

# Human Behaviour and Planning

## Overcoming Social and Environmental Barriers to Implementation<sup>i</sup>

by Harmony Folz

I became a planner because of a hotdog toaster.

An ad for this household gadget appeared in an in-flight catalogue that I leafed through on a flight returning from a four-month backpacking trip through Central America. The very existence of such an appliance jolted into consciousness the thoughts that had been simmering on the back burner of my mind, thoughts that had germinated while I was traveling and tree-planting, and that had been planted by reading Gordon and Suzuki's *It's A Matter of Survival* (1990) in my tent while I was tree-planting. These were thoughts of concern for what was happening to the environment and thoughts about material belongings and the ramifications of both having too much and having too little stuff. The hotdog toaster helped me to realize that the environmental problems facing the world were a result of our non-necessary over-consumption of resources.

But hotdog toaster to planner was not a straightforward step. All I knew at first was that I wanted to work in the environmental field. My first thought was that it was too late for the developed world, so it made sense to help the developing world take the sustainable path. I quickly realized that the developing world was trying as hard as they could to become like us and was less than receptive to the idea that they should make do with less; after all, if sustainable technology was so good, why weren't we using it?

My next thought was "build it and they will come," or provide people in Canada with examples of how to live sustainably in hopes that they would go "Oh neat! Thank you for showing us how!" It was with this mindset that I entered planning school. It didn't take me long to figure out that there were already a number of sustainable solutions out there, and people hadn't come running. I started to ask why that was.

Education seemed like the next obvious answer – if we created a new ecologically wise generation, then eventually society would change. However, when I looked at the school system to figure out how, it became apparent that changing the education system

would mean changing teachers' mindsets, and even the most dedicated environmentalist teachers are reluctant to change anything too much because they are leery of how parents will react. And a little research showed that changing adults' mindsets through the provision of knowledge was a woefully ineffective strategy.

I then thought about structural change – working towards changing the political and economic structure of society. But it quickly became obvious that those who make it to the top of a system tend to like the system the way it is. Besides, radical change is nearly impossible to legislate because of reactance, which is the very human reaction to being told what to do: "No, I don't want to, and you can't make me. So there!"

And economic incentives could work, but only as long as they were in place, no longer. Making sweeping changes to the economic system would likely work but is well-nigh impossible without other changes.

What did that leave? Looking at all of these change strategies, it became apparent that they were all based on changing behaviour, and that changing behaviour had the potential to effect the most change. In my initial survey, I found that there were a variety of strategies for changing single behaviours<sup>ii</sup>, many of them proven effective. However, as a societal change strategy, that seemed inadequate – very much like trying to stop water coming through

(continued next page)



### Pop-Up Hot Dog Cooker.

Operating much like a pop-up toaster, this unique kitchen appliance lets you easily prepare two hot dogs (complete with heated buns) in minutes. To use, simply drop two hot dogs in the center basket, and the buns in the two warming chambers on either side. Its 660-watt electronic heating coil has time settings so that you can heat the wieners and both buns to your taste preference. Crumb basket removes for cleaning. Plugs into household outlet. 8 1/2" H x 10 1/2" W x 5 1/2" D. (6 lbs.) 50929D.....\$49.95

## Overcoming Barriers, (cont'd)

a colander with your fingers. It seemed more efficient to change behaviour in general than address each maladaptive behaviour with a separate strategy.

But how? Ironically, the answer seemed to be change a behaviour, any behaviour. This means that:

“Policy should be focused on activation and behaviour change, but instead of trying to install a specific and well-defined behaviour – which may produce reactance in some and which others may find is prohibitively inconvenient – the goal should be to produce some relevant behaviour change and to stimulate activity around serious environmental problems in general.”<sup>iii</sup>

There are at least four reasons for this. First, cognitive dissonance, which is what we feel when we are inconsistent in our thoughts or actions, means that if we find inconsistencies between what we do and what we think, change in one or the other is necessary. Second, the spillover effect shows that people who change one behaviour are more likely to change another in the same area, again to be consistent. Third, social norms, which are what we think society expects us to do, are a powerful force for change because by changing what we do, we influence how others perceive social norms – think about how the change in smoking and recycling behaviours happened. Finally, research in the diffusion of innovation shows that when a critical mass is reached an innovation tends to be adopted. Taken together, these four ideas show that by helping people to change

some behaviours they change how they view themselves, change other behaviours, make others think these behaviours are cool and start their society wide dissemination.

Again, the question came, but how? After a great deal of research, I found no silver bullets, but instead many guidelines for designing a general behaviour change strategy. These are:

- Strategies should be comprehensive, and address predisposing, reinforcing, and enabling factors.

...by helping people to change some behaviours they change how they view themselves, change other behaviours, make others think these behaviours are cool and start their society wide dissemination...

- Changing knowledge, beliefs, attitudes and values is important, but only because they are predisposing factors – changing them does not lead to behaviour change – to this end information strategies should be used, but with the understanding that they are in support of the strategy, not the whole strategy; they should aim to give understanding and motivation.
- Enabling strategies such as removing barriers and increasing availability/accessibility are necessary and often the most overlooked.
- Reinforcement is effective, whether it is feedback or tangible rewards or punishments. However, these only work

as long as they are in place and once they are taken away the behaviour stops. Intermittent reinforcement can make it last longer.

- Tangible reinforcements can extinguish natural behaviour. If someone is doing something already and then gets paid for it and then the payment gets taken away, he or she will stop doing it.
  - Mandating behaviours can lead to reactance, which makes people less likely to perform those behaviours. Setting tangible reinforcements too high can also breed reactance.
    - Habits and experience are strong factors against changing behaviour, but once behaviour is changed, can be strong factors in continuing with the behaviour.
    - Skills and feelings of competence and self-efficacy (a feeling of one's actions having an effect) should be developed as they affect how likely people are to try a new behaviour. People are motivated by feeling satisfaction; experiencing competence and frugality lead to feelings of satisfaction.
  - Behaviour change works best when it is voluntary and chosen by the individual.
  - Social factors can have a strong effect on behaviour, leading to a person behaving in a way he or she may not necessarily believe in – people like to act in accordance with what they believe others think they should or should not do.
  - Telling people that they are a certain way works much better than telling people they should be a certain way. Doing so shifts people's personal norms,
- (continued on page 14)*

i This paper is based on my Masters thesis at UBC's School of Community and Regional Planning; my advisors were Drs. C. James Frankish and Robert Vanwynsburghe at the Institute for Health Promotion Research (UBC) and Dr. William Rees at the School of Community and Regional Planning. My thesis work was supported in part by the Sustainable Development Research Institute's Georgia Basin Futures Project, and influenced by work done for that project with Drs. Frankish and Vanwynsburghe as well as Aviva Savelson, then a Masters student at the Institute of Resources and the Environment (UBC).

ii For probably the most comprehensive look at changing individual behaviours see McKenzie-Mohr and Smith' 1999 book *Fostering Sustainable Behavior: An Introduction to Community Based Social Marketing* or [www.cbsm.com](http://www.cbsm.com). Also, a behaviour change model widely used in health promotion is the Precede-Proceed model, as found in Green and Kreuter's *Health Promotion Planning: An Educational and Ecological Approach* or [www.lgreen.net](http://www.lgreen.net).

iii Thøgersen, John (1999). "Spillover processes in the development of a sustainable consumption pattern." *Journal of Economic Psychology* 20: 53–81, p. 55.


## Overcoming Barriers, (cont'd from page 6)

self-concept and social identity, all of which have a large influence on behaviour.

- Asking for, and getting, commitment is a strong predictor of the success of a behaviour change strategy.
- Decisions to change made as part of a small group are very effective because of the effects of social norms and making commitment.
- Doom and gloom messages only work when a solution is presented as well.

- Asking people to sacrifice does not really encourage behaviour change – instead, change should be framed as an improvement to one's lifestyle.
- People should be made to feel that they can make a difference, and once behaviour has changed, that they are making a difference.

While I truly believe implementing a general behaviour change strategy following these guidelines would have a significant effect on changing behaviour towards

sustainability and bringing about a sustainable world, I fully recognize that other concurrent changes are both necessary and desirable. Planners should be aware of the need for multiple and integrated strategies and do their utmost to enable strategies in different areas, forever pushing forward, skating on the edge between what is possible and what is feasible. 

*Harmony Folz made a presentation on her thesis research and findings at the 2005 PIBC Annual Conference.*