

## **[The Oil Drum: Campfire](#)**

### **Discussions about Energy and Our Future**

#### **Some thoughts on walking and our ability to cope**

Posted by [Gail the Actuary](#) on April 11, 2010 - 10:55am in [The Oil Drum: Campfire](#)

Topic: [Environment/Sustainability](#)

Tags: [raymond de young](#), [walking](#) [[list all tags](#)]

Raymond De Young (Associate Professor of Environmental Psychology and Planning at the School of Natural Resources and Environment, University of Michigan, Ann Arbor, Michigan) sent me a recent paper he wrote called [Coping With Environmental Transitions: Some Attentional Benefits of Walking in Natural Settings](#), published in *Ecopsychology*, Vol. 2, No. 1, March 2010. For tonight's Campfire post, I thought I would quote some sections from it. The full paper is available at the link above.

#### **Abstract**

Coping with the challenges of global climate disruption and the peaking of the rate of fossil fuel production will require behavioral change on a massive scale. There are many skills that will help individuals deal with this coming transition but none more central than the abilities to problem-solve creatively, plan and restrain behavior, and manage the emotions that result from the loss of an affluent lifestyle. These abilities require a mental state called vitality. Even in the best of circumstances, maintaining this state can be difficult and, to make matters worse, it seems that modern culture is conspiring to wear down this aspect of mental effectiveness. This article discusses mental vitality as being based upon the capacity to direct attention. Functioning effectively despite the distractions and challenges of an electrifying and changing world fatigues this capacity. Restoring one's ability to direct attention is explained as a likely precondition to effective problem-solving, planning, and self-regulating, thus making such restoration essential for high levels of individual performance in general and for thoughtful coping in particular.

Fortunately, restoring mental vitality requires nothing more than commonplace activities in everyday environments. In fact, since everyday nature is sufficient, there may be no special advantage to time spent in spectacular environments. For instance, the simple activity of walking in natural settings, particularly walking mindfully, may be all that is needed for restoration. The article concludes with a series of specific prescriptions for enhancing our ability to cope with the coming transition, which can be summarized as simply to spend time walking outdoors, regularly, surrounded by and mindful of everyday nature.

---

#### **Excerpt from Introduction**

This transition is crucial and overdue, but hard. The process requires that we think and act in clever, clearheaded, and new ways. Yet such thought and action can wear us out mentally. Burned out people cannot help heal the planet. Thus, we need to know specifically what mental capacity is wearing out, how it wears out, and the conditions under which it can be restored. This article explores these issues and:

1. Suggests that coping with the environmental challenges we face demands a number of distinct mental and behavioral abilities.
2. Suggests that these abilities each draw upon a mental resource defined as the capacity to direct attention.
3. Explains what directed attention is, how it differs from another form of attention, how it fatigues, and the environments that help to restore it.
4. Provides a prescription for maintaining this vital mental capacity. By following the prescription offered, we can restore and better manage our mental vitality. In a restored state we will have a greater ability both to pursue behaviors that heal nature and to learn to live well, within limits, on this one planet.

## Excerpt from "A Prescription to Aid Coping"

The general prescription presented here is to spend more time in natural settings regardless of what other activities we are pursuing during our day. However, theory and research allow us to be somewhat more specific. Because at this time most of us would benefit from doing more walking, we can use it as a prototype behavior. Soon we may need to walk not just for contemplation and restoration, but for basic locomotion. The prescription below is likely relevant for either circumstance.

Clearly this prescription contains many researchable issues with important theoretical and practical implications, but they are derived from a central question: what are the conditions under which walking effectively revitalizes the mind? More specifically, where, how, and with whom should we walk?

### What to do

The prescription is simply to walk in a natural setting. Nothing extreme, neither grand nor distant, is required. A walk during lunch down tree-lined streets, a restful interlude in a vest pocket park, or an evening stroll through neighborhood nature will suffice. Certainly the choice of what walking route to take does matter. In a study that validated aspects of attention restoration theory, a walking route through an arboretum that was tree-lined and separated from traffic significantly improved mental effectiveness when compared to a route in the same area and of the same length but more urban in character ( Berman, Jonides, & Kaplan, 2008).

Walking is a deceptively simple yet apparently effective means of promoting deep contemplation (Loehle, 1990). Regular walks, which are rare today, were used to great

effect by generations of thinkers. Darwin is known to have walked on a planned route while he worked on some of his more difficult problems. The familiarity of the route he walked likely minimized the attentional demands of navigation. The natural setting with its quiet fascination may have allowed him to feel quite far away from everyday concerns and distractions thus allowing for the deep reflection needed to gain his insights. As a result, his name is now given to walks that have a deeply engrossing effect on the mind.

## **Who to walk with**

Generally, solitary walking is preferable to an absentee partner on a cell phone, or to the hyper-vigilance necessary when walking with young children. However, having a walking partner may provide benefits.

Choosing between solitary and social walking becomes easier once it is understood that social interaction can be intense or gentle and can have an inward or outward focus. The first thing to note is that it is a rare walk that consumes no directed attention since basic navigation alone is demanding. The concern here is how to keep the attentional demand from growing beyond basic information processing. If the social interaction is riveting with a lively back-and-forth conversation, then it is likely that additional directed attention will be consumed through the process of ensuring a civil discourse (e.g., not interrupting, following streams of thought, keeping up your end of the conversation). A more gentle conversation, perhaps one that is accepting of extended periods of silence, will make less additional demand on directed attention. It may be that the latter situation is similar in attentional demand to a solitary walk where we carry on an internal dialog.

In contrast, if the social interaction is itself engaged in noticing nearby nature, then the conversation might help both individuals to dwell more deeply in the setting and thus gain additional restoration. Again, the more tranquil the conversation, the less additional directed attention will be needed to ensure civility.

## **How to walk**

Whether walking alone or with a partner, if we seek mental restoration, then we should direct our perception toward the surrounding natural features. Having an environmental engagement plan may help keep our thoughts from taking up the work we would be advised to leave behind. An environmental engagement plan is a strategy designed to influence how we engage in and interact with the physical environment (Leff, 1984; Leff & Gordon, 1979; Leff, Thousand, Nevin, & Quioco, 2002). They often draw on a variety of senses (e.g., listen for bird songs, sense weather changes, notice scents), involve making inferences (e.g., think how an edible landscape would alter the area), or employ whimsy (e.g., what three things would you change in the setting to ease the transition to sustainable living). Such a plan can encourage greater engagement with nearby nature, enhancing the restorative effect of the walk even in a setting with only modest natural features. The power of an engagement plan is based on the realization that the restorative potential of a setting results from the interaction of our mind with the physical attributes of that setting.

Meditation also has been suggested as an activity that may restore the capacity to direct

attention ( Kaplan, 2001; Tang et al., 2007 ). This makes the practice of walking meditation particularly useful for enhancing our coping (see Kabat-Zinn, 2005). However, it raises for us the question of where to look while walking, inward on the body or outward on the environment, and if on the environment, then whether to be vigilant or just gently mindful. Research exploring this issue is needed, but we can speculate that both approaches may work, albeit for different reasons. If we allow the quiet fascination of nature to fill our mind, then the capacity to direct attention can rest and thus be restored. It is likely that too vigilant a focus on the environment will be counter-productive as vigilance is another name for employing directed attention through visual scanning.

Gentle mindfulness might also enhance mental recovery but perhaps in an indirect and delayed fashion. One goal of mindfulness-based modalities is the facilitation of self-awareness. Socrates famously said that the unexamined life is not worth living. This partly may be due to the fact that an unexamined life may be mentally fatiguing. One can be burdened by distractions that are internal. Having to function despite internal anguish and confusion (e.g., muddled set of priorities, nagging sense of helplessness or foreboding, uncertainty about next steps to take) saps mental vitality. Mindfully examining one's life will consume some directed attention, but for a worthy goal. The self-awareness gained may help to reduce internal noise, reducing the frequency of future internal distractions and thus increasing the possibility of future mental effectiveness.

Finally, walking is unlikely to be restorative if we allow electronic gadgets to interrupt our restorative outing. Neither should we imagine that we can multitask our restorative walk with a phone call or tweet.

### **When to walk**

The capacity to direct attention is diminished continuously by everyday mental activity, which suggests the need for a restoration routine. Furthermore, because we are terrible judges of when we need restoration, we should take regular restorative breaks; since by the time we think we need a break, it is well past due.

Clearly, daily outdoor walking helps as does the ancient notion of following a weekly restorative ritual, particularly those that involve being away from our occupation. But if we accept that year-round mental effectiveness matters, then we also must pursue outdoor revitalization year-round. To the extent that we follow this prescription of getting a frequent dose of nature, we encounter difficulties in most parts of North America where signs of nearby nature diminish in winter. While two small studies suggest that people do find winter walks restorative and can find signs of nature even in the dead of the season (Metz, Boggs, King, & De Young, 2002; Pine, Thomas, & De Young, 2001), this is clearly a difficult task.

This brings up an important subject: what quality and dose of nature is needed to restore directed attention. More research is needed to answer this question but findings suggest that restoration may result from exposure to very limited amounts of nature. Kuo has suggested that isolated pockets of nature may suffice (Kuo, as cited in Clay, 2001 ) which might make possible the full restoration of directed attention in stark winter environments. Nonetheless, it would be important to seek out the many veiled

forms of winter nature and to appreciate its more ephemeral character, and for this the engagement plans mentioned earlier would help.

## Questions

What are your thoughts about walking? Have you found it helpful in your ability to cope? Do you have any specific recommendations?



This work is licensed under a [Creative Commons Attribution-Share Alike 3.0 United States License](http://creativecommons.org/licenses/by-sa/3.0/).