Non-Disruption and Non-Emissions as Cultural Resources

Ned Kaufman

"There is a danger," write some wise Australian conservationists, "that as time goes by the ship of practice will have sailed so far from the ship of knowledge that there will be almost no way back and they will each have gone beyond the range of communication" (Byrne, Brayshaw, and Ireland, 2001). We would then be left, they warn, with "a cultural heritage field insulated against new thinking… and insulated from change" (Byrne, Brayshaw, and Ireland, 2001, p. 44). This is already happening in the United States (US). A symptom of this problem is the failure to update our definition of cultural resources to keep pace with the social (and other) sciences. Half a century ago, psychiatrists documented the health costs of disrupting people's environment, yet we still haven't acknowledged human habitat stability as a cultural resource. A quarter of a century ago, climate scientists documented the environmental costs of emitting carbon dioxide, yet we still haven't recognized embodied carbon as a cultural resource. Environmental practice has lost touch with knowledge.

Human habitat stability and embodied carbon are tough values to grasp. People show their appreciation for stability by taking it for granted; it isn't valued until it's lost. Something similar is true of embodied carbon, in the sense that its value becomes evident only when we squander it and release new emissions, and even then, the consequences are so distant that many people still fail to see the connection between embodied carbon and their quality of life. Perhaps it's easiest to think of both virtues as absences of vice: of habitat stability as non-disruption and embodied carbon as non-emissions.

Regrettably, we have learned a great deal about the value of non-disruption and non-emissions. I say regrettably because we have learned the value of these concepts by destroying them and then examining what happens next. Facing the trauma of urban renewal in Boston, psychiatrist Marc Fried found displaced residents to be literally sick to their stomachs, many suffering from feelings of "grief and mourning" like those associated with the loss of a beloved person (Fried, 1963). Decades later, psychiatrist Mindy Thompson Fullilove found that feelings of disorientation and loss resulting from displacement stayed with some people throughout their lives (Fullilove, 2005, 1996). Apart from urban renewal, psychiatrists have amply documented how older individuals suffer when they are taken out of the environments they are familiar with. The problem for older people isn't just that their surroundings have changed, it's the loss of control, which is why elderly individuals who are forced to leave their homes generally do worse than those who leave of their own volition. This is hardly surprising: most of us resent being pushed around. But the point is important, because the kinds of development projects that trigger environmental reviews nearly always involve pushing residents around, either displacing them from their homes and neighborhoods or reordering their environment in unwanted ways. To assess the full impacts of disruption therefore means finding a way to account for coercion.

Displacement and the destruction of people's homes are growing problems worldwide. Israeli settlers have displaced Palestinians from the West Bank, the US forced the entire population of Diego Garcia into exile, and urban renewal displaced 1 million people in Beijing during a single decade. It adds up. Researchers estimate that around 15 million people are dislodged each year by "development induced displacement and resettlement" (notably, economic development displaces far more people than warfare) (Terminski, 2013).

Psychiatrists were among the first to demonstrate curiosity about what actually happens to displaced persons, but other social scientists have joined them, and new concepts related to this subject have emerged. Australian environmental philosopher Glenn Albrecht coined the term *solastalgia* to denote "the pain or sickness caused by the loss of, or inability

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to derive solace from, the present state of one's home environment" (Albrecht, 2006; Albrecht et al., 2007).[1] Canadian geographers J. Douglas Porteous and Sandra Smith coined the term *domicide*, which likens the intentional destruction of people's homes to murder (Porteous and Smith, 2001). The United Nations has framed displacement/domicide in human rights terms. Its guidelines on the subject say that people should not be "arbitrarily displaced" from home (United Nations, 2004). Displacement by development is explicitly forbidden, except when there are "compelling and overriding public interests" (United Nations, 2004). Governments have a "particular obligation" to protect those with a "special dependency on and attachment to their lands" (United Nations, 2004).

If we insist on ignoring the social scientists, we might at least pay attention to the human rights guardians… who will tell us to listen to the social scientists. How then to translate their findings into cultural resource management practices? The English psychiatrist Hugh Freeman outlined an answer over 30 years ago when he alerted environmental planners to the "urgent need to pay attention to the psychological conservation of the environment" (Freeman, 1984, p. 13). Recognizing habitat stability, or non-disruption, as a cultural resource would be a good start.

Though the learning curve for carbon emissions has been shorter than that for habitat disruption, it's also been steeper; as a result, we now understand the impacts of carbon emissions very well. Unfortunately, while everyone grasps that carbon emissions are an evil to be avoided, many well-meaning activists seem to have missed the corollary: that embodied carbon is an asset to be protected. Instead of conserving the carbon embodied in existing buildings, so that it does not have to be burned all over again, activists call for replacing old buildings with new "green" ones and old energy installations (i.e., power plants) with new "renewable" ones. Let us take the power plants first. The problem is that while burning fossil fuels is undeniably bad, building new "renewable" mega-projects isn't necessarily good – at least not without simultaneously capping energy demand. Although sun and wind energy may be renewable, the installations needed to harvest it are not, nor are they emission-free. The concrete alone for a 1-gigawatt wind farm releases about 1 million tons of carbon dioxide (Lovelock, 2009, p. 27). What's more, solar "farms" take up a great deal of space and wind "farms" much more still (15,000 times the area of a comparable coal or oil plant). Their proliferation now threatens landscape disruption on a massive scale. To simply divert the demand for energy from one source to another, without also trying to rein it in,

solves one problem while creating others; for though we may stave off climate collapse, we'll sacrifice deserts, forests, ridgelines, coastlines, and *real* farms in the process. And we'll still be enslaved to energy, sacrificing all other environmental values in order to generate more of it. Eventually people will starve, because the land needed to grow food has been occupied instead by reflectors, turbines, and biofuel crops; already, the competition for land has raised food prices.

If replacing old power plants with more energy-efficient ones is problematic, replacing old buildings in the same manner is downright misguided. It's based on the theory that new green buildings will bring down total emissions through more efficient heating and cooling. But this plan can't work. US building stock is immense; so, even at a very high rate of replacement, it would take decades before the energy saved by the new green buildings makes a significant dent in total emissions. Meanwhile, the construction of those building would actually *increase* emissions, because the upfront expenditure of energy on construction and demolition of buildings would be greater than the total energy that can be saved by decades of future efficiencies (Athena Sustainable Materials Institute, 2009; Empty Homes Agency, 2008; Hsu, 2010; National Trust for Historic Preservation, Preservation Green Lab, 2011). In other words, before the replacement of an existing building with a new green one can bend the emissions curve downward, it must force it sharply upwards. It's a suicidal policy. The solution to this dilemma is not to demolish and replace existing buildings but to reuse and upgrade them. For cultural resource managers, that means recognizing embodied carbon – the carbon baked and hauled and hammered into the shape of buildings – as a cultural resource, one to be carefully catalogued, tracked through each step of the environmental assessment process, and zealously conserved.

I like to think of embodied carbon as a cultural resource (even though it's also clearly natural) because it's built into the cultural environment, representing the fruit of previous cultural investments, and because putting it in a cultural frame highlights the parallels it has with habitat stability. Both demand a similar reorientation of cultural resource management, especially in regards to the ordinary environment. The usual approach to conservation, based on picking out the "best" bits and leaving the rest of the environment to take care of itself, won't work for either of these concepts. People form psychological attachments to their habitat without much regard to its beauty or historical significance. What's more, the stability and familiarity on which people

depend rest more on the environment's typical features and overall patterns than on the exceptional buildings that tend to catch the cultural resource manager's eye. This is why Freeman himself thought the "psychological conservation of the environment" required "retaining familiar landmarks *and forms of housing*" (emphasis added) (Freeman, 1984, p. 13). As for carbon, because special buildings are by definition rather rare, their fate cannot have a significant impact on the climate. That need not worry us, as long as we are willing to look beyond the usual markers of quality, because carbon is embodied in all kinds of buildings, ordinary as well as special. Meaningful carbon conservation means protecting as much of it as we can, wherever we can find it, and that means protecting the ordinary environment. It means something very much like the "psychological conservation of the environment" (Freeman, 1984, p. 13).

Where does this leave cultural resource management? Scientists (social and otherwise) have demonstrated that non-emissions and non-disruption (or embodied carbon and habitat stability) are fundamentally important for human life. In cultural resource management terms, we would say they are cultural resources, values as basic to the cultural environment as aesthetic quality, historical significance, or information potential. It's time we formally recognized them as such and built them into the environmental assessment process. That would help us manage some of the most pressing environmental problems of our time. It might also reestablish communication with the ship of knowledge before it sails over the horizon and out of sight.

Note

1 I am grateful to Tom King for introducing me to this useful concept.

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