

# **Points of Persuasion:**

## **Strategic Essentialism and Environmental Sustainability**

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### *Abstract*

The environmental movement, as a political body, is an alliance of many different groups with different agendas and goals, not always compatible. Nonetheless, as a matter of political pragmatism, the identification of “the environment” as a common focus binds these actors together – an act of strategic essentialism. Drawing on this observation and on an account of identity production in social software, I suggest that an alternative approach to pervasive persuasion might be to help crystallize this sort of political connection.

### **1. Strategic Essentialism and Sustainability**

Postcolonial scholar Gayatri Spivak (1987) coined the term “strategic essentialism” to refer to the ways in which subordinate or marginalized social groups may temporarily put aside local differences in order to forge a sense of collective identity through which they band together in political movements. Post-war resistance movements to colonial rule often relied on just such mechanisms by which particular forms of ethnicity or nation-hood were used to align disparate groups towards common goals. Spivak’s observation is that, while such terms as “indigenous” peoples or similar labels result in problematic and unstable groupings that erase significant differences and distinctions (rethinking colonial categories), nonetheless these acts of identity formation support important political ends. So while terms such as “Indian,” “African”, or “Native American” may be manufactured and suppress highly significant differences, they nonetheless do important work.

Studies of the social history of environmentalism show much the same sort of process at work in the development of the environmental movement. Cronon (1995) documents the history of our conception of Wilderness. In the period of the Western Expansion, wilderness is a threat to human existence. It betokens the kinds of arid, unforgiving and hostile environment that settlers might experience in their movement west, something that must be conquered (and so also a source of opportunity.) It is not for nothing, he argues, that it is the wilderness where Christ

struggles with the Devil, or into which Adam and Eve are cast. By the late nineteenth century, though, a new notion of wilderness has emerged – not a threat but a comfort, not something to be overcome but something to be cherished, a place not of danger but of rejuvenation. The national park movement reflects a change in the understanding of what wilderness might be, what it might be worth, and why. Cronon documents a range of considerations that are part of this ideological reframing of wilderness (including the gender issues associated with the image of the rugged masculinity involved in taming “virgin” nature, the problems of habitation by indigenous peoples, and the issues of the supernatural associated with the encounter with wilderness), but his central concern is the way that the ideological construction of wilderness obscures the central role of human action:

By imagining that our true home is in the wilderness, we forgive ourselves the homes we actually inhabit. In its flight from history, in its siren song of escape, in its reproduction of the dangerous dualism that sets human beings outside of nature—in all of these ways, wilderness poses a serious threat to responsible environmentalism at the end of the twentieth century. (Cronon, 1995:81).

More broadly, as Proctor (1998) also demonstrates, strategic essentialism lies at the heart of the creation of the environmental movement at all. What we think of as environmentalism is a political force resulting from the forging of an alliance between groups with concerns as diverse as open access, biodiversity, air and water pollution, surfing, animal husbandry, agricultural efficiency, bioengineering, and rock climbing. “The environment” emerges as a concept shaped by the union of common interests, even though these interests might be mobilized in quite different ways and for quite different reasons. As Spivak would note, the inherent heterogeneity of the group is made subservient to strategic goals. Arguably, one of the reasons that the clash of perspectives over environmentalism – between, for instance, Western environmentalists and native Amazonians over sustainability and economic survival in the rainforest (Tsing, 2004) – are so troubling is because they threaten the unstable alliances out of which these political movements are formed.

## **2. Pervasive Persuasion**

When we talk of persuasion as a consideration for information technologies, we are frequently concerned with how behavior modification can be induced by intervening in moments of local decision-making and by providing people with new rewards and new motivations for desirable behaviors (Fogg, 2003). These kinds of strategies have been common, for instance, in health and fitness applications (e.g. Lin et al., 2006). One might imagine a range of pervasive persuasive technologies along these lines. If we argue that the essential importance of pervasiveness is that the technology accompanies people in the course of their everyday lives, then technologies that help people to assess their everyday actions in terms of broader questions of sustainability present themselves – applications that help people understand their carbon footprint, for example, or ones that provide access to environmental information as a part of shopping (e.g. Bernheim-Brush et al., 2004).

However, if we think about environmental sustainability from a political perspective, and particularly bearing in mind the important role of strategic essentialism, then a different

application area presents itself. From this perspective, what we might want to persuade people of is the ways in which their interests are aligned with those of others. As is demonstrated by sociological research into the formation of social movements, this process of alignment and mobilization, by which one can start to find one's own interests as being congruent with those of others, is a critical first step in political mobilization (Snow et al., 1986).

Arguably, we can find the foundations for such technologies in the current crop of so-called "social software" applications, of which Facebook is perhaps currently the most prominent. Social networking sites claim simply to articulate social networks that are already there, but of course, social networks in the formal sense are an analytic device rather than an aspect of our own everyday experience. (This can most easily be demonstrated by asking the question, "Tell me about someone two hops away from you in your social network." Nobody can, since, by definition, such a person is not known to the subject.) Instead, then, we can approach social networking sites as technologies of affiliation, alignment, and identification, sites at which forms of collective identity are forged and enacted.

If social software works by, first, tying individuals and actions to groups and networks and, second, by providing a platform through which one acts as a member of a group (be that an institutional affiliation, an informal group, or simply a identifiable social type), then a similar approach can perhaps be harnessed in the domain of sustainability. This would suggest that, rather than using technology to provoke reflection on environmental impact of individual actions, we might use it instead to show how particular actions or concerns link one into a broader coalition of concerned citizens, social groups, and organizations. So, for instance, if we were to combine the sorts of monitoring technologies developed by Paulos (2008) or the kinds of scanning technologies explored by Bernheim-Brush et al. (2004) with social networking accounts of the different interests associated with sustainability debates and movements, then we might have a system that could tell people, "the action you are about to take aligns you with X but against Y," or, "the products that you are looking at have these different impacts on these different groups." What is being done here is a process of frame bridging (Snow et al., 1986) that not only allows for forms of reflection and behaviour modification but also links the individual into a broader coalition of interests. What becomes visible is not so much the world, but its political alignments.

### **3. Conclusions**

Various attempts have been made to use pervasive technologies to connect people to the environment in which they live (e.g. Paulos, 2008), or to provide them with tools for reflection on the impacts of their practices (e.g. Bernheim-Brush et al, 2004). Observing that we need to think about sustainability also as a process of political mobilization, I have suggested that we can draw too on a different set of technologies – the social networking technologies familiar from Web 2.0 applications – as a means to connect people not only to environments and to actions but to other people; and, moreover, to do this in a way that helps them to see their way through the central questions around which political action might be initiated. The new goal of pervasive technology here, then, is to promote a form of strategic essentialism that is part of this process.

## 4. Acknowledgements

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## 5. References

Bernheim-Brush, A.J., Combs-Turner, T., Smith, M., and Gupta, N. 2004. Scanning Objects in the Wild: Assessing an Object-Triggered Information System. Proc. Intl Conf. Ubiquitous Computing UbiComp 2004 (Nottingham, England).

Cronon, W. 1995. *Uncommon Ground: Rethinking the Human Place in Nature*. Norton.

Fogg, B.J. 2003. *Persuasive Technology: Using Computers to Change What We Think and Do*. Morgan Kaufman.

Lin, J., Mamykina, L., Lindtner, S., Delajoux, G., and Strub, H. 2006. Fish'n'Steps: Encouraging Physical Activity with an Interactive Computer Game. Proc. Intl. Conf. Ubiquitous Computing UbiComp 2006 (Orange County, CA), 261-278.

Paulos, E. 2008. Citizen Science: Enabling Participatory Urbanism. In Foth, M. (ed), *Urban Informatics: Community Integration and Implementation*.

Proctor, J. 1998. The Social Construction of Nature: Relativist Accusations, Pragmatist and Critical Realist Responses. *Annals of the Association of American Geographers*, 88(3), 352-376.

Snow, D., Ruchford, B., Worden, S., and Benford, R. 1986. Frame Alignment Processes, Micromobilization, and Movement Participation. *American Sociological Review*, 51, 464-481.

Spivak, G. 1987. *In Other Worlds: Essays in Cultural Politics*. Taylor and Francis.

Stoler, A. 1989. Rethinking Colonial Categories: European Communities and the Boundaries of Rule. *Comparative Studies in Society and History*, 31, 134-161.

Tsing, A. 2004. *Friction: An Ethnography of Global Connection*. Princeton, NJ: Princeton University Press.

*Bio Statement:* Paul Dourish is a Professor of Informatics in the Donald Bren School of Information and Computer Sciences at UC Irvine, with courtesy appointments in Computer Science and Anthropology. He teaches in the Informatics program and in the interdisciplinary graduate program in Arts Computation and Engineering (ACE). In 2008, he was elected to the CHI Academy.

*Motivation for attending:* I'd like to understand the ways in which environmental questions act as a nexus for technological, social, and cultural considerations, and are likely to develop over the next few years.