Chapter 6: Placemaking and sustainability: moving from rhetoric to transformative sustainability policies, mindsets and actions

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Abstract

Sustainability features in the national and local policies of many countries, but there is often a lack of clarity about what it means in practice. Interpretations of sustainable development (or sustainable cities and places) vary widely between different countries and social, economic, political and environmental actors and interest groups influenced by underlying values and specific contexts. Considering the already-felt impacts of rapid climate change and ecological breakdown, continuing with business as usual will add more pollution, resource depletion, and lead to economic and societal turmoil under a massive shift or collapse in ecological and climate systems. A significant factor in past and current policy failures is that 'weak' rather than 'strong' sustainability models have been adopted laced with a voter-enticing rhetoric yet delaying painful (to the current status quo), but essential, changes in production and consumption and a shift in focus away from profit towards human and ecological wellbeing. This requires clear and ambitious legal, regulatory and policy frameworks, yet also flexible approaches and 'agency' of citizens, employees, employers and politicians for transformation across different geographical and institutional levels, moving away from competition and greed, making room for experimentation and creativity and old and new forms of collaboration and sharing. Relevant concepts, principles, examples and critiques can be gleaned from the ecological economic, social-ecological transformation and planning literature, offering direction for the kinds of shifts in place-making to achieve social and environmental justice and wellbeing.

Keywords: greenwashing; weak sustainability; strong sustainability; sustainability indicators; placemaking; transformative practices; social-ecological systems; collaborative approaches; sufficiency; quality of life

The push for sustainability

This chapter focuses on examining what different interpretations of becoming sustainable means for informing policies and actions relating to placemaking. Enabling sustainable development, and adopting sustainability as the focus for policy- and decision-making, requires clarity of rationale and underlying principles as well as some understanding of the origin and spectrum of interpretations and representations of the concepts.

In the late-twentieth century, many countries committed to 'sustainable development' after the publication of *Our common future* (World Commission on Environment and Development (WCED), 1987), also called 'the Brundtland report', which advocated intergenerational equity. The 1992 United Nations (UN) Conference on Environment and Development held in Rio added influential conventions on climate change and biodiversity spurring new policies and actions. Other outputs included 'Agenda 21' (United Nations Conference on Environment and Development, 1992), which was adopted by 178 governments across the world, aiming to achieve sustainable development by 2000. Its chapter 28 focuses on 'Local Agenda 21', recognising that many problems and solutions are rooted in local activities and the role of local governments in devising, supporting or overseeing economic, social and environmental policies and actions; thus being directly relevant to strategic and local planning and efforts in placemaking.

The concept of 'sustainability' also emerged in academic and policy circles around that time, introduced by the International Union for Conservation of Nature (IUCN) in 1969 and discussed by the UN conference in Stockholm in 1972 (Adams, 2006). Amongst the several hundred definitions of 'sustainability' and 'sustainable development' that have emerged since (Dobson, 1996; Johnston et al, 2007), the definition from the Brundtland Report, stating that sustainable development "meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, p. 8), is one of the most frequently used or adapted. This is so general that it is not particularly helpful other than emphasising attention on human needs (rather than wants) now and into the long term. However, looking beyond the generic definition, four principles were highlighted by Davies (2013, p. 112) as embedded in this influential WCED publication which have direct relevance for good spatial planning and creating sustainable places: 1. holistic planning and strategy making; 2. preservation of ecological processes; 3. protection of heritage and biodiversity; and 4. development that can be sustained for future years. These signal an emphasis on holistic or integrated approaches and natural systems dependency – and therefore the need to maintain and pay attention to these.

Regarding the urban placemaking context, the 10 Melbourne Principles for Sustainable Cities developed in April 2002 (United Nations Environment Program (UNEP) & International Environmental Technology Centre (IETC), 2002) were endorsed by local governments at the Johannesburg Earth Summit in June 2002. These principles "have become the touchstone for the urban sustainability movement" (Campbell et al, 2023a, p. 4) providing specific guidance to towns and cities for their sustainability trajectory. Each principle is elaborated with a few paragraphs to help explain the rationale, actions and desired outcomes (see Table 6.1 for an overview of the focus and principles).

Table 1: The 10 Melbourne Principles for Sustainable Cities (Source: Newman & Jennings, 2008, Table 0.1, p. 4; United Nations Environment Program (UNEP) & International Environmental Technology Centre (IETC), 2002)

Focus	No.	Principle
Vision	1	Provide a long-term vision for cities based on sustainability; intergenerational, social, economic and political equity; and their individuality.
Economy & Society	2	Achieve long-term economic and social security.
Biodiversity	3	Recognise the intrinsic value of biodiversity and natural ecosystems, and protect and restore them.
Ecological Footprint	4	Enable communities to minimise their ecological footprint.
Model cities on Ecosystems	5	Build on the characteristics of ecosystems in the development and nurturing of healthy and sustainable cities.
Sense of Place	6	Recognise and build on the distinctive characteristics of cities, including their human and cultural values, history and natural systems.
Empowerment	7	Empower people and foster participation.
Partnership	8	Expand and enable cooperative networks to work towards a common, sustainable future.
Sustainable Production & Consumption	9	Promote sustainable production and consumption, through appropriate use of environmentally sound technologies and effective demand management.
Governance & Hope	10	Enable continual improvement, based on accountability, transparency and good governance.

While both sustainability and sustainable development continue to be widely used and familiar terms, their meaning is still ambiguous and their interpretations certainly wide-ranging. Differences in interpretation of what sustainable development means largely relate to the underlying worldview, associated economic, social-ecological paradigms and associated ethical perspectives (Barr, 2008; Davies, 2013). Attention to these differences is the focus of this chapter, highlighting how they affect policies, decisions and actions.

Are (we making) countries and places sustainable?

The looseness in definition of what sustainable development means is seen as a significant reason for its ineffectiveness in driving change at the scale required (Ghavampour & Vale, 2019), whether that is in local place-making or national and international endeavours. Globally, the 17 UN Sustainable Development Goals (SDGs; UN, 2015) have gained traction and, nationally and locally, these are often used alongside governmental policies and commitments arising from international efforts and negotiations such as the Paris Agreement and the Convention on Biological Diversity amongst others. Based on research and trends world-wide it is apparent that, to date, no developed and few developing nations can prove that they are being sustainable or even on a sustainable pathway (e.g. UN, 2023; Voulvoulis et al, 2022). In fact, the opposite has been observed. Signs of this include a persisting strong push for global economic growth with rising production and consumption, as well as recreational behaviours that are largely reliant on fossil fuels. This economic growth policy and decision-making mantra also has led to the continued exploitation and decline of natural

resources (e.g. Brondizio et al, 2019; Pörtner et al, 2022, especially chapter 8) and destruction, degradation or threat to the livelihoods of low-impact societies under the banner of 'progress'. It has also increased local to global thermal, physical and chemical pollution of fresh and saline waters, air and soil (see, for example, Almond et al, 2022).

Around 55% of the world's population currently live in cities and substantial urban growth is forecast to continue. While cities cover around 2–3% of land surface across the globe and contribute around 80% of Gross Domestic product (GDP), they consume 60–80% of the world's primary energy and 75% of natural resources (World Economic Forum (WEF), 2021; Clement et al, 2023). On the energy/carbon front alone, huge efficiencies and reductions are thus required by the construction, housing, power generation and transport sectors, as well as in advancing and supporting energy efficiency (retrofit) measures. The environmental footprint of cities is large, especially when accounting for their consumption needs that extend well beyond their city boundaries (see, for example, the case study of Brussels, Belgium in Athanassiadis et al, 2018). Even cities marketing themselves as being sustainable tend to be so only in parts, such as Copenhagen in Denmark, Vancouver, Toronto and Montreal in Canada or Melbourne in Australia, which have put sustainability at the top of their policy agendas and boast many public and private sector sustainability schemes to reduce waste, improve infrastructure efficiency and resilience, extending and improving greenspaces and urban woodland, creating attractive civic spaces and safe active travel routes. However, ultimately, even those cities and other urban areas still consume more than is produced; and currently they are neither carbon-neutral (one aspect of becoming sustainable) nor ecologically, socially or economically sustainable in the long term (Shmelev & Shmeleva, 2018; Zhang et al, 2018). However, these urban transformative efforts still serve as examples of attempts to make places sustainable in terms of their physical provisions such as green, blue and grey infrastructure (transport, energy, water, nature-rich habitats, digital etc.), public spaces and (mixed-use) developments; but also in terms of their social-cultural and socio-economic justice goals and inclusivity efforts in shaping urban planning and placemaking.

Sustainability is often interpreted as the goal of sustainable development, although some disagree with this simplistic explanation and point to the different origins and associated worldviews of these concepts. Hector et al (2014), for example, argue that the concept of sustainability was influenced by philosophical thinking and values of the eighteenth-century Romantic movement which saw Nature as more than providing useful services and materials for humans. Nature carries a sacral, or beyond human, significance which in policy- and decision-making leads to provisions and actions of environmental protection. Sustainable development, on the other hand, has its origin in conservationism, with humans standing above Nature and managing it according to human needs. This distinction thus places the attention on underlying beliefs, and the values and moral interests of individuals, groups and societies.

What kind of sustainable development?

This section focuses on the kind of values and principles that inform different interpretations of what 'sustainable' placemaking means. It represents, explains and critiques existing

commonly-found ways of conceptualising sustainable development and highlights the differences for policy- and decision-making between weak and strong interpretations. The following sections then provide further explanation of what sustainable placemaking could or should look like and specific examples to illustrate different interpretations in informing and shaping local planning and placemaking in practice.

Common representations of sustainability and sustainable development

Representations of sustainable development, as captured in Figure 6.1, include the widely-used Venn diagram representing environmental, social and economic interests (Figure 6.1A) with alternative labels used, such as People-Planet-Profit or Prosperity) and in the middle where they all intersect signalling the locus of sustainability; this is sometimes also referred to as the triple bottom line. The three-legged chair or three pillars to a building are variations of this where the three legs or pillars of sustainability need to be balanced to reach sustainability (represented by the seat and the roof respectively). Especially in applications for urban and historic environments, the three pillars may extend to include a fourth, human-cultural, pillar (Figure 6.1B). A further expansion of this is the 5P version which, in addition to People, Planet and Prosperity, also includes Partnership and Peace. This model draws on the UN SDGs, and specifically the preamble of its formal launch document *Transforming our world: The 2030 agenda for sustainable development* (UN, 2015) which explains the 5 Ps; Figure 6.1E is based on a 5Ps diagram made popular by Wayne Visser in the same year (waynevisser, 2015). Economic-centric presentations include the so-called Mickey Mouse version as illustrated in Figure 6.1C; here, the economic realm is central and largest and social and environmental aspects represented as the 'ears', both being significantly smaller in focus compared to the large economic 'face' with little or no space for integration (no or small intersections between the three parts).

A different iteration of representing sustainable development, and in fact sustainability, as shown in Figure 6.1D, uses a nested hierarchy. Here, the environment provides the base and must be protected and maintained for society to flourish and economic systems to operate. This nested structure signals strong sustainability whereas the other representations all symbolise weak sustainability as explained in more detail next.
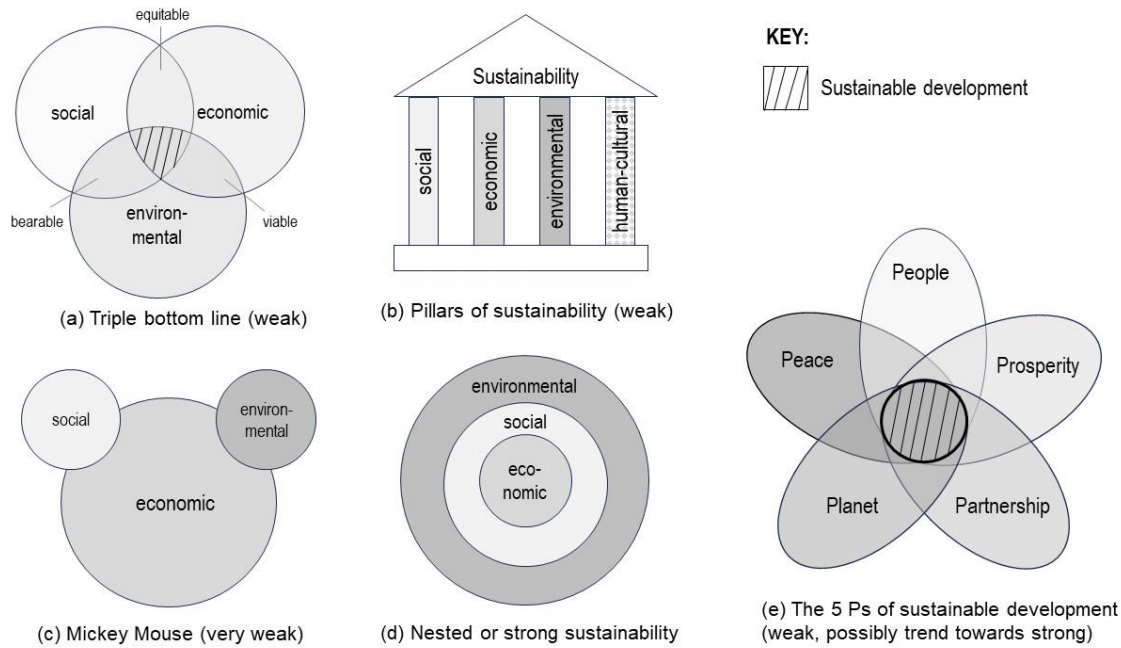
Figure 6.1: Commonly used generic representations of various weak and strong sustainability. Source: drawn by Claudia Carter based on publicly available images.

Table 6.2: Characterising different forms (or stages) of sustainable development. (Source: Claudia Carter, inspired by, and partially based on, N. Carter, 2001, Table 8.1, p. 201 who acknowledges O'Riordan, 1996).

Stages and Transformation	Policy	Economy	Society	Environment	Discourse
Very weak sustainability	Lip service to policy integration; no or vague delivery targets	Neoliberal economic tools to support economic growth; minor adjustments	Superficially aware; little media coverage	Biodiversity loss, habitat losses; product-oriented management	Polarised debate; superficial consultations; rhetoric
Weak sustainability	Some policy integration and delivery targets	Market-based tools; micro-economic incentives; niche markets; recycling; innovation	Sustainability project opportunities and education	Biodiversity loss; habitat fragmentation; targeted (un-coordinated) efforts	Parliamentary surveillance; voice through stakeholder groups; intentions
Strong sustainability	Binding policy integration; strong international agreements	Green accounts alongside national accounts; full costing; partnership approaches	Curriculum integration; local initiatives; collaborative efforts; innovation	Net balance of natural capital; catchment / habitat targets and management plans	Parliamentary accountability; community actions; 'glocal' information and debates
Very strong sustainability	International commitments and targets; duty of care; precautionary; statutory and cultural support	Formal and effective adoption of sustainability accounting; reduce, reuse and repair	Sustainability literate and skilled; plurality and diversity of projects and communities	Ecological recovery; integrated management practices; long-term goals and support	Community-led or -supported initiatives become the norm; ethics and values made explicit
Holistic Transformation	Strong local to global commitment with monitoring and accountability; multi-scalar; pro-active	Focus on social-ecological wellbeing, sharing and repairing; sufficiency; within planetary boundaries	Embedded sustainability literacy and skills; beyond-human communitarian	Regenerative management; some rewilding; connected and long-term planning and actions	Human and ecological wellbeing supported by economy; shared responsibility

Weak and strong sustainability

As illustrated in Figure 6.1, a key distinction can be made between weak and strong sustainability, some also including very weak and very strong categories (see Table 6.2). To fully appreciate the differences between them one needs to understand the different underlying values and theories.

Weak sustainability is grounded in neoclassical economic theory of capital, postulating that the total capital (whether that is social, economic or environmental) needs to stay constant or at least non-declining; it thus assumes that all parts are commensurate. Under this paradigm, human-made capital (such as wealth created through technological innovation or urban development) can substitute natural capital. Berkes & Folke (1992, p. 2) explain that natural capital is a collective term for (1) non-renewable/exhaustible resources (such as fossil fuels), (2) renewable resources (such as food crops, fish, wood), and (3) regulating ecosystem services functions (such as the hydrological and soil cycles). In reality, there is no such clear demarcation between natural or human because the geo-hydro-ecological and human systems and processes are intrinsically intertwined. However, while Nature can survive without humans, humans cannot survive without Nature (or, as expressed in economic terminology, without natural capital from which ecosystem services are derived). In weak sustainability, the decline of exhaustible resources can be compensated with human-made alternatives. Weak sustainability protagonists typically put money and faith into science and technology to develop technical fixes, push for economic growth and accommodate (but not prioritise) environmental issues within development decisions (Carrosio, 2024). A utilitarian stance is evident in which Nature is being commodified and marketed to produce profit and happiness; any negative impacts are labelled 'externalities' that could be internalised with appropriate policies or regulations (Gómez-Baggethun & Muradian, 2015).

Strong sustainability, on the other hand, recognises incommensurability (O'Neill, 2017). A strongly sustainable stance prioritises attention to environmental objectives with a clear awareness of environmental functions and limits when advancing economic and social development. Using commonly-found economic-influenced thinking and terminology, strong sustainability requires that natural capital is kept constant, or non-declining, over time. According to Barr (2008), natural capital includes three dimensions: critical, constant and tradeable natural capital. Critical natural capital is vital to life, such as the composition of the atmosphere and ozone layer; constant natural capital is important but not essential and means that while the overall stock of natural capital should remain constant over time, changes in composition through substitution is possible (e.g. a park instead of an area of woodland); tradable capital indicates a low value and hence can be replaced (e.g. natural capital that is very common, of low quality and in a location where other landcover and land use is desirable). 'Valued capital' is a further category which includes, for example, rare species (Davies, 2013). Strong sustainability poses definitive limits on consumption of natural resources and aims to halt and reverse ecological degradation, such as the loss of species and biodiversity or the undermining of integrity of natural (water, climatic, air) cycles. Nature, or 'natural capital', is seen as key to a good life and any deterioration or loss in

habitats and species as potentially irreversible. Attention to the environmental and ecological integrity of both local and global systems is important. Thus the Earth is understood as a complex system with thresholds and finite elements, and a system that is nearing several tipping points due to massive land-use changes that have caused irreversible global warming and pollution (Trisos et al, 2020; Lenton et al, 2023). Development goals under a strong sustainability paradigm focus on human and environmental well-being, and explore degrowth as a new political-economic paradigm (Latouche, 2009; Kallis, 2018; Buch-Hansen & Nesterova, 2023). The strong sustainability perspective is sometimes labelled as spiritual or eco-centric, whereas weak sustainability as anthropocentric.

Defined with reference to economic theory, weak sustainability is grounded in neoclassical theory of capital accumulation and economic growth; whereas strong sustainability adopts a steady-state paradigm anchored in the laws of thermodynamics and biophysical principles (see Hediger, 2006). Thus different visions and interests exist as to what, or what kinds of capital, should be sustained. As the different theoretical foundations imply, it would be naïve to conceive of sustainable and weak sustainability as a simple continuum; their ideologies, reasoning and associated policies and actions are only in parts progressive and, in several ways, substantially different, as is outlined in Table 6.2. Even so, some authors have tried to create bridges and attempted to argue that economic growth and environmental protection, or sustainability more generally, do not have to be mutually exclusive (Hediger, 2006) or that these two paradigms are, in fact, reconcilable and a middle ground would be the most probable hope for a trajectory towards sustainability (e.g. Davies, 2013). Others are less convinced, based on recent efforts to halt or reverse climate and ecological crises but which are falling a long way short (see, for example, Bonnedahl & Heikkurinen, 2018).

Discourses, investments and mindsets

Recent decades have seen fast-paced progress and innovation and associated (often neo-liberal thinking infused) educational models, enabling for many citizens a lifestyle of convenience. These developments are generally viewed as superior to what we had before. Associated dominant political discourses, public distractedness and wishful siloed thinking are, therefore, not easily challenged or changed, despite some contrary evidence of long-term detrimental impacts on political stability, human wellbeing, the environment and the global economy (Bihouix, 2020). Neoclassical economic assumptions and narrow analysis of costs and benefits have become mainstream and misled policy- and decision-makers in underestimating the severity of environmental (and social) negative impacts of economic growth, as Keen (2022), for example, argues and illustrates in relation to climate change economics.

While a change in political-economic orientation, mindset and processes that are anchored in strong rather than weak sustainability has been advocated, it is certainly not visible or on the horizon for most countries (Hickel, 2019; Spash & Smith, 2019; Buch-Hansen & Nesterova, 2023; C. Carter, 2024; Spash, 2024). Societies that show strongly sustainable characteristics are largely indigenous or traditional societies with cultures or policies aligned to ecological/natural cycles and culturally embedded moral-ethical principles of respect and care for others. Chet A. Bowers, for example, was a strong advocate within the education

sector who highlighted such cultures as worthy of learning from and emulating (e.g. Bowers, 1993, 2001). This in some ways runs counter to the strong influence by Freire (1970) in educational contexts with the move away from traditional educational systems and an emphasis on liberation and freeing oneself from cultural shackles. Communities and societies foregoing technological development and global information platforms are commonly seen to be in need of educating and development support (see, for example, the role of and dilemmas encountered by anthropologists working in developing countries: Lewis, 2005). Any project proposals or person advocating low/traditional-tech or no-tech solutions may receive labels such as primitive, outdated, backward, Neo-Luddite or nostalgic because the world has moved on. Such a perspective highlights the liberating aspects of modernisation and the assumptions that technological progress is implicitly equated with social progress, and that economic growth is synonymous with progress (Schmelzer, 2023).

A current example is the investment and drive, politically and economically, to provide 'smart' digital and increasingly now also Artificial Intelligence (AI) solutions for almost any societal challenge and some fundamental changes to most areas of life. Massive investment has been provided by both governments and a super-rich elite to facilitate this. However, some of these developments cause ethical concern yet largely fail to investigate and discuss those technologies' own human, social and environmental negative impacts explicitly and transparently. These include known impacts such as environmentally damaging, unsafe and exploitative mining operations; exploitation of rare metals and materials (e.g. McKie, 2021, 2023; Penke, 2021) and high energy use where gains in efficiency improvements are quickly outweighed by more widespread demand and intensive uses (e.g. Kettle, 2021; Williams et al, 2022; Bertics, 2024, chapter 4). They also include many unknown impacts especially considering rapid AI development and the push for ever faster and pervasive digital connectivity, such as 5G which uses higher waveband frequencies. Computer processing and cloud-based storage systems also need cooling and maintaining. Furthermore, installations, hardware and software need frequent upgrading to accommodate innovation but also due to their vulnerability to public and private security risks and disruptions (International Energy Agency, 2017), resulting in a race for ever-faster changes to protect against potential misuses of digital systems and data, as well as to stay competitive in the market. These factors drive up waste generation and the costs of digital solutions; they also highlight the limited or failing resilience of these services and infrastructures. A sustainable approach would be to transparently scope alternatives (including low and no-tech known methods; Bihouix, 2020), and apply integrated digital approaches to placemaking and planning where they offer reductions in cost and materials/energy and improve socially just outcomes (see Chapter 5).

Increasing the focus on social sustainability

Interestingly, the distinction between weak and strong sustainability has largely been based on distinguishing between a primary concern for economic development versus a primary concern for the preservation of the environment and ecological recovery. While the economy is anthropocentric and social welfare gain assumed, issues surrounding the distribution of the economic system's benefits and disbenefits, access to nature and infrastructure, distribution and enjoyment of environmental quality, equity and other social sustainability
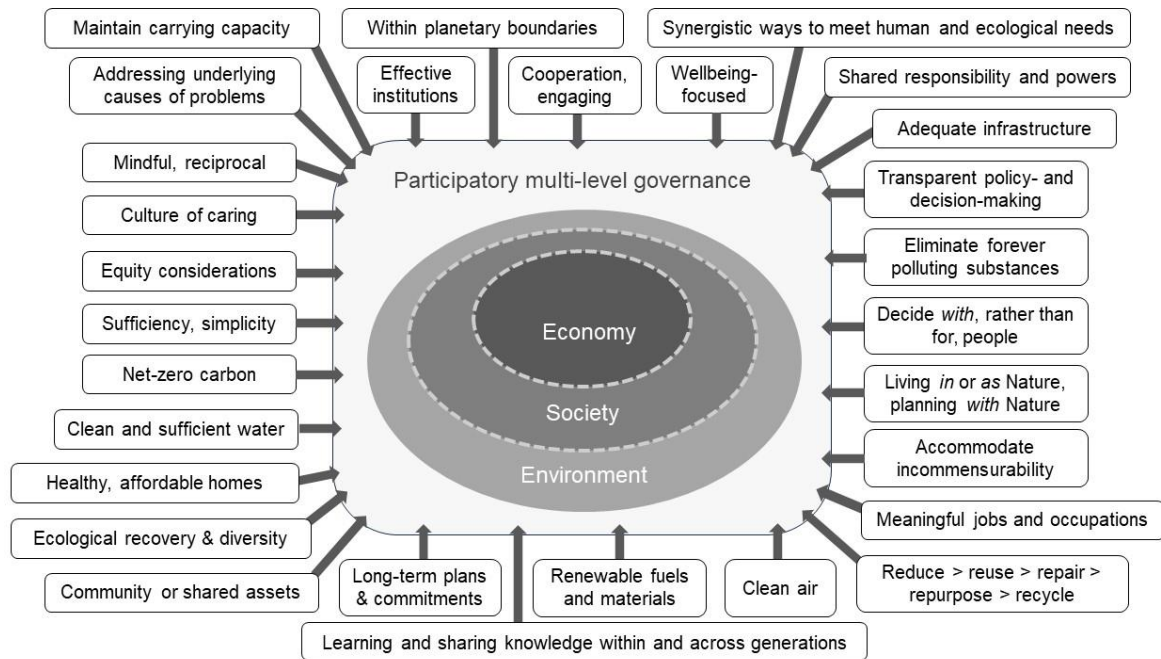
related concerns generally seem to receive less explicit attention in those debates (see Chapter 8); although the SDGs appear quite balanced across the social, economic and environmental domains. According to Atalay & Gülersoy (2023), a significant reason for current urban problems is this comparative neglect of social sustainability in urban areas and interventions. They argue that "social sustainability is still largely unexplored and undertheorized" (Atalay & Gülersoy, 2023, p. 19). To them, a holistic approach to measuring and evaluating social sustainability through qualitative and quantitative indicators relates to the following top ten criteria:

1. *population* (balanced distribution, poverty prevention, employment);
2. *accessibility* to social and blue-green-grey infrastructure and services;
3. *education* and *skills*;
4. physical and mental *health*;
5. adequate and affordable *housing*;
6. *security* in public spaces and private areas;
7. social and spatial *belonging*;
8. *participation* in policy- and decision-making and projects/actions;
9. *social capital* and *social cohesion* (while ensuring cultural diversity and integration); and
10. *urban life quality satisfaction* and *adequacy of services* (sufficient, fair, balanced).

Social sustainability includes a strong focus on participation in decision-making (see criterion 8), and access or opportunities to meeting fundamental physical, psychological, social-cultural and economic needs (criteria 1–7, 9–10). Voice and agency in urban planning and placemaking is widely recognised as a key ingredient (e.g. Healey, 1997, 2010) and advocated by some as a fundamental right (see Chapters 8 and 9 discussing the 'right to the city'). Some disagreement and conflicting interests are a given but, through dialogue and inclusive planning, a more holistic approach is possible and meaningful projects and plans appropriate for the specific context(s) can be co-created to benefit the many (humans and beyond human) in the longer term and not just a privileged few (Healey, 2010). In a nutshell social (and environmental and economic) sustainability requires planning *with*, not just *for*, people.

While advocating that more attention to researching and improving social sustainability should not lead to neglecting any of the other interacting and important principles, goals and factors of sustainable development overall (see Figure 6.2), Campbell et al. (2023a) provides evidence that social infrastructure needs attention first to enable the success of green infrastructure. In this vein, neglecting social sustainability may in fact undermine ecological and economic wellbeing, and hence attention to social sustainability in urban placemaking may be a necessary starting point from which agency to aid ecological recovery and economic benefits can be catalysed.

Figure 6.2: Principles and goals for (strong) sustainable development which seek to create and maintain healthy economies and societies both of which are intricately linked with and reliant on the environment with its ecosystems. (Source: Claudia Carter)

Diagram showing concentric ellipses labeled Economy, Society, Environment within "Participatory multi-level governance", surrounded by goal/principle labels:

- Maintain carrying capacity
- Within planetary boundaries
- Synergistic ways to meet human and ecological needs
- Addressing underlying causes of problems
- Effective institutions
- Cooperation, engaging
- Wellbeing-focused
- Shared responsibility and powers
- Adequate infrastructure
- Mindful, reciprocal
- Transparent policy- and decision-making
- Culture of caring
- Eliminate forever polluting substances
- Equity considerations
- Decide *with*, rather than for, people
- Sufficiency, simplicity
- Living *in* or *as* Nature, planning *with* Nature
- Net-zero carbon
- Accommodate incommensurability
- Clean and sufficient water
- Healthy, affordable homes
- Meaningful jobs and occupations
- Ecological recovery & diversity
- Community or shared assets
- Long-term plans & commitments
- Renewable fuels and materials
- Clean air
- Reduce > reuse > repair > repurpose > recycle
- Learning and sharing knowledge within and across generations

Sustainable placemaking

Sustainable placemaking draws together theory and thinking from both sustainability and placemaking: it has received some explicit attention and provides useful principles and suggestions for its visioning and collaborative translation into practice (Healey, 2010; Goosen & Cilliers, 2020). Prevalent urban development has been characterised as being centred on profit-driven consumption and dependence on substantial investment in real estate and technology akin to weak sustainability, which caters for and favours affluent sections of society, rather than creating high quality-of-life urban designs which serve the wider socio-economic diverse population (Nassar, 2013). However, alternative urban development and planning models are evident and perceived to be more holistic and environmental- and social-justice orientated. Figure 6.2 captures goals and principles that are typical across strong sustainable development and placemaking; most of which are mentioned or discussed above and below to provide more explanation and reasoning.

Lively Planning

According to the Lively Planning perspective, an integrated approach to address complex urban realities is necessary (Cilliers et al, 2014). Whether focusing on public spaces or place-making more generally, attention needs to focus on "creating versatile, diverse and integrative functions, elements and linkages" to attract people and activities and create unique places (Goosen & Cilliers, 2020, p. 848). These considerations can then link or lead to research and marketing (researching community needs for quality of space) to elicit functional (practical and useful), environmental (green designs, nature-based solutions), social (interaction opportunities), visual and aesthetic (appealing), movement (pedestrian flow), compatibility (layout in context) and psychological (mental and emotional) dimensions of placemaking (Goosen & Cilliers, 2020, Table 3).

Ahirrao & Khan (2021) developed an analytical framework of the Lively Planning Integrative Perspective (LPIP) to critically examine planned and spontaneous, active and passive uses of public open spaces (POS) at the city, neighbourhood and site scales. They included seven aspects – green planning intervention, liveability, new urbanism, placemaking, public realm, successful spaces, and sustainability – and these seven aspects are further split into 16 variables and 39 items in their LPIP index to evaluate two POS in the form of urban parks in the city of Nagpur, India. Their developing country case study identified strengths and weaknesses of POS provision at the three scales (city, neighbourhood, site) and provided scale-related recommendations to enable existing and new POS to be "more inclusive, meaningful, functional and aesthetically appealing to a wide range of users" (Ahirrao & Khan, 2021, p. 5253). The results for this case study showed that, depending on the chosen scale, different aspects of the lively planning integrated approach were important and performing well. This zooming in and out for their evaluation of existing POS then led to specific meaningful recommendations for different actors and stakeholders.

Green Urbanism

As part of sustainable cities, a focus on Green Urbanism emerged as an important approach in the built environment which emphasises connectivity and interconnectedness (see Chapter 4). According to Beatley (2000), green cities are centred upon urban and environmental sustainability, living within ecological limits, nature-based or inspired solutions, local and regional self-sufficiency (food, energy, economy), and healthy lifestyles facilitated as part of highly liveable neighbourhoods. Their urban design and planning characteristics include the integration of multi-functional environmental elements of vegetation and habitats at multiple scales (human, neighbourhood, urban, city-region) emphasising diversity, sustainability and adaptability, requiring inter- and transdisciplinary working for its design and implementation (Goosen & Cilliers, 2020, pp. 848–852). 'Green' is also sometimes interpreted as a synonym for net-zero-carbon designs and moving towards zero-waste living (e.g. Nassar, 2013) but this seems a rather narrow and partial interpretation. Increasingly, green, sustainable and smart are considered in combination, highlighting the need for a more holistic lens in city planning when framing primary and wider challenges and pursuing integrated approaches to developing responses and solutions (see Javidroozi et al, 2023 for a state-of-the-art literature review on this).

Examples of weak and strong place-making

To illustrate what strong versus weak sustainability may look like in placemaking this is approached first in a generic way (Table 6.3) and then by using two case studies: one at a regional level, being an area of largely countryside with small towns but situated within easy reach of large conurbations; and the other at the urban neighbourhood level. Table 6.3 presents a selection of commonly-found suggestions for urban improvements towards becoming sustainable, derived from the author's reading, contact with practitioners, teaching and reflective practice. The examples help illustrate that the move from weak to strong sustainability requires a holistic framing and diverse perspectives. Probing into actual,

intended and unintended connections and connectivity across scales, sectors and different individuals and communities is an important part of policy- and decision-making. Strong sustainability builds on critical awareness of self and culture(s) with an outlook towards achieving societal and beyond-human wellbeing.

Plural approaches and diversity (within and across social, economic and environmental interests and realms) are a given and necessary to strengthen resilience and adaptability, and with these come potential conflict and the need for deliberation, negotiation and social learning (Healey, 2010). How decision- and policy-making processes are structured and operating is important for joint-up collaborative efforts to achieve worthy outcomes and meaningful outputs. In relation to twenty-first century complex challenges, adaptive multi-level governance with shared responsibility and accountability is widely suggested for defining sustainability trajectories, making necessary adjustments and taking the desired actions across sectors and local to global scales (Allen et al, 2023; Buch-Hansen & Nesterova, 2023; Carter, 2024).

Table 6.3: Characterising typical urban sustainability elements and goals from a weak and strong sustainability perspective (Source: Claudia Carter)

Specific Elements	Weak Sustainability	Strong Sustainability
Green Infrastructure	Approached as beneficial site-specific additions to fulfil specific needs (e.g. playing field; (pocket) parks; burial grounds; adventure/nature playgrounds)	Approached as networks of connected linear and areal habitats with different levels of management (from rewilding to targeted biodiversity gains and climate change adaptation measures); quality, size and multi-functionality are explicitly considered and inform the design and maintenance (e.g. for biodiversity, food-growing, recreation, active transport, mental health, climate change mitigation and adaptation)
Sustainable Urban Drainage systems (SUDs)	Designed for the relevant local capacity to reduce and mitigate flood risk	Designed with multi-functional benefits in line with local needs and opportunities to mitigate flood risk; increase biodiversity; provide recreational space and/or aesthetic pleasure
Digitalisation	Competitive approach (that quickly makes products and services obsolete	Targeted to where no low-tech alternatives exist, able to reduce energy and resource use, and encourage or improve sustainable behaviours; designed to be lasting and locally maintained
Goals	**Weak Sustainability**	**Strong Sustainability**
Access to amenities and essential services	Largely market-driven and planned by experts; some community-based initiatives	Proactive planning and provision for any new developments and collaborative planning for areas of regeneration and renewal; mixture of commercial, shared, gifted etc. social-economic models; experimentation; cater for local needs
Clean, affordable, accessible public transport	Renewal of fleet to lower emission technologies; active travel provision	Reducing the need to travel / access services; priority given to active travel road or shared space users; joined up local low-carbon travel provision and connectivity across scales (local, regional, national, international); locally publicly subsidised fares for all; free fare for young, elderly and unemployed
Affordable, healthy housing	Below market price housing offers and low-interest loans	Adaptable living spaces; local and sustainably sourced materials; well insulated and easy to ventilate buildings with natural light; range of tenures and co-living/housing options; provision of diverse, functional and attractive communal indoor and outdoor spaces; appliances/tools swap and loan facilities
Energy conservation	Efficient engineering and digital technologies; switch from high to low/no carbon and renewable fuels	Focus on reduction of need for energy use, then energy efficiency, greener energy sources, shorter supply distances; improving renewable energy generation and storage capacity and resilience of all energy infrastructure; low-tech and heat-recovery solutions
Improving air quality	Cleaner technology for manufacturing, chemical,	Lean and circular economy; less choice but better quality longer lasting energy efficient products; less need to transport and travel

	recycling and transport sectors; electric private cars and local fleet vans	(fast) by air; shared electric cars and switch to active and reliable public transport for commuting and most journeys; separate/safe and green local and regional active travel network; phasing out coal power stations; reduced and high welfare quality meat production
Waste reduction	Provision and use of recycling schemes; waste to energy; composting of organic waste; processing of food waste for animal feed etc.	Waste hierarchy prioritises reduction of material consumption, then reuse and repair of goods and materials, then separation and recycling of waste and finally safe disposal of or energy-generation from remaining waste; phasing out single use plastics for fast/microwave food and bottled drinks; reusable bags and containers; left-over materials exchange markets
Water purification and conservation	Garden water butts; water efficient equipment and appliances; water metres	Rainwater-harvesting; greywater use for non-potable water needs; ban of forever chemicals; swales and buffers alongside busy roads and polluting agricultural, industrial and commercial activities
Soil remediation and conservation	Remove, detox or seal polluted brownfield soils	On-site remediation and conservation practices; avoid removal, compaction and pollution; vegetative soil cover practices to reduce soil erosion
Social justice / equity	Voluntary-, public- and private-sector support structures; living wages	Commercial and community clothes/goods repair and swap shops or places; narrowing of pay gaps within and across sectors; focus on removal of barriers and addressing causes of inequality or injustice

Example: Integrated plan-making and policies with natural capital and ecosystem services at the core

In terms of using an explicit social-ecological systems approach in their plan-making process and Local Plan, the South Downs National Park Authority (SDNPA) in South-East England provides an interesting example at the local and regional scales; this case study mainly draws on Scott et al (2018) and SDNPA (2019) which provide more detailed information. Formed in 2011, the SDNPA is a public body and the formal planning authority for the National Park. The South Downs National Park comprises 15 local authorities across the counties of Hampshire, West Sussex and East Sussex and has over 50 neighbourhood plans. It is the UK's most populated National Park and has over 2 million people living within 5 km of its boundary. The SDNPA put 'ecosystem services' (and natural capital) as one of its three core policies for its local development plan for 2014–2022, alongside 'sustainable development' and 'major development' (SDNPA, 2019, pp. 33–41).

The Plan draws on the National Planning Policy Framework which, in its first version of 2012, mentioned "recognising the wider benefits of ecosystem services" (Department for Communities and Local Government (DCLG), 2012) and in later versions stated "recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland" (Ministry of Housing, Communities and Local Government (MHCLG), 2019, para 170 b; Department for Levelling Up, Housing and Communities (DLUCH), 2021, 2023, para 174 b). The adopted South Downs Local Plan pays attention to ecosystem services throughout the whole plan, explaining different types and linking their benefits and relevance to economic and social, and not just environmental policies and goals within the Plan. The SDNPA thus adopted an ecosystem-approach-led way of thinking, planning and decision-making and, as part of that journey, developed its own research and collaborative explorations to help mainstream this ecosystem-services centric approach internally (with its board members) and externally (public, private and third sector stakeholders; residents, tourists etc.). Contributing factors to their success included being bold in their visioning, transparent in their learning and policy-

making processes, inclusive in their evidence gathering and consultations, and specific in formulating their ecosystem approach principles (Scott et al, 2018, Box 1, p. 241). Most goals and principles outlined in Figure 6.2 are being embedded within such local and regional planning and placemaking efforts.

Example: Bottom-up placemaking through creating a neighbourhood venue

A second example of sustainable placemaking relates to the neighbourhood and street level, triggered by the uncertainties and changes around 2016 (Trump presidency; Brexit; climate change emergency; ecological emergency; rise of AI; poly-crises; rise of populism and misinformation) and the lack of community spaces for meeting and critical debate. This specific initiative, *Zwischenraum* [in-between-room], is the brainchild of a private creative and entrepreneur who used their café-bar in Hamburg to bring people together, discuss, socialise and laugh (Heine, 2019). Perceiving a need to have more ad hoc and cross-cutting encounters of different people from across the neighbourhood and beyond, as well as opportunities to discuss diverse topical societal issues, led to the café-bar offering regular (weekly / monthly) discourse sessions to foster informed debate, cultural exchange and social learning alongside cultural and culinary offers.

Figure 6.3: Hadley's Bar, Hamburg which hosts the Zwischenraum regular debates and events. (Source: with kind permission from Tina Heine)

Weekly debates and events are held in Hamburg's Hadley's Bar, a local-and-beyond initiative to make connections and hear about and discuss with experts and community members a wide range of contemporary and often complex societal issues, including sustainability, peace and security, digitalisation, AI, amongst others. Left: A 'Morgen.Salon' (morning salon) event hosted by author Elly Oldenburg. Right: Tina Heine (left), founder and owner of Hadley's and ideator of the 'Zwischenraum'; guest speaker Prof Dr Maja Göpel (middle); Elly Oldenburg (right). Photos by Xenia Bluhm.

This beyond-profit thinking brought into focus the many different connections that can be established and made with the people living locally, visiting, or in transit, and through the host's and participants' professional and social network being able to offer relevant debate, reflection and the opportunity to make new connections in understanding as well as with

people and places. The venture uses a STEAM approach (see below), making connections between art, culture and the sciences to consider, debate and engage with neighbourhood, urban and regional development and planning; fostering attentive listening, interdisciplinary conversations and sparking ideas and connections for action. As highlighted earlier, a greater focus on social sustainability can act as a catalyst of greater resilience and motivate to actively help shape and create strong sustainability mindsets, practices and contexts, rather than enduring greenwash or feeling clueless or powerless.

Measures, concepts and skills to aid the transformation to sustainable places, economies and societies

Progressing actions to satisfy human needs, to ensure social equity and respect environmental limits will benefit from having specific time-bound goals and indicators to help drive holistic, sustainable changes and accountability (Holden et al, 2017). Since different sectors, structures and processes are intricately connected and interdependent, any measures and actions will have consequences beyond their immediate or primary goal. Ideally, goals and actions should trigger so-called 'win-win' situations where, for example, an environmental project also brings positive impacts for advancing social and economic health and wellbeing into the future. However, realistically within a pluralistic society and complex systems there will always be winners and losers and a benefit in one area (in its beyond spatial meaning) may prove a disbenefit in another and affect different people in different ways.

This section first considers the UN's Sustainable Development Goals and choosing and using sustainability indicators. Both measures are popular and widely discussed and applied, but not without their challenges and inadequacies. Furthermore, an integrative planning approach (Quality of Life Planning) and a new guiding mantra (sufficiency) are discussed with respect to their propensity to enable and advance strong sustainability.

The UN's Sustainable Development Goals

The 17 SDGs have generally been accepted globally as a holistic set of goal-focused principles for organisations, governments, settlements, production and consumption systems to become sustainable by 2030, guided by the 169 associated aspirational targets. While widely referenced and discussed in academic and policy publications, there are also inherent tensions and gaps within them that give rise to concern, especially when advancing strong sustainability.

Hickel (2019), for example, examined the crux of tensions between achieving economic growth (rather than wellbeing) in SDG8, on the one hand, and protecting the planet from degradation and living harmoniously with nature (e.g. SDGs 6 and 12–15), on the other hand. Essentially, an implicit assumption is that economic growth is necessary for (sustainable) development and is instrumental in overcoming hunger and poverty (as in SDGs 1–4). Furthermore, the assumption is that economic growth can happen within the carbon budget estimated to keep the world at or below 2 degrees Celsius warming

compared to pre-industrial levels. Jason Hickel's analysis showed that it is, in fact, not feasible to pursue all these goals simultaneously, and achieving continued economic growth as well as achieving "two key ecological indicators" of "resource use and greenhouse gas emission" is specifically problematic (Hickel, 2019, p. 874). Essentially the rhetoric of economic growth in harmony with earth's land, water and air systems and capacity is greenwash rather than feasible reality, based on existing data and empirical models. SDG8 may benefit from being reconfigured into economic well-being and flows of benefits, at least to some extent, being dematerialised.

Another critique of the SDGs, discussed by Poole (2018), arises from a gap rather than an inherent contradiction or incompatibility, namely that drivers of unsustainable land-use practices and development as well as cultural diversity are insufficiently addressed. Issues such as explicit attention to subsistence-based cultures, bio-cultural and linguistic diversity are largely ignored; yet relational and intrinsic values that people and communities have with Nature are important and constitute indirect drivers for land-use decisions and management. Alexandria Poole argues that since "values underlying the sustainable management of non-human resources" (Poole, 2018, p. 57) are absent, "threats to cultural diversity and alternative forms of economies will remain a blind spot in development discourse" (p. 58). She argues that attention to biocultural heritage should form the currently missing SDG18.

Sustainability indicators

Identifying appropriate proxies that are meaningfully measurable, be that qualitatively or quantitatively, and for which relevant data will be cost-effective to collect, can be challenging. Such indicators may be derived from and linked to the SDGs, or decided and defined through other relevant drivers such as public policies or reference points from planning theory and good practice standards or guidance. While ideally such indicators will be comprehensive, reliable and user-friendly, limited knowledge, lack of investment in data gathering/processing and a political vacuum or manipulation may weaken or distort their development, use and effectiveness (Healey, 1997; Gillen & Scanlan, 2004; Lyytimäki et al, 2020). Furthermore, the range of multiple scales (microscopic to global) and potential data at disaggregate and aggregate levels can prove challenging. Data at the disaggregate level, for example, include individual provisions, sightings, events or activities at specific locations; whereas data at the aggregate level may relate to whole neighbourhoods or cities, or the national census (Singleton et al, 2017). Despite most likely being imperfect, in danger of non-use, misuse or overuse, sustainability indicators can be beneficial if associated risks and challenges are brought into focus and, as far as possible, mitigated (Lyytimäki et al, 2020).

While a wide range of indicators are possible, existing sets of sustainability indicators and standards are largely drawing on empirical or measured data that is already compiled or easily obtainable. Like the distinction between weak and strong sustainability, the choice of indicators and their measurement depends on the normative perspective adopted (Halla & Binder, 2020) – i.e. the worldview of those influencing and deciding what is monitored and measured. Thus, choices must be made between indicators for which the necessary data already exists or is cheap to obtain versus possibly more meaningful but more expensive or

complex indicators, drawing on a wide range of heterogenous sources and ways of measuring or calculating data points and trends.

Sets of indicators can be used to help compare performance across a wide range of neighbourhoods, cities or countries (Massaro et al, 2020) and/or to highlight endemic and situational specific characteristics over a period of time in a specific location. The balance between different aspects of sustainability, and especially attention to meaningful and accurate measures of impacts and change on society as well as specific groups thereof, also need attention. An ethical holistic perspective having in focus planet and people and their long-term prosperity is key.

Quality of Life Planning

Quality of Life (QoL) is an important concept for planners; and, like sustainable development, it is multi-faceted and has attracted various definitions and methods when used as an indicator for human wellbeing within built and natural environments (Massam, 2002). It is also a concept suitable for assessments at a range of scales from the street and neighbourhood level to the national and global levels. QoL indicators have comprised objective and subjective measures of wellbeing, such as life expectancy, infant mortality, literacy and educational levels, economic status, physical and mental health, social capital, neighbourhood satisfaction and a wide range of other factors pertaining to the social, economic and environmental (actual and perceived) qualities experienced in a place as well as relating to self. The variety of and connections between relevant factors are potentially huge.

Planning to enhance QoL has been shaped by policy, research and practice and gained traction over recent decades. Myers (1988) proposed an early community- and trend-based approach for QoL-focused urban planning, highlighting the need for selecting an approach and measures that are accurate, appropriate and meaningful within a policy-driven urban development and political planning context. More recently, a group of United States-based social scientists developed QoL Planning as a methodology to enable rapid assessment, reflection and consensus-building on community priorities and actions based around community assets (Campbell et al, 2023b). Their proposal arose from a context of removing barriers between communities and nature conservation goals, but its steps and principles are more widely relevant and applicable. Aligned with discussions in Chapter 9, this methodology takes a rights-based approach centred on working with communities and their life-supporting and wider connections with their natural and built environment. Hence, QoL Planning is highly relevant to sustainable placemaking, taking a strong social sustainability starting point in addressing environmental conservation issues and being mindful of the linkages between people and nature (as opposed to creating hard boundaries around biodiversity and ecological conservation areas and adopting siloed approaches).

The core tenets of QoL Planning come from multiple theoretical and methodological origins emphasising (1) collaborating with and empowering marginalised communities through an asset-based approach; (2) giving communities in planning room for self-defined wellbeing processes; and (3) insisting on a holistic and biocultural approach to environmental

conservation (Campbell et al, 2023b). While not universally relevant, such a QoL-oriented planning approach appears capable of dealing with some thorny and widespread sustainability challenges in current urban and urbanisation contexts of the global North and South.

Similar to other approaches, QoL Planning has key principles which are outlined in Table 6.4. These show similarities in underlying values and principles as discussed in previous sections; notably the focus on being community-centric and participative; the importance of building and maintaining trust; holistic thinking and framing; the need for adaptability and flexibility; and considering strategic aspects. The seven QoL Planning principles also provide a useful prompt sheet, and their more detailed explanations in Campbell et al (2023b) offer a practical methodology for planning and place-making. Results from 54 QoL Planning projects in Peru and the United States show that this approach helped communities to become committed to nature conservation and improve the working relationship between policy-/decision-makers and communities. It also helped to institutionalise integrated approaches to sustainable development, becoming more collaborative in the design and delivery of sustainability policies and actions than was previously the case (Campbell et al, 2023b).

Table 6.4 Seven key principles of QoL Planning (Source: Campbell et al, 2023b, Table 1, p. 51)

Principle	Description
Asset-based	The approach draws from community strengths, rather than starting with problems or deficiencies. These positive aspects of social organisation, cultural practices, values, and environmental knowledge are explicitly identified and emphasised throughout the process.
Community-centered	The community is the central actor and driver of the process. Planning occurs through the facilitation of community reflection, debate, discussion, and priority-setting.
Holistic	Community well-being is understood as multidimensional and rooted in the understanding that healthy ecosystems and biodiversity underlie quality of life. QoL Planning always addresses economic, cultural, political, social, and environmental aspects of community health.
Pluralistic	QoL Planning begins with the assumption that communities are not monoliths. For this reason, the process is designed to bring in many partners, voices, and perspectives, and to identify shared understanding and goals before outlining priorities.
Trusting	A successful outcome depends on building and maintaining strong relationships and trust among all participants. This is a major factor in determining how much time to take and the order of phases as trust-building imbues all phases.
Flexible	The process is flexible in its phasing, duration, and particular activities because we have found differences across communities require an adaptive approach to create an agreed-upon, shared pathway for community priorities to inform conservation initiatives.
Strategically focused	One of the hardest but most important elements of the process is setting a few realistic and actionable priorities that clearly build on the particular assets of a given community.

Sankofa and Sufficiency

As argued above, current mainstream thinking tends to overlook traditional sustainable practices that have stood the test of time and are accessible and simple to use for most. Taking inspiration from them could help reduce resource consumption, human and Nature exploitation as well as conflict and pollution. *Sankofa* is a movement, symbol and word that

is worthy of attention in this context. *Sankofa* is usually translated as 'to retrieve', and the movement takes its steer from a Ghanian proverb which has been translated as "it is not wrong to reach back for that which you have forgotten" (Campbell et al, 2023a, p. 2). In other words, learn from the past. It would be foolish to ignore, deny and destroy knowledge and practices that have proven to be of low or no negative environmental impact yet able to satisfy human (and economic) wellbeing.

To become sustainable, the scale and efficiency of local to global economies and the (re)distribution of resources and benefits need attention. A political and economic shift away from growth or profit and realignment toward moral wisdom and good lives (Kekes, 1995) seems necessary. Proposals include an economy focused on human livelihood such as Polanyi's (1957) substantive economy or a sufficiency-based economy (Mongsawad, 2010). Such resituating of policies and actions towards everyday practices, basic respect for all life and efforts grounded in the physical reality and place could help overcome alienation between humans and Nature, redress an elite and expert-driven development model and catalyse inclusive local development and planning, leading to sustainable livelihoods, communities and places. This would also shift the focus towards connectivity and relations rather than monetary valuation and a commensurating rationality (O'Neill, 2017); and producing and consuming what is needed rather than all that which is possible with current technologies or financially affordable by some. Both subsistence and sufficiency economies are socially embedded models with strong virtues-anchored philosophical rationales. The definition (and perceived values) of Nature then also moves away from Western science-centric notions and definitions with more holistic and pluralistic governance proposals (Raymond et al., 2023).

Sustainability Skills and STEAM

What kind of sustainability skills are needed for a sufficiency-oriented and community-based approach? According to the *Handbook of Sustainability Literacy* (Stibbe, 2009), the range of skills and attributes needed for transformation include, amongst others: grounded economic awareness; materials awareness; advertising awareness; technology appraisal; creative and cultural commons thinking; systems thinking; and practical skills such as woodland crafts, building crafts, field crafts, workshop crafts, textile crafts and domestic crafts; community gardening; permaculture design; ecological intelligence; and mental/emotional wellbeing research, reflection and practice.

This contrasts with the widespread current secondary and tertiary educational focus on STEM subjects (sciences, technology, engineering and maths) without placing them in their planetary boundaries context, or taking an interdisciplinary STEAM approach which pays attention to critical framing and cultural-historic contexts embedding the humanities, arts and creative-based disciplines as equals to STEM disciplines (see, for example, C. Carter et al, 2021). While innovation and new technological developments have their place in current societies and economies across the globe, the way these are driven and developed is not reflecting a holistic or sustainable approach, nor social and environmental justice goals. Drawing on Heidegger's work, technology may also create distance to Nature; it may block access to truth and neglect knowing through being (Diederich, 2023). Thus, we find the

counter-currents to Enlightenment induced dualistic thinking in politics, economic systems and society. Facing high uncertainties over political and social stability and with environmental and ecological systems' thresholds reached we urgently need to accept more pluralistic approaches and a morally sound grounding as argued all the way through this chapter. STEAM-type inter- and transdisciplinary education and emphasis on practical skills as well as governance systems and institutions that anchor themselves in virtues / ethical principles to make moderated and prudent decisions would create some hope and scope for a strong(er) sustainability trajectory, be that in place-making efforts or more generally.

Conclusions

The above sections and Figure 6.1 and Table 6.1 clarified the different conceptions and associated definitions of sustainable development and their attributes. Importantly, when bearing in mind the actual state of the environment and current decision-making processes for people and places, the need to shift from weak to strong sustainability becomes apparent (Tables 6.2, 6.3). Interpretations of and efforts towards sustainable development to date largely fall into the category of 'weak' sustainability and greenwashing, taking partial or ineffective approaches which lack (i) a holistic and realistic representation of the current state of the world; and (ii) collaborative and integrated ways of change and transformation. Common viewpoints either emphasise economic or environmental considerations or superficially address the different, but closely connected, strands of environmental, social and economic sustainability. In terms of urban sustainability, considering the push for zero-carbon neighbourhoods as equivalent to creating sustainable communities and places is dangerous, as the urban carbon footprint is but one element among many other environmental, economic and social sustainable development aspects, as is illustrated in Figure 6.2.

The complexity of the connected factors and interdependent relationships from the microscopic to the global scale require ethically grounded inter- and transdisciplinary approaches, striving for collaboration rather than submitting to competition or the political and financial pressures levied to protect the current status quo. We need critical debate and more transparent, social-ecological grounded criteria to negotiate and decide the adoption/rejection of development and technological pathways and their likely social and environmental justice outcomes. We need wise and appropriate (long-lasting; reliant; equitable etc.) solutions rather than unquestioningly jump onto the bandwagon of smart and AI technologies. The need for a sustainability transformation in developed and developing countries, urban and rural areas, rather than a (linear) transition, is increasingly evident and highlighted (e.g. Marsden & Farioli, 2015; Martin et al, 2020; Raymond et al, 2023; Carter, 2024; Spash, 2024).

In placemaking, a crucial aspect highlighted for many years is the need for participatory planning, in which not only a wide range of experts, statutory stakeholders and accepted interest groups are invited (often to inform or comment rather than 'collaborate') but also those affected and living locally (Healey, 1997, 2010). While a focus on nature conservation of selected areas and species was and to a degree still is important, planning has to happen *with* rather than *for* people; and with people *as* (part of) nature rather than *in* (making

decision for) nature (Raymond et al, 2023). Such social-ecological systems awareness will help moving from putting Nature in designated spaces to Nature being a vital part of urban life (Campbell et al, 2023b, p. 4). Participatory, inclusive, integrated, climate- and biodiversity-aware spatial planning (Raymond et al, 2023, pp. 4–5) could and must happen across urban, peri-urban and rural areas. Social infrastructure and green infrastructure become intertwined; integrating biodiversity and other environmental, economic and social functions into sustainable placemaking.

This chapter suggests that sustainable placemaking focused around QoL and sufficiency looks promising, offering some flexibility and adaptability in the focus of specific goals and indicators, yet anchored in a physical reality and past-present-future context to co-produce aspirational futures and define necessary policies and actions. While there is no shortage of guiding principles (as discussed in this chapter and also Chapter 4) and relevant laws and policies (see Chapter 3) for placemaking projects and local planning, the actual specifics will be case-by-case dependent. None of these concepts and paths are ready-made. Placemaking must be negotiated between communities, stakeholders and planners within its political context and societal, economic and environmental trends; interpretations of policies will need to be negotiated and actions and responsibilities agreed and shared (Myers, 1988). Planning always involves political elements and needs to make space for local narratives and views. Different needs, wants and interests should be made explicit and included in placemaking endeavours; they cannot just focus on the individual but must consider the community level (Myers 1988, p. 355) and how local placemaking processes link or fit within wider strategic goals, social-ecological-economic requirements, processes and impacts.

Human and planetary health are intricately connected and, as Hickel (2019, p. 873) put it: "human flourishing cannot be achieved and sustained on a planet in ecological crisis". Sustaining the current mainstream economic system rather than focusing on economic sustainability of communities and individuals is one elephant in the room. We have the knowledge, principles, tools and examples for strongly sustainable place-making; however, on the whole we lack the political support and mindset to make the move from weak to strong sustainability. Until we do, environmental, economic and social challenges and decline are likely to worsen.

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