of a personal subjective mental state of quality in relation to one’s character*.
12. *Masterful*. Often included within eudaimonia is the notion of skilfully navigating life, captured in Ryff’s (1989) framework as “mastery,” and also reflected in concepts such as coping and resilience. Whereas eudaimonia focuses on character, mastery is more about developing *skills*. The distinction likewise appears in Aristotle. Such mastery is less about becoming one’s “best self,” and more an adaptive fit between oneself and one’s environment (with skills tending to be context-dependent and situationally relevant). Such happiness is also about the rewards one may receive from successful skill use. Thus, masterful happiness is *the relative attainment of a personal subjective mental state of quality in relation to the development and use of one’s skills*.
13. *Accomplished*. Mastery can often, but not always, lead to achievement; conversely, achievement will sometimes but certainly not always require mastery. Independent of mastery, a certain happiness often comes from accomplishing something – with “accomplishment” one of the five pillars of Seligman’s (2012) PERMA model of flourishing (alongside positive emotions, engagement, relationships, and meaning, which align respectively with hedonic, absorbed, relational, and meaningful forms of happiness). While mastery concerns skill use in the present, accomplished happiness is more about the past and the outcome, being *the relative attainment of a personal subjective mental state of quality in relation to what one has achieved*.
14. *Harmonic*. In considering how people navigate life, two interrelated principles may be especially valuable: balance and harmony. Moreover, their importance is not limited to dealing with the world around, but may extend across all areas of life, constituting a “golden thread” through all aspects of well-being (Lomas, 2021). These range from affective processes (Lee et al., 2013) to work-life balance (Pulcrano et al., 2016). Although these principles may have historically been emphasised more in Eastern cultures, these may be more universally valued than often appreciated (Delle Fave et al., 2016). Indeed, their importance is being shown on a worldwide scale by the Global Wellbeing Initiative (Lomas, Lai, et al., 2022), which as noted above has oriented its research in the Gallup World Poll around these concepts, which it calls “harmonic principles of well-being” (Gallup & Wellbeing for Planet Earth, 2023). Harmonic happiness might thus be conceived as *the relative attainment of a personal subjective mental state of quality in relation to how well the different elements of one’s life are ordered and operating together*.
15. *Relational*. Although we’ve positioned happiness as pertaining to the mental dimension of well-being, some forms transcend its limits, overlapping with other dimensions. Just as chaironic and vital happiness intersect with spiritual and physical well-being respectively, relational happiness intersects with social well-being. While social well-being concerns the quality of people’s relationships in general, this broad category includes *experiential states* arising from interpersonal interaction, which thus also brings it

into the purview of the mental dimension. Moreover, such states can often be *shared* in important ways, creating forms of happiness that are fundamentally intersubjective, i.e., emergent gestalt phenomena that exist at, and pertain to, the level of multiple people (Uchida et al., 2004). Relational happiness might therefore be conceived as *the relative attainment of a personal (inter)subjective mental state of quality arising from a relational dynamic*.

16. *Nirvanic*. This taxonomy has mainly focused on contemporary academic concepts. However, these do not exhaust the potentially relevant terrain, with much lying outside the bounds of current scientific knowledge. Many religious traditions for instance have developed insights in relation to experiential states which are presently not well understood by modern science, if at all. By way of example, this final form pertains to Buddhism, which has a wealth of psychologically-oriented theories about happiness of all kinds (Williams & Kabat-Zinn, 2011). Uppermost is Buddhism's ultimate goal, *nirvāṇa*; although a complex concept, this alludes generally to the complete and lasting cessation of *duḥkha* (roughly, suffering), and attainment of *mokṣa* (total freedom), from following the Buddhist path (Collins, 2010). This path is dependent on various actions (e.g., ethical behaviour), hence this form being categorized as "doing." Thus, nirvanic happiness might be conceived as *the relative attainment of a personal subjective mental state of quality in relation to one's capacity to be relatively permanently free of suffering and experiencing psychological freedom*.

Finally, having explored the kind of internal granularity enabled by the map, we now expand outwards to consider flourishing as its overarching concept.

## 5. Flourishing

Flourishing is deployed in our framework as the most all-encompassing concept, enfolding health and well-being (as well as more specific regions within them, such as happiness). To reiterate, we can define "complete health and well-being" as *the relative attainment of a personal objective and subjective state of quality across the physical, mental, social, and spiritual dimensions of existence*. Crucially, the quality of our complete health and well-being depends on and interacts with the human and non-human environments in which we live. These environments include a vast array of factors, such as our close relationships and our larger communities, our work conditions and the economy to which our work contributes, the food we eat and the ecosystems to which we belong, and the location in which we live and the planet on which we dwell. While health and well-being refer to personal states themselves, flourishing refers to these states *in the context* of all these environmental factors. We might thus define flourishing as *the relative attainment of a state in which all aspects of a person's life are good, including the contexts in which that person lives* (VanderWeele, 2017; VanderWeele & Lomas, 2023).

Essentially, key to our definition of flourishing is that the conditions of a person's life are conducive to that state, which is not always the case with health and well-being (and their subsidiary concepts). With these, it is possible and even not uncommon for people to attain them *in spite of* their contexts and circumstances. Similarly, the verb "to thrive" in some sense suggests well-being potentially regardless of – or even despite – inhospitable conditions, as reflected in its etymology, having entered English around 1200 CE from a Scandinavian source akin to Old Norse *þrifask*, which originally meant "grasp to oneself". By contrast, flourishing implies being supported by one's environment, deriving etymologically from the Latin *florere* ("to bloom, blossom, flower"). Thus, flourishing suggests an adaptive interaction and consonance between the individual and their contextual systems, such that they help people within those systems to

prosper, and perhaps vice versa. Thus, expanding upon our definitions of health and well-being, we can define flourishing as *a state of personal and systemic quality in relation to all dimensions of existence, in a way that is relatively enduring and well-supported by the various conditions of life*. Or, as noted above, an alternative, more concise phrasing which captures the same idea is *the relative attainment of a state in which all aspects of a person's life are good, including the contexts in which that person lives*.

Our primary concern in this paper is with individual human beings and their human and non-human environments. Thus, we use the terms health, well-being, happiness, and flourishing to refer primarily to individuals and their contexts. We do acknowledge that these terms can also be used to describe human collectives (e.g. communities, nations) and their functions (e.g., the economy). It is common, for example, to talk about the health or well-being of a community, the happiness of a nation, or the flourishing of an economy. These terms are sometimes even deployed to describe conditions in non-human worlds, such as the health or well-being of an ecosystem, the happiness of a pet, or the flourishing of a garden. There are, of course, similarities and differences between the ways these terms are used in reference to human and non-human environments and the ways we are using them here. Clarifying these similarities and differences, and even exploring a common usage across all these domains, is important work, but it is beyond the scope of this paper.

Thus, to reiterate the central point of differentiation between health/well-being and flourishing we are making here, while health/well-being fundamentally apply to individual people, flourishing is even broader in that it encompasses also the contexts and systems in which those individuals are situated. This vision of flourishing therefore expands upon that offered by VanderWeele (2017), which proposed that flourishing “would, at the very least, require doing or being well in the following five broad domains of human life: (i) happiness and life satisfaction; (ii) health, both mental and physical; (iii) meaning and purpose; (iv) character and virtue; and (v) close social relationships.” Essentially, we are arguing that flourishing includes these five domains, along with other aspects of well-being, plus the conditions and contexts that sustain them. The present paper thus expands outwards to consider what other elements might *also* be important. In thinking about flourishing, then, our focus is on the myriad conditions or factors that influence well-being. In that respect, below we briefly note 20 factors – 10 individual, 10 collective – that, based on our reading of the literature, have an important influence on health and well-being. These factors are not necessarily all *essential* for health and well-being, which can potentially be achieved even in the absence of some of them (though we consider it very unlikely that one could attain health and well-being in the absence of *all* such factors). We should also note that principles of flexibility apply here too; thus, these factors can be, (a) differentiated further into more fine-grained components (per scalable granularity), and (b) revised in light of emerging knowledge (per epistemological openness).

It is worth briefly comparing our approach to other main flourishing frameworks in the literature. Essentially, ours is considerably broader, as most others concern themselves primarily with mental well-being specifically. Among the most prominent is Huppert and So's (2013), for instance, who state: “Flourishing refers to the experience of life going well. It is a combination of feeling good and functioning effectively. Flourishing is synonymous with a high level of mental well-being, and it epitomises mental health” (p. 838). Similarly, in *Flourish*, Seligman (2012) calls it “an arrangement of positive emotion, engagement, meaning, positive relationships and accomplishment” (p. 16). Likewise, Deci and Ryan's (2000) self-determination theory is sometimes presented as a theory of flourishing; Ryan et al. (2013), for example, offer an “account of human wellness or flourishing” centred on eudaimonia, whose fulfilment is described as

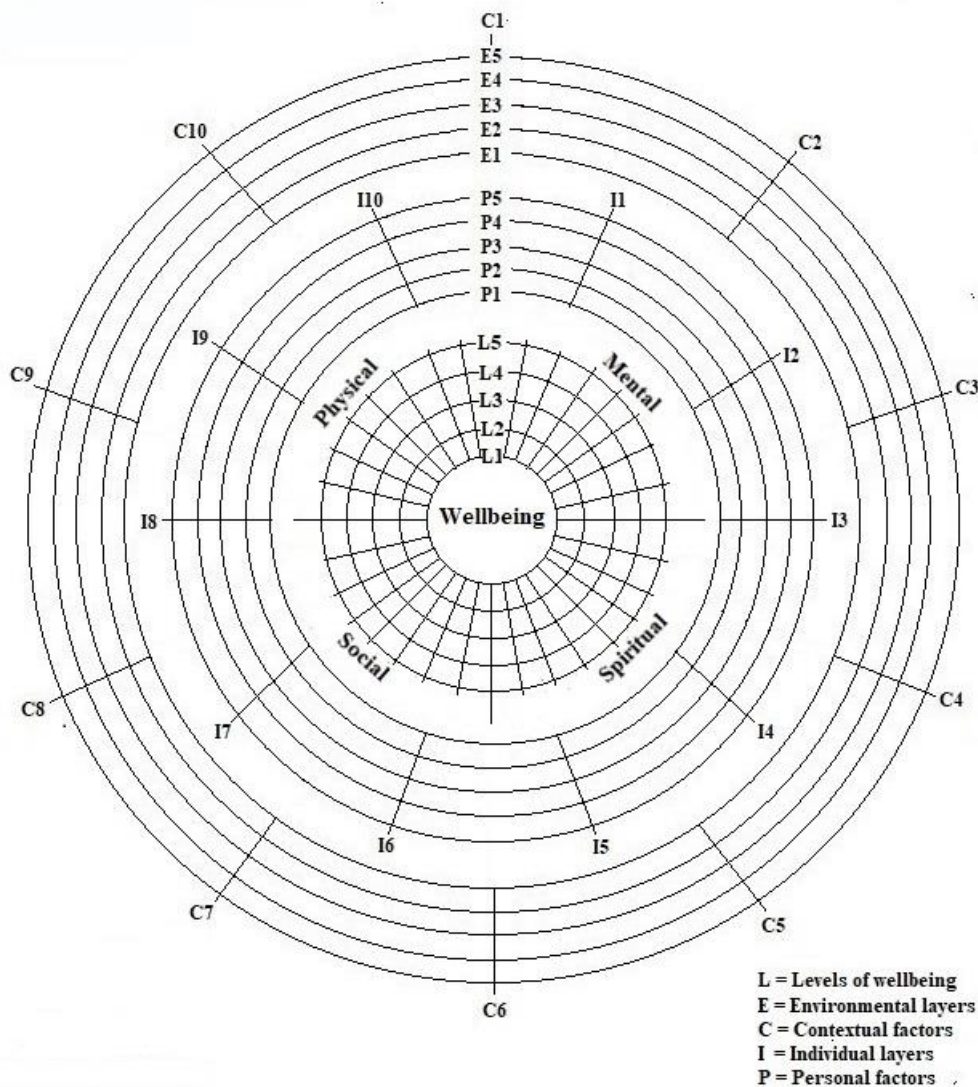
“essential to well-being and happiness,” and which involves satisfaction of the three self-determination needs (autonomy, competence, and relatedness), these being “central to human flourishing” (p. 57). Keyes (2002), who pioneered the bivariate mental ill-health–health dual continua model, introduced above, used flourishing for the upper-right ideal quadrant (which we call “thriving”). While these are all pioneering models that have inspired and influenced our own work, an issue with these definitions is that flourishing serves a similar role as terms like mental health, mental well-being, and happiness. In doing so, its use becomes either ambiguous or superfluous. For this reason, we give it a distinct conceptual role which these other terms do not serve. Our usage of flourishing thus bears closer relation to Pawelski’s (2016c) vision of “fractal flourishing” (p. 363). This involves thinking about flourishing in terms of “sustainable preference” – “an ideal that holds out for the well-being of individuals and groups, that values happiness in the short-term and in the long-term, and that seeks approaches that work locally and globally.”

Before describing the factors themselves, let’s consider the dynamics by which their influence is manifested. For this we can harness the LIFE model, since the factors exert their impact in various ways through its levels. For instance, economics is one factor. To begin with, we might look at people’s individual wealth, which refracts through the individual layers: consciousness (e.g., awareness of their wealth); emotions (e.g., how it makes them feel); thought (e.g., their views on it); physicality (e.g., its impact upon their body); and behaviour (e.g., the lifestyle it facilitates). We can also consider economics from a socio-cultural perspective: the microsystem (e.g., household income); the mesosystem (e.g., financial tensions between microsystems); the exosystem (e.g., affluence of the community), the macrosystem (e.g., country GDP); and the ecosystem (e.g., how financial factors impact the environment). Moreover, these levels create meaningful dynamics. Consider how the impact of wealth may vary among, (a) a poor household in a poor country, (b) a poor household in a rich country, (c) a rich household in a poor country, and (d) a rich household in a rich country. This assessment is complicated, involving the interaction of at least four collective factors: economics, equality, governance, and resources. To the extent that income and wealth is associated with happiness – which they are, up to a point (Lomas, 2023a) – then rich households (c) and (d) are likely to be happier than poor households (a) and (b). Then, to the extent that inequality and social comparison matter, (a) is likelier to be happier than (b), as they are less prone to making invidious comparisons with those around, while (c) may be happier than (d), as they would accrue greater status gains. However, all these calculations are affected by the specifics of the context. For instance, if the poor country of (a) lacks a strong welfare system, while the rich country of (b) *has* one, then (b) might be better off than (a). Or, if the social inequality in the case of (c) is *too* great, then general social capital would be diminished, and the greater relative equality enjoyed by (d) might be preferable. And so on.

The LIFE model layering allows nuanced appreciation of such interactions. Thus, in our map, the person and their well-being are encompassed within this model, as illustrated in Figure 5 overleaf, which shows the map in its entirety. The four WHO+ dimensions are presented as four quadrants of the inner circle: to allude to their granularity, each includes seven subdimensions (i.e., seven radial spokes for each quadrant); moreover, each features five levels (as represented by the innermost concentric circles labelled L1-L5), which would allow a person to receive a rating from 1-5 on each subdimension. Of course, seven and five are arbitrary numbers, selected here for aesthetic purposes (i.e., as not overly cluttering the figure), and each dimension could be differentiated into far more subdimensions and levels, as elucidated above. Then, surrounding these four dimensions, the LIFE model has been reconfigured as ten concentric circles: first, its five individual/personal layers (P1–P5), followed by its five contextual/collective layers (E1–E5).

Note that, in this configuration, the distinction between subjective and objective in the LIFE model is now only implicit (every circle includes both subjective/intersubjective and objective/interobjective dimensions). We can then imagine the factors exerting influence “through” the layers. Ten factors pertain more to the individual (e.g., temperament), pictured filtering through the individual layers (I1–I10). Then, ten are more socio-cultural (e.g., governance), filtering through the socio-cultural layers (C1–C10). That said, in many cases, factors have both individual and systemic aspects – as illustrated above with economics – and there is not a rigid distinction between the two types of factors. These factors and layers together create the environment in which the person is situated, though it is not simply that outer layers press inward on the person, with causal directionality only top down; “lower” levels can also exert agency and influence upwards, including individuals themselves (e.g., citizens of a democratic country may shape its functionality).

**Figure 5.** The flexible map of flourishing



In principle, there are an almost unlimited number of factors, depending on how fine-grained one makes the analysis. For instance, community is one factor: an extensive literature shows it has a potent impact on well-being, particularly mental and obviously social well-being. But there is clearly massive flexibility in *how* one assesses this, particularly in terms of scalable granularity. At the simplest end, one could just assess this factor via a single survey question (e.g., “On a scale

of 1-10, to what extent does your local community help you experience well-being”). But then, towards more differentiation, Burke et al. (2009) identified 120 facets of community, each potentially a factor unto itself. The more such subfactors – i.e., granular aspects of an overarching factor – are assessed, the more robust one’s assessment of this factor. So, we are not implying that these 20 are the only potential factors, as one could identify others by having a more fine-grained approach. Their inclusion here is simply to demonstrate a basic list of factors relevant to any analysis and assessment of flourishing.

Finally, we should note that we identified these factors as being significant in relation to happiness in particular (Lomas & VanderWeele, 2021). As such, here we cite examples of work showing their relevance to happiness specifically. However, we submit that they are also highly likely to pertain to the other dimensions – though whether and to what extent will need further substantiating. Insofar as happiness is concerned though, a wealth of research indicates these factors do appear to exert an impact, so any comprehensive conceptualization and assessment of it needs to include all these. Note, though, our cautious phrasing, which reflects the fact that most analyses are cross-sectional, not longitudinal, and in many cases more evidence is needed to definitively demonstrate directional causality. Also, the majority of research focuses specifically on evaluative happiness (e.g., assessed by the Satisfaction with Life Scale), and also, to a lesser extent, hedonic happiness (e.g., assessed by the Positive and Negative Affect Scale). Nevertheless, all these factors are likely to be relevant to all dimensions of health/well-being, although we encourage people to adapt the map to their own needs. This includes providing greater granularity regarding one’s area of interest – such as identifying factors that are especially relevant to the *other* dimensions of health/well-being.

### 5.1 Individual

1. *Physiology*. Genetic factors appear to explain between 20-50% of the variance in happiness (Nes & Røysamb, 2017), while more broadly health is one of the most important determinants (Steptoe, 2019).
2. *Temperament/personality*. A meta-analysis of the “Big Five” domains by Anglim et al. (2020) found strong correlations with happiness: neuroticism = -.46; extraversion = .37; conscientiousness = .36; agreeableness = .25; and openness = .19.
3. *Age/development*. Happiness appears to be relatively “U-shaped” across the lifespan, declining into middle-age, before rising in people’s 50s and 60s (Blanchflower, 2021), although it tends to tail off again after 75; there are also other complications to the pattern (e.g., it usually involves controlling for variables such as health and family situation, which mediate the relationship between age and happiness, and which scholars such as Hellevik (2017) argue should *not* be “controlled away”).
4. *Sex/gender*. The picture is complicated, with outcomes between men and women depending on intersections with other factors (such as age), but overall men seem to be slightly happier (Batz & Tay, 2018); however, others have suggested that women are more liable to greater positive *and* negative emotion (Kahneman & Deaton, 2010), though this itself may possibly in part also result from women being socialised to be more emotionally expressive (Courtenay, 2000).
5. *Race/ethnicity*. People from racial or ethnic minority groups are liable to have their happiness impeded by discrimination – personal and systemic – that such minorities often experience (which of course also makes this a collective factor) (Assari, 2019).

6. *Cognition/intelligence.* Various forms of intelligence may affect happiness differently, with cognitive intelligence (“IQ”) more indirect (e.g., via socio-economic status), and emotional intelligence (“EQ”) more direct (Altaras Dimitrijević et al., 2018).
7. *Motivation/will.* Motivation, will, and energy influence people’s inclination and ability to engage with the various factors that shape happiness (e.g., health behaviours or cultivating relationships) (Butt et al., 2020).
8. *Behaviour/action.* Behaviours such as exercise can influence happiness, both directly (e.g., via endorphin release) and indirectly (e.g., via their impact on overall health) (Lahart et al., 2019).
9. *Values/choices.* Values/choices are implicated in factors like behaviour/action, and in how people live generally; for instance, values associated with religious participation (e.g., prosociality) have been linked to happiness (Sander, 2017).
10. *Beliefs/ideas.* Beliefs/ideas are similarly implicated in factors like behaviour/action, and in how people live; for instance, again, some beliefs associated with religion (e.g., in the afterlife) have been linked to happiness (Hastings & Roeser, 2020).

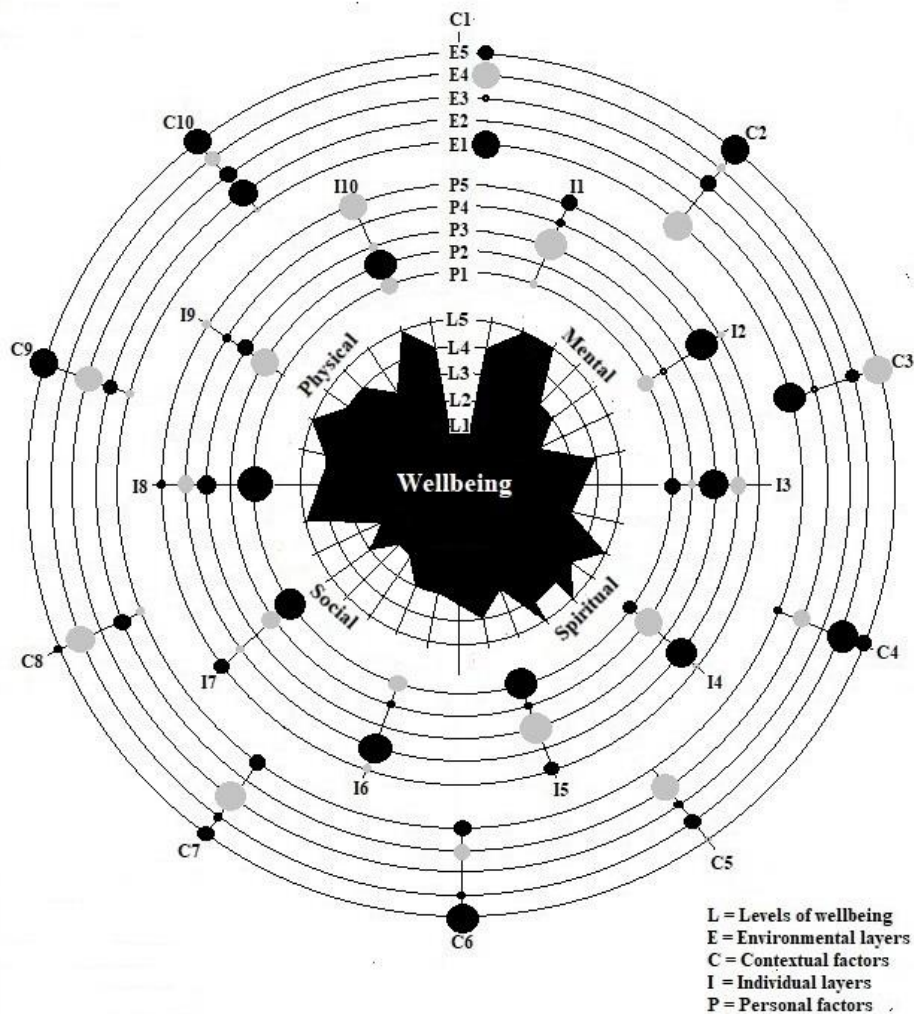
## 5.2 Collective

11. *Relationships.* Of all the factors influencing happiness, close personal relationships are usually understood as among the most impactful, and indeed were ranked as the most important by the 2020 World Happiness Report (Helliwell et al., 2022).
12. *Community.* Besides close relationships, the quality of people’s social networks and the broader community (e.g., trust in one’s neighbours) – as captured by notions of social capital – are also vital for happiness (Oshio, 2017).
13. *Demographics.* The impact of some individual factors, including age/development, sex/gender, and race/ethnicity, is largely determined by the way such demographic factors are regarded and treated within a given socio-cultural context (Assari, 2017).
14. *Religion.* Religion has been extensively studied as a significant factor, including in terms of facilitating other factors listed here, both individual (e.g., health behaviours) and collective (e.g., relationships and community) (Sander, 2017).
15. *Governance.* Of the six factors identified by the 2020 World Happiness Report as most important in shaping national levels of happiness, two pertained to the quality of governance: freedom (e.g., of opportunity) and corruption (Helliwell et al., 2020).
16. *Infrastructure.* Closely linked to governance is infrastructure, which describes the extent to which people’s environments are structured to meet their basic needs (e.g., housing and education), which in turn is pivotal for happiness (Burke et al., 2009).
17. *Economics.* Although the link between wealth/income and happiness is complex, a common view is that these matter up until the point at which people’s basic needs are met, after which the association weakens (“income satiation”) (Jebb et al., 2018).
18. *Traditions.* Tradition is a broad concept that intersects with other factors in complex ways; for instance, complicating the relationship between economics and happiness are social and political traditions such as concerning the understanding of social class, and embedded attitudes towards the (in)appropriateness of inequality and the strength of the welfare state (Pacek et al., 2019).

19. *Culture.* Similarly, culture is entwined with tradition in shaping other factors, such as – once again – governance and economics, with some analyses suggesting that an egalitarian culture helps account for the relatively high levels of happiness in Nordic nations (Martela et al., 2020).
20. *Language.* One of the deepest and most consequential aspects of culture is language, which plays a foundational role in how people actually experience, conceptualise, and understand happiness itself (Lomas, 2018).

As a final point, it would also be possible to individualize the map for particular people. An example of this is provided overleaf in Figure 6. In this, a hypothetical person has firstly been given ratings for the four dimensions of health and well-being. This creates a “spider-web” design – influenced by the way modern footballers are rated (Knutson, 2016) – in which the larger the area covered, the greater the well-being. Then, with the 20 drivers of health and well-being filtering through the outer two layers of circles, we have imagined that a driver might overall be appraised as having a positive or negative impact, represented by black and grey dots respectively, with the size of the dot in proportion to the degree of impact.

**Figure 6.** An Individualized Map of Flourishing





## 6. Conclusions and future directions

This paper has introduced a multidimensional conceptual map within which flourishing, well-being, and health – together with numerous more specific subsidiary terms, like happiness – can be situated, thereby offering a much-needed common language with which interested fields can better discuss these important topics. We began by providing an ontological model of the person-in-context, generating the map’s structural foundation. We then situated health and well-being as central terms, encompassing mental, physical, social, and spiritual dimensions of existence. Next, we saw how one can “zoom in” to any given dimension to conceptualize it in fine-grained detail, using the mental dimension as an example. We then expanded outwards to articulate flourishing as an overarching concept which includes health and well-being (and their subsidiary concepts), plus the myriad factors which influence them. Throughout we emphasised the map’s flexibility (i.e., scalable granularity and epistemological openness). So, going forward, the map can be adapted to suit different fields, and updated to accommodate advances in knowledge. In that spirit, we conclude by considering how the study of flourishing might advance, using the map to help us better understand and promote flourishing for people globally, organized under the headings of: (i) measurement; (ii) distribution; (iii) etiology; and (iv) interventions and policy.

Before doing so, however, we want to reiterate that this map focuses on individual human beings and their human and non-human environments. Although it is beyond the scope of our present endeavour, we hope that future work will clarify ways in which the terms health, well-being, happiness, and flourishing can also be used to describe human collectives (e.g., communities, nations), the functions of those collectives (e.g., the economy), and non-human worlds (e.g., ecosystems). This work could result in complementary maps to the one we are presenting here, thus furthering the overall progress of understanding and advancing health, well-being, happiness, and flourishing.

### 6.1 Measurement

Assessments to study flourishing have proliferated over recent decades. While it can be difficult to compare research with diverse measures, when similar results hold across diverse measures of the same construct, this lends additional credibility to findings and better ensures robustness of results. Moreover, different metrics often facilitate better recognition of important conceptual differences between related constructs, or make more evident various facets of constructs. While great effort has gone into measure development for various aspects of well-being, our map shows much has been devoted to a relatively small portion of the continuum, and for many aspects of health and well-being, much remains to be done. Scholarship has extensively charted the negative territories of the *mental* and *physical* dimensions, and to a lesser extent the positive territory of the former. With mental ill-health/ill-being, for instance, this coverage includes in-depth understanding of outcomes such as depression, spanning well-established scales (e.g., Radloff’s (1977) CES-D scale has nearly 65,000 citations as of January 2024) to decades of research regarding its neurophysiological dynamics (Sankar et al., 2015). These techniques can be similarly brought to bear on *other* aspects of well-being. These other aspects – including the positive realm of the physical dimension, and almost the entire social and spiritual dimensions – have been relatively neglected in comparison, including being under-theorized and without an adequate set of measures. By emulating the work undertaken regarding mental and physical ill-health/ill-being, over time we may see similarly detailed understanding of these other domains. Indeed, this has already happened, to an extent, with mental health/well-being, which over recent decades has likewise developed scales and made progress towards neurophysiological

assessments (King, 2019). Scholars in other realms may hopefully feel similarly empowered to develop such paradigms for their topics.

To begin with, conceptual and measurement work needs to be advanced vis-à-vis positive physical health/well-being concepts like vitality and fitness. While some has been done in areas like sports medicine and positive cardiovascular health (Labarthe et al., 2016), ideally we will see an expansion in measurement and conceptualization akin to that taking place with mental health/well-being. With the social dimension, there is increasing study of loneliness in the negative realm (Erzen & Çikrikci, 2018), and important work also in the positive realm, especially regarding social support and romantic relationships (Chervonsky & Hunt, 2017). However, work is needed on more adequate relational assessments around friendship, belonging, and inclusion. While the literature on communal wellness has developed considerably (Phillips & Wong, 2016), further efforts are needed, especially as to how measurement approaches ought to vary by type of community – including family, school, workplace, religious community, neighbourhood, etc. (VanderWeele, 2019). With spiritual health/well-being, much more is likewise needed. Although some generic measures of spiritual health/well-being have been proposed (Paloutzian & Ellison, 1982; Fisher, 2010), how such health/well-being itself is understood varies dramatically across religious/spiritual traditions, so adequate measurement will arguably require tradition-specific measures, ideally shaped by religious leaders' and adherents' specific understandings and values (VanderWeele et al., 2021).

Even with mental health/well-being – certainly the best studied of the positive realms – our map indicates where further work is needed. While certain forms, particularly hedonic and evaluative happiness, have received considerable attention, others require much more attention. More detailed conceptualization and theorizing on these and other newer and/or underexplored forms could likewise help expand measurement endeavours. One positive example is around meaning and purpose. While earlier work treated these synonymously, more recent efforts have differentiated them, with a relatively well-accepted tripartite conceptualization – coherence, significance, and purpose – receiving notable consensus (Martela & Steger, 2016), with measures now available (Hanson & VanderWeele, 2021). Yet further distinctions arising from philosophical literature (e.g., local versus global coherence; subjective versus objective significance) are also possible, with the resulting sub-facets amenable to assessment. Our map makes clear that as focus turns to a particular area, more work on measurement, and yet finer-grained distinctions can be made. These considerations moreover apply to flourishing more broadly. Even though considerable progress has been made, many factors have not received adequate attention and need further measurement work. These extend to the still broader aspects of flourishing concerning the entire context of human society. How we go about measurement will depend on different visions of what human life and society ought to look like, and tradition-specific measures may be needed.

## 6.2 Distribution

Considerable work is also needed understanding the distribution of flourishing globally and within particular demographic groups. The WHO and other bodies have illuminated the distribution of physical and mental ill-health/ill-being around the globe, and endeavours like the World Happiness Report are doing impressive documentation with elements of mental well-being (e.g., evaluative happiness). However, we ideally need similar global assessments for other aspects of flourishing. Once again, these can emulate work that has already occurred with mental and physical ill-health/ill-being. Researchers in less well-studied domains need not start from scratch: they can go far simply by taking work already done – such as in methodology and

analytic techniques – and adapting these to their topics. Thus, for example, we should assess, using representative samples, distribution of all forms of happiness once adequate measures are available.

Beyond the physical and mental dimensions, we are even further behind in studying, understanding and measuring the distribution and temporal trends in social and spiritual health/well-being. There has, for example, been considerable debate over whether, and the extent to which, loneliness has increased over past decades. That we have not carried out sufficient data collection to settle this points to the inadequate emphasis social well-being has received. While we have some better data for the past decade (Twenge et al., 2019), that so little is historically available makes clear the need for greater efforts going forward. Moreover, we want to understand trends and demographic relationships concerning not only negative social dynamics such as loneliness but also its positive elements, like social connectedness, belonging, friendship, social support, trust, and communal well-being. Once measure development work has been done, as discussed above, the next step is to assess their distribution. Likewise, with spiritual health/well-being, once further tradition-specific measure development has been done, such measures could be used in representative samples and religious communities to examine the extent to which the latter regard themselves as adequately progressing towards those ends they deem important. Such measurement could also help leaders of such communities understand who is most in need vis-à-vis spiritual health/well-being. With all dimensions, once measures have been developed and assessment carried out in representative samples, work can examine demographic correlates, understand trends over time, and identify those most in need, to better promoting flourishing.

### 6.3 Etiology

Third, improving flourishing also requires better understanding of causes and etiology, including how different aspects of flourishing are related and may vary depending on cultural contexts. Once again, our map points to research that needs doing. Considerable attention in past decades has been devoted to accumulating evidence on, for example, how mental health/well-being can shape physical health/well-being, and how social health/well-being influences both physical and mental health/well-being (Trudel-Fitzgerald et al., 2017). However, more work is needed. For example, not all forms of happiness are likely to relate to physical health/well-being to the same degree. There is evidence, for example, that certain aspects of mental well-being, such as meaning and purpose, have stronger effects on all-cause mortality than hedonic happiness (Trudel-Fitzgerald et al., 2021). Such scholarship helps us better identify potential intervention targets to promote health/well-being, as we will discuss below. Similarly, more nuanced examination of etiology could be pursued for other specific aspects of physical, mental, social, and spiritual wellness.

Likewise, further empirical research could be carried out on determinants of all forms of health/well-being. Earlier in this paper, we discussed factors at micro-, meso-, exo-, macro-, and eco-system levels. However, we are only just beginning to develop adequate holistic understanding of the contextual drivers of select forms of happiness, particularly its hedonic and evaluative varieties (Lomas & VanderWeele, 2021). We would likewise want understanding of determinants of other forms of happiness, and indeed all health/well-being dimensions. Evidence to adequately examine these determinants, along with the effects of the various aspects of health/well-being on one another, would ideally be undertaken with longitudinal data, with capacity to control for baseline outcomes, prior exposures, and a rich set of covariates to allow more robust evidence for causal inference (VanderWeele, 2021). Once again, while important

progress has been made with hedonic and evaluative happiness, along with important but limited work on determinants of other aspects of mental well-being such as purpose (Kim et al., 2022), much more work is needed on the positive and negative aspects of all health/well-being. Our map thus makes clear the considerable scope of the research needed, and the possibilities for it. Given the number of potential relationships that can be examined, pioneering new analytic approaches would be advantageous to more rapidly advance knowledge. New data-driven “outcome-wide” designs (VanderWeele, 2017b; VanderWeele et al., 2020), for instance, can be used with cohort data to examine how a single exposure or factor affects a vast array of aspects of wellness across different domains over time. Examples of such analytic approaches include studies examining various aspects of wellness such as life satisfaction (Kim et al., 2021), or different drivers like positive parenting (Chen et al., 2021).

#### 6.4 Interventions and policy

Finally, greater knowledge of etiology would in turn prompt better intervention development and policy decisions on how to enhance these outcomes. In academia and public life there is considerable and burgeoning interest in all aspects of flourishing. Arguably though, at the heart of this attention is the fundamental question: can we actually *improve* flourishing (Lomas et al., 2021). Developing intellectual understanding is valuable and necessary, but arguably underpinning even the most detached scholarship is concern with improving lives. In that respect, our map offers a comprehensive route for accomplishing this. In specific, localized ways, we can look towards interventions to promote flourishing, such as clinical programs evaluated in RCTs. Then, in broader, more diffuse ways, we can also aim to implement policies to promote such flourishing. Here we briefly look at each in turn. In both cases, we can again seek to emulate the extensive applied paradigms that have been developed regarding mental and physical ill-health/ill-being – and to a lesser extent mental health/well-being – and apply this practical expertise to domains of health/well-being that have received less attention.

An exemplar of this process of transfer and evolution is mindfulness. This can be understood both as a form of consciousness – defined by Kabat-Zinn (2003, p.145) as “the awareness that arises through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment” – and a meditative practice designed to facilitate such awareness (Lomas, 2017). Originating in Buddhist teaching and practice developed around 2,500 years ago, it was first harnessed clinically by Kabat-Zinn (1982) in creating his Mindfulness-Based Stress Reduction (MBSR) protocol. MBSR was initially designed to treat physical illness, specifically chronic pain. However, once its efficacy had been established via RCTs, the protocol lent itself to adaptation regarding other dimensions of health/well-being, to the point where there are now hundreds of such adaptations (Lomas et al., 2019). The first major adaptation was for mental ill-health/ill-being, with the Mindfulness-Based Cognitive Therapy paradigm for depressive relapse (Teasdale et al., 2000). These protocols then began expanding within the realms of treating physical and mental ill-health/ill-being, from fibromyalgia (Lauche et al., 2013) to psychosis (Khoury et al., 2013). Now, we find emergent adaptations for aspects of positive health/well-being, most notably mental health/well-being, for outcomes from meaning in life (Ivtzan et al., 2016), to engagement (Coo & Salanova, 2018), to the development of character strengths (Niemi, 2014). But even these adaptations leave many possibilities for future development. Across the worlds’ religious/spiritual traditions are myriad meditative and contemplative practices, all with potential to be similarly harnessed. Even then, meditation is only one type of activity amenable for adaptation, and across the world’s cultures there is almost no limit to the activities that could likewise be used (Yaden et al., 2020). For instance, applied

practitioners are starting to create interventions based around dance traditions to facilitate health/well-being (Connolly et al., 2011). Again, our map systematically shows areas that warrant attention. Some parts – especially physical and mental ill-health/ill-being – are already well-served by interventions. Going forward, researchers may be empowered to develop interventions for areas less well-served.

Beyond these narrowly focused activities, there is increasing appreciation for more comprehensive, systematic, and multidimensional initiatives. Here focus on interventions shades into policy, and again, our map offers a useful guide. To begin with, we can think about policy-making at various levels of scale. Thus, at the smaller scale, one can talk about policy development within microsystems like schools. This is the ethos of positive education (Seligman et al., 2009), whose premise is that education ought not only be about intellectual development, but helping children flourish more broadly. Such programmes do include specific interventions, like age-adapted mindfulness activities (Dunning et al., 2019), but more ambitiously seek to transform microsystems *themselves* to be structurally more conducive to flourishing, as epistemised by a “whole school approach” of “learn it [i.e., flourishing], live it, teach it, embed it” (Hoare et al., 2017). Other relevant microsystems amenable to promoting flourishing through policy include workplaces, families, and religious communities (VanderWeele, 2017). At yet higher levels, policy efforts could be made at city or country levels to enhance the flourishing of numerous microsystems within.

Our map offers a guide for how to create these “salutogenic” (Antonovsky, 1996) – i.e., conducive to flourishing – systems and contexts. For a start, the map helps identify relevant interventions that could be applied in given contexts. Recognising that flourishing is multidimensional, the map makes clear that ideally interventions should be implemented to cover all aspects of health/well-being – physical (e.g., exercise), mental (e.g., mindfulness), social (e.g., communication skills), and spiritual (e.g., contemplation). To the extent that time and resources allow, one could use the map’s granularity to provide various interventions *within* each of these domains (e.g., regarding mental health/well-being, having activities for different forms of happiness). Then, beyond interventions per se, the map allows better appreciation of the factors which influence health/well-being, enabling the development of systems that are sensitive to these factors. Such insights can be incorporated into policy at all levels, up to national and international macrosystems – with flourishing now a policy goal of numerous governments (Sigal, 2019). Our map offers policy-makers a common language and framework for situating the factors that influence flourishing and developing an agenda that can actually facilitate such outcomes. This commonality is much needed. There are now many initiatives to promote flourishing at various policy levels, from international bodies like the UN and OECD to more localized institutions nationally. However, these tend to use different measures and conceptualizations of flourishing. Our map can serve as a common framework, helping situate more specific different visions, goals, and approaches towards flourishing.

Also, though, our map shows how *complex* flourishing is, and the kinds of policy and ethical questions this raises. This consideration brings us into vast terrains of thought and practice in relation to rights and laws, together with different traditions and perspectives on how people can and should live and, moreover, live *together* peacefully and productively. We noted above the botanical etymological roots of flourishing. In that respect, flourishing itself could be construed through a botanical metaphor, in which both individual plants (i.e., persons) and the garden as a whole (i.e., their socio-cultural context) are doing well (Lomas & VanderWeele, 2022). But what happens if a particular plant is a poisonous weed (e.g., a violent criminal) who not only encroaches upon but endangers plants around him? Moreover, what if the growth of this plant

constitutes *its* version of thriving? We would not call it *flourishing*, since a path of maximal self-interest that is detrimental to one's context does not actually constitute flourishing in our view, which involves both a person and their context doing well. But that weed could still be said to be pursuing its own thriving in some respects. A criminal who takes pleasure in violence could be seen as at least experiencing some forms of well-being – e.g., hedonic happiness – even if at the expense of other forms. In such cases, what rights or responsibilities do other people, especially those with power (as “gardener”), have to restrain that plant for the good of other plants and the entire garden, and even for the plant's *own* overall good? Similarly, what rights and freedoms do people have to pursue forms of well-being they value but which harm those around them? These are weighty and thorny issues that have perplexed philosophical and legal minds for centuries. It is beyond our scope to delve deeply into these issues, but our map at least brings them to attention. But more than that, our map *can* potentially play some role in helping address such questions. For example, many legal and ethical arguments and traditions involve particular visions of concepts central to this paper. However, they often involve fairly *narrow* visions of these ideas, with utilitarian traditions frequently focusing only on hedonic or evaluative happiness (Kahneman, 1997). By contrast, our map illustrates the fine-grained complexity of flourishing and its subsidiary concepts like health and well-being.

As with any map, of course, it is possible for ours to be used for various purposes. We urge that care always be taken to use it in ethical ways that optimize flourishing and avoid causing harm. This is consonant with Pawelski's (2016a) call for a “a comprehensive eudaimonic profile” – which more broadly we would call a “comprehensive flourishing profile” – which can delineate “domains of possible positive and negative impact,” thereby “raising awareness of the full range of effects” that use of this map can have on flourishing. Pawelski's profile demonstrates that desirable effects can range from promotion and preservation of the positive to mitigation and prevention of the negative, and that undesirable effects can range from aggravation and entrenchment of the negative to destruction and obstruction of the positive. In considering these effects, we can attempt to do so with a comprehensive understanding of the full scope and complexity of flourishing, which is what our map provides. In this way, it can hopefully help promote the flourishing that people the world over seek and deserve.

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### Author contribution statement

Tim Lomas conceived of the paper and developed all aspects of it in close collaboration with Tyler VanderWeele. After a first draft had been completed, the paper was further refined with the close attention of, and in engaging dialogue with, James Pawelski.

### Conflict of interest statement

The authors report no conflicts of interest.

### Data availability statement

N/A.

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