

Mystery: The desire to explore a place is greatly enhanced if there is some promise that one can find out more as one keeps going. The suggestion that there is more to see is very compelling. There are various ways that the landscape provides hints of what is coming: A curved path is often more enticing than a straight one. Vegetation that partially obscures what lies behind can invite the visitor to take a look. Blocked views (see photos on p. 12, top), however, certainly lack any sense of mystery. When one cannot see anything behind a jumble of vegetation, one is less likely to be intrigued. The various studies of people's preferences for different environments showed that mystery was a particularly effective factor in making a scene highly favored.



Mystery can be a curving path.

Summary

Even small amounts of coherence, legibility, complexity, or mystery can make a substantial difference in how comfortable people feel in a place. Yet many settings lack even minimal amounts of these qualities. The understanding-and-exploration framework and the powerful role of these four informational factors provide the basis for many of the suggestions that are offered in later portions of the book. Information is central to the way people can relate to the environment; it needs also to be central in the way environments are designed and managed.

The Psychological Costs of Managing Information

People have a love-hate relationship with information. We can't survive without it, but there are times we think we can't survive with it, either. Our lives are inundated with information. Some of it is vital. Some is trivial. Some is not important, but the messengers are doing everything in their power to make us think otherwise. Unfortunately, sorting through the information comes at a price. Worse yet, the price is largely invisible.

The informational toll is paid in attention and effort. Struggling to screen out a nearby conversation while focusing on a difficult task is a

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familiar challenge. Forcing oneself to listen to a friend's tale of woe is another. Sometimes the attentional challenge comes from trying to work despite the disturbing thoughts or worries running around in one's head. And some tasks are inherently difficult, requiring juggling of so many aspects or issues, that maintaining focus is a constant challenge. All these examples require that one concentrate, or focus one's attention. People's capacity for such directed attention is limited. Even if the work that needs to be done is enjoyable and important and one wants to do it, one can only spend so long at it without needing a break. In other words, the capacity to direct attention wears one down. This is a situation we refer to as *mental fatigue*.

Mental fatigue expresses itself in many ways. Having difficulty focusing on the needed work is a clear symptom and becomes problematic as one's attention shifts easily to all the other events and demands in one's immediate environment or in one's head. Other consequences of mental fatigue are expressed in one's actions. One is more likely to take risks, be impulsive and impatient. Irritability is another common symptom. In other words, when attention wears thin, there are many repercussions above and beyond the failures of performing needed tasks. People who are in this state have difficulty taking in information, are more likely to make errors, and are less likely to be decent and helpful to their fellows.

And who hasn't been mentally fatigued? It is not at all unusual for people to go home at the end of the day in something less than a pleasant mood, feeling tired and ornery. Being mentally fatigued, however, does not preclude doing something that is physically demanding. Though one feels tired, the tiredness is related to the need to focus attention. In fact, one is not too tired to do certain kinds of activities.

Doable Activities When Mentally Fatigued

The list of things that are easy to do when one is mentally fatigued is very long. It includes activities that are fun, exciting, fascinating, and transforming. In fact, some activities would be hard not to do because

they are so compelling. For many people a fire, whether on a camping trip or in the fireplace, provides a good example. Many people also find settings that are tranquil and serene to be particularly compelling and absorbing. Some passive involvements in natural settings include: noticing different colors in fall leaves, listening to the wind, watching the clouds go by, and delighting in the antics of a chipmunk.



In contrast to the requirements of directed attention, fascination involves attention that does not demand effort. Something that is fascinating is hard to resist noticing or participating in. One of the important benefits of fascinating situations is that they provide time to recover from mental fatigue. In other words, mental fatigue can be reduced by being in settings that offer fascination. Collecting firewood, walking in the woods, rock climbing, and white water canoeing are all sources of fascination.

That is the simple version of the story. The fuller story is about the various ways to recover from mental fatigue and the characteristics of settings that can facilitate that. While fascination is an important component of recovering from mental fatigue, all fascinations are not equally effective, nor is fascination all that is needed for restoration.

Characteristics of Restorative Settings

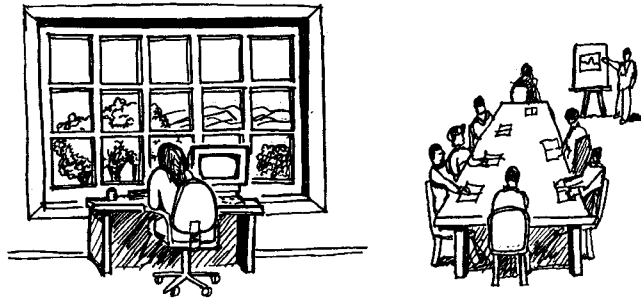
The concept of restorative experiences arose in the context of a research program in the wilderness (Kaplan and Kaplan 1989). Fortunately, however, it does not require an intensive nine-day wilderness experience to recover from mental fatigue. In fact, restoration can happen at many different levels and in vastly different amounts of time. Many activities and settings can provide opportunities to recover from mental fatigue. It is striking, however, how readily nature settings and activities that involve the natural environment lend themselves to restoration. Though experiences may differ in scale, they have some properties in common.

These properties are interesting in that they concern both the physical and the mental world at the same time. As conceptual thinkers, people are very good at imagining themselves going places and doing things. Those thoughts can help in the restorative process. Thus, in discussing the characteristics of restorative settings we will be dealing with the rich possibilities created by the combination of real places and places represented by the mind's eye.

Being away. Recovering from mental fatigue requires that one be some place other than the source of the fatigue. People often talk of having to get away, of needing a change. Such expressions indicate accumulated mental fatigue. While people usually think of a physical change in place, getting away can also be achieved more conceptually. Often the mind wanders off to distant places for a moment, while looking out a window, for example. At least for that moment, one can feel that one is far away.

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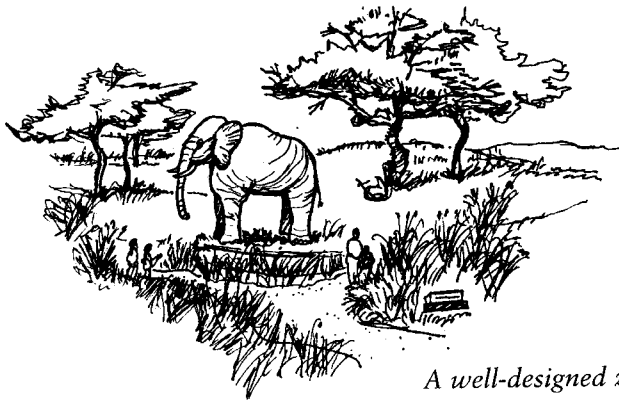
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Looking out a window can be restorative, while a meeting is unlikely to be.

Not just any “away” will do when one needs a change. Not infrequently places that are physically distant from one’s usual setting contribute to mental fatigue rather than restoring it. Attending a conference, even if its location is an attraction, provides an example of an away that is unlikely to help. ✓

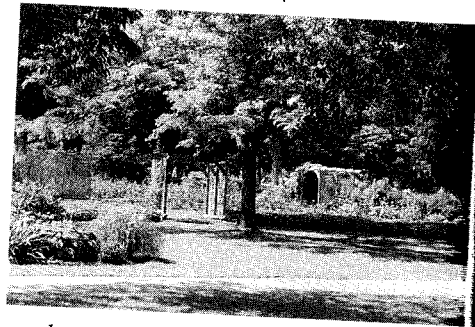
Extent. One reason that some settings are not restorative despite being away is that they are limited in scope or extent. Restorative settings are often described as being a whole different world. There are many ways to accomplish such a sense of being in a large enough place that its boundaries are not evident. A zoo that is designed as a total-immersion experience offers an example of a place that seems to have great extent (a “real” rain forest or savanna). Visitors in such a setting can feel as though they are somewhere that is very different, that has its own rules and properties.



A well-designed zoo exhibit has extent.

Extent can also be created in the mind, influenced by both knowledge and fantasy. Some find a whole world in a slide viewed under a microscope; others find their different world between the covers of a good book. The restorative process can draw upon the remarkable conceptual capacity to elaborate or even transcend what we perceive.

Nature can give a sense of extent, even if one is not in a wilderness. For many people a home garden has extent both in the physical sense and conceptually. Even in the depth of winter, in one's mind one can wander around the garden and consider changes to be made come spring.



Wilderness provides extent, and so does a garden.

Fascination. As we have already mentioned, the experience of fascination is central to giving fatigued attention a rest. A prison cell provides an example of a place that is "away" but hardly qualifies as having either extent or fascination. This example might seem strange, since no one would think of vacationing in a prison cell. "Being away," however, means precisely that. It does not mean "being away in a nice place." It refers merely to a respite from the everyday tasks that tire one and that one is tired of. When considered in these terms it is clear that being away is in itself insufficient to define a restorative experience.

Fascination derives not only from interesting things or places, but also from processes such as thinking, doing, and wondering. People are fascinated by figuring things out, by predicting, by recognizing. Such informational activities gain their fascination by the challenge of uncertainty or difficulty. Detective stories, stalking wildlife, and bird watching are all examples of such process-based fascination.

Nature is well endowed with objects of fascination in flora, fauna, water, and the endless play of light. People also tend to be fascinated

with natural processes such as growth, succession, predation, and even survival itself.

Compatibility. An environment may offer fascination and extent and still fall short as a setting for restorative experiences. The final property of restorative settings involves compatibility between one's inclinations and environmental circumstances. Such circumstances include both what the setting requires from the individual and what it offers in terms of information and opportunities. The compatibility concept is a bit more difficult to explain, but examples where such compatibility is missing may help to make the idea clearer. One might, for example, wish to relax and enjoy the sunset but feel called upon instead to watch for marauding mosquitoes. Or one might wish to walk in the woods but be expected to attend a family gathering. Alternatively, one might want to finish a project only to find that some crucial information is missing. In much of daily life the most striking information (the loudest, biggest, brightest, or most abundant) is not the information needed for action. These are all instances of incompatibility, and they add to mental fatigue.



Nature is a compatible setting for many human inclinations.

People often experience nature as particularly high in compatibility. There are many ways of relating to the natural environment that people seem to fall into rather readily. These include predation (hunting or fishing), domestication of the wild (gardening, caring for pets), and observation (bird watching, visiting zoos). Other activities that can be high in compatibility are closely related to survival, for example, fire building, constructing shelter, and even locomotion. People often choose natural areas with one or more of these purposes already in mind, so that compatibility is likely to be high.

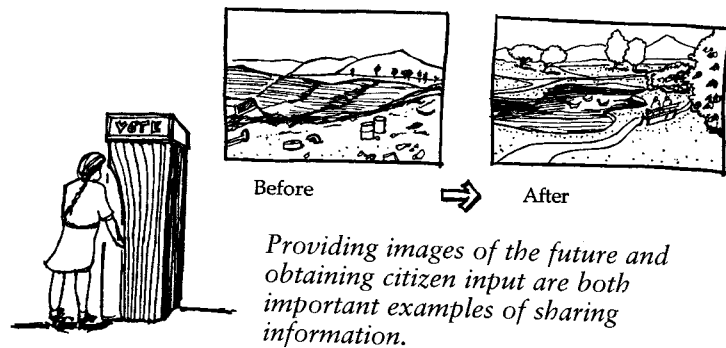
Summary

Mental fatigue is a fact of life in a world overflowing with information. Finding ways to recover is greatly helped by the availability of restorative settings and experiences. Fortunately, it is possible to design and manage natural environments in ways that encourage recovery from mental fatigue.

Sharing Information

Design and management efforts depend on the exchange of information. The information exchange includes finding out about people's concerns as well as providing information to make their outdoor experiences satisfying. People require way-finding information to avoid getting lost, guidance to facilitate their understanding of a setting or restrictions to its use, and material that helps them anticipate the consequences of projected changes. Information exchange constitutes a major budgetary item for many agencies, not only for the production and distribution of printed material, but also for staff positions (such as public information officer) that are dedicated to garnering public support. Recognizing the importance of information exchange, however, provides little assurance of its success. The purpose of this section is to explore why sharing information often fails to be satisfying and to offer some suggestions for making such efforts more effective.

Cognitive maps



Sharing information involves some interesting paradoxes. One of these is that despite their great desire for information, people often ignore information that is provided even if it is pertinent to their needs. What parent has not suffered the frustration of a child who is unwilling to hear sage advice? What adult has not turned a deaf ear to invaluable