

## **LOCALIZATION: SMALL EXPERIMENTS FOR THE COMING DOWNSHIFT**

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### **A NEW CONTEXT**

To the extent that our response to an environmental dilemma (e.g., energy descent, climate disruption, soil depletion) benefits from being place-based, it becomes less appropriate to rely upon universal interventions. In fact, the need for a localized response greatly diminishes the very effectiveness of outside solutions. Citizens rarely benefit from generic instructions. And they certainly do not take kindly to being informed by experts about how they must behave in their local setting.

In such situations, a competent and situation-aware expert will see that his or her role must change. Their new role involves, at most, suggesting guidelines for how citizens might craft their own response and creating a supportive setting for the ensuing process. The experts might then prepare themselves to answer the questions that arise as citizens' begin to formulate their response. Certainly, the urgency and consequences remain, but the process of responding has changed. This new context may take some getting used to, primarily by the experts.

### **A NEW PROCESS**

An approach to behavior change under conditions of great environmental uncertainty and grave stakes, yet with a need for place-based sensitivity, might start with small steps. As anthropologist and political scientist James Scott advises with respect to interventions for economic development, "Prefer wherever possible to take a small step, stand back, observe, and then plan the next small move" (Scott 1998: 345). Scott's suggestion follows, in part, the small-experiment approach to environmental problem-solving outlined by Irvine and Kaplan (2001; see also Kaplan, Kaplan and Ryan 1998). Small-experiments is a framework for supporting problem-solving that is based on innate human inclinations. It supports innovation, maintains local relevance and experimental validity all while promoting rapid dissemination of findings. It is also a response to the large-scale, bigger-is-better approach that dominates so much of environmental research and planning these days; an experiment need not be intimidating to be useful.

The small-experiment framework can help people who are not trained scientists to validate what works in their locality. But while the involvement of the non-expert is possible, it is appropriate to ask whether their involvement is more likely under this approach. To be effective, the small-experiment framework would need to create greater individual and group engagement, and to craft a more pragmatic response.

To enhance engagement, the small-experiment framework carefully manages the scale of the activity. Picking the appropriate scale is a crucial step. It was Weick's (1984) insight that people anchor around the scale and structure of the initial problem definition and start to work on solutions that are only at that same scale or structure. If we cast the problems faced as being at a large scale, as is often the case with environmental issues, then it is hard to imagine anything but a large scale solution sufficing. Furthermore, imagining that solutions as being of only one fundamental type (e.g., political, economic, social) unnecessarily limits what people can offer. Large scale problems may seem to demand large scale solutions, yet the scale of the problem need not dictate the scale of the solution. And not all environmental problems work out to be problems of policy or economics and thus not all solutions need be political or economic in nature.

There are both ethical and motivational issues at work in the small-experiment framework. The careful attention to the scale of problems and solutions is well-matched to the ancient ethical teaching that while, "it is not your responsibility to finish the work [of perfecting the world], you are not free to desist from it either." A key element of the small-experiment framework is that people need only focus on what they are better prepared to handle. Others will handle that to which they are well positioned to respond.

The motivational effect likely comes from the intrinsic satisfaction derived from developing, displaying and maintaining proficiency and resourcefulness (De Young 1996, 2012). Since success at a smaller scale can result in an empowering sense of competence, this may result in people being more willing to continue or re-start their problem-solving efforts at a later date or in a different setting (Monroe 2003). Social benefits also may emerge from keeping the scale small; trust may be easier to build at the small scale and prove useful when efforts must be repeated.

Small experiments are going on all around us and will occur more frequently as localization gains effect. These experiments are often the basis of stories told by reskilling instructors, at-home tinkerers, dedicated gardeners, community problem-solvers and innovative teachers. They are part of team efforts where experts and citizens combine and apply their talents and insights to a local problem of mutual concern. Consider also the many pilot programs, field tests, demonstration sites and trial runs regularly reported in both popular and scientific publications.

Small experiments are so common that they may seem inconsequential to the casual observer yet they can be a powerful means of behavioral entrepreneurship. Their effectiveness can be enhanced by following a few simple guidelines.

**Scale and expectation.** While already an integral aspect of small experiments, smallness can be managed in a variety of ways. Keeping the physical scope small is obvious. Others include keeping the breadth of exploring small and the time-span short as well as involving only a small number of people as participants and respondents.

The experiment can also be tentative, tried out for a limited time or on a limited basis. These guidelines help keep the costs of project initiation and management low. So too should expectations be kept in check. The findings of small experiments are unavoidably imperfect and incomplete. Yet small too are the consequences of failure; failure is always a possibility if the experiment is genuine. Nonetheless, as Irvine and Kaplan document (2001), findings from so modest an enterprise may prove extraordinarily useful and have broad effects.

**Goal and focus.** Keep the focus on only one specific and well-defined problem. While it may be okay to start exploring before having absolutely everything in place, it is essential to first have a clear and concise question. Such a question motivates the effort and makes it easier to avoid distractions no matter how fascinating they may be. Spending too little time on figuring out what you hope to learn is the surest way to fail. Anticipating what you would like to be able to say at the end is an excellent way of formulating your initial question. Here too, modest expectations may be a helpful guide; the aim of the small experiment is to identify reasonable solutions, preferably a multitude of them. The goal is not a search for the ideal answer.

**Tracking and record keeping.** Empirical research, at its core, involves being attentive to what is going on. Whether formal or informal information gathering is used, the objective is to systematically learn what worked and what did not. At the immediate timeframe and at the local level, the tracking allows for feedback to the participants. In situations involving behavior change, rapid feedback allows for self-correction; people can learn how the specific choices they made affected the outcome. Without such feedback behavior cannot be changed in a pragmatic and productive way. Over the longer timeframe, the information recorded informs next steps and may provide the basis for developing generalizations that might be useful to share with others. Once again, modest expectations can play a role in deciding the amount and form of information to be tracked. The intent is to collect only enough information to allow for feedback and inference; too little information precludes useful learning, while too much information can paralyze the analysis process. Easy to gain information is always preferred in modestly-funded small experiments.

**Dissemination and communication.** Sharing the successes of a small experiment is an excellent way to let participants know that their efforts mattered. It is also an opportunity to validate the correctness of the proposed changes for the local people who were not directly involved in the small experiment. Finally, communicating with people at a distance may inform and motivate other small experiments; successes in one locality become plausible options to explore elsewhere, while communicating about failures instills caution. The form of communication used can vary with the circumstances. Newsletters, newspaper articles and presentations at an open-house can work well locally while professional presentations, blogs, journals and magazines can help with wider dissemination. But regardless of the outlet used, clear, concrete, vivid and engaging language will help to familiarize others with the findings.

It is noteworthy that nothing in these guidelines restricts small experiments to taking only small steps or to an exceedingly slow discovery process. A behavior change process called adaptive muddling stresses this subtle but important issue (De Young and Kaplan 1988). Adaptive muddling adds an important aspect to the small experiment framework. A stability component is used to reduce the costs of failure for the individuals involved. It also makes highly improbable unchecked and disorienting change. With social and environmental safety nets in place people need not privilege the status quo by investigating only marginal behavior change. Far reaching change can be both contemplated and explored. The scale of the experiment may be small but adaptive muddling supports people exploring, and thus prefamiliarizing themselves with, life-changing adaptations. Since this modification to the small experiment framework makes the exploration process less intimidating, discovery can occur more quickly as more people become engaged. Furthermore, while the impact from any one group's change may be modest, this process supports simultaneously exploring, and sharing the results of, many changes at once, each drawing on the knowledge and experience people already possess.

Some people may argue that the small experiment framework is a renamed version of the experimenting society proposed by Campbell (1981). The experimenting society suggests that social programs should be designed and implemented as experiments with a built-in evaluation process. However, in Campbell's version the evaluation is a formal process, one conducted by social scientists using meticulous, expertly designed trials followed by rigorous statistical analyses. Furthermore, the results are intended for use by governmental policy makers and, perhaps, for later publication. The small experiments approach uses the concept of an experiment in a much less restricted sense. The analysis involved in such experiments is less formal and more compatible with immediate needs and local capabilities. Online accounts, reports by participants or visits by interested individuals would be appropriate additions to whatever formal record keeping is employed. The more expert-based framing of an experiment used by Campbell make his approach less likely to be tried by, and the results less accessible to, non-experts.

The small experiment framework is a quick, simple and pragmatic way to promote behavior change that is compatible with what environmental psychology has learned about human nature. Such an approach can enable people to build mental models that allow them to view the urgent and serious environmental issues prompting localization in terms of challenge and possibility rather than inevitability and despair. In short, by being attentive to the needs of the environment, and the needs and capabilities of people, responses that can change the world are possible.

## REFERENCES

Campbell, D. T. (1981). Introduction: Getting ready for the experimenting society. In L. Saxe and M. Fine (Eds.) Social Experiments: Methods for Design and Evaluation. (Pp. 41-62). Beverly Hills, CA: Sage.

- De Young, R. and S. Kaplan (1988). On averting the tragedy of the commons. Environmental Management, 12, 283-293.
- De Young, R. (1996). Some psychological aspects of reduced consumption behavior: The role of intrinsic satisfaction and competence motivation. Environment and Behavior, 28, 358-409.
- De Young, R. (2012). Motives for living lightly. In R. De Young and T. Princen T (Eds). The Localization Reader: Adapting to the Coming Downshift. (Pp. 223-231). Cambridge, MA: The MIT Press.
- Irvine, K. N. and S. Kaplan (2001). Coping with Change: The Small Experiment as a Strategic Approach to Environmental Sustainability. Environmental Management, 28, 713–725.
- Kaplan, R., S. Kaplan and R. L. Ryan (1998). With People in Mind: Design and Management of Everyday Nature. Washington, DC: Island Press.
- Monroe, M. (2003). Two avenues for encouraging conservation behaviors. Human Ecology Review, 10, 113-125.
- Scott, J. C. (1998). Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed. New Haven, CT: Yale University Press.
- Weick, K. (1984). Small wins: Redefining the scale of social problems. American Psychologist, 39, 40-49.