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TITLE

After development? In defence of sustainability

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ABSTRACT

The Paris Agreement was a success only for the carbon traders, sequestrators and geoengineers who are now expected to 'balance emissions with removals' by 2050, against a background of continued economic growth. If this is sustainable development, it is indeed discredited. But the problem is with the 'sustainable development' paradigm, not with the idea of sustainability. The UN's Sustainable Development Goals explicitly call for intensified economic growth, and are clearly incompatible with the allegedly overarching goal of ecological sustainability. To aim at *this* very different goal is simply to aim at living in a way that does not contain the seeds of its own destruction. Far from invalidating this objective, diagnoses of crisis make its pursuit more urgent than ever. 'Why aim at sustainability?' is an odd question to pose, but one that may nonetheless produce illuminating answers. One answer derives from intergenerational obligations, but this may not even be the most important. An orientation towards sustainability is also beneficial in its own right, since it is a key part of aiming at the good life.

KEYWORDS

Sustainability; Development; Sustainable Development; Climate Change; Anthropocene; Ecomodernism.

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Sustainability stands charged with having failed (Benson and Craig 2014, Foster 2015): but it remains a useful and important guiding principle, albeit one that is more ethical than technical. By contrast sustainable development (SD) could clearly be said to have failed, if its task had been to bring about ecologically sustainable human societies. Documents emerging from two recent sets of protracted UN negotiations confirm however that in reality SD continues to succeed spectacularly in its true objective of sustaining the 'development' paradigm, transforming evidence of ecological crises into arguments for further economic growth.

COP21 – Endings, Beginnings and Contradictions

In the north of England, 2015 ended with the flooding of several major cities. The rain arrived at the margins of an Atlantic storm system so powerful that it raised midwinter temperatures at the North Pole above freezing, for only the second time ever recorded (Griffin 2015). This graphic illustration of climatic disruption came as a swift and sobering corrective to the choreographed euphoria which had just greeted the Paris Agreement on Climate Change.

The primary achievement of the 21st Conference of the Parties to the UN Framework Convention on Climate Change was to get 195 countries to formally agree firstly that anthropogenic climate change is real, and secondly to set targets ('intended nationally determined contributions' or INDCs) for reduction of their own net greenhouse gas emissions. There is no requirement to set INDCs at any particular level, nor any penalties for not meeting them – but all nations have agreed to set them and publicly account for progress towards them, and they are intended to be ratcheted up with each five-yearly review (UNFCCC 2015).

This apparent consensus masked a significant backward step from the previous Kyoto agreement which, for all its many flaws, had acknowledged 'differential responsibility'. Countries whose current wealth and power derive from early industrialisation and disproportionate past use of fossil fuels were seen as bearing particular responsibility for current greenhouse gas levels, and expected to lead the way in reducing emissions. Following twenty years of pressure, primarily though not exclusively from the US, this acknowledgement has now been abandoned. 'We' are now officially all in it together, and a veil has been determinedly drawn over the fact that some did more than others to get 'us' here. Despite ample historical evidence to the contrary, the politically convenient narrative of the unforeseen Anthropocene has been institutionalised (Bonneuil and Fressoz 2016). 'Loss and damage' provisions on adaptation finance may sweeten this pill, but commitments here are vague.

The other headline from Paris was the unexpected adoption, alongside the widely-trailed explicit target of keeping global temperature rise within two degrees, of a more challenging aspiration to limit warming to 1.5°C. This was particularly welcomed by the Alliance of Small Island States, some of whose low-lying territories are predicted to disappear under the sea level rise expected at two degrees. The adoption of a 1.5° target was a public relations masterstroke, but given that temperatures have already risen by one degree, and that there is a delay of decades between emissions and the resulting warming, it is almost certainly unachievable even if all available stops were pulled out now. Existing targets, if met, will result in warming of closer to three

degrees. To have even a 50 percent chance of achieving 1.5°, current emissions levels would need to be cut by 60 percent within ten years.

There is of course a large gap here between aspiration and action. The Paris Agreement was presented by excited environmental journalists as signalling 'the end of the fossil fuel era' (eg Goldenberg *et al* 2015) but it makes no mention of reducing the extraction or use of fossil fuels. Nor does it endorse direct taxation of fossil fuel production. It does not call for any reductions in consumption levels, and it reaffirms (at article 10.5) the importance of 'promoting economic growth'. These multiple contradictions are reconciled by two innocuous words that do a great deal of work in the text: 'net' and 'balance'. The key aim agreed is:

> 'to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century' (article 2.1)

The envisaged reduction is in *net* emissions, rather than in what might be – but never are – called *gross* emissions. By sometime after 2050, the amount of carbon emitted should be matched by the amount being removed. Given the inevitable increased emissions associated with continued economic growth, this balance will presumably be primarily achieved by action on the sink side of the equation, using 'negative emissions' technologies to take carbon back out of the atmosphere. Some such measures, such as increasing carbon sequestration in topsoil, may be beneficial if done sensitively but seem unlikely to be sufficiently scaleable. Others, such as seeding algal blooms in the oceans or pumping carbon dioxide into saline aquifers, could well be disastrous. All are highly speculative.

Whatever the mechanism, the clear intention is that carbon capture and trading will be used to offset continued growth in emissions. The agreement (at article 6) promises new trading mechanisms and standardised accounting rules to help integrate national and regional carbon markets, making this offsetting both easier and more profitable. With remarkable circularity the resulting Green Economy is itself envisaged as a key driver of the broader economic growth allegedly required to produce the additional financial flows needed for climate change adaptation. Financial engineering is just as much part of this picture as geoengineering – and is arguably just as dangerous (see eg Lohmann 2011, Sullivan 2014).

All this represents a massive opportunity for the carbon traders, sequestrators and geoengineers whose 'godlike' redemptive powers are now expected to 'balance emissions with removals' indefinitely, while economic growth continues (Lynas 2011; discussion in Hannis 2012). Aggressively pushing back against the supposed Luddism of steady-state left-green environmentalism, 'ecomodernists' proclaim without any apparent irony that once humanity accepts its true destiny, our creative ingenuity will usher us into a 'good Anthropocene' (Asafuyu-Adjaye *et al* 2015: see also Caradonna *et al* 2015; Hamilton 2013: 199-205). If this is sustainable development, it is indeed discredited. However the problem is, as it has been all along, with the paradigm of sustainable development, rather than with the co-opted concept of sustainability.

Sustainable Development Goals?

The salience of the idea of sustainability increased dramatically from 1987, in the wake of the Brundtland report's historic call for sustainable development (WCED 1987). The word 'development' defines what is to be sustained in this paradigm: it is not a neutral term denoting social organisation or human activity in any generic sense, but has a very specific (and question-begging) meaning. This usage can be traced back to the inaugural speech of post-war US president Harry Truman, which famously called for

> 'a bold new program for making the benefits of our scientific advances and industrial progress available for the improvement and growth of underdeveloped areas' (Truman 1949, quoted in Esteva 1992)

The assumed end point of human social and economic 'development' was henceforth defined as industrialised, market-economy societies on the US model. The majority of the world, with its prodigious variety of other social and economic traditions, was redefined at a stroke as 'underdeveloped', and needing to be brought into the fold.

Early attempts by independent-minded countries in the global South to achieve such development autonomously through import substitution were later suppressed. US-dominated global financial institutions insisted on structural adjustment programmes which 'liberalised' such economies, opening their domestic markets to Northern exports and ownership of their assets and industries to Northern capital, while enforcing export-orientated economic policies locking in the historic colonial emphasis on provision of raw materials and cheap labour. Development thus came to inescapably imply participation in globalised markets, usually on highly unequal terms. The powerful organic metaphor of development lent an air of respectability and irresistible teleology to this highly constructed and ideologically driven project, as it still does today.[1]

Brundtland's masterful reinvention of this neocolonial project as *sustainable* development not only pacified the environmentalist objectors of the late 1980s, but recruited many of them to the cause. 2015 arguably saw an attempt to achieve the same thing with social justice campaigners, as sustainable development was authoritatively updated and redefined through the adoption of the UN's 2030 Agenda for Sustainable Development (UN 2015). Once again the document seeks to be all things to all people. This time however the rhetorical technique employed is not to gather allcomers around the campfire of a vague general principle, but to bundle (almost) everyone's demands in together, glossing over any incompatibilities.

Like Brundtland, and indeed Paris, the 2030 Agenda represents the outcome of a tortuous process of consensus-building between several axes of diametrically opposed constituencies. Its seventeen Sustainable Development Goals (SDGs) and 169 targets have been roundly criticised from the right as utopian, impossibly expensive and a misguided attempt to shoehorn all available concerns into one document (eg Economist 2015). From the left, the accusation is that laudable headline aspirations on issues such as poverty, food security and inequality (goals 1, 2 and 10) are entirely undermined by the failure of the related targets to endorse any policies that might threaten existing power structures, strengthen regulation of corporate bodies, or propose significant redistribution of existing wealth (eg Hickel 2015).

Both critiques have some merit. The latter though is particularly pertinent to the environmental goals. For instance the targets underlying goal 7 on energy, while endorsing renewable energy and energy efficiency measures, do not support any reduction in fossil fuel use but in fact call for 'advanced and cleaner fossil-fuel technology'. Most paradoxically of all, while endorsing 'sustainable consumption and production patterns' (goal 12) and 'urgent action to combat climate change' (goal 13), the SDGs are also repeatedly premised on intensified growth in GDP. While artfully broadening the appeal with references to inclusivity and full employment, Goal 8 calls explicitly for 'sustained economic growth'. The key supporting target here is more detailed than most:

> 'sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries' (goal 8.1)

This is not the place for detailed argument in support of the contested claim that economic growth is a key driver of ecological crisis, not a solution to it. Suffice it to say that (*pace* ecomodernism) 'weightless' growth decoupled from extractive industries and waste generation remains a myth, and the Jevons effect continues to undermine efforts to square this circle through efficiency gains and technological ingenuity (Jackson 2009, Polimeni *et al* 2009). The point here is simply that the SDGs exemplify and clarify the SD paradigm, illustrating its fundamental incompatibility with the supposedly underlying objective of ecological sustainability. The two have definitively come apart, if they were ever together. Sustainability has not failed – it has never been attempted.

Needs and Futures

Stepping outside the SD mindset means reopening the question of what is to be sustained. Brundtland brokered an unequal compromise between sustainability and development, and sustainability has been fading into the background ever since (Dresner 2008). Let us then return briefly to that pivotal moment, and to Brundtland's protean definition of SD: 'development which meets the needs of the present without compromising the ability of future generations to meet their own needs' (WCED 1987). In striking contrast to the voluminous SDGs, this apparently unobjectionable formulation is entirely (and notoriously) free of empirical content. In particular, it says nothing explicitly about environmental issues. It simply proposes that a very general ethical principle should govern the activity of 'development'. To spell it out, this principle, once shorn of the word 'development', yields a similarly protean definition of 'sustainable': X is sustainable if it 'meets the needs of the present without compromising the ability of future generations to meet their own needs'.

As noted above, 'development' is a highly disingenuous term which while masquerading as neutral, smuggles in far more than is apparent. It is essentially *impossible* for the project of 'development' to be conducted in a way that 'meets the needs of the present without compromising the ability of future generations to meet their own needs' – not because the basic principle is at fault, but because it is simply not compatible with what 'development' is. The disconnect is not only ecological but also social, historical and conceptual. As one Indian scholar memorably observed,

> 'Sustainability and development belong to different, almost incommensurable worlds. ... Sustainability is about the ethics of care and concern. It exudes the warmth of locality, of the Earth as a home. Development is a genocidal act of control. ... Development is a contract between modern nation-state and modern Western science to reduce all forms of difference – all ethnic forms, all ethnic knowledges – to create a flatland called modernity.' (Visvanathan 1991: 378-379)

What then if X were something else? What would it be to have a *politics*, a *society* or an *environmentalism* which met the needs of the present without compromising the ability of future generations to meet theirs? Compared to current mainstream discourse, it is hard to imagine what genuinely open-ended conversations about such matters, freed of the unspoken obligation to reach answers compatible with economic growth and 'development', would even look like. But these are conversations which urgently need to take place.

Brundtland thus remains a surprisingly good place to start thinking about sustainability, not just because of its historical significance, but because its basic ethical injunction is so hard to resist. As a principle of social organisation, it seems clear almost to the point of banality that present people should be able to meet their needs, but not at the expense of future people's ability to meet theirs. Of course, the ethical force derives in large part from the fact that the definition talks not about wants, desires or preferences but about needs. It appeals to fundamental notions of respect for the dignity and autonomy of persons, to support a strong ethical claim that genuine human needs should not go unmet. As John O'Neill (2011) points out, such claims are far more compelling when they refer to needs, rather than preferences. Indeed it could be argued that the one word 'needs' provides *all* the ethical ballast here.

What will future people's needs be? How could anyone in the present possibly know the answer to such a question? One possible response is to say that the ethical imperative that needs be met applies in fact only to 'basic' needs. These are still notoriously difficult to define, but it is nonetheless tempting to think that this reduced task should not be impossible, even in respect of future people. But both reason and compassion militate against seeing present obligations to future generations as limited to safeguarding the provision of their basic needs. The bare minimum is certainly a good starting point for identifying what to pass on, but a starting point is all it is. Present actions should aim at maximising the chances that future people not only survive, but flourish. This remains true however difficult it may seem, or however gloomy we may be now about likely future conditions.

Clearly then, taking the idea of sustainability seriously implies an ethical obligation to reflect now on what future people will need in order to flourish, and then to ensure, as far as possible, that these needs will be able to be met. This does not mean that the needs of the future trump those of the present. It means rather that needs both present and future should be understood in terms not of how markets can satisfy preferences, but of how societies can best satisfy genuine requirements for human flourishing. This opens up many further questions, some new and some ancient, such as what constitutes a flourishing life, and what the relationships might be between human and

non-human flourishing. Answers to such questions may be judged by the extent to which they are applicable to past, present and future generations of human beings, and across cultures (Sullivan and Hannis 2015a). While this kind of fundamental reflection might seem distant from the urgent practicalities of the Anthropocene, it may well be the only way to understand and (hopefully) escape the drivers of what John Barry (2012) calls 'actually existing unsustainability' (Hannis 2015a).

Temptations of Agnosticism

Perhaps though, given the inevitable uncertainty under which such reflection takes place, we present-day humans should not impose our present-day expectations on future people, but simply aim to maximise the range of options that will be available in the future, enabling them to fulfil their autonomously defined needs in the widest possible range of ways.

This would be to apply a broader political principle of neutrality about conceptions of the good life to environmental matters. It has been argued that this principle can legitimise or even require robustly precautionary environmental policy (Wissenburg 2006; Dobson 2003; Sagoff 2008). The idea is that if both environmentalists and eco-sceptics are to be able to live the lives they choose, then the future demands of both will need to be met, and making this possible will in practice require the implementation of strong environmental policies. There are significant ethical and political problems with this view, many of which boil down to the fact that the two sets of demands may very well turn out to be not just different but mutually exclusive, and hence to require diametrically opposed sets of policies. To adjudicate between them in any meaningful or effective way will eventually require abandoning neutrality, and replacing it with an overt commitment to some substantive idea of what a flourishing life requires.[2]

Such agnosticism about what will be valued by future people is neither ethically tenable nor politically defensible (Hannis 2005). But there are also formidable practical difficulties in maintaining an agnostic position on future needs. It is not possible to pass on both the option to live in a world free of radioactive waste, and the option to live in a world equipped with nuclear power plants. The option of living in a world containing Yangtze river dolphins, and the option to live in a world in which that river serves as a major freight shipping route, are incompatible. In both of these cases the choice has already been made, and only one of each pair of options will be passed on. Whether the choice was conscious or deliberate is now largely immaterial. The nuclear waste is here, and the dolphins are extinct. Humanity's current trajectory is closing off options at an accelerating rate, multiplying the choices we in the present are required to make about what is bequeathed to future generations. Rainforests, or biofuel plantations? A briefly increased supply of oil, or intact arctic ecosystems? Expanding economies, or a habitable climate?

Sustainable development, as conceived in both the 2030 Agenda and the Paris Agreement, seeks 'win-win solutions' to such dilemmas which circumvent the need for attitudinal or political change. These frequently rely on heroic optimism about technology, but often also on deceptive aggregation techniques which assume and enforce unjustifiable commensurabilities of value. For instance, proposals for the 'offsetting' of biodiversity impacts, in their calculative utilitarianism, recognise no

ethical, ecological or ontological problems with the idea that ecological degradation arising from overexploitation, overproduction or overconsumption can be cancelled out by additional conservation efforts elsewhere, leaving 'no net loss' (Hannis and Sullivan 2012, Sullivan and Hannis 2015b). This is ideology, not ecology. Creative solutions to particular problems may sometimes be able to reconcile ecological sustainability with other conflicting objectives, perhaps even in some contexts with economic growth. But the possibility of such reconciliation cannot be assumed, and certainly cannot avoid the need for choices, or for the critical evaluation of options.

It might be the case in a given instance that options opened up by changing parts of the non-human world irreversibly were so valuable as to outweigh the other options thereby closed off. But even for agnostics (or ecomodernists) this would somehow need to have been calculated and demonstrated in advance, if they were to meet their obligations to future people – and such calculations are by definition made in conditions of radical uncertainty. The impact of this year's catch on North Sea cod stocks a decade from now is impossible to calculate without knowing whether quotas in the intervening years will be set to allow recovery or to maximise yield. The ecological impact of cutting down a square mile of forest depends not only on how large the whole forest is now, and on how much intact forest is needed for it to remain a viable ecosystem, but also on how likely the remaining forest is to be left intact in the future. Great uncertainty arises regarding such counterfactuals, both when assessing degradation and when planning conservation interventions (see eg Maron et al. 2013). In evaluating a proposed forest clearance, for instance, it matters not only what species are present now, but also what species might have been present in the future had the current trajectory continued. Impacts on livelihoods and climate are of course similarly uncertain, often rendering calculations of what future options are closed off by a given present action close to meaningless.

Flourishing beyond Progress

The unsurprising ethical upshot is that we in the present *should* think seriously now about what future people will need in order to flourish, with the equally serious intent of not making it impossible for them to have it. Two qualifications immediately arise. The formidable levels of uncertainty involved suggest firstly that a strongly precautionary attitude is appropriate, and secondly that such reflection should focus on aspects of human experience which *can* be reasonably expected to persist into the future. Both of these point away from any rash assumption that the satisfaction of future needs will require the continuation of present (and historically anomalous) high-consumption lifestyles, or their associated economic and political structures.

I have argued elsewhere that making an ethical argument for sustainability requires not consequentialism or deontology, but a eudaimonist virtue approach building on, and contributing to, an ecologically literate conception of human flourishing (Hannis 2015a, 2015b). However in his challenging attack on the very idea of sustainability, John Foster (2015) questions the efficacy of such arguments, on the basis that other visions of human flourishing are possible, and indeed apparently widely shared. Utilitarian arguments urging the avoidance of present-day profligacy in order to avoid a painful future can be undermined by techno-optimistic claims that future problems can and will be fixed. Foster argues that virtue arguments urging the avoidance of present-day profligacy because of their likely effects on future human flourishing are

similarly vulnerable to consumerist (or indeed ecomodernist) revisionings of flourishing, in which little or no value is placed on 'wildness' or non-controlling relationships with the nonhuman world.[3]

But Foster glosses over the fact that from a political perspective, virtue ethics tends to be associated with a broadly perfectionist view of the role of government. While such matters should indeed be open to debate, as briefly discussed above it is not the case that action on environmental matters requires neutrality between those who want it and those who don't. Yes, the argument that a fully flourishing human life requires some kind of ecological virtues would need to be cogently put, and competently defended – and yes, if this argument were squarely lost then perhaps humanity really would find itself in the position Foster evocatively terms 'environmental tragedy'. But we're not quite there yet. Given the tsunami of propaganda required to keep consumerism on track, and the coercive force required to maintain current levels of inequity, Foster's apparent conviction that post-Enlightenment humanity is hopelessly lost in unreflective individualism seems overstated. Gramsci's 'pessimism of the intellect, optimism of the will' seems more appropriate here.

Only a very strange version of human flourishing could deny not only the value of meaningful human relationships with non-human nature, but also the value of caring about the future. Care for the future is not premised only on consequences. *Aiming* at sustainability is something that contributes to human flourishing in the present. Most obviously, it ameliorates present as well as future predicaments. Given sustainability's intricate connection with egalitarianism, honestly adopting it as a genuine goal can also bolster community and help address corrosive inequality. There is a virtuous circle here, since *in*equality drives *un*sustainability (Barry 2012, Wilkinson and Pickett 2012). Lastly an orientation towards sustainability involves, not just peripherally but centrally, thoughtful reflection on just what it is that constitutes a good human life: and such reflection is itself a key part of a good life.

Foster's is a more nuanced argument against the idea of sustainability than those premised on neutrality or ecomodernism. He yokes it together though with a further argument that sustainability is inevitably associated with progressivism. This I think is mistaken. Unlike sustainable development, sustainability is not about maintaining a trajectory of 'progress'. Caring about – and planning for – the future does not imply this kind of linear narrative. Indeed it might be argued that the opposite is true. If I believe the future will by some mysterious mechanism be necessarily 'better' than the present whatever I get up to, why would I bother doing anything other than live it up? Conversely if I believe the future may be harsher than the present, I may feel an intensified obligation to do what I can now to help. Foster is right that it is time to build the post-SD world, and right that this may require accepting that 'catastrophe' is coming – but this does not mean that sustainability is no longer relevant or useful as a guiding concept.

Conclusion – Sustainability for the Anthropocene?

To aim at ecological sustainability is simply to aim at living in a way that does not contain the seeds of its own destruction. Far from invalidating this objective, diagnoses of crisis, whether 'entering the Anthropocene' or 'facing catastrophic climate change' make its pursuit more urgent than ever, for both practical and ethical

reasons. Getting from here to anything like ecological sustainability will probably require not just conquering the institutionalised addiction to economic growth, but dismantling many existing power structures, and evolving radically different principles of social organisation. The worse things get, the more urgent this becomes. Whether it currently looks politically achievable ultimately has no bearing on whether it is a worthwhile ethical objective. Despite its widespread appropriation by technocrats and market enthusiasts, sustainability is not an apolitical idea, but a rich and powerfully normative concept which may yet prove invaluable.

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ENDNOTES

1) On the history and genealogy of development discourse, including the emergence of the 'sustainable development' paradigm, see contributions to Crush's (1995) anthology, particularly Porter (1995). Porter discusses the background assumptions of Truman's speech, relating it to Arndt's important (1981) distinction between intransitive (Marxist) and transitive (colonialist, as in the British 1929 Colonial Development Act) usages of the verb 'develop'. See also Deb (2009) on 'developmentality', and discussion in Hannis 2011.

2) Also relevant here is the well-established broader communitarian critique of liberalism, which argues that any attempt at government based on liberal neutrality will in fact inevitably result in the imposition of unexamined liberal conceptions of the good, not least those embedded in the very idea that neutrality is desirable. The related concern that Rawlsian liberal neutrality relies on an untenable conception of persons as 'radically disembodied subjects' (Sandel 1998) is particularly pertinent in the context of environmental policy.

3) 'Wildness' is of course a complex and slippery concept which can be deployed to support many different perspectives. See eg discussion in Sullivan 2015.

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