

## Addressing Tipping Points for a Precarious Future

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## Sustaining Markets, Establishing Well-Being, and Promoting Social Virtue for Transformational Tipping Points

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### [–] Abstract and Keywords

This chapter looks at the evolving links between markets, citizens, and politics. It offers the scope for virtue, for beneficence, and for responsibility for the future in both market and human behaviour. Three forms of market are addressed: the informal exchange markets, the free markets of liberal ideology, and the social democratic regulated markets which temper the excesses of untrammelled capitalism. In general, all three forms are poorly designed to deliver sustainability and long-term adaptiveness and resilience. Indeed in the 'free market' version there are many perverse signals and moralities which seemingly accelerate the onset of tipping points. With attention to well-being as a central tenet of economic success, coupled with virtue politics and citizenship, there is at least some hope for transformation of politics and the markets. But such a profound shift of the many inflexible market cultures may not come with time to make the necessary adjustments.

*Keywords:* markets, tipping points, virtue politics, virtue citizenship, well-being, social capital, natural capital, beneficence

The chapters and commentaries which compose this Part are concerned with the social, political, and economic conditions that might be best able to identify, anticipate, and cope with tipping points. Part of this process is to consider the changing roles of markets and of the political structures in which they function.

In approaching this coupling, this chapter looks at the evolving linkages between markets, citizens, and politics as means of making decisions about the economy, via the uses of concepts such as 'prosperity', 'progress', and 'citizenship'. It ends with some suggestions for restructuring the relationships between markets, regulation, incentives, civic virtue, and responsible government for guiding us towards positively transformational tipping points. In doing so, this introductory chapter and Chapter 6.3 by Sara Parkin consider not only the strengths and weaknesses of markets as means of making economic decisions, but also the

strengths and weaknesses of the many influences of political systems and cultures which are shaped by markets, as well as the appropriate role for individuals and groups of citizens.

These arrangements are, of course, always linked together in some way. Political institutions are always occupied in regulating and responding to the workings of the market. Markets develop within expressions of values and aspirational contexts created by the activities and cultural outlooks of **(p.174)** civil society and its political structures. Individuals, in their own lives and as citizens, both respond to and influence the market and politics. The ways in which the three currently combine give little attention to long-term sustainability. It is therefore vitally important to address their very basic deficiencies so that they function cooperatively to create the conditions for successfully addressing positively transformational tipping points.

## Markets and the future

The 'market' is a mechanism for guiding behaviour and investment, for encouraging a constructive relationship between buyers and sellers and supply and demand, for promoting innovation, productivity, and competition so as to encourage efficiency and to minimize inflation, and to guide behaviour through prices, incentives, and other regulatory measures. Broadly there are three forms of markets:

- Markets which are open to exchange processes, via buying, selling, and bartering, essentially informal markets of huge variety, including 'black' markets;
- Markets which seek a more formal social contract between the economy and the citizen, through a combination of political and market processes, the socio-democratic markets;
- Markets which seek to free up exchange and innovation in a more unrestrained manner, the so-called 'neoliberal' markets.

Markets can act locally, or through national and multinational agreements, or globally. All markets are regulated to one degree or another, but none is regulated to ensure the sustainable long term, or, indeed, a socially fair and redistributive present. Markets currently consider the uncertain future in a number of ways, as outlined below.

### 1. Insurance and the spreading of risk

This is normally only tackled where profits are reasonably guaranteed. In general, this process is based on relatively short-term planning and calculation of returns. So very long-term notions, such as those connected to malign or benign tipping points, are not automatically included. Markets are just beginning to recognize that climate change will introduce a whole series of 'normal abnormal' weather-related events, such as droughts, floods, storms, and fires, which will have to be factored into costs and **(p.175)** opportunities. This is a key role for the tipping points science offered by Tim Lenton in Chapter 2.1.

### 2. Futures contracts

Futures contracts, whereby prices are fixed in advance of goods and commodities being supplied, are also fairly short-term in perspective – for example, for periods of three months. Futures contracts do not normally take into account long-term tipping point considerations, even when there are some (admittedly imperfect) measures on offer. This point is made clearly from the perspective of a CEO of a global company, Keith Clarke, in his commentary (6.5).

### 3. Investment geared towards future returns

Investment geared towards future returns, provided reasonable guarantees are thrown in, is nearly always based on models of investment where there is a presumption of growth, innovation, and overall betterment of income. Indeed, these are important preconditions. Up until now investment for the future has always been predicated on a reasonable guarantee of future returns on the funds committed. In a world of unstable financial markets and diminishing ecosystem functioning, as well as growing social tension and increasing political distrust, it may no longer be possible to guarantee long-term payback from a given investment. Yet, as Dolphin and Nash (2011: 20–21) argue, there is no apparent shift in the prevailing economic paradigm to give attention to this danger. Indeed they go further. They argue that unless those who seek a more ‘eco-centered’ economics of the kind promoted by Tim Jackson (2011) apply their new paradigms to real-world evidence, their propositions will not be heard by top-table economists who prefer to tweak the more conventional approaches. We address this conundrum in Part 8.

### 4. Lending at interest, depending on positive interest rates

The charging of interest also depends on a critical basic assumption. This is that borrowers will normally have more money (even after taking the effect of inflation into account) when they come to repay the loan than they had when they took it out in the first place, enabling them to pay the interest as well as repaying the loan. On the scale of the economy as a whole, this depends on economic growth, and continuing investment. And **(p.176)** such growth in turn ultimately depends on stable amounts of available ecological and natural resources, as well as reliable social relationships and justice. If these two conditions are not met, or are not calculated in pricing and regulation, or are not monitored by markets, then interest rates cannot do their intended job. The discussion in the concluding chapter (8.1) over planetary boundaries and social floors is not apparently yet incorporated in any setting of interest rates, which currently are geared to the very short term.

The UK government has established a Natural Capital Committee, reporting to the Treasury, which is asked to report on the unsustainable trajectory of natural resources use, to offer procedures to halt such losses based on robust cost-effectiveness measures, and to encourage scientific research to buttress its work. If this Committee is allowed to do its work effectively, this will mark the beginning of an important shift in national economic accounting, which may be emulated elsewhere and hopefully by the UN. The test will lie in the length of the time-framing of the Committee’s scenarios, and how much it will take into account the precursors of possible tipping points outlined in Chapters 1.1 and 2.1.

### 5. Trading in shares, commodities, and currencies

This is based on guesses about the future, in which 90 days appears as ‘long-term’, and trading is often within daily cycles and perturbations. The recent convulsions in global commodity and stock markets show that these are subject to speculation and manipulation, on confidence and despair, on top of the basic influences of supply and demand. Commodities appear to be a form of currency and not just a natural resource. This will be another test for the Natural Capital Committee to prove its spurs.

### 6. Self-interest and short-term objectives

The market consists largely of individuals attempting to secure self-interested and/or short-term objectives. So there is no inherent sense of the collective interest. Indeed, it can be argued from the events of the past few years, that ‘markets’ predominately expose an ideology favouring the

greed of the shareholder and the boards of directors, not a fundamental concern for the wider and longer-term public interest or social fairness.

## **(p.177)** 7. Undervaluing of future costs and benefits

Interest rates, and discount rates based largely on them, usually lead to an undervaluing of future costs and benefits by comparison with the short term. This point was graphically illustrated by the Stern Report (2007), which showed that delay in reducing greenhouse gas emissions would result in increasingly higher costs in the future. These costs would escalate both in the expenditures for removing the gases as well as for the consequences to societies and economies of greater climate change. In such a case, claimed Stern, discount rates should be lower than normal 'market' rates.

Konrad Ott (2003) notes that 'rationality' tends to dictate 'prudence' in discounting. This brings the maximization of the present value of net benefits to the fore. This is a prescription for short-termism, high interest rates and 'sure bets'. But Ott also notes that 'reason' may amend this perspective when the future of the quality of life is at stake. Furthermore, if a moral outcome (such as social justice and ecological resilience) is to be retained (sustained) then a zero-discounting process may be used. Hence discounting may have to be much more dependent on context, especially where huge uncertainties over the well-being of the unborn are involved. Paradoxically, the current commitment to very low interest rates may penalize the scope for investment for the betterment of future generations, as scarce investment funds are diverted to present gains rather than providing buffering funds for possible tipping point outcomes.

## 8. Externalities

'Externalities' are, by definition, factors the market does not take into account. These include some very important considerations from environment and sustainability perspectives. This is the essence of the new moves to incorporate natural capital accounting into mainstream economics (Kumar *et al.* 2010; HM Government 2011: 36). What some economists see as 'externalities' others see as 'cost-shifting successes', an outcome of an essentially political process in which firms, and some other economic actors, are able to shift costs away to someone else, and/or to the environment. As noted above, the possible pioneering reports of the newly formed Natural Capital Committee could open up exciting new approaches to long-term adaptation to avoid degradation of nature. It will have its work cut out. The very persistence of the term 'externality' suggests that **(p.178)** such effects are regarded as essentially peripheral to the mainstream of prosperity formation.

## 9. Abrupt basic change

Abrupt basic change is difficult for markets to cope with because of their inherent lack of coordination, unless they either take the form of a highly organized monopoly or oligopoly, or depend on large-scale government intervention. This suggests that 'tipping points', or abrupt and reinforcing shifts in Earth system processes, are not readily handled by market procedures. As was outlined by Tim Lenton in Chapter 2.1, not only are tipping points highly uncertain, they are also potentially catastrophic in effect, over relatively short time periods. Markets at present contain few cushioning mechanisms for such eventualities.

What is particularly revealing is the current fixation with the short term, and the hedging against future uncertainty. A survey for the UN Environment Programme (2011) found that both the demands of the shareholders and the needs to ensure current profitability are seriously

limiting both the ability for businesses to plan for sustainability, and to prepare for anything close to tipping points.

A global survey of 642 senior executives, campaigners, and academics conducted by consultancies GlobeScan and SustainAbility found that 88 per cent of respondents regarded pressure to deliver immediate financial results remained a significant barrier to firms' sustainability efforts.

Dolphin and Nash (2011: 16–18) offer an interesting perspective on this theme. They claim that the mainstream economists and their polity bedfellows have faith in technology and investment, that they put to one side climate change and resource limitations, believe that ecological economics has no firm deliverable foundation, and in any case cannot cope with the current fiscal and sovereign debt crises. So they see the economics of a regulated market as continuing well into the real crises to come.

Complexity economics seeks to understand how interactions at the micro level lead to particular macroeconomic outcomes. Change and adaptation at the individual level are viewed as the cause of emergent patterns that can only be seen at the macro level. Most non-economists would recognize this as a reasonable description of the real world and accept that 'without an adequate understanding of [the inherent dynamics and instability of economic systems] one is likely to miss the major factors (p.179) that influence the economic sphere of our societies' (Colander *et al.* 2008: 3). They would be surprised, therefore, to discover that the vast majority of economists continue to cling to the orthodox or traditional neoclassical economic view of the world, which simply fails to provide for such an understanding.

### How do polities deal with tipping points?

'Polities' rather than governments are the issue here. What we are concerned with is not simply governments themselves, but governments in the context of whole political systems, including the values and behaviours of citizens and organizations involved in those systems. This combination is what is referred to here as 'polity'.

Again, as with markets, there are both strengths and weaknesses. The strengths and weaknesses of a polity concern not only the merits of its institutions and their procedures, but also the political culture within which the institutions function. Political parties generally play an important part in shaping the culture, as well as the workings of the institutions. Polities consider the future in a number of ways:

- They generally exist for longer than the lifetime of an individual, and therefore can take a more long-term view.
- They can draw on senses of loyalty, identification, and idealism which favour long-term approaches – e.g. building up an industrial base at the expense of individual consumption, sacrifice in wartime for the good of the nation, the sense of a 'long march' of national or social progress, and perhaps 'environmentally virtuous' behaviour for the good of the planet.

However there are weaknesses:

- There is a constant temptation for politicians to prioritize short-term considerations – generally made worse by the behaviour of the mass media, but also often by the expectations of citizens as well, especially when in consuming mode.

- Many actors within political institutions are concerned with their own self-interest and/or short-term perspectives. Ministers do not easily arrange to promote multi-departmental initiatives where the gains may go to other departmental budgets. Yet such arrangements are often the **(p.180)** hallmark of sustainable investment. Virtually all tipping point issues, such as food and ecological security as revealed in Part 4, combine many aspects of government and economy, and hence departmental responsibilities. One outcome here is that crises may have ominously to rear up into attentive reality before avoiding action is taken.

The Commons' Public Administration Committee (PAC) bemoan the lack of capacity in government to create policy coherence for strategic vision:

We have little confidence that Government policies are informed by a clear, coherent strategic approach, itself informed by a coherent assessment of the public's aspirations and their perceptions of the national interest. The Cabinet and its committees are made accountable for decisions, but there remains a critical unfulfilled role at the centre of Government in coordinating and reconciling priorities, to ensure that long-term and short-term goals are coherent across departments. Policy decisions are made for short-term reasons, little reflecting the longer-term interests of the nation. This has led to mistakes which are becoming evident in such areas as the Strategic Defence and Security Review (carrier policy), energy (electricity generation and renewables) and climate change, child poverty targets (which may not be achieved), and economic policy (lower economic growth than forecast).

(Public Administration Committee 2012: 1)

Tim Jackson (2011: 183) argues convincingly that the building of social capital with an equivalent committee to the Natural Capital Committee, can only take place with the provision of a consistent policy framework for building resilient communities and supporting social cohesion. This should have been the broader message of the PAC. It is still not in the work of central government, where a long-term approach to building well-being is not yet in evidence. The nearest effort is being developed by the Department for Environment, Food and Rural Affairs, the department with a sustainability remit in government (see Figure 6.1).

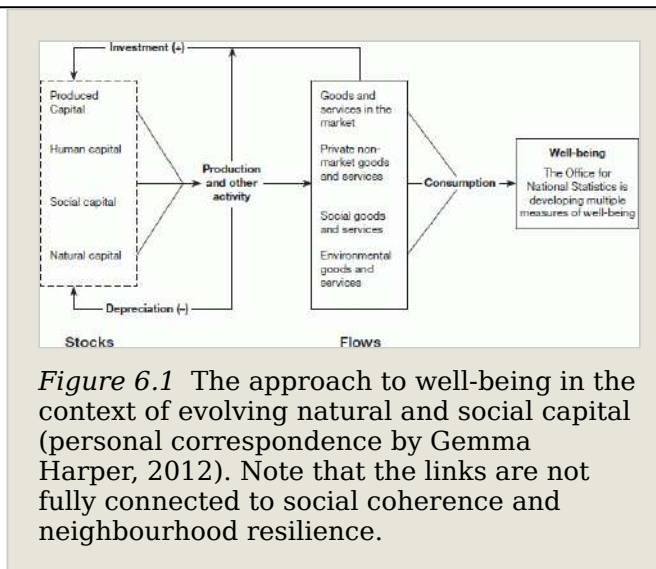
Indeed this is the central message. It appears that the institutional lock-in effect, introduced in Chapter 1.1, may take us to a point of genuine crisis before transformation is even contemplated. As Dolphin and Nash conclude:

Consequently, one might be inclined to presume that change will only come if it is driven from outside the profession by demands for economics to provide solutions to problems in the real world, rather than models of hypothetical worlds that bear little relation to reality.

(Dolphin and Nash 2011: 21) **(p.181)**

## Comparison of markets and polities

The essence of political decision-making is that it depends on conscious choice – so consideration for the future comes about only if that is what citizens and governments wish. Markets appear to operate more ‘automatically’, beyond the will of individuals. In reality they are the consequence of individual behaviour and decisions, but these are aggregated (in the form of ‘supply’ and ‘demand’ and various financial structures), rather than being developed or transcended through deliberation and conscious interchange of opinions (Lyotard 1984).



*Figure 6.1* The approach to well-being in the context of evolving natural and social capital (personal correspondence by Gemma Harper, 2012). Note that the links are not fully connected to social coherence and neighbourhood resilience.

This is particularly true of ‘free’ markets, which provide the basis for pure market theory in neoclassical economics, and have often guided economic policy, especially in the USA and UK. There are, however, other types of markets, summarized at the outset, which differ from this. These are social markets and ‘informal markets’, in which free market principles are mixed in with the operation of social institutions and connections between people, principally the state in ‘social markets’ (e.g. through high levels of welfare provision or economic planning), and local communities in the case of ‘informal markets’. These forms of market therefore incorporate some of the characteristics of a polity into the workings of the (p.182) marketplace. Where contrasts are drawn in this chapter between ‘markets’ and ‘polities’, they are therefore principally between polities and the ‘free market’. There seems to be huge untapped scope for enabling more informal and socially framed markets to rise to the challenge of transformational tipping points as introduced in Chapter 1.1.

## The notions of well-being, virtue citizenship, and virtue politics

The concept of ‘well-being’ raises many issues. The most central is the question of whether well-being can serve as the primary aim of policy, perhaps as a rival to GDP, or perhaps as one corner of a triangle in which GDP growth, well-being, and sustainability have equal status.

There is some scepticism about this. Rather than attempt to measure well-being in some overall way, it may be more reliable separately to investigate different ‘domains of well-being’ based on responses about what factors people feel affect their well-being. It would then be possible to monitor trends in these different sectors affecting well-being, monitoring each separately, although perhaps combining them into some overall index. Laurence Freeman addresses these matters in Chapter 5.1. The strands within ‘well-being’ include:

- self-esteem, self-respect, and personal awakening, built into a setting of social justice and civil rights;
- security of person, of safety, of income, of health, employment, and home, set in the context of a supportive community or neighbourhood;
- responsibility for others, for the future of the human family and for the betterment of the life-support functions of the planet, set in an empathetic, moral and spiritual context.



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These three elements – esteem, security, responsibility – lie at the heart of virtue, the notion that existence is a matter of social obligation and not just personal gain.

In his treatise, *On the Theory of Moral Sentiments*, Adam Smith defined ‘virtue’ through a combination of four qualities as the basis for both virtue and well-being: *prudence*, careful planning and satisficing consumption (enough but not too much and guided by considerations of tempering indulgence); *justice*, the careful avoidance of knowable harm to others; *beneficence*, the unconditional giving to others to promote their happiness; **(p.183)** and *self-command*, the personal moderation of any excesses in behaviour or desire. The virtuous know by what means to reach satisfaction, and not to strive for everything, which only leads to dissatisfaction, and ultimately unhappiness. Laurence Freeman develops this theme in his examination of meditation and contemplative consciousness.

Nevertheless, virtue is a treacherous concept. For many it is a route to citizen compulsion, on the basis that altruism is not often voluntarily followed. For others, such as Michael Sandel, virtue is akin to searching out what is ultimately the common good:

We can’t decide any of the questions we argue about, without implicitly relying on certain ethical ideas, certain ideas of justice; certain ideas of common good. We can’t be neutral on those questions even if we pretend to be.

(Sandel 2012)

Virtue will remain argued over as it divides those who see it as an entry point to some form of regulated coercion, while others regard it as the basis of sustainable citizenship.

This leads to the role of citizens as individuals and members of families and other small units. Citizenship aims to bind sets of individual freedoms and responsibilities to a secure and safe human family and community. All societies combine rights and responsibilities.

Andrew Dobson (2009) (and 8.2) suggests that ‘good’ citizenship does not just stem from particular patterns of behaviour. It is spurred by profound values of care, compassion, and justice. Moreover, it requires a sympathetic and supportive form of representative government that extols such qualities and sets the examples for citizens to follow. So virtue in citizenship is promoted by virtue in governance. This combination is almost non-existent in such ‘democracies’ where ‘government’ is seen as synonymous with sleaze, deceit, or duplicity.

Dobson promotes the notion of a cosmopolitan citizen, outward-looking, somewhat independent of locality, nationhood and time dependency, yet in a zone of conflict over rights, civil care, ecological sensitivity, and spirituality. In essence, Dobson is looking at a new concept of political space – ‘the space in which citizens move, and the space in which citizens’ rights and obligations are noticed’. The notion of the safe operating space outlined in Parts 1, 2, and 8 means that nations as well as individuals are unavoidably confronted with the injustice and immorality of absorbing too much ecological and social space. This means knowingly reducing the **(p.184)** ecological-social space for today’s impoverished peoples, and particularly for all future generations. This is the essence of the Brundtland concept of sustainability, namely, enabling future citizens to be able to use the planet and meet their social requirements without being avoidably prohibited from doing so by our present actions and outlooks.



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To get to benign tipping points, we need to address virtue through three primary concepts:

- *Autonomy*, criticality, rationality, awareness of self in a social and spiritual context. Freedom to choose, but to do so with care and understanding.
- *Responsibility* based on an extended notion of utility and satisfaction from being concerned about the general well-being of others. This includes building self-respect by taking greater responsibility for others' livelihoods. This also touches on human flourishing as a basis for living a good life; and fairness - ensuring that the interests of the self are also related to the interests of others.
- *Awareness and accountability* linked to better information and moral interpretation of the consequences of actions on others and on future societies and ecologies. The key here is moral sentiment as well as understanding and recognition of outcomes of any behaviour. Not just arriving at a judgement and then labelling accordingly, but also alerting the conscience.

All of this places an emphasis on the institutions and values that contribute to the shaping of individual choice and behaviour. 'Virtue' provides a concept of social transformation that better aligns the individual to the interests of others and to the natural world. This in turn breeds consideration and respect for the interests of others. This leads to a better 'wisdom' and a wish to be more active in participation for a better life for self and others.

The possible implications of virtue ethics and citizenship for effective democracy and for any shift towards transformational tipping points are these:

- Schools should be effective learning experiences for civic virtue and sustainable values. So all schools should live out virtue and sustainability. This is beginning to happen in the energy and climate change arenas, where responsible behaviour is being learned and rewarded, and where notions of good citizenship are being introduced to inculcate social and cultural tolerance. **(p.185)**
- Every active citizen, emboldened by this school experience, should find, and be offered, opportunities to participate in the design and success of sustainable consumption and living (Hobson 2003). So the institutions of effective engagement in sustainable community design are central to the practicalities of virtue citizenship.
- Acting sustainably becomes acting virtuously. It is the sense of fairness and rightness about sustainable behaviour that adds to its energy. Thomas and Brown (2011: 18) encapsulate this in a new culture of learning where the bounds of conventional classroom teaching become transformed to open networks of fun, play, imagination, creativity, and open-ended exploration, but set within bounds of well-being and the safe operating space introduced here and in the introduction. Their exuberant analysis opens up learning to exchange, to all manner of networks face to face, forming communities, and across cyberspace. If we can get the framework right, this new culture of learning will pay mighty dividends.

There is a case for re-introducing the notion of governments co-evolving with virtuous citizens to shape a common virtue destiny. Governments should act to enhance the human aspects of human nature. This raises the issue of what is a 'political context' for being prepared for benign tipping points:

- Build a new trust between politics and citizens so that each sees the other as a part of the same quest for reliable and fair futures. At present this is a long shot, given the antipathy to

politicians. But as we cover in Chapter 8.1, 'islands of hope' are being formed, which provide the confidence to others that there are successes out there.

- Establish a series of opportunities for civic engagement in the visualization, design, and content of creating a stepwise progression to a sustainable future.
- Enable citizens to effectively become part of the legislature by coexisting with elected representatives in interesting and novel coalitions. Again, this is a long shot at present. But as localism in governance begins to take hold, there is scope for creative incorporation here.

In order to change this model, political systems need to re-engage and activate citizens. Currently, governments tend either to follow public opinion through jerking to opinion polls, or to try to lead it through asserting political manifestos and campaigns. Because of this, political **(p.186)** systems and markets feel constrained and directed by public demand. However, the whole point of positive transformational tipping points is that public demand can be harnessed in cooperation with government and business for positive, long-term benefits.

A genuine move towards a participative democracy, where government has a more open debate on complex issues with the public, is one of the key ways that can shift the emphasis away from consumerism to responsible citizenship; by using debate to construct a wider consensus, political space for more radical action can be created. Sadly all the signs are that in most democracies there is declining public faith in politics and political institutions, especially at the local level. So creating a more effective and willing participative democracy is, at present, a herculean task.

Of course there are still conflicting interests and competing points of view in any democracy, and it is healthy that there should be. But it is also healthy that this should be complemented by a developing sense of the common good, arising out of discussion, deliberation, and a willingness to listen to other people's opinions.

As global political institutions develop, and as citizens are increasingly brought to focus on long-term and global questions as a result of impending climate change and a possible collapse of the conventional economy, so this sense of the common good will need to shift from a purely national and short-term perspective – as in the notion of 'social partners' negotiating about wages and social benefits, for example – to a primary concern for the future of the planet and its human family.

The more successful the efforts at bringing about these shifts in focus are – from consumer to citizen, from self-interested to virtuous, from short-term to long-term, and from national to global – the more likely it is that political systems will be adapted so that they take action to contribute to long-term sustainability.

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### Notes:

(<sup>1</sup>) This chapter greatly benefited from the ideas of Victor Anderson.

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