Attention! That's a precious resource

Connecting with nature sustains our effectiveness and fosters reasonableness and clear-headedness

There was no need to implore our forebears to get outdoors and be in nature. Presumably these ancestors also rarely experienced any gap between what was interesting in their environment and what was important to attend. But the times are ever-changing. Today these two vectors—the important and the interesting—are often at odds as inordinate amounts of information, and the ease of accessing it, dominate our swirling world. We depend on the information, and often crave and cherish it. At the same time, however, much of it is irrelevant or even misleading. Sometimes it is terrifying and too often it renders us helpless. Its constancy and intensity comes at a substantial cost to us both personally and interpersonally. In subtle yet persistent ways, it affects our health, our effectiveness, and our capacity for reasonableness.

Herbert Simon, the Nobel Prize-winning economist, portrayed that cost in 1971 with his insight that “in an information-rich world, the wealth of information means a dearth of something else: a scarcity of whatever it is that information consumes. What information consumes is rather obvious: it consumes the attention of its recipients. Hence a scarcity of attention is a scarcity of something important and the interesting—are often at odds as inordinate amounts of information, and the ease of accessing it, dominate our swirling world. We depend on the information, and often crave and cherish it. At the same time, however, much of it is irrelevant or even misleading. Sometimes it is terrifying and too often it renders us helpless. Its constancy and intensity comes at a substantial cost to us both personally and interpersonally. In subtle yet persistent ways, it affects our health, our effectiveness, and our capacity for reasonableness.

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For most of us it is probably not obvious that what is being consumed by our wondrous, buzzing world is our attention. Nor are the consequences of that theft readily recognized. Heeding Simon’s advice to allocate our attentional resources “efficiently” requires that we are aware of them as assets and that we know when they are depleted. If we knew all that, could we be more selective in how we spend this limited and precious resource? Could we perhaps even defend against the depletion? Attention Restoration Theory (ART), a framework originally developed by my colleague, and husband, Stephen Kaplan, sheds light on these issues.

ART draws on the distinction made by William James, the 19th century philosopher and psychologist, between two kinds of attention in terms of the effort they require. The first, Directed Attention, entails information that obliges us to direct our focus or to “pay” attention. James contrasted that with what we might call Effortless Attention, information that is so compelling that it is difficult to ignore. Much of what has been important throughout the vast majority of human evolution—wild animals, danger, caves, blood—was intrinsically interesting, and thus required little reliance on Directed Attention.

The distinction between Directed and Effortless Attention turns out to have dramatic consequences for issues at the heart of World Environment Day—and especially for this year’s theme of “connecting people with nature.” Connecting with nature—and appreciating our dependence on it—provides a path to sustaining our effectiveness and fostering reasonableness. ART explains the role of attention in bringing these seemingly unrelated concepts together.

Directed Attention is essential for pursuing all that demands our attention. We use it to focus on the task at hand. It is also critical to ignoring or suppressing the ever-present distractions of our contemporary information-rich world. Our lives require us to juggle multiple demands, monitor what we do or say, check on diverse sources, and manage the wealth of information we are dealing with. This all requires ceaseless mental effort.

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ART posits that Directed Attention is a finite resource and that it fatigues. We commonly call the resulting decline “mental fatigue;” but it is not the mind or the brain that is fatigued. Even while experiencing mental fatigue we can, and do, pursue many activities—for instance, go for a walk or ride, hang out with friends, read a novel, watch television, or play games. Pursuing some of them, however, may be counterproductive in terms of restoring attention.

How then can we humans recover the attentional resources we so readily deplete? ART points to the second attentional system—the effortless kind—as critical for reducing mental fatigue by freeing us from directing our attention and thereby allowing it to replenish. Many environments, situations, and activities that call on Effortless Attention have an intrinsic fascination that makes us feel at ease in tune with our surroundings and leaves room for the mind to wander. They allow for reflection and enable clear-headedness. Stephen Kaplan referred to such places as having “soft fascination” and conjectured that this is particularly conducive to restorative attention. Incorporating opportunities for soft fascination in our lives can reduce the mental clutter that results from the constant information that draws on our Directed Attention.

Soft fascination can be found in many contexts. The press and many publications offer numerous stories documenting the wide array of benefits offered by one category of them: connecting with nature. Breathtaking, pristine places and long lasting encounters in faraway places may offer needed tranquility; but an abundance of research has demonstrated that “everyday nature” can also provide restorative benefits and permit recovery from attentional fatigue. Such restorative opportunities can be achieved even in mini-doses, as in a view of trees from the window. Nurturing a garden or taking a nature walk near home can also provide the needed connection.

ART thus provides a framework for understanding some of the benefits that engaging with nature can play in our lives. Mental fatigue is rampant; we all experience it frequently. Unbeknownst to us, however, we readily undermine our efforts to recover from what we call stress. Spending hours engaged with the virtual world or watching television may be entertaining, but may also add to our internal noise rather than permitting it to dissipate. It is easy to confuse restoration with the seduction and excitement that screen time provides. By contrast, nature allows the mind to wander. It allows space to process lingering thoughts. Such reflection contributes to clear-headedness. It may bring what is interesting and what is important into better balance.

Humans depend on information, but its constancy entails a severe cost to our finite attentional capacity. The consequences of such depletion—irritability, distractibility, impatience, and reduced effectiveness—manifest themselves in loss of civility and reasonableness. Even if we are not aware of it, connecting with nature offers many ideal ways to replenish fatigued attentional capacity and facilitate clear-headedness. Consequently it is in our self-interest not only to engage with nature, but to assure that opportunities for such engagement will continue to sustain the human community.
Connecting People to Nature

Justin Trudeau
Stepping up action

David Suzuki
Natural cure

Yolanda Kakabadse
The cornerstone of life

Karma Tshering
Small and beautiful

Moritz Kraemer
Nature of risk

Lü Zhi
Conserving the world’s roof