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Is the West Really the Best? Modernisation and the Psychosocial Dynamics of Human Progress and Development

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ABSTRACT

Scientific and political interest in measures of human progress and development is increasing, but the indicators are far from capturing all we need to know. They place Western liberal democracies at the leading edge of progress, and present them as models of development; Western nations typically occupy all but a few of the top 20 places in progress indices. However, indicators are measuring modernisation rather than optimal quality of life or wellbeing; modernity's benefits are counted but its costs are underestimated. In particular, the measures do not adequately acknowledge the 'psychosocial dynamics' of human societies: the complex interactions and relationships between the subjective and objective worlds. Unless we pay more attention to these dynamics, we will not develop solutions which match in scale the problems they are intended to address. Indicators need to allow a transformation in our worldview and beliefs as profound as that which gave rise to modernity.

Key words

Development, indicators, modernisation, progress, sustainability, wellbeing.

1. The Mismeasure of Progress

The measures of human progress and development which we employ matter. Good measures are a prerequisite for good governance because they are how we judge its success. They also influence how we evaluate our own lives because they affect our values, perceptions and goals. Measures both reflect and reinforce what we understand development to be: if we believe the wrong thing, we will measure the wrong thing, and if we measure the wrong thing, we will not do the right thing.

Scientific and political interest in indicators of progress and development has surged in the past two decades (Eckersley, 1998a, 2005, pp. 25-42; Stiglitz, Sen, & Fitoussi, 2009; Costanza et al., 2014; Noll, 2014). The central concern has been the adequacy of (per capita) Gross Domestic Product (GDP), the dominant measure of a nation's performance, relative to other countries and the past. The result has been the development of new indicator sets or composite indices which include a wide range of measures – social, economic and environmental. Subjective wellbeing (commonly measured as self-reported life satisfaction or happiness) has attracted particular enthusiasm, with many researchers advocating its use as a stand-alone measure or a component of indicator sets and indices (Costanza et al., 2007; Eckersley, 2009; Stiglitz et al., 2009; Layard, 2010; Diener, Inglehart, &

Tay, 2013; Helliwell, Layard, & Sachs, 2015). Life satisfaction and happiness are believed to capture important subjective elements of wellbeing which other objective indicators do not. However, Noll (2014) notes that theoretical and conceptual issues are rarely thoroughly reflected in the debate on measuring progress; nor is there general agreement on what a composite index of progress would look like, methodologically and in terms of the domains and dimensions to be included.

The idea behind this work is that better indicators of the progress of nations will lead to better choices, especially in public policy, and so to higher quality of life and wellbeing for their citizens. The United Nations Development Programme (UNDP, 2010) says development is about creating an environment in which people can develop their full potential and lead productive, creative lives in accord with their needs and interests; it is about expanding the choices people have to lead lives they value. Fundamental to this goal is building human capabilities: to lead long and healthy lives, to be knowledgeable, to have access to the resources needed for a decent standard of living, and to be able to participate in the life of the community. 'Philosophers, economists and political leaders have long emphasised human wellbeing as the purpose, the end, of development,' it says (*ibid.*).

Similarly, the influential (French) Commission on the Measurement of Economic Performance and Social Progress emphasises three conceptual approaches to measuring quality of life based on: subjective wellbeing, capabilities, and fair allocation (Stiglitz et al., 2009, p. 42). These approaches respectively reflect that: enabling people to be 'happy' and 'satisfied' with their life is a universal goal of human existence; a person's life is a combination of various doings and beings (functionings) and the freedom to choose among these functionings (capabilities), respecting the individual's ability to pursue and realise goals which he or she values; and the various non-monetary dimensions of quality of life should be weighted in a way which respects people's preferences, with a focus on equality among all members of society.

Generally speaking, indicators place Western liberal democracies at the leading edge of progress, and present them as models of development for less developed nations. Typically, with indices such as the Human Development Index (UNDP, 2015), the Social Progress Index (SPI, 2015) and the Legatum Prosperity Index (Legatum Institute, 2014), Western nations occupy most of the top 20 places, with higher-income Asian nations filling most of the rest. Only when environmental impacts are given significant weight, as in the Happy Planet Index (nef, 2009) and the Sustainable Society Index (SSF, 2014), does this ranking change substantially. More details of these and other international indices are provided in Table 1.

[Insert Table 1 about here.]

I argue in this paper that, conceptually, the dominant indicators of progress, including GDP, subjective wellbeing and the newer composite indices, equate progress with modernisation (Eckersley, 2009, 2012, 2013, 2014). The United Nations Development Programme (UNDP, 2014) notes that past decades have seen substantial progress in many aspects of human development. Most people today are healthier, live longer, are more educated and have more access to goods and services, it says; they also have more power to select leaders, influence public decisions and share knowledge. Thus, indicators focus on those qualities which characterise modernisation and which we celebrate as success or improvement, such as material wealth, high life expectancy, education, democratic governance, and individual freedom.

However valuable these gains are, they do not represent the sum total of what constitutes optimal wellbeing and quality of life. Nor do they integrate or reconcile adequately the requirements of sustainability. Modernisation's benefits are counted, but its costs to wellbeing are underestimated and downplayed. At best, the qualities being measured under orthodox approaches may be desirable and even necessary, but are not sufficient. At worst, the measures are promoting a lower quality of life and leading us towards an uncertain and problematic future.

Put another way, the dominant model of progress and development reflects one particular worldview: modernity. Modernisation is a pervasive, complex, multidimensional process which characterises our era. It includes: industrialisation, globalisation, urbanisation, democratisation, scientific and technological advance, capitalism, secularism, rationalism, individualism and consumerism. Many of these features are part of the processes of cultural Westernisation and material progress (measured as economic growth), on which my analysis focuses.

Recent advances in thinking have dispelled the idea that per capita GDP is an accurate or adequate measure of progress (although GDP growth remains firmly entrenched as a political priority), and broadened the measures accordingly. For example, the Genuine Progress Indicator, which adjusts the personal consumption component of GDP for a range of factors that GDP ignores or treats inappropriately, tracks GDP from 1950 to the 1970s, then diverges as social and environmental costs increase (Kubiszewski et al., 2013; Costanza et al., 2014). However, the alternative indices have not yet gone far enough in allowing, even encouraging, the scrutiny and critical evaluation of modernity itself.

To the extent that new concepts of development permit more diverse, or more broadly based, forms of development, they still do not capture the depths and complexities of being human and human wellbeing. A fuller accounting demands wholly new models of progress and development. For all the new interest and effort, the work remains constrained by arbitrary disciplinary boundaries; it still falls short of explaining and resolving the inconsistencies and ambiguities which emerge from research, especially when evidence from other scientific disciplines and fields outside indicators research is taken into account. We may be making progress in measuring progress, but we still have a long way to go.

This paper proposes that a critical flaw in equating progress with modernisation is an insufficient acknowledgement of the ‘psychosocial dynamics’ of human societies: the complex interactions between the subjective and objective worlds (Eckersley, 2009, 2012, 2013, 2014). Existing measures reflect or capture some aspects of these dynamics, but not enough. This is as true of subjective-wellbeing indicators as it is of other measures. We should not be surprised that what makes a good life – in all its richness, diversity, complexity and subjectivity – defies ready, or precise, quantitative evaluation. Unless we pay more attention to these dynamics, we will continue to miss too much of what matters, limiting our options and prospects. We will not be able to devise and implement solutions which match the scale of the problems we face.

In the following sections, the paper: defines psychosocial dynamics as an important dimension of modern societies as complex systems (Section 2); describes psychosocial dimensions of materialism and individualism as defining qualities of modernisation (Section 3); compares measures of subjective wellbeing with other measures of personal wellbeing, societal wellbeing and people’s expected and preferred futures (Section 4); shows how psychosocial dynamics can help to reconcile the goals of high wellbeing and sustainability (Section 5); outlines the cultural transformation necessary to ensure our future (Section 6); and proposes a more open-ended, transdisciplinary approach to research into development (Section 7).

2. Psychosocial Dynamics and Complex Systems

Psychosocial dynamics are about relationships: between us, separately and together, and with other things or entities, both physical and metaphysical. They describe the ways in which social conditions affect individual psychology and behaviour and vice versa, and how perceptions, expectations and values influence the intrinsic meanings of life events and social situations, and so affect our emotional responses (Eckersley, 2006). These interactions can bring satisfaction, happiness, contentment and fulfilment – or cause stress, depression, anxiety, isolation, insecurity and hostility. They frame how we see the world and our place in it, and so what we do in the world, shaping our personal lives and, collectively, the societies in which we live.

The psychosocial dynamics model or perspective has common ground with a 'transactions' model of wellbeing (ABS, 2001). The transactions approach maps the whole of society, acknowledges the interrelatedness which is at its heart, and addresses the dynamic processes behind wellbeing. It emphasises the transactions between people and communities which can create or diminish social capital: the shared social values, beliefs and attitudes which shape individual behaviour and promote greater wellbeing for society as a whole. However, the transactions model, like the concept of social capital, is focused on the more tangible social and economic relationships involving families, friends, social groups, work, government, and the marketplace (ABS 2001). The conceptual boundaries of 'psychosocial dynamics' are wider, deeper, richer: they reflect the past, present and future; they better capture the depths and varieties of relationships which go beyond individuals and social organisation, and embrace spiritual and existential aspects of life, such as our relationships to place, nature and deities. The perspective includes the worldviews and cultural stories, myths and symbols which define reality and give meaning to our lives.

It is impossible to describe – and hence measure or map – every aspect of the psychosocial dynamics of modernisation. Human societies are complex adaptive, or dynamical, systems (Eckersley 2005, pp. 8-15; Helbing, 2013; McKenzie, 2014). These systems are dynamic and self-organising, and display openness, fuzziness, messiness, novelty and learning. They are governed by feedback and driven by often multiple and diffuse interactions between their components. Change in one part of the system can cause changes, often non-linear and unpredictable, in other parts. Complex adaptive systems show emergence: characteristics 'emerge' from the collective behaviour of the whole system, not from the behaviour of its individual components. In other words, the whole is more than the sum of its parts. If we do not understand these patterns of interactions between the components of a complex system, we will not understand how it works (McKenzie, 2014).

Changes in such systems tend to be fast, and can trigger amplifying and cascading effects, which are often hard to identify and map (Helbing, 2013). Rather than deterministic one-to-one relationships between 'causes' and 'effects', there are many possible paths between them. Summarising the current global situation, Helbing (2013, p.52) says: 'Today's strongly connected, global networks have produced highly interdependent systems that we do not understand and cannot control well. These systems are vulnerable to failure at all scales, posing serious threats to society'.

3. Psychosocial Impacts of Materialism and Individualism

While all aspects of society, including structural factors such as poverty and inequality, have psychosocial impacts, I have focused in my own work on cultural influences (Eckersley, 2005, 2006, 2007). Cultures are not merely the window-dressing of human existence; they give order and meaning to our lives. Of all species, we alone require cultures to give us reasons to live, to make life worth living. Cultures can fulfil this role in many ways, and more or less well; they can also be manipulated to serve established interests. The emphasis in human development on needs and capabilities, and the freedom to choose lives we value, underestimates the degree to which culture shapes capabilities and choices, including in ways which can be detrimental to wellbeing. I have argued that modern Western culture is a health hazard – a form of 'cultural fraud' – because of its promotion of images and ideals of 'the good life' which serve the demand for economic growth, especially through increased consumption, but do not meet psychological needs or reflect social realities (Eckersley, 2006).

Take material wealth and individual freedom, both of which are closely associated with progress and development in the orthodox view. GDP measures material wealth, but says nothing about our relationship with wealth. Material progress does not simply make us richer, liberating us from scarcity and hardship, and freeing us to live as we wish (as economists often assume). Rather, it comes with an array of cultural and moral prerequisites and consequences which affects how we think of the world and ourselves, and so the choices we make. For example, the soaring incomes of

the super-rich, which are driving rising inequality in many nations at a growing cost to wellbeing, have been ascribed more to an erosion of social norms than to economic forces (Krugman, 2014).

A US study shows materialism – giving priority to money and what it buys – has increased over several generations as a result of cultural reinforcement and social instability and disconnection (Twenge, & Kasser, 2013). Materialistic values, the study says, are associated with: lower life satisfaction, happiness and vitality, and higher depression and anxiety; less prosocial and cooperative behaviours, and more antisocial and competitive behaviours; and more environmentally damaging and unsustainable choices and lifestyles. In other words, the costs of rising materialism extend beyond the simple question of increased consumption, of having ‘more stuff’.

Other evidence reflects increasing individualism as well as materialism. Three linked studies found that extrinsic goals (money, image, fame) have become more important since the 1960s among American high school and college students, and intrinsic goals (self-acceptance, affiliation, community) less important; concern for others, civic orientation and environmental action have all declined (Twenge, Campbell, & Freeman, 2012). Another study of young Americans examined changes in attachment style (how people relate to others, and form or avoid interpersonal bonds), and found secure attachment (characterised by positive views of self and others) declined between 1988 and 2011; insecure attachment increased, especially ‘dismissing’ attachment (characterised by a positive view of self and a negative view of others) (Konrath, Chopik, Hsing, & O’Brien, 2014).

Like materialism, individualism – the relaxation of social ties and regulation and the promotion of personal freedom and choice – is a defining quality of Western culture, and a central concept in human progress and development; many of the new indices include measures of personal freedom. Studies show that as societies become richer, financial satisfaction becomes less important to overall life satisfaction, and free choice becomes more important (Diener et al., 2013). Historically, individualism has been a progressive force: loosening the chains of religious dogma, class oppression and gender and ethnic discrimination, and so associated with the liberation of human potential.

However, research in other fields indicates that freedom is far from being an unqualified good, and is, rather, a two-edged sword (Eckersley, 2005, pp. 87-96, 2006, 2009, 2013). It can be both exhilarating and disturbing; with new opportunities for personal growth and experience can also come the anxiety of social dislocation and isolation. The sociological literature emphasises the centrality of individualisation to late-modern or postmodern life, marked by a heightened sense of insecurity, uncertainty and risk, and a lack of clear frames of reference (the beliefs and assumptions that determine how we perceive and understand our lives). Psychological research suggests individualism, taken too far, can come at a cost to human needs for intimacy, belonging and meaning in life.

For example, Finland, like other Nordic countries, usually ranks high in international comparisons of progress and development (see Table 1), and its education system is regarded as one of the best in the world. Yet a recent study of changes in students’ fears for the future since the 1980s found that while fears about war, terrorism and environmental disasters fell, and those about work and education did not change substantially, more personal fears rose, including fears relating to failure and making wrong choices, future family and partnerships, loneliness, accidents and, especially, health and death (Lindfors, Solantaus, & Rimpela, 2012). The authors conclude that perceptions of risk have become more individualised, so supporting late-modernist theory. They note that adolescents’ images of the future act as a mirror of the times, reflecting the values and ethos of society and its social and cultural norms and their changes over time. ‘Cultural and societal changes, including emphasis on individual choice and increased uncertainty, seem to create perceptions of uneasiness and insecurity in young people’s transitions to adulthood’ (*Ibid.*, p. 998).

The study’s findings form part of a larger picture of changing health and wellbeing. Contrary to the modern myth, or ‘official story’, that young people in the developed world have never been healthier, I have argued that their health and wellbeing have declined over several generations (Eckersley, 2005, pp. 147-169, 2008a, 2011; see also Section 4.1 in this paper). Behind this changed

trajectory has been a change in significance from socio-economic to cultural causes of ill-health, from material deprivation to psychosocial deprivation. The young best reflect their times because they are growing up in them; if their health and wellbeing are not improving, it is hard to claim that life is getting better.

The sociological and psychological literatures suggest that materialism and individualism, when taken together and too far, reduce social integration, self-worth, moral clarity and existential confidence and certainty (Eckersley, 2006, 2011, 2012). There is a shift from intrinsic to extrinsic values and goals; from self-transcendence to self-enhancement; from doing things for their own sake to doing things in the hope or expectation of other rewards, such as status, money and recognition. The result is an increasing focus on our own lives and an unrelenting need to make the most of life: to fashion identity and belonging increasingly from personal achievements and appearances, possessions and lifestyles, rather than from enduring social bonds and cultural traditions.

Meaning in life, so central to wellbeing, becomes both more difficult to find, or create, and more dependent on transient and ephemeral qualities, on passing fads and fashions. Nietzsche said that 'he who has a *why* to live for can bear almost any *how*' (cited in Frankl, [1946] 1985); Western culture over-emphasises the 'how', at the expense of the 'why'. Frustration, disappointment and failure become more likely; anger, depression and anxiety are a greater risk. As consumer culture extends beyond the acquisition of things to the enhancement of personal attributes, qualities and experiences, its aim becomes not only to make us dissatisfied with what we have, but with who we are. It both fosters and exploits the restless, insatiable expectation that there must be more to life.

4. Measuring Different Worlds: Personal and Social Wellbeing, and Global Futures

As already noted, subjective-wellbeing indicators, especially life satisfaction and happiness, are attracting special attention in the quest for better indicators of progress and development. A recent paper states that 'there appears to be an emerging consensus in the policy community that subjective wellbeing ought to be the key criterion of policy success' (Zagorski, Evans, Kelley, & Piotrowska, 2014, p. 1107). However, measures of subjective wellbeing do not fundamentally alter the dominant view of progress. The correlation between the Human Development Index and the World Happiness Report's scores is a high 0.77 (Helliwell, Layard, & Sachs, 2013, p. 10). A global study linked happiness to the extent to which a society allowed free choice; free choice was, in turn, associated with economic development, democratisation, and social liberalisation, all aspects of modernisation (Inglehart, Foa, Peterson, & Welzel, 2008).

Global surveys in 2014 found that life satisfaction rose strongly in emerging economies such as China, India and Brazil between 2007 and 2014, almost closing the gap between them and the advanced economies (where life satisfaction changed little); it also rose in the poorer, developing economies (Pew Research Center, 2014a). Life satisfaction increased more in those countries with higher rates of economic growth. In most countries, majorities agreed most people were better off in a free-market economy, even if some people were rich and some poor (Pew Research Center, 2014b).

On the face of it, these associations seem persuasive. However, subjective-wellbeing indicators have their limitations; like other indicators, they also fail to capture fully the psychosocial dynamics of our ways of life. Aspects of subjective wellbeing which remain unresolved or contested in the research literature include: adaptation and homeostatic control, which buffer subjective wellbeing against external circumstances and help to maintain a relatively stable and positive life evaluation; the influence of personal situations compared to social conditions; the ambiguous role of individual freedom in wellbeing; and a cultural bias towards Western societies (Eckersley, 2005, pp.77-104; 2009, 2013).

A critique of positive psychology (the disciplinary home of subjective-wellbeing research) says it rests on Western ideologies of liberal individualism, and so risks becoming 'a form of disguised ideology that perpetuates the socio-political status quo and fails to do justice to moral

visions outside the dominant outlook' (Christopher, & Hickenbottom, 2008, p. 565). Variants of Western individualism constitute moral visions which shape our understanding of both what the self is and what the self should be or become, visions which are not necessarily shared by other cultures. Zevnik (2014), in analysing the growing interest in happiness and its emergence as a central theme guiding the processes of modernisation, argues (*Ibid.*, p. ix) that 'happiness is not universal but instead a culturally and historically specific experience that emerged in the 17th and 18th Century [sic] and that is characteristic only to the Western world'.

There are several streams of evidence which expose the limitations of subjective wellbeing indicators, and cast doubt on how we currently conceptualise and measure progress and development; they also highlight the underestimated role of psychosocial dynamics. The evidence comes from other research on personal wellbeing; what people think, not about their own lives, but about the overall quality of life and of their societies as a whole; and people's views of the future of society and humanity.

4.1 Measuring personal wellbeing

Drawing on wider measures of personal wellbeing than life satisfaction or happiness produces less positive and more varied findings. A study of 22 European countries using a 10-item measure of 'flourishing' (covering competence, emotional stability, engagement, meaning, optimism, positive emotion, positive relationships, resilience, self-esteem, and vitality) found that an average of only 16% were flourishing, with scores ranging from 41% in Denmark to 9% in Portugal (Huppert & So, 2013); these scores are much lower than typically reported for life satisfaction. Western Europeans scored higher on most measures, but Eastern Europeans did better on vitality (having a lot of energy). The correlation between flourishing and life satisfaction was 0.34; about half (46%) of those who were flourishing had high life satisfaction, and about one third (39%) of those with high life satisfaction were flourishing. The authors note that flourishing and life satisfaction are overlapping but distinct concepts, and 'a great deal would be lost by measuring life satisfaction alone' (*Ibid.*, p. 854).

The 'deception' of existing indicators is clear in the case of young people's health and wellbeing. The great majority of adolescents and young adults in the developed world say they are happy, healthy and satisfied with their lives, and their life expectancy continues to rise; yet other research indicates their wellbeing has declined because of increased rates of chronic physical and mental illness (Eckersley, 2005, pp. 147-169, 2008a, 2011; Twenge, 2011; Collishaw, 2015). Growing numbers of overweight and obese youth are at higher risk of a wide range of health problems, including diabetes, heart disease, some cancers and mental illness (Eckersley 2008a, 2011). An Australian study of students aged 7-16 years found that the prevalence of overweight and obesity had risen from 11% in 1985 to 25% in 2004; up to 20% of 15-16-year-olds already had risk factors for diabetes, heart disease and liver disease, with overweight and obese students much more likely to be at risk (Booth et al., 2006).

Mental disorders now contribute the largest share of the 'burden of disease', measured as both death and disability, in young people in rich countries, with research showing they have become more common since the mid-20th century. Psychological distress and emotional pain are rife. One American study, comparing the results of a widely used psychological test, found a steady decline in the mental health of college students over a period of 70 years: compared to 1938, five times as many college students in 2007 scored high enough on the test to indicate psychological problems (Twenge et al., 2010). A British study found that adolescents experienced considerably higher rates of emotional problems in 2006 than they did in 1986. The greatest changes were for worry, irritability, fatigue, sleep disturbance, panic, and feeling worn out or under strain; the more severe the reported symptoms, the larger the increase in prevalence over the two decades (Collishaw, Maughan, Natarajan, & Pickles, 2010). While chronic physical diseases such as heart disease and cancer afflict mainly the elderly, most mental illness begins at a young age, affecting

people in the most productive time of life, and so exacts a greater personal, social and economic cost (Eckersley, 2008a).

4.2 Measuring societal wellbeing

Subjective measures of societal wellbeing or overall quality of life also present a very different view of modern life compared to subjective wellbeing indicators (Eckersley, 2005, pp. 105-125, 2009, 2013, 2014). Researchers largely overlook these measures, with some regarding them as dubious because they are at odds with the objective data and subjective wellbeing. Nevertheless, social measures offer insights into our lives which the personal perspective masks, and suggest societal discontent and disillusion are prevalent in the developed world. A European study found that while over 80% of people were satisfied with their lives in all but two of 15 countries, less than 50% were satisfied with society in seven of the countries (with scores ranging from 85% to 25%) (Noll, 2008). Another study of 23 European nations found an average of 50% of people agreed that, for most people in their country, life was getting worse (with scores ranging from 86% to 13%) (Noll, 2014). (The data used in both studies predate the global financial crisis.) The headline of a 2012 story in *The Atlantic* says of the US: 'Americans are losing confidence in the nation but still believe in themselves' (Penn, 2012). The article notes that in a pervasive wave of pessimism, perhaps the longest in American history, 'Americans believe their country is heading in the wrong direction, that [their] values are weathering, that their generation is worse off than their parents' generation, and that their children will be still worse off'. Australia ranks high in progress indices, including life satisfaction (see Table 1), yet when asked in a 2015 poll about quality of life in Australia, taking into account social, economic and environmental conditions and trends, only 16% of Australians thought life was getting better; 35% thought it was staying about the same; and 49% thought it was getting worse (J. Davis, partner, Omnipoll, personal communication, 25 October 2015).

Steenvoorden (2015, p. 86), in a conceptual and empirical study, argues that societal unease is 'a latent concern among citizens in contemporary western countries about the precarious state of society'. This concern arises from the 'perceived unmanageable deterioration' of five fundamental aspects of society: distrust in human capability (to make improvements and overcome problems), loss of ideology, decline of political power, decline of community, and socioeconomic vulnerability (p. 86). Societal unease is only weakly related to happiness, proving, the author says (p.105), that personal happiness is clearly distinct from societal unease, and that 'high levels of private contentment are not to be mistaken for public contentment'.

4.3 Expected and preferred futures

The third line of evidence, consistent with this social perspective, concerns people's views of the future, both in terms of their expectations and preferences. Pessimism is widespread in the developed world (people in developing countries are more optimistic) and the future people want differs from both what they expect and what orthodox progress promises (Eckersley, 2005, pp. 185-201, 2009; Eckersley, Cahill, Wierenga, & Wyn, 2007; Pew Research Center, 2014b). A 2005 survey asked Australians which of two scenarios of the world in the 21st century more closely reflected their view: only about a quarter (23%) thought that 'humanity will overcome the obstacles it faces and enter a new age of peace and prosperity'; 66% thought 'the world is heading for a bad time of crisis and trouble' (Eckersley et al., 2007).

A 2015 study graphically reinforces this view (Randle, & Eckersley, 2015). The study investigated the perceived probability of threats to humanity in four Western nations: the US, UK, Canada and Australia. Overall, 54% of people rated the risk of 'our way of life ending' within the next 100 years at 50% or greater, while 24% rated the risk of 'humans being wiped out' at 50% or greater. The responses were relatively uniform across countries, age groups, sex and education level.

Global events and risks have increasingly become part of our personal frame of reference, and this relationship provides another example of the importance of psychosocial dynamics. Individually and collectively, we can respond very differently to the same perception of threat,

including ‘apocalyptic suspicions’ about the 21st century (Eckersley, 2008b). These responses include: nihilism (the loss of belief in a social or moral order), fundamentalism (the return to certain belief), and activism (the transformation of belief). The categories highlight differences between responses which, in reality, have subtle to extreme expressions, and are not fixed or mutually exclusive but can overlap, co-exist and change in individuals and groups. In the four-nation survey mentioned above, 78% agreed ‘we need to transform our worldview and way of life if we are to create a better future for the world’ (activism) (Randle & Eckersley, 2015). Almost half (48%) agreed that ‘the world’s future looks grim so we have to focus on looking after ourselves and those we love’ (nihilism), and 36% that ‘we are facing a final conflict between good and evil in the world’ (fundamentalism). Each response offers benefits to people’s personal wellbeing, but in quite different ways: nihilism through a disengagement and distraction from frightening possibilities and prospects; fundamentalism through the conviction of righteousness and the promise of salvation; and activism through a unity of purpose and a belief in a cause. However, only activism is a socially constructive, adaptive response.

In the 2005 Australian study mentioned above, people were given two positive scenarios for the nation’s future – ‘a fast-paced, internationally competitive society, with the emphasis on the individual, wealth generation and enjoying the good life’; or ‘a greener, more stable society, where the emphasis is on cooperation, community and family, more equal distribution of wealth, and greater economic self-sufficiency’ – and asked which came closer to the society they expected and preferred. Three quarters (73%) expected the first, almost all (93%) preferred the second (Eckersley et al., 2007). This finding fits other studies indicating people’s preferred futures emphasise close-knit communities, more conviviality and intimacy, social harmony, human-scale settlements and technologies, and a clean, healthy environment.

5. Reconciling wellbeing and sustainability

People’s concern about humanity’s future is related to the sustainability of our ways of life. The debate about sustainable development is now converging and merging with that about human progress and development (Eckersley, 1998b, 2005, pp. 25-42, 229-251). My analysis of wellbeing, including the role of psychosocial dynamics, contributes to this debate.

Modernity’s dominant narrative of material progress gives priority to economic growth and a rising standard of living. It is being increasingly challenged by the alternative narrative of sustainability, which seeks to balance social, environmental and economic priorities and goals to achieve a high, equitable and lasting quality of life. Material progress represents an outdated, industrial model of development: pump more wealth into one end of the pipeline of progress and more welfare flows out the other. Sustainable development reflects an ecological model, based on our understanding of complex systems (as discussed in Section 2), in which wellbeing results from many entities or factors interacting in often multiple, diffuse and non-linear ways.

One approach to measuring sustainable development is to divide quality-of-life or wellbeing measures by energy use or environmental impacts. The Happy Planet Index does this, multiplying national life satisfaction by life expectancy and dividing the resulting ‘happy life years’ by a country’s per capita Ecological Footprint (nef, 2009). My aim here, however, is to assess the wellbeing side of the equation. Wellbeing measures tend to reinforce the conventional view of progress by suggesting wellbeing is continuing to increase; even indices which include environmental impacts show Western nations performing best on the social and economic measures.

There is often an assumption, explicit or implicit, that there will be a cost to current quality of life in shifting to a sustainable path, as reflected in the title of a recent paper on the topic: ‘Untangling the environmentalist’s paradox: Why is human well-being increasing as ecosystem services degrade?’ (Raudsepp-Hearne et al., 2010). The Happy Planet Index notes the ‘undeniable tension’ between its numerator of happy life years and the denominator of the Ecological Footprint (nef, 2009). The Sustainable Society Index no longer aggregates beyond the three dimensions of

human, economic and environmental wellbeing because of the negative correlation between human and environmental wellbeing, which it says seem to be on a 'collision course' (SSF, 2014).

A 2008 study comparing countries' Human Development Index scores with their per capita Ecological Footprints shows environmental impacts rise steeply with high development (see Figure 1) (Moran, Wackernagel, Kitzes, Goldfinger, & Boutaud, 2008). Only one country (Cuba) of the 93 surveyed met the requirements for both high development (an HDI score of 0.8 or more) and global sustainability (a footprint of less than 1.8 global hectares). Among high-income countries over the previous 25 years, improvements in index scores came with disproportionately larger increases in their footprints, showing a movement away from sustainability. Some lower-income countries, in contrast, achieved higher levels of development without a corresponding increase in their footprints.

The psychosocial perspective helps to resolve this dilemma by highlighting how Western high-consumption lifestyles and the type of economy and culture they reflect and require are not only increasing resource consumption and environmental damage, they are also hostile to health and wellbeing (especially in countries which are already rich). The importance of 'correcting', or at least questioning more deeply, the conventional picture of progress and development is underscored by environmental analyses which demonstrate the extent of the environmental costs, the limits they impose on orthodox development, and their potentially catastrophic impact on human health (Corvalan, Hales, & McMichael, 2005; Wiedmann et al., 2015). That most measures of progress, including newer indices, do not reflect this reality – and show, in effect, that we are enjoying a high or improving quality of life even as we move ever closer and faster to an ecological abyss – demonstrates how far we have to go.

[Insert Figure 1 about here.]

6. Cultural Transformation: Beyond the Modern Mind

In exposing the fundamental and inherent failure of material progress, even on its own terms of making life better, the psychosocial-dynamics perspective reinforces the message which is becoming clearer from the reality of global threats to humanity such as climate change, food, water and energy security, economic collapse, and technological anarchy. This message is that we need to change the symbols, myths, worldviews and values by which we define ourselves, our lives, and our goals (Eckersley, 2005, pp. 252-266, 2012). Without this deeper change, we will not close the gulf between the magnitude of the challenges and the scale of our responses. A cultural transformation of this depth is very different from the policy reforms on which our public discussions and political debates focus and which, by and large, our indicators of development track. The 2015 Paris Agreement on climate change, hailed politically to be an outstanding success, but judged scientifically to be a failure, exemplifies well this 'reality gap' (Hamilton, 2015).

The necessary transformation can be compared to that in Europe from the Middle Ages to the Enlightenment: from the medieval mind, dominated by religion and the afterlife, to the modern mind, focused on material life here on earth (Eckersley, 2012). Tuchman ([1978] 1989, p. xxi) has said that Christianity provided 'the matrix and law of medieval life, omnipresent, indeed compulsory'. Its insistent principle was that 'the life of the spirit and of the afterworld was superior to the here and now, to material life on earth.... The rupture of this principle and its replacement by belief in the worth of the individual and of an active life not necessarily focused on God is, in fact, what created the modern world and ended the Middle Ages.'

Tuchman notes that the pressures of adverse and violent events, including the Black Death, war and climate change (in the form of the Little Ice Age), contributed to this rupture. More broadly, a gulf had opened in Europe between Christian beliefs and conduct, not least within the Church, and between the ideal of chivalry and the behaviour of the nobility. 'When the gap between the ideal and real becomes too wide, the system breaks down', she says (*Ibid.*, pp. xxi-xxii). Tuchman is

conscious of the parallels with the current age, and says the lesson is ultimately consoling: we have lived through worse before.

It seems inevitable that we face another rupture or discontinuity in our view of what it is to be human which will change profoundly how we live. Just as it was impossible for the medieval mind to anticipate the modern, so too is it impossible for the modern mind to grasp what might come next. However, a greater awareness and acknowledgement of the flaws and failings of material progress and modernisation encourage us to think more positively about alternative ways of living which deliver a high quality of life with much lower material consumption and social complexity.

I have argued that the modern myth of material progress implies, even insists, that past life was wretched, as expressed in the oft-quoted words of Hobbes that the life of man in his natural state was 'solitary, poor, nasty, brutish, and short' (Eckersley, 2008c). It is true that people were materially poorer and their life expectancy lower in the past, but they often led rich social and spiritual lives, as recent accounts of the sustainability and quality of life among indigenous Australians show. Traditional indigenous ways of living were devastated by the arrival of Europeans, but early accounts suggest a life of relative abundance and ease (Sveiby & Skuthorpe, 2006). People spent between two and five hours a day gathering and preparing food; there were seasonal fluctuations but, except during extreme drought, it was not hard work. They spent a few hours more on making tools and shelters, allowing the rest of the day to be spent on 'intangibles', such as spiritual, intellectual and artistic activities. James Cook noted in his journal after his visit to Australia in 1770: 'From what I have said of the Natives of New Holland they may appear to some to be the most wretched people upon Earth; but in reality they are far happier than we Europeans...the earth and the sea of their own accord furnishes them with all things necessary for life...' (Sveiby & Skuthorpe, 2006, p. 209).

Such accounts are criticised for romanticising indigenous life and reflecting a false ideal of the 'noble savage' (Eckersley, 2008c). However, my intention is not, obviously, to suggest that we revert to a hunter-gatherer existence; it is to show that we need to realise and accept that other, quite different, and even better, ways of making sense of the world and our lives are possible. Furthermore, we need to examine our situation at this fundamental level if we are to have any chance of achieving a higher and sustainable quality of life.

Similarly, Floyd (2014) says that human experiences of wellbeing are principally a function of the sources of meaning and associated narratives by which people make sense of their situation. He uses the examples of Aboriginal Australia and Buddhist Tibet to show that 'high levels of wellbeing have in the past been achieved with material, economic and technological means that are orders of magnitude more modest than those provided by modern industrial societies' (*ibid.*, p. 595). 'Descent pathways commensurate with human wellbeing are available to us' (*ibid.*, pp. 603,604). Davis (2009, pp. 217-218) also urges us to heed the voices of other cultures because these remind us that there are alternatives, 'other ways of orienting human beings in social, spiritual, and ecological space'. They allow us 'to draw inspiration and comfort from the fact that the path we have taken is not the only one available, that our destiny is therefore not indelibly written in a set of choices that demonstrably and scientifically have proven not to be wise' (*ibid.*). By their very existence, he says, the diverse cultures of the world show we can change, as we know we must, the fundamental manner in which we inhabit this planet.

These perceptions about other cultures are at the core of the psychosocial dynamics which I emphasise. Davis's account is an exploration of ancient ways and wisdom. He cautions (*ibid.*, p. 193) that modernity (whether identified as Westernisation, globalisation, capitalism, or democracy) is an expression of cultural values: 'It is not some objective force removed from the constraints of culture. And it is certainly not the true and only pulse of history.' The Western paradigm, for all its accomplishments, and inspired in so many ways, is not 'the paragon of humanity's potential', he says (*ibid.*, p.195); 'there is no universal progression in the lives and destiny of human beings'.

7. Implications for Research

The resurgent interest in indicators has led to improvements in our understanding and measurement of progress and development. However, the work is not without critics (Eckersley, 1998b). Tensions exist between the need to quantify environmental and social issues so that they can be assessed together with economic factors, and the impossibility or inappropriateness of quantification. Aggregated or composite indicators can provide a stark contrast to GDP, but have the same tendency as GDP to obscure the assumptions, values and criteria which critically influence the result. One environmental scientist has described indicators research as ‘voodoo science’, saying indicators are the consequences of an approach to understanding the complexity of the world which is fundamentally flawed, a pathological corruption of the reductionist approach to science (cited in Eckersley, 1998b, p. 13). We need to approach the complexity, the richness of the world, he says, with theory, data, models and tools which honour that richness instead of subverting it, and acknowledge that complexity instead of denying it.

Our increasing knowledge of complex systems (discussed in Section 2) highlights these concerns. The ‘holy grail’ of a single index which accurately measures and compares how well nations are faring has proved elusive. It is now widely accepted that GDP does not do this and neither, I have argued, does subjective wellbeing. Assembling a growing number of component measures into an indicators set (regardless of whether these are aggregated into a single, composite index) does not solve the problem: given the property of ‘emergence’, the performance of a whole system cannot be derived from that of individual components. And, finally, existing measures do not allow us to anticipate, and so prevent or prepare for, sudden, non-linear, and possibly irreversible changes which risk causing catastrophic failure.

Could it be, then, that the search for comprehensive and universally applicable measures of progress and development is scientific folly? A key lesson of this analysis is to shift the emphasis of research away from the goal of developing better indices of progress, and towards using a much wider range of indicators and other research to inform a more open-ended discussion about its meaning and purpose. Research in this field has become over-quantified because of advances in computing and statistical analysis; numbers have become an end in themselves, a ‘scorecard’ of performance, rather than being used as one means of creating deeper, richer stories of humanity and its future. This need is consistent with narrative studies, which reveal the importance of rich or ‘thick’ storylines in enabling people to construct identities, create meaning, and enrich social life (Eckersley et al., 2007).

This paper is based on transdisciplinary synthesis, the strengths and usefulness of which are under-valued in science (Eckersley, 2007). While empirical research seeks to improve understanding of the world by creating new knowledge, synthesis creates new understanding by integrating existing knowledge from across a range of fields, disciplines and sciences. It aims to develop new, common frameworks of understanding, striving for coherence in the overall conceptual picture rather than precision in the empirical detail. It dispenses with expectations of scientific certainty and exactness, including with respect to cause and effect; everything is provisional, and relationships are often reciprocal.

Science favours depth of knowledge, but breadth also has its place: synthesis adds value to existing specialised knowledge; reduces disciplinary biases; transcends interdisciplinary tensions; improves researchers’ knowledge outside their specialisation; generates new research questions; and enhances the application of knowledge. Synthesis is particularly appropriate for addressing the increasing scale, complexity and interconnectedness of human problems, and suits the complex, diffuse processes of social change.

The cultures of scientific disciplines are like the cultures of societies: so ingrained that they appear to be the natural and right way to look at the world. Disciplines see things differently; they draw on different conceptual frameworks and approaches, which yield different evidence and interpretations. In crossing disciplinary boundaries, synthesis can expose the ‘false consensus’ which

can arise within disciplines. Synthesis allows us to identify and acknowledge not only areas of consensus and convergence, but also those of disagreement and divergence, so highlighting topics for further investigation. If we look only at the findings of mainstream indicators research, for example, the case for equating progress with modernisation seems compelling (its sustainability aside). When we draw on evidence and insights from quite disparate fields – complex-systems science, cultural determinants of health, young people’s wellbeing, and people’s views of the future – the equation is less convincing.

8. Conclusion

Increasing interest in recent decades in measuring human progress and development has led to the creation of new indicators. Of these, subjective wellbeing, measured as self-reported happiness or life satisfaction, has become especially popular. However valid and important this work is, it still fails to measure all we need to know, and falls short of explaining and resolving the inconsistencies and ambiguities in the research.

Western liberal democracies top the international ranking of progress and development, and are presented as models for other nations. In effect, the dominant indicators equate progress with modernisation, including cultural Westernisation. Whatever the benefits to wellbeing which flow from this equation, they are not the same thing; modernity does not represent the best of all possible worlds, or even the best path to it. Its benefits are emphasised, but its costs are underestimated.

What is needed is a better acknowledgement of the ‘psychosocial dynamics’ of human wellbeing, the complex interactions and relationships between the subjective and objective worlds. Unless we pay more attention to these dynamics, we will limit our choices and options and fail to develop responses which meet the challenges and problems humanity faces. Research into human development and progress needs to allow, even encourage, the conceptual space for a transformation in our worldview, beliefs and values as profound as that which gave rise to modernity in the first place.

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Table 1. International indices of progress and development and top rankings¹

Index	Income per capita	Human Development Index	Social Progress Index	Legatum Prosperity Index
Source	World Bank, 2013, http://data.worldbank.org/indicator/	UN Development Programme, 2015, http://hdr.undp.org/en/data	Social Progress Imperative, 2015, http://www.socialprogressimperative.org/	Legatum Institute, 2014, http://www.prosperity.com/#!/
Features	GDP per capita, PPP (constant 2011 international \$).	188 countries; 4 indicators for: life expectancy, years of schooling (2), per capita gross national income. ²	161 countries; 52 indicators in 3 categories: basic human needs, foundations of wellbeing, and opportunity.	142 countries; 89 indicators for 8 topics: economy, opportunity, governance, education, health, security, freedom, social capital.
Top Ranking	Macao (SAR, China) Qatar Luxembourg Singapore Brunei Darussalam Norway Switzerland Saudi Arabia Hong Kong (SAR, China) United States Netherlands Ireland Austria Sweden Germany Australia Bahrain Denmark Canada Iceland	Norway Australia Switzerland Denmark Netherlands Germany Ireland United States Canada New Zealand Singapore Hong Kong (SAR, China) Liechtenstein Sweden United Kingdom Iceland Korea Israel Luxembourg Japan	Norway Sweden Switzerland Iceland New Zealand Canada Finland Denmark Netherlands Australia United Kingdom Ireland Austria Germany Japan United States Belgium Portugal Slovenia Spain	Norway Switzerland New Zealand Denmark Canada Sweden Australia Finland Netherlands United States Iceland Ireland United Kingdom Germany Austria Luxembourg Belgium Singapore Japan Hong Kong (SAR, China)

¹ This list includes examples of indices which involve large, international analyses (with pc GDP for comparison).

² Adjusting HDI for inequality has little effect on most top rankings except, notably, that the US drops 20 places and Korea 19.

Table 1 (cont). International indices of progress and development and top rankings

Index	OECD Better Life Index	National Happiness	Sustainable Society Index	Happy Planet Index
Source	OECD, 2014, http://www.oecdbetterlifeindex.org/	World Happiness Report, 2015, http://worldhappiness.report/ed/2015/	Sustainable Society Foundation, 2014, http://www.ssindex.com/	New economics foundation, 2009, http://www.happyplanetindex.org
Features	36 OECD countries; 24 indicators for 11 topics: community, education, environment, civic engagement, health, housing, income, jobs, life satisfaction, safety, work-life balance.	158 countries; life evaluation (Cantril ladder: self-reported happiness about life as a whole).	151 countries; 21 indicators in 7 categories for 3 dimensions of human, environmental and economic wellbeing.	143 countries; 3 indicators: life satisfaction, life expectancy, ecological footprint.
Top Ranking	Australia Norway Sweden Denmark Canada Switzerland United States Finland Netherlands New Zealand Iceland United Kingdom Belgium Germany Austria Ireland Luxembourg France Slovenia Japan	Switzerland Iceland Denmark Norway Canada Finland Netherlands Sweden New Zealand Australia Israel Costa Rica Austria Mexico United States Brazil Luxembourg Ireland Belgium United Arab Emirates	Switzerland Sweden Austria Latvia Norway Costa Rica Slovenia Finland Slovak Republic Sri Lanka Note: Rankings are for 2012. In 2014, the SSI did not aggregate above the 3 dimensions to produce a single index (see text).	Costa Rica Dominican Republic Jamaica Guatemala Vietnam Colombia Cuba El Salvador Brazil Honduras Nicaragua Egypt Saudi Arabia Philippines Argentina Indonesia Bhutan Panama Laos China

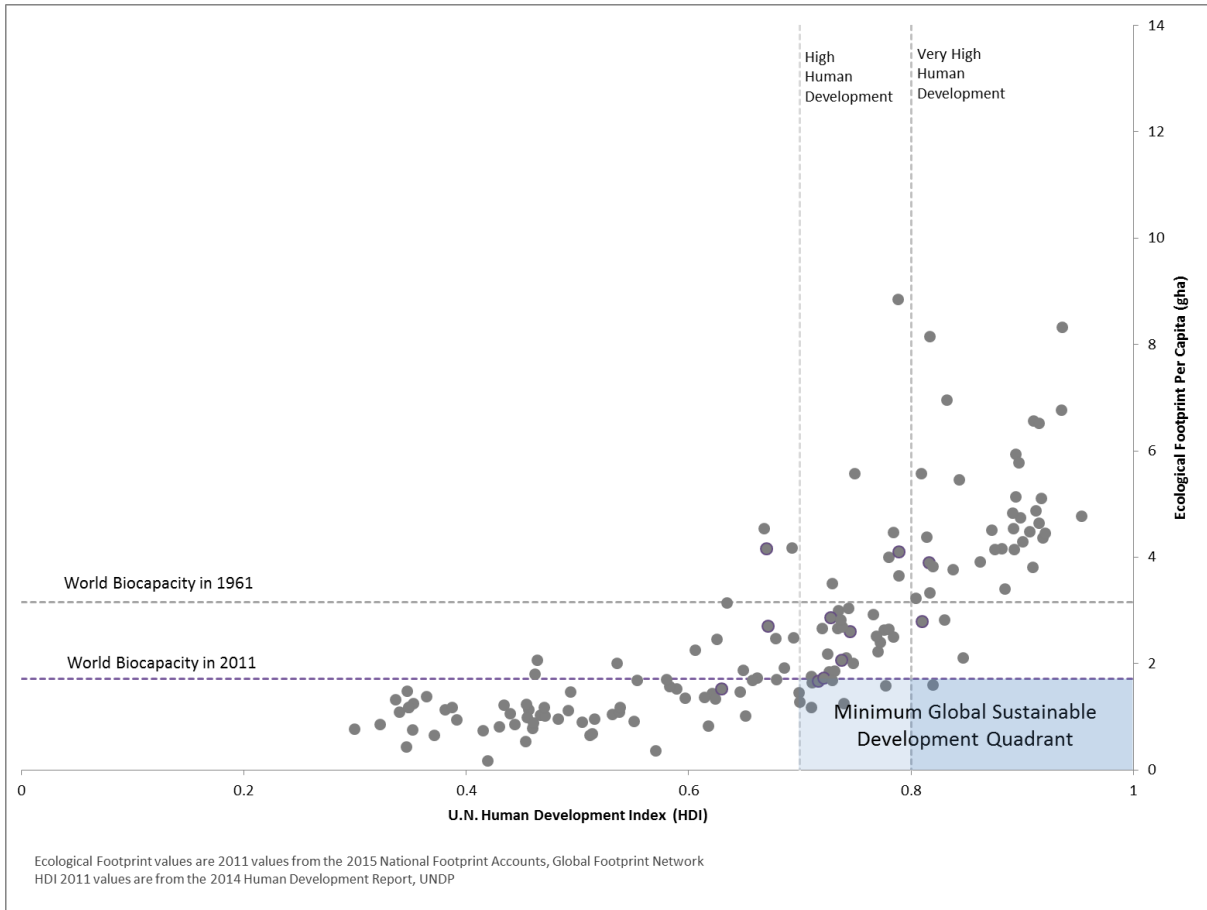


Figure 1: (Un)sustainable development: Human Development Index and Ecological Footprint by country. The footprint is measured in global hectares (gha) per person, the area of land and water with world average bioproductivity required to produce the food and other resources consumed and to absorb wastes. World biocapacity is the productive capacity of the biosphere to supply biological resources and services useful to humanity. The decline in biocapacity since 1961 is mainly a result of population growth. Updated from Moran et al. (2008) and reprinted with permission from the Global Footprint Network, www.footprintnetwork.org