Designing Interactive Ethical Spectacles for Sustainability

Roy Bendor
Centre for Interactive Research on
Sustainability,
University of British Columbia
roy@digitalsustainability.com
1-604-569-7716

ABSTRACT
This position paper includes three components: first, a discussion of the meaning of sustainability, in which I suggest that in addition to seeing sustainability as a desired end-state we should view it as a process of collective future-visioning. Second, drawing from Stephen Duncombe's notion of the "ethical spectacle", I propose a model for designing inclusive, resonant, engaging and thought-provoking interactive experiences to promote public engagement with sustainability. Third, moving from the conceptual to the practical, I suggest a few concrete guiding principles for designing interactive ethical spectacles for sustainability (IESS).

SUSTAINABILITY AS END-STATE OR AS PROCESS?

There are few notions as complex, contested and, at times, outright nebulous as sustainability. An "elevator word" par excellence [14], sustainability is often defined circularly and fluidly, with some arguing that it is an "essentially contested concept", one of those terms "like fairness, freedom, or liberty, for which there is some common sense for what they mean in the abstract, but which lack the same common sense of how to put them in play" [10, p.215. See also 6, 15]. Nonetheless, the dominant conceptualization of sustainability views it as a desirable end-state in which, as expressed by the Brundtland Committee Report, the needs of humans and nonhumans are balanced so as not to compromise "the ability of future generations to meet their own needs" [27].

Granted, what counts as actually existing human needs may take as fluid a form as sustainability itself (a point to which I return below), but if sustainability-as-end-state can indeed be envisioned and formulated, then it should be possible to design interactive sociotechnical systems that will aid humanity to achieve it. In this mode, and following the more specific definition of sustainability given by the National Research Council [21, p.16], we may be able to distill a set of achievable social goals – "providing food and nutrition, nurturing children, finding shelter, providing an education, and finding employment" – alongside a set of achievable ecological goals – "ensuring the quality and supply of fresh water, controlling emissions into the atmosphere, protecting the oceans, and maintaining species and ecosystems" – and then design interactions that promote the awareness and acceptability of these goals, or that "nudge" users to make choices that correspond with

them [26; but see 11]. Possible guidelines for designing such interactions have already been proposed [e.g., 4].

But since the goals of sustainability themselves are a product of some social conversation over needs, desires and hopes, I suggest, as a critical supplement, that we approach sustainability as *a future oriented project rife with potentialities* – an invitation to collectively imagine the future and select among the many possible paths that may realize it. This position reflects the idea that sustainability is constructed *in practice*, inescapably involves social, economic and political dimensions, and raises normative and ethical questions related to the nature of the world we want to create. It is therefore a situated, context-sensitive notion that needs to be debated and redefined for each place and time; its meaning a temporary and spatially explicit stabilization of what exists and what matters, something to be realized through social processes of articulation, verification, and institutionalization [cf. 3, 19]. Sustainability, in short, represents *a way of being, of relating, of imagining and of acting in, and on the world*.

In sustainability scholarship this view is closely aligned to what is coming to be known as the "procedural approach to sustainability". As Robinson [22, p.381] puts it,

> … sustainability can usefully be thought of as the emergent property of a conversation about desired futures that is informed by some understanding of the ecological, social and economic consequences of different courses of action…. This view acknowledges the inherently normative and political nature of sustainability, the need for integration of different perspectives, and the recognition that sustainability is a process, not an end-state. It must be constructed through an essentially social process whereby scientific and other 'expert' information is combined with the values, preferences and beliefs of affected communities, to give rise to an emergent, 'co-produced' understanding of possibilities and preferred outcomes.

Does the shift from ends to means implicit in this view risk collapsing sustainability into the process of achieving it? Perhaps, but no more so than considering democracy to be a continuous project of inclusion, debate and empowerment, and not merely the state of having an elected government. So what differentiates sustainability-as-process (or a procedural approach to sustainability) from other

participatory, collective processes that aim to shape the future, like democracy? Nothing inherent – there is no ontological difference at play – but only a different set of emphases: on socio-ecological processes and outcomes, on the relations between local action and global effects, on the links between ecological footprints and social justice, on the values and essence implicit in modern lifestyles, on inter-generational responsibility, and on the possibility of public empowerment in the age of corporate-state power. In other words, seen through the prism of a procedural approach to sustainability, sustainability-as-process becomes a site for a deep consideration of the future, for engaging our social imagination, and developing our collective abilities to affect, halt and even reverse complex, uncertain yet powerful socio-ecological processes.

THE ETHICAL SPECTACLE

One of the most difficult challenges we face, as we try to create the inclusive, equitable and empowering processes of future-visioning implied by the procedural approach to sustainability, is the need to promote meaningful public engagement with the issues – not only to create an awareness of sustainability but to invest it with lasting relevance and salience, while indicating potential paths for action. Alas, when it comes to political involvement (at least in the developed North) cynicism, inertia and disengagement are quite commonplace [2, 24, 30]. One way to mend this situation is by designing resonant and attractive interactive experiences that follow the model suggested by Stephen Duncombe's "ethical spectacle" [9].

While Duncombe proposes the ethical spectacle as an invigorating antidote to what he identifies as a demoralizing combination of dreariness and ineffectiveness that afflicts progressive politics, his model applies to any social issue that begs a more active political constituency. A spectacle, Duncombe writes, meets people "where they are", draws upon "preexisting desires" and then redirects them. It is

> ... a way of making an argument. Not through appeals to reason, rationality, and self-evident truth, but instead through story and myth, fears and desire, imagination and fantasy. It realizes what reality cannot represent. It is the animation of an abstraction, a transformation from ideal to expression. *Spectacle is a dream on display*. [9, p.30; emphasis in origin].

The spectacle is appealing for Duncombe for its ability to captivate, engage and motivate its participants, and especially to promote dissent. But while spectacles have been traditionally deployed as a way to mask political reality (turning politics into mere aesthetics, as Walter Benjamin famously remarked), Duncombe proposes we re-formulate the spectacle along more ethical lines. What he calls an "ethical spectacle" is therefore an event that, on the one hand, retains the spectacle's engaging affectivity, but, on the other hand, is much more inclusive and participatory, open to a multiplicity of meanings, and committed to

representing its politics and goals in a transparent manner – refusing to represent fantasy *as* reality. In his words,

> … a *progressive* ethical spectacle will be one that is directly democratic, breaks down hierarchies, fosters community, allows for diversity, and engages with reality while asking what new realities might be possible" [9, p.126; emphasis in origin].

Ethical spectacles invite us to imagine a better future and "try it on for size" [on the performativity of public spheres see also 29]. As such, they present us with an apt model for rethinking the ways in which we can design interactive sociotechnical systems that would draw the public into the process of future-visioning that is sustainability.

GUIDELINES FOR DESIGNING INTERACTIVE ETHICAL SPECTACLES FOR SUSTAINABILITY

From the dual perspectives of procedural sustainability and the ethical spectacle we may be able to distill several guidelines for the design of interactive ethical spectacles for sustainability (IESS). I make some suggestions here not as a finished product but as a starting point for a larger conversation.

Scale-Making

Since sustainability is a social, political and cultural issue, not merely a matter of adopting greener individual lifestyles or consumer choices [25], IESSs should aspire to address collectives and not individuals – what Dourish calls "scale-making" [8]. Foregrounding the structural (or institutional) barriers for meaningful individual action, and indicating the ways by which they could be overcome may increase users' self-efficacy and reduce the effects of the "behavioural gap" (the gap between knowing that an issue exists and between actually acting upon it [18]).

Involvement

Both approaches to sustainability – as an end-state and as a process – call for meaningful public participation. Likewise, the ethical spectacle aims to break down hierarchies of creator and spectator, producer and consumer, leader and follower. As Duncombe puts it (perhaps a bit naïvely) , "With a democratized spectacle there is no man behind the curtain, pulling the levers to create the illusions, bellowing into a microphone: 'I am Oz'. Participatory spectacles put us all behind the curtain" [9, p.134]. Duncombe's naiveté aside, IESSs should aspire to involve potential users in the design of the sociotechnical system itself. This means going beyond conducting usability tests but developing the very goals of the interaction collaboratively. Encouraging users to get involved in (and even take ownership over) the development, deployment and evaluation of the interaction helps to bring the particular contexts within which users are engaged to bear on the design process, making it more relevant, flexible and reflexive [17, 23].

Experience Over Information

The majority of current efforts to engage the public on sustainability still adhere to the creed of the information deficit communication paradigm, namely that the provision of high quality information is a sufficient condition for political engagement. However, the information deficit model has recently come under wide criticism for its logocentrism, unidirectionality, lack of context, and behaviouristic undertones [5, 7, 16, 28]. It follows that the goal of IESSs should not be merely the provision of more information but the evocation of resonant interactive *experiences*. Such experiences may also be useful in connecting the issues that underlie sustainability to our everyday experiences [1, 13].

Emergent Interactions

If interactions that aim to persuade or nudge users to act in a particular way are useful to help achieve an (ideally collaboratively and ethically formulated) pre-defined goal, promoting a procedural approach to sustainability calls for IESSs that are more open-ended, ambiguous, fuzzy or perplexing [12]. Such potentially rhizomatic interactive structures [20] may help break the "immersive spell" by promoting moments of reflexivity that shift the users' intentionally from interactive affordances to their wider contexts, prompting considerations of the very structures of the world itself.

CONCLUSION

If the challenge of sustainability is to engage as wide a section of the population as possible in a process of collective future-visioning, we would do well to imagine and realize interactive sociotechnical systems that are inclusive, participatory, evocative and imaginative. The preceding discussion of the IESS as a guiding model is merely an incipient suggestion for a very complex problem – likely the most gargantuan challenge we have ever faced. We may envision IESSs that employ some of the suggested principles or even all of them, but there are no guarantees for success. I look forward to discussing how the HCI & Sustainability community may move forward in the forthcoming workshop.

REFERENCES

1. Bendor, R. (2012). Analytic and Deictic Approaches to the Design of Sustainability Decision-Making Tools. *Proceedings of iConference '12*, Toronto, Canada, 215-222.

2. Berger, B. (2011). *Attention deficit democracy: the paradox of civic engagement*. Princeton, NJ: Princeton University Press.

3. Berger, P. L., & Luckmann, T. (1989). *The social construction of reality: a treatise in the sociology of knowledge*. New York: Anchor Books.

4. Brynjarsdóttir, H. n., Håkansson, M., Pierce, J., Baumer, E. P. S., DiSalvo, C., & Sengers, P. (2012). Sustainably Unpersuaded: How Persuasion Narrows Our Vision of Sustainability. *Proceedings of CHI 12* (May 5-10, 2012, Austin, Texas, USA), 947-956.

5. Bucchi, M. (2008). Of deficits, deviations and dialogues: Theories of public communication of science. In M. Bucchi & B. Trench (Eds.), *Handbook of public communication of science and technology* (pp. 57-76). London & New York: Routledge.

6. Connelly, S. (2007). Mapping Sustainable Development as a Contested Concept. *Local Environment: The International Journal of Justice and Sustainability*, 12(3), 259-278.

7. Crompton, T. (2010). *Common Cause: The case for working with our cultural values*. WWF-UK.

8. Dourish, P. (2010). HCI and Environmental Sustainability: The Politics of Design and the Design of Politics. In *Proceedings of DIS 2010,* 1-10.

9. Duncombe, S. (2007). *Dream: re-imagining progressive politics in an age of fantasy*. New York: New Press.

10. Ehrenfeld, J. (2008). *Sustainability by Design*. New Haven: Yale University Press.

11. Farrell, H., & Shalizi, C. (Nov. 9, 2011). 'Nudge' policies are another name for coercion. *New Scientist, 2837,* 28. Available: http://www.newscientist.com/article/mg21228376.500-nudge-policies-are-another-name-for-coercion.html

12. Gaver, W. W., Beaver, J., & Benford, S. (2003). Ambiguity as a Resource for Design. *Proceedings of CHI 2003*, 233-240. Available here

13. Gordon, E., Schirra, S., & Hollander, J. (2011). Immersive Planning: a conceptual model for designing public participation with new technologies. *Environment and Planning B: Planning and Design, 38*, 505-519.

14. Hacking, I. (1999). *The social construction of what?* Cambridge, Mass: Harvard University Press.

15. Jacobs, M., (2006). Sustainable Development as a Contested Concept, in A. Dobson (ed.), *Fairness and Futurity: Essays on Environmental Sustainability and Social Justice* (pp. 21-45). Oxford University Press.

16. Kahneman, D. (2011). *Thinking, fast and slow*. New York: Farrar, Straus and Giroux.

17. Kemp, R., & Martens, P. (2007). Sustainable development: how to manage something that is subjective and never can be achieved? *Sustainability: Science, Practice, & Policy,* 3(2), 5-14.

18. Kollmuss, A. & J. Agyeman (2002). Mind the Gap: why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research* 8(3), 239-60.

19. Latour, B. (2004). *The Politics of Nature* (translated by C. Porter). Cambridge: Harvard University Press.

20. Murray, J. H. (1997). *Hamlet on the holodeck: the future of narrative in cyberspace*. Cambridge, Mass.: MIT Press.

21. National Research Council (1999). *Our Common Journey*. National Academies Press.

22. Robinson, J. (2004). Squaring the Circle: Some thoughts on the idea of sustainable development. *Ecological Economics* 48(4), 369-384.

23. Robinson, J., Carmichael, J., VanWynsberghe, R., Tansey, J., Journeay, M., & Rogers, L. (2006). Sustainability as a problem of design: interactive science in the Georgia Basin. *The Integrated Assessment Journal, 6*(4), 165-192.

24. Samara. (2013). *Lightweights? Political Participation Beyond the Ballot Box*. Toronto: Samara. Available: http://www.samaracanada.com/docs/default-document-library/samara_lightweights.pdf

25. Shove, E. (2010). Beyond the ABC: climate change policy and theories of social change. *Environment and Planning A*, 42, 1273-1285.

26. Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: improving decisions about health, wealth, and happiness*. New Haven: Yale University Press.

27. UNWCED. (1987). *Our Common Future: Report of the World Commission on Environment and Development*. NYC: Oxford University Press.

28. van Kerkhoff, L., & Lebel, L. (2006). Linking knowledge and action for sustainable development. *Annual Review of Environment and Resources, 31*, 445-477.

29. Warner, M. (2002). Publics and Counterpublics. *Public Culture, 14*(1), 49-90.

30. Wright, O. (April 25, 2012). Political apathy hits record level - especially if you're a Lib Dem. *The Independent,* p. 12.