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Vol. 29, No. 2, Summer/Fall 2018 (Includes "Items of Interest," and "Citations Received;" Book note on the recently published 2nd edition of "Place and Experience: A Philosophical Topography" by philosopher Jeff Malpas; book note on EAP editor David Seamon's recently published "Life Takes Place: Phenomenology, Lifeworlds and Place Making;" and essays by the late philosopher and science educator Henri Bortoft, and retired environmental educator John Cameron.)

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Environmental & Architectural Phenomenology

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This *EAP* completes 29 years of publication and includes “items of interest” and “citations received.” Two important books dealing with the phenomenology of place have recently been published, and we highlight their front covers, below, and feature additional information in “book notes.”

The first volume is a 2nd edition of philosopher **Jeff Malpas’** groundbreaking *Place and Experience: A Philosophical Topography*, originally published in 1999. This expanded version includes a new chapter on place and technological modernity, “especially the seeming loss of place in the contemporary world.”

The second book note describes *EAP* editor **David Seamon’s** *Life Takes Place: Phenomenology, Lifeworlds and Place Making*, which argues that, “even in our mobile, hypermodern world, human life is impossible without place.” Seamon gives particular attention to the generative as-

pects of place and locates six place processes that he identifies as place *interaction*, place *identity*, place *release*, place *realization*, place *intensification*, and place *creation*.

This issue of *EAP* includes two essays, the first by the late philosopher and science educator **Henri Bortoft**, who focuses on ways of thinking holistically, including the conceptual efforts of proto-phenomenologist **Johann Wolfgang von Goethe**; physicists **Niels Bohr** and **David Bohm**; and philosophers **J. G. Bennett**, **Edmund Husserl**, and **Ludwig Wittgenstein**.

The second entry is by retired environmental educator **John Cameron**, who begins a new series of essays on the lived relationship between interiority and exteriority, particularly as qualities of the natural world and place contribute to that relationship. *EAP* readers will remember Cameron’s earlier set of essays, “Letters from Far South,” that focused on his homesteading experience on Bruny Island, Tasmania.

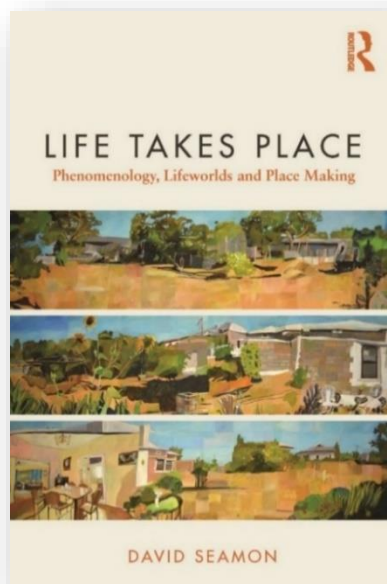
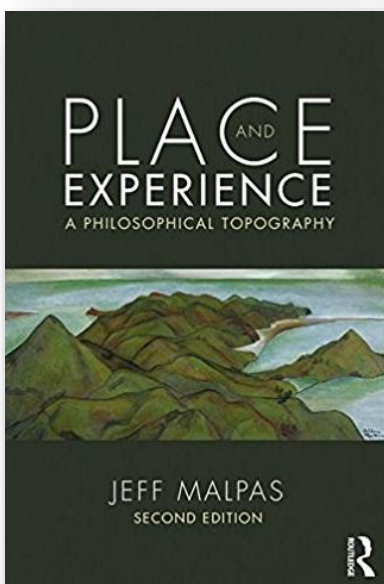
Items of interest

A summer seminar intensive, “Let the Phenomena Speak!” is sponsored by upstate New York’s **Nature Institute**, June 24–28, 2018. Participants will engage in careful observation and accurate description of natural phenomena via first-person, experiential encounter grounded in the phenomenological science of Goethe. <http://natureinstitute.org/>.

The **Portland Urban Architecture Research Lab** (PURAL) is sponsoring their annual conference on the work of architect **Christopher Alexander**, best known for his influential book, *Pattern Language*. To be held in Portland, Oregon, October 24–28, 2018, this year’s conference theme is “Migration, Refugees, and Patterns.” *EAP* editor **David Seamon** is a keynote speaker and will present “Ways of Understanding Wholeness: Christopher Alexander’s Work as Synergistic Relationality.”

The peer-reviewed *Ecopsychology* focuses on the links between human health, culture, and the health of the planet. The journal “seeks to reshape modern psychology by showing that it cannot stand apart from an intimate human connection with the natural environment. We need that connection with nature to do well mentally and physically, let alone to flourish, as individuals and as a species.”

The journal will publish a special issue on “Children and Nature,” co-edited by **Judy Braus**, executive director of the North American Association of Environmental Education; and **Sarah Milligan Toffler**, executive director of the Children and Nature Network. The editors are interested in both empirical and theoretical papers as well as evocative essays. <http://www.liebertpub.com/overview/ecopsychology/300/>.



Citations received

Ian Angus, 2018. Crisis, Biology, Ecology: A New Starting Point for Phenomenology? *Journal of the British Society for Phenomenology*, vol. 49, pp. 1-13.

This philosopher explains that, particularly in his 1935 *The Crisis of the European Sciences and Transcendental Phenomenology*, Edmund Husserl focused “on a critique of the formal-mathematical paradigm of the physical science of nature” and suggested “the possibility of biology as the exemplary science” rather than physics. Angus argues that the science of ecology might be a more comprehensive starting point for Husserl’s “radical inquiry into the grounding of the idea of science.” For Angus’s justification of this claim, see the sidebar, below.

Biology, ecology, and lifeworlds

[I]f biology is concerned with the specificity of... life-forms and their worlds, then it does not seem to adequately capture the *interaction between* these life-forms and worlds that constitutes the “life” of the lifeworld. Scientific ecology began with precisely this distinction between biology as a morphological science of characteristics of species considered independently and ecology as a science of the interaction between species and non-living forms....

The set of relationships within a pragmatically delimited place constitutes a whole through achieving a certain *balance* between its interacting parts. It is this concept of balance which most clearly adds to the biological concept of life to which Husserl reverted in seeking a concept of scientific striving not bound to the exemplary role of mathematical physics....

Speaking teleologically, we may say that the concept of an ecosystem is a way of conceptualizing the Whole that is the universe of all that is through relationships of dependence and maintenance by the community of all beings. Humans, as one species of these be-

ings, depend upon this Whole. A particular grouping of humans, humans within a larger community of beings in a given place circumscribed by an elastic boundary, develop the specifics of their culture in relation to the specifics of the local ecology....

Indeed, insofar as humans are dependent on the ecology of their life, and, as Husserl asserted, humans understand other life-forms by analogical transfer from their own sense of life, human understanding of the sustaining balance of other life-forms seems to be essential to the meaning of humans themselves and to thereby confer a sense of intrinsic worth on that ecology.

Ecology as a limited but encompassing science stands at the threshold of a reconsideration of, not only embodied subjectivity, but also worth and ethics insofar as humans are dependent on it. It would thus appear to have a greater claim than biology to being a science of continuity with lifeworld experience. It would therefore not only be crisis-free but would motivate conceptual abstractions that aim at scientific understanding of living relationships (I. Angus, p. 9, p. 11).

Elizabeth A. Behnke, 2018. Phenomenological Reflections on the Structure of Transformation: The Example of Sustainable Agriculture. *Filosofija Sociologia*, vol. 29, no. 1, pp. 21-31.

This phenomenologist writes that the purpose of this paper is twofold: “First, I want to suggest that the very practice of phenomenology itself includes transformative elements, prefiguring a possible kinship between phenomenologists and environmental advocates or other proponents of cultural change. But I also want to take some preliminary steps toward a phenomenological analysis of a topic in which issues of both the ‘natural’ and the ‘cultural’ environment are woven into a single (and sometimes fragile) fabric: namely, the food we eat. This in turn will entail some investigation into certain parallels between the

constitution of the ‘physicalistic thing’ in the objective natural-scientific attitude and the constitution of the ‘commodity’ in the commercial corporate attitude.... In this way, I hope to present phenomenology as a living tradition with much to contribute to our current crises and challenges—and to the cultural transformations they call for” (p. 21). See the sidebar, below.

Mundane and transcendental phenomenologies

[One can identify] two main approaches through which phenomenology can recognize and honor values beyond those of the commercial corporate attitude: namely, mundane phenomenology (lifeworldly phenomenology, phenomenological psychology) and transcendental phenomenology.

The former is typically reached by placing scientific knowledge in brackets and returning to the world of pre-scientific experience, a move for which Husserl often uses the term *Rückgang* (going back); the latter, for which Husserl often uses the term *Rückfrage* (asking back), takes the phenomena—and their horizons—as clues (*Leitfaden*) from which to inquire back into the correlative attitudes, assumptions, interest, achievements, and essential styles of constituting (inter)subjective life. Following the latter path would accordingly require, for instance, more detailed analyses of the ways in which the world is constituted for such dominant knowledge systems as the corporate mentality through such categories as consumers, commodities, and profits....

On the other hand, we must also continue to (re)establish the legitimacy of situated lifeworldly experience and its values; here the accent lies on further description of patterns of lived meanings, just as they are experienced in the natural attitude, within the subject-relative contexts we study. Such work is particularly crucial to save endangered local knowledge systems, and thereby to foster a biodemocracy in which both biodiversity and the diverse communities that ultimately sustain it can be restored to health and wholeness.

These, then are at least two of the main ways in which phenomenology offers us the possibility of a new scientificity that can provide the intersubjective verifiability we require while preserving not only the subject-relatedness that makes our earth a surrounding world or “environment” (*Umwelt*) in the first place, but also the situated world-relatedness that makes us human.

It is true that phenomenological investigation might not, in and of itself, feed a starving person, or renew depleted soil, or restore the pollinators killed by pesticide, or heal the air and the water of a wounded planet, or halt the globalization of the corporate mentality. Like a seed, however, the retrieval and rehabilitation of the experiential dimension is capable of unfurling into something beyond itself, implying a world in which it can truly flourish.

Thus for me, the task of phenomenology in a time of political crisis, cultural change, and environmental challenges is not only to clarify our predicaments, but also to contribute—in whatever way possible—to transforming our traditions in ever more fruitful ways (E. Behnke, p. 29).

Jelena Bogdanović, ed., 2018. *Perceptions of the Body and Sacred Space in Late Antiquity and Byzantium*. London: Routledge.

The nine chapters of this edited collection consider “the Christian understanding of the body and sacred space in the medieval Mediterranean.” The chapters are organized in three parts: “the immaterial and placeless sacred”; “the sacred made palpable”; and “the sacred delivered.” The editor’s aim is “a better understanding of the corporeality of sacred art and architecture.” See the sidebar, above right, which is a section from the editor’s introduction discussing contributors’ contrasting conceptual perspectives.

The sacred and corporeality

[In current research on the sacred and its corporeality, there is a scholarly split] in the very definition of the sacred and how the sacred related to the forces (agents) that mediate the sacred and the capacity (agency) of the sacred to act in a given locale....

[F]or some researchers, the sacred is a constructed sociopolitical discourse amongst humans as agents, recurrently studied as cohesive, idealized groups as mediatory forces that allow us to address the agency of the sacred through the contextualized materials world. Other scholars align with teleological views, looking at the final causes, design, and purpose in the abstract, wherein the material world is acting as an agent and is mediating the ideal, divine agency.

In each case, human agency and the locale of the sacred remain present in these scholarly debates. Human agency is examined either through the human body most literally understood or through various material objects that reflect the embodiment of human encounters with the holy, while the locale of the sacred is habitually examined through various material forms of framing the sacred space (J. Bogdanović, p. 2).

Christine Varga-Harris, 2015. *Stories of House and Home: Soviet Apartment Life during the Khrushchev Years*. Ithaca, NY: Cornell Univ. Press.

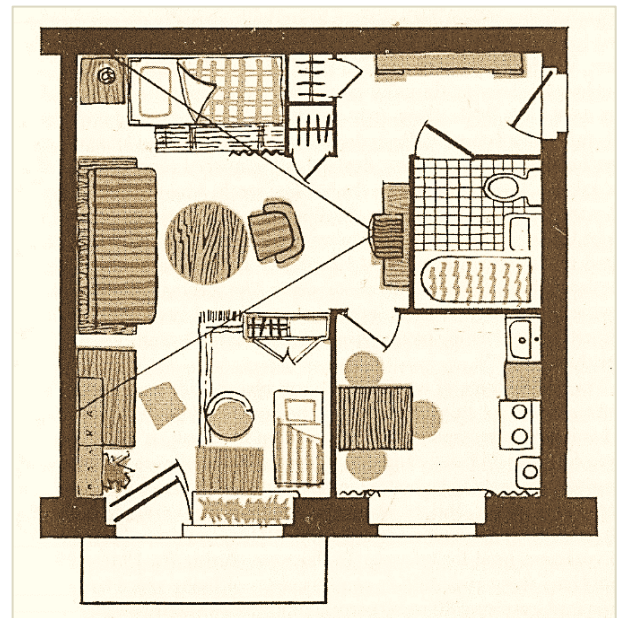
This historian offers a “social and cultural history of the massive construction campaign that Khrushchev instituted in 1957 to resolve the housing crisis in the Soviet Union and to provide each family its own apartment. Drawing on archival materials, as well as memoirs, fiction, and the Soviet press, Varga-Harris shows how the

many aspects of this enormous state initiative—from neighborhood planning to interior design—sought to alleviate crowded, undignified living conditions and sculpt residents into ideal Soviet citizens.”

Khrushchev aimed for a separate-apartment arrangement that marked a major shift in living space from communal to one family-dwelling, such as the unit illustrated in the plan below, which was designed for a nuclear family of three (upper right, bath; lower right, kitchen; left, the main “common room,” marked out into “zones” for leisure, study, and sleep).

Stephanie Meeks with Kevin C. Murphy, 2016. *The Past and Future City: How Historic Preservation is Reviving America’s Communities*. Washington, DC: Island Press.

This book argues that “the preservation of historic buildings and places is essential in the present and future world of urban planning,” with a focus on the United States. One central question asked by Meeks is “what makes a building loved?” The author argues that “historic preservation is not only important for the emotional sake of humans, but that it can and should play a significant role to ensure a more sustainable and environmentally friendly future for our planet.”



Derek J. Paulsen, 2013. *Crime and Planning: Building Socially Sustainable Communities*. NY: Planners Press/CRC Press/Taylor & Francis.

This criminologist argues that “the form and layout of a built environment has a significant influence on crime by creating opportunities for it and, in turn, shaping community crime patterns.” Topics discussed include “connectivity, mixed-use developments, land use and zoning, transit-oriented design, and pedestrian trails, greenways, and parks.” Includes a discussion of what Paulsen identifies as the two main design approaches to prevent crime: what he calls “connectivity” (including space syntax) vs. “enclosure” (including Oscar Newman’s defensible space).

Martino Stierli, 2013. *Las Vegas in the Rearview Mirror: The City in Theory, Photography, and Film*. Malibu, CA: Getty Research Institute.

This Swiss art historian uses Las Vegas as a case study to examine American megacities and urban sprawl. Drawing particularly on Venturi, Scott Brown and Izenour’s 1972 *Learning from Las Vegas*, Stierli considers “the way architectural theories of modernism and postmodernism were questioned in a context of radical and rapid social change.... [He envisions] a methodology for understanding the... impact of signs in the urban context of megacities.” Includes discussion of Gordon Cullen, Kevin Lynch, Donald Appleyard, Phil Thiel, and Peter Blake.

Julian Thomas, 2006. *Phenomenology and Material Culture, in Handbook of Material Culture*, Christopher Tilley, Webb Keane, Susanne Küchler, Michael Rowlands, and Patricia Spyer, eds. London: Sage, pp. 43-59.

This anthropologist argues that “the ideas of the phenomenological tradition have been highly influential in the study of material culture, although their source has not

always been explicitly acknowledged.” Thomas reviews the phenomenological perspectives of Husserl, Heidegger, Merleau-Ponty, and Levinas; he then discusses work in the human and social sciences that have drawn on phenomenological themes to better understand aspects of material culture, particularly buildings, places, and landscapes.

He uses an essay by anthropologist Tim Ingold on basket weaving to illustrate the process of human making: “weaving is... a paradigm of what human beings do when they create artefacts, a skillful crafting that knits things together” (p. 54). The sidebar, below and right, is reproduced from Thomas’s conclusion.

An interrogation of the everyday

Phenomenology developed out of an imperative to secure Western science by ascertaining the precise relationship between consciousness and the material world....

Since the scientific revolution of the 17th century, Western thought had relied on the notion that science had privileged access to the fundamental nature of the universe. Husserl had implicitly claimed that phenomenology was concerned with an order of reality that was more primordial than that addressed by the natural sciences. Heidegger and Merleau-Ponty, by arguing that our most basic understandings can only be generated in the context of a social and phenomenal world, transformed phenomenology from a search for abstract essences to an interrogation of the everyday.

This shift from the transcendental to the immanent can be understood as part of a more general 20th-century trend, which acknowledges the importance of ordinary life. In turn, we could identify the emergence of material culture studies with this growing interest in the quotidian.

What distinguishes phenomenology, however, is a desire to see the everyday as an appropriate location for attending to the deepest of existential questions. A mediation on a discarded shoe [Heidegger] can lead into a questioning of the nature of art, and so on. This is because the tradition refuses to separate philosophical knowledge from

the world of things, while viewing thinking as an embodied practice, and sees no observation, however, mundane, as immune from an unending critique. Phenomenology consequentially has an invaluable contribution to make to the investigation of material culture, but it must do this without relinquishing its critical spirit.

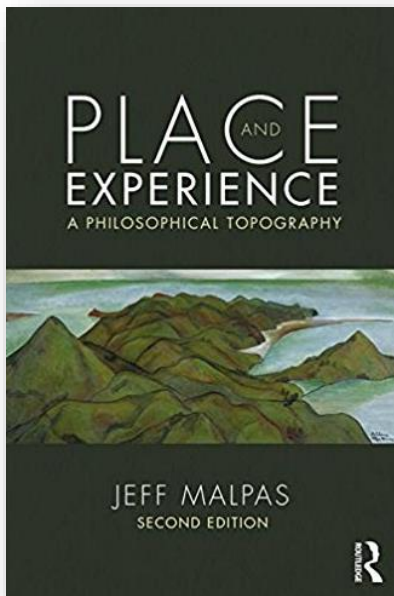
More precisely, it is clear that the full potential of phenomenological approaches to material culture is far from having been realized. While experiential analyses of architecture and landscape in present and past contexts have been undertaken, these have often concentrated on the visual and (to a lesser extent) the tactile aspects of human engagements with space and place....

By comparison, portable artefacts have been less intensively studied from a phenomenological standpoint than places and structures. Ingold’s account of basket weaving opens the way for new approaches to a variety of forms of “making”.... Moving beyond the conventional focus on production and consumption [in archeology], an investigation of the haptic qualities of objects might prove productive, particularly in the context of the mass-produced material culture of the contemporary West, where the impact of phenomenological thought has been slim.

Finally, a keystone of the phenomenological approach is the understanding that the “subjective” aspects of experience are not superficial elements constructed on the bedrock of an invariant materiality, but are the means through which the material world reveals itself to us. It might therefore be instructive to consider the question of the variable ways in which the (presumably culturally constructed) moods, attunements and emotional states of people in a variety of contexts disclose their material surroundings and conditions to them (J. Thomas, pp. 56-57).

Book Note

Jeff Malpas, 2018. *Place and Experience, A Philosophical Topography*, 2nd edition. London: Routledge [1st edition published in 1999 by Cambridge University Press].



When the first edition of philosopher **Jeff Malpas'** *Place and Experience* was published in 1999, it marked a major advance in place thinking begun with philosopher Edward Casey's *Getting back into Place*, published in 1993. Both thinkers argued that place and lived emplacement are an integral part of who and what we are as human beings. As Casey writes in his thoughtful forward to the new edition of Malpas's book:

It is notable that Malpas is not so much interested in "place as experienced" as in "place as a structure within which experience (as well as action, thought, and judgment) is possible" [Malpas 2018, p. 179]. This structure is not a formal a priori of experience but rather what we call a material condition of that experience in its many forms. As such, it is requisite for that experience: "such placedness is a necessary condition of our very capacity to experience" [Malpas, 2018, p. 194]....

...For places are places for experiences of every actual or imaginable sort. Conversely, experiences are nothing if not emplaced: without a place in which to be present and to be situated, an experience would evaporate into thin air—thus would not be the experience of an experienter, a sensing or thinking or feeling subject, and thus no experience at all.

With the phrase "place and experience," we are not talking of a tautology here but of a profound identity, or better, of what Plato called an "indefinite dyad," in which each term is essential to the other even if the terms of the relationship may not be objectively discernable (p. xi, xii).

One of the most important questions Malpas probes in this new edition of *Place and Experience* is how, in our hypermodern, globalized world, do we find ways to relocate ourselves in a lived emplacement that we can never as human beings escape or set aside? He writes: "Place must persist even in the face of the apparent loss of place."

Though its argument is difficult and requires much concentration to master, this book—like Casey's *Getting back into Place*—radically reconfigures our conceptual and lived understanding of how we experience, know, and act in the world. The following sidebars include three passages from the book and some of Malpas's depictions of place-as-concept.

Descriptions of place-as-concept

"Place is understood as an open region within which a variety of elements are brought to light through their mutual inter-relation and juxtaposition within that region...." (p. 15).

"a bounded openness or opening...." (p. 26)

"The crucial point about the connection between place and experience is not, however, that place is properly

something only encountered 'in' experience, but rather that place is integral to the very structure and possibility of experience" (p. 31).

"fundamental to the idea of place is the idea of an open and yet bounded realm within which the things of the world can appear and events can 'take place'" (p. 33).

"Place is that bounded open region of possibility in which even space and time, as well as subjectivity and objectivity, first emerge. As such a region, it is fundamentally relational, and that relationality permeates everything that pertains to place, everything that belongs with it, everything that appears in its embrace.

"It might even be said that it is the relationality of place that underpins the idea of the essential human connection to place, since that connection is itself a specific mode of the broader relationality that characterizes place as such, and so also characterizes what is in place" (p. 40).

Only within the framework of place

The idea of place encompasses both the idea of the social activities and the institutions that are expressed in and through the structure of a particular place... and the idea of the physical objects and events in the world... that constrain and are sometimes constrained by those social activities and institutions.

There is no doubt that the ordering of a particular place... is not independent of social ordering... however, this does not legitimate the claim that place, space, or time are merely social constructions. Indeed, the social does not exist prior to place, nor is it given expression except in and through place—in and through spatialized, temporalized ordering—

and so the social cannot be that out of which, or solely by means of which, place is “constructed.” It is within the structure of place that the very possibility of the social arises.

In grasping the structure of place at issue here what is grasped is an open and interconnected region within which other persons, things, spaces, and abstract locations, and even one’s self can appear, be recognized, identified, and interacted with.

But in ‘grasping’ such a region, it is not a matter of the subject grasping something of which the acting, experiencing creature is independent. A region or place does not simply stand ready for the gaze of some observing subject. Instead, it encompasses the experiencing creature itself, and so the structure of subjectivity is given in and through the structure of place.

Something similar might be said of the idea of objectivity, at least in the sense that objectivity is understood, not merely as consisting in the existence of some physical entity or system, but as precisely *that which can be present to a subject*. In this respect, the idea of the object is something established only within a place, and thereby in relation to a subject—although, in saying this, it must be remembered that *both* subject and object are thereby “placed” within the same structure, rather than one or the other being the underlying ground for that structure.

Of course, the existence of some particular place... will be *causally* dependent on a set of physical processes and structures, but this does not mean that place can be simply reduced to such processes or structures. The language of place, of self and other, of subject and object, describes the world in a way that is tied to the possibility of agency and attitude, not in terms of physical process alone.

Indeed, while the existence of a place may be causally dependent on certain physical processes, the capacity to describe, experience, and understand those processes is, in turn, possible only within the framework of place (J. Malpas, pp. 34–35).

Within the embrace of place

Given that the fundamental structure of place and the relation to it cannot be treated as anything other than a *necessary* structure, the basic structure of place and the relation to place must indeed remain much the same now as it has been in the past. That this is so is reinforced by consideration of the fact that the apparent loss of place, to which [geographer Edward] Relph and others draw attention, is something that itself occurs topologically, which is to say that it occurs *in and through the experience of places*. That it should be so is, of course, just what one would expect given the necessity just alluded to.

If we distinguish between, on the one hand, *place as a general and encompassing structure*—the complex bounded and interwoven structure of spatiality and temporality—and, on the other hand, place as it refers to *individual places*, each of which has its own character..., then it is easy to see how place must persist, even in the face of the apparent loss of place.

Places can be objects of experience—as I experience this place or that place—but place is also that within and out of which experience arises. Any experience of the world, along with the appearing of things within the world, will thus always be from within the embrace of place.

What is described as the loss of place is therefore more properly described as an experience of place in which place is seemingly effaced in its very presentation. I find myself *here*, and yet, in being here, I find nothing that marks off this place as distinctive—that marks it off as just the place that it is.

Consider this example, which will be familiar to many: except for differences in the clothing and ethnicity of the shoppers, being in a shopping mall in Beijing may be almost indistinguishable from being in a shopping mall in Sydney, from being in a shopping mall in Dubai, from being in a shopping mall in Houston—the same shops, the same products, the same architecture. Here is the experience of

being in a place that nevertheless also appears in such a way that it obscures its very character as a place, and, so, one can say that the experience is almost like being nowhere at all.... (J. Malpas, pp. 202–03).

Losing and regaining place

The way in which the sense of the loss of self may be tied to a sense of the loss of place, and the regaining of self to a regaining of place, was a central theme in the last chapter [chapter 8]. Consideration of the topographic and spatial effects of modern technology on action and the self merely reinforces that basic point. Taking up new technologies is not like donning a new set of clothes—as if the technology were something completely external that could be put on or off at will, without making any real difference to the body (or the self) beneath.

Technologies change us through changing the material forms in which our lives are embodied and expressed—through changing the ways in which space, time, and place are experienced and appear. This point has significant implications, not just for the consideration of modernity or the technologies that reign within it, but also for all manner of human life and activity.

When we act, we act in ways that are both shaped *by* and also, to some extent, shaping *of* the specific character of the places, times, and spaces in which we are embodied and located...

The ways in which we shape places thus have a direct effect on the shapes of our very lives and the lives of those around us. This has special significance for... practices such as architecture, landscape design, urban and regional planning, interior design, and even furniture and fashion design.

In as much as those practices deal directly with the place, time, and space of things, which are the very materiality of things, they shape the things themselves, and so shape the possibilities that are made available for human life. To design and build a house, to construct a garden or plan a town, to craft a chair or sew a gown,

is also to touch on the shape of action, the form of experience, the contour of thought.

Yet even when the spatial and topographic are not directly or explicitly thematised in some practice, place is no less relevant or influential. Any and every action, any and every intervention in the world, is always placed and thereby affected by place as well as affecting place. So, too, place is always affecting of human being, even if only the being of the one who acts. Place is the very medium of our lives; that which supports us, that within which we encounter one another, and that which gives us space in which to move and time for such movement.

The fundamental role played by place is indeed unchanged by technology (because, as already noted, technology depends on place and our relation to place in order to function, even as it also obscures place). Yet, although limited in this way, the changes wrought by modern technology in respect of place, and so of space and time, remain quite radical and far-reaching. One of those changes is... the way different places are entangled together in the same places. Another is the frequently noted phenomenon of time-space compression, originally advanced by geographer David Harvey and taken up by others since....

Given the way in which the rise of modern science, as well as modern technology, has been closely tied to the rise of the idea of space as pure extension..., one can view modernity, in general, as determined by that very same mode of spatiality. The supposed 'placelessness' of the modern world can thus be seen as a reflection of the dominance of an almost purely spatialised view... that is based not in any *subjective* mode of spatiality but, rather, in the levelled-out spatiality that belongs with *objectivity*.

To the extent that place itself is allowed to appear in that view, it is as a

mere *location* within such an objective spatiality. Thus, within the structures of contemporary capitalism, within modern financial and managerial frameworks, within the digital media and communications networks of today, appear no genuine 'places', but only the representation of unbounded spaces containing nodes, lines, and flows... [T]his mode of spatiality is dominant in the writing and thinking even among those who attempt to theorize and critique the structures of modernity.

Not only are there those who valorise this mode of spatiality, but, even where it is the object of critique, the assumption that this mode of spatiality is inevitable and ubiquitous in contemporary life means that there is no real basis on which any genuine critique can be based. If the modern world is indeed a "space of flows" (to use Manuel Castells' phrase), then that is just what it is, and we must accommodate ourselves to it. If it results in a change to the character of human experience, then that is simply the way things are, and, once again, we can only accommodate ourselves to that change.

The possibility of real critique depends, in fact, on recognising the way in which the mode of spatiality, through which modern technological capitalism articulates and presents itself, is indeed inconsistent with the properly placed character not only of human being but of all experience and all appearing—even, if we attend closely enough, the appearing of modern technological capitalism. Critique, in this instance, depends on revealing the way the modern spatialisation of the world hides the topographical character of the world, as well as the topography in which that spatialisation is itself embedded.

What the consideration of technological modernity demonstrates, in spite of its own contrary self-representation (since the rhetoric of moder-

nity is so often about precisely the *escape* from place), is indeed the necessity of place for all appearance, and so also the way the world itself opens up only in and through place.

And it is not just one unique place that is at issue here—"The centre starts from everywhere," writes [poet] Kenneth White, and so, too, does the world have its beginning in any and every place, even though the exact way this occurs may be different in different places. Just as the horizon of the visual field is not that which prevents vision but precisely that which enables it—the abolition of the horizon being the erasure of vision rather than its freeing-up—so place and being-placed is that which enables the opening up of the entirety of the world. Thus, the essential *boundedness* of place allows the entry into the *unboundedness* of the world.

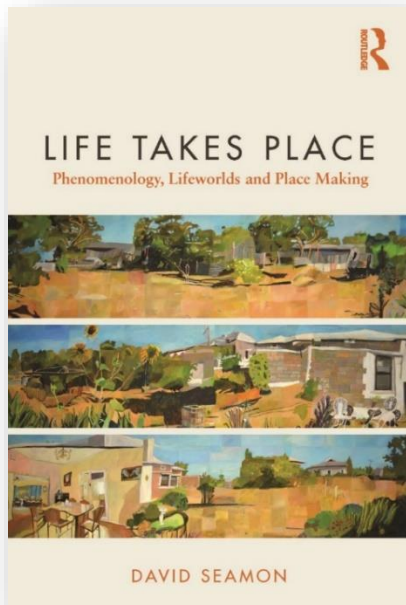
In this way, too, place appears as the first and most primordial form of liminality, the latter term deriving from the Latin for threshold, *limen*, and connecting with the Latin *limitem* or *limes*, meaning limit or bound; and place appears as essentially adventual, as in 'arrival', 'event', 'happening', or, more literally, a 'coming to'. To be in place is therefore to be *at the threshold of the world* and to be taken up *in the happening of world*.

The relation between place and world, between limit and openness, limit and opening, is frequently overlooked or misconstrued—whether because of the obscuring effects of technology or as a result of our own tendency to introverted obsession with ourselves. Yet even though places may seem to change, place as such remains, and so too does the essential relation of place and the human.

The world begins in place, but so too do we (J. Malpas, pp. 206–09).

Book Note

David Seamon, 2018. *Life Takes Place: Phenomenology, Lifeworlds and Place Making*. London: Routledge.



In *Life Takes Place* environment-behavior researcher and EAP editor David Seamon argues that, even in our mobile, hypermodern world, human life is impossible without place. Seamon draws on examples of specific places and place experiences to understand place and lived emplacement more broadly. Advocating for a holistic way of understanding that he calls *synergistic relationality*, he defines places as spatial fields that gather, activate, sustain, identify, and interconnect things, human beings, experiences, meanings, and events.

As a hook to focus his argument, Seamon draws on the colloquial expression, “Life takes place,” and what it might mean experientially, existentially, and phenomenologically. Why does life “take” place? Does “take” mean “requires” as in the phrases “learning takes effort” or “healing takes time”? What could it mean that life requires place? In today’s hypermodern times, does the phrase even make sense as human life so often involves autonomous individuals making their way in worlds independent

of any environments or places in which those individuals find themselves?

Recognizing that places change over time, Seamon examines their processual dimension by identifying six generative processes that he labels place *interaction*, place *identity*, place *release*, place *realization*, place *intensification*, and place *creation*. Drawing on practical examples from architecture, planning, and urban design, he argues that an understanding of these six place processes might contribute to a more rigorous place making that produces robust places and propels vibrant environmental experiences.

In the sidebars below are reproduced Seamon’s introduction to a synergistic approach to place and his description of one of the place processes—*place release*, which most broadly refers to environmental serendipity and happenstance. The third sidebar relates to the lived synergy among the six processes, which are summarized, in both their sustaining and undermining modes, in the table on p. 10.

Place as synergistic relationality

To provide a conceptual starting point for the phenomenology of place I develop here, I identify two contrasting conceptual understandings of place—what I call *analytic relationality* and *synergistic relationality*. In analytic relationality, place is understood as a collection of parts among which are arbitrarily identified a series of linkages then measured and correlated to demonstrate stronger and weaker connections and relationships. This mode of understanding informs much current place research, mostly in a tacit, unquestioned way.

In contrast, an understanding of place grounded in synergistic relationality assumes a phenomenological perspective and works to interpret place as an integrated, generative field that shapes and is shaped by parts integrally interconnected in a physical

and experiential whole. The parts are only parts as they sustain and are sustained by the constitution of the whole....

Articulating this inseparable interconnectedness is hugely difficult because place as a whole must be understood to know its parts, yet those parts must be understood to know the whole of place. In this book, I argue that the perspective of synergistic relationality contributes to an understanding of place that is more accurate, comprehensive, and usable than an understanding grounded in analytic relationality....

The difficult conceptual and practical matter, however, is how places are to be looked at and understood via synergistic relationality. If this approach to wholeness offers a more comprehensive, processual rendition of place, how is this knowledge to be looked for and discerned? How, ontologically and epistemologically, is place to be understood synergistically? These are the central questions I address in this book (D. Seamon, pp. 21–22, p. 27).

Place release

Place release involves an environmental serendipity of unexpected encounters and events. In everyday language, these moments of happenstance are described by such words and phrases as “surprising,” “accidental,” “seemingly random,” or “without clear cause.” English incorporates a good number of colloquial expressions for these serendipitous events, including “out of the blue,” “from left field,” “without warning,” “all of a sudden,” “not bargained for,” and “not in the cards.”

Proceeding phenomenologically, I am largely concerned here with explicating some of the lived features of these unusual, unexpected moments.

Real-world examples of place release are meeting an old friend accidentally on the sidewalk; enjoying the extemporaneous performance of an itinerant street musician; or becoming friendly with, dating, and eventually marrying the checkout clerk who just happened to take your take-out lunch order each work day....

[P]lace release contributes, in smaller and larger measure, to the pleasure of being alive, particularly in relation to the places with which one is most often associated. Place release as process undermines place when the pleasure of the place becomes unsettled or unsettling in some way. The place less often or no longer offers enjoyable surprises and unexpectedness; users feel less a zest for daily life to which the place formerly contributed.

In a more crippling mode, release as undermining place can involve disruptive, non-expected situations whereby one is upset, frightened, or hurt—for example, one happens by chance to be mugged in front of the apartment house where he or she lives....

[Broadly, place release refers] to encounters and happenings that cannot be foreseen or predicted from one's past or present experience. Such events demonstrate that many things in life are unforeseeable and apparently fortuitous. They may be propitious and gratifying; they may be ill-starred and calamitous. A missed train, a chance meeting, a wrong turn—place happenings like these may be momentary disruptions or life-changing events. They offer refreshing or baleful possibilities.

As with the place interaction and identity [the two place processes Seamon discusses before release], place release demands its own thorough phenomenology, and here I overview three topics that future phenomenologies might explore more thoroughly: first, the moment in which unexpected experiences happen; second, situations in which the unexpected experience triggers a chain of consequential

place events, some of which are only indirectly relatable to the original experience; and, third, ways that aspects of [both the material and human worlds] contribute to situations of place release (D. Seamon, pp. 118–19, p. 121).

The being and becoming of place

Table 15.1 [see table next page] summarizes the six place processes as, on one hand, they maintain and buoy places; or, on the other hand, as they undermine and shatter places. In thriving places, the six processes mutually support and invigorate each other at a wide range of generative levels and environmental scales. Robust places give pleasure to their users, who in turn feel attachment to those places and may wish to preserve and strengthen them through responsible, well-considered actions, plans, and constructions whereby robustness is intensified further.

One must emphasize, however, that the six processes can *weaken* place. For example, American post-war urban-renewal programs exemplify a mode of place creation in which policy makers and planners, partly out of ignorance as to how places work, imposed an inappropriate mode of place intensification that unsettled or destroyed the animated street life and *genius loci* of many American cities and their neighborhoods and districts....

Another example is superficial modes of place intensification that incorporate inappropriate environmental designs contributing to an erosion of place rather than to its invigoration—e.g., public plazas that include no seating; megastructures that turn their backs to the sidewalk and street; or a hierarchical pathway structure that interferes with ease of pedestrian movement....

In examining the six processes as they unfold in lived relationship, one notes that the first four (interaction,

identity, release, and realization) relate more to the *being* of a place: What that place is, how it maintains itself, and how and why people are attached to that place. The processes of place interaction and place identity might be called the *generative foundations* of place and place experience, since they point to the everyday actions, meanings, and attachments that presuppose and ground robust places. Through place interaction, participants identify with place for which they feel fondness, concern—even devotion and profound loyalty. In turn, this lived reciprocity between place interaction and identity sustains place release in that environmental serendipity offers the surprises and pleasures of place unexpectedness. Yet again, a supportive reciprocity among interaction, identity, and release energizes place realization and a distinctive atmosphere and character that, though largely ineffable, become an integral place quality.

If the first four processes contribute to a synergistic understanding of what places are and how they work in day-to-day fashion, the two remaining processes (intensification and creation) speak to the *becoming* of place: How robust places might be envisioned and actualized via empathetic understanding and action (creation) and well-crafted improvements in the place (intensification). Place creation requires dedicated, well-informed individuals who thoughtfully improve place, whereas place intensification identifies the independent power of appropriate designs and fabrications to revive and strengthen place by being one way materially and spatially rather than some other. The result is that place becomes better or more durable in some way—for example, increasing sidewalk traffic by creatively redesigning street fronts; or enhancing street activity by making an urban district's pathway grid more connected and permeable for pedestrians (Seamon, pp. 166–69).

Seamon's six place processes: Sustaining and undermining aspects*

Place process	Sustaining aspects	Undermining aspects
Place interaction	The goings-on in a place, both ordinary and day-to-day <i>and</i> out-of-the-ordinary and eventful; “a day in the life of the place”; the daily, weekly, and seasonal “rounds” of a place.	Typical interactions of place become fewer or destructive; the pleasure of being part of place is undermined by discomfort, stress, nuisance, inefficiency, fear, and so forth.
Place identity	Taking up place as a significant part of one's world; accepting and recognizing place as integral to one's personal and communal identity; feeling that one belongs to place; unself-conscious being-in-place.	People associated with a place feel uncomfortable with taking up that place as a part of their world; one mistrusts or feels threatened by the people and events of the place; one loses her unself-conscious sense of belonging to the place; one feels a lived separation from a place that before was an essential part of who one was.
Place release	An environmental serendipity of unexpected encounters and events; people are “released” more deeply into themselves through gaining pleasure from surprises-in-place.	Serendipitous events unfold that make one anxious, unsettled, or fearful; unfortunate surprises undercut people's sense of security and safety.
Place realization	The power of place to generate an environmental order with a specific rhythm, ambience, and character.	The physical and lived order of place deteriorates or disintegrates; the ambience of the place becomes unpleasant, negative, or non-existent.
Place intensification	The ways that the physical, material, and spatial environment works as an independent agent for strengthening place; the active role played by architecture, design, planning, and policy in making place one way rather than another.	Arbitrary, imposed plans, designs, fabrications, and policies upset and undermine place; inappropriate constructions and interventions squelch the life of the place.
Place creation	People-in-place, out of concern and attachment, envision and reshape place in ways whereby it is sustained and strengthened.	Individuals and groups misunderstand place and impose unsuitable policies, designs, and actions that weaken place and ignore its unique qualities and character.

*Reproduced from Seamon 2018, Table 15.1, p. 168.

Seeing and Understanding Holistically

Goethean Science and the Wholeness of Nature—Part I

Henri Bortoft

Bortoft (1938–2012) was a philosopher, physicist, and science educator who wrote Taking Appearance Seriously (2012) and the influential Wholeness of Nature (1996). This essay was originally the first part of a paper for the conference, “Goethean Science in Holistic Perspective: Scientific, Ethical, and Educational Implications,” held at Columbia University’s Teacher College, New York City, May 20–22, 1999. The essay is published with the permission of Jacqueline Bortoft. We hope to include additional sections of Bortoft’s paper in future EAPs. Note that, in the original written version of his talk, Bortoft does not provide complete references. Here, we have added citations as available, but some works remain unreferenced. The editor thanks Stephen Wood for assistance in locating references. See EAP, spring, 2013, for the “in memoriam” issue devoted to Bortoft, including his essay, “The Transformative Potential of Paradox.” © 2018 Jacqueline Bortoft.

The central question I ask is what contribution Goethean science makes to understanding the wholeness of nature. I contend that there is something to be known about the wholeness of nature to which Goethean science can contribute. I was first introduced to the problem of wholeness by physicist David Bohm (1917–1992), when I became one of his post-graduate research students in the early 1960s (Bohm 1980, 2003; Bortoft 1982). Today, Bohm’s name is associated with wholeness and quantum physics but, in fact, this topic was first recognized and explored by physicist Niels Bohr (1885–1962), who saw that a new factor in physics—what he called “an indivisible wholeness” and completely absent in classical physics—arose because of the indivisibility of the quantum itself.

Bohr was particularly concerned about the consequences of this indivisibility for measurement, a problem that led him to speak of the “unanalyzable wholeness” of the measuring apparatus and the phenomenon being measured. Faced with this concern, Bohr adopted a somewhat pessimistic view: Although physicists might be able to speak of the bare concept, “wholeness,” this was all they could say. Thus, there was no possibility of identifying a more adequate, content-filled concept of wholeness than its “unanalyzability.”

Bohr proposed that wholeness is an irrationality in nature just as the square root of the number two is an irrationality in mathematics. And just as the incommensurability of the length of the diagonal of a triangle with unit sides is accommodated by the extension of the system of integers and

fractions to “cover” cases that do not fit into that number system, so Bohr believed it possible to accommodate the “irrational” wholeness in quantum physics by an analogous procedure of using the concepts of classical physics (the only physics he thought there could be) in a way that would “cover” wholeness, even though wholeness as such does not fit into that conceptual system.

Here, we reach Bohm’s disagreement with Bohr: Bohm believed it was possible to have a *content-filled* idea of wholeness. The huge problem was how to do it?

The irreducible wholeness in quantum physics is seen dramatically in the case of interference experiments with a single-photon light source. There arises the difficulty of thinking of the single photon as having a definite path as would be the case if the photon were a classical particle. If we insist that the photon is a classical particle, then we find ourselves in the contradictory position of saying that the single photon travels simultaneously in both one path and two paths. How at the same time can something that seems one also seem two? Here, with a vengeance, we have the irreducible wholeness of quantum indivisibility. As physicist Arthur Zajonc (1995, p. 299) explained,

Goethe was right [when he said about light, “How often do they strive to divide that which, despite everything, would always remain single and whole?"]. Try though we may to split light into fundamental atomic pieces, it remains whole to the end. Our very notion of what it means to be elementary is challenged. Until now we

have equated smallest with most fundamental. Perhaps for light, at least, the most fundamental feature is not found in smallness but rather in wholeness.

Completely absent from the world of classical physics, the irreducible “quantum wholeness” became even more evident in the discussions between Einstein and Bohr that eventually led to the formulation of the paradox of Einstein, Podolsky, and Rosen (EPR) and its later reformulation in Bell’s inequality theory (which has now received remarkable experimental confirmation; see Zajonc 1995). This research made evident that quantum wholeness cannot be described in terms of independent elements externally connected.

Quantum “non-locality” (as it is called) seems to involve “two” objects that are far apart physically and yet can be connected instantaneously as if they are not separated at all. Again, we have a situation where the language used contradicts what one is trying to say—i.e., we are trying to describe quantum non-locality in the language of physical locality.

In the quantum domain, reality cannot be broken down into independent parts and hence cannot be analyzed (if we mean by that word “broken apart and measured”). At this fundamental level of presence, the world cannot be thought of as composed of independent parts connected together in some way.

We do, however, continue to think in terms of parts and whole, largely because the very form of our language channels our doing so. Bohm pointed to the fact that the subject-verb structure assumed by modern languages tends to emphasize the role of

separate entities acting on other entities, interacting by connections external to those entities themselves. He stressed how nouns are the dominant form, whereas earlier languages were often verb-based and therefore did not encourage speakers to think primarily in terms of separate, localized entities.

Niels Bohr himself was acutely aware of the crucial role that language plays in human understanding. In fact, it was a major source of his epistemological pessimism regarding quantum theory. As he explained, “We are suspended in language in such a way that we cannot say what is up and what is down” (Petersen 1985, p. 302).

Since Bohr assumed we cannot escape from this situation, he thought that the only way we could describe the quantum world was via concepts already available to us—i.e., the concepts of classical physics. Hence, we had to learn how to use these concepts in such a way as to accommodate “irrational” quantum wholeness without leading our understanding into contradiction. He mounted a heroic rearguard defense for a situation that he perceived as impossible.

Bohm thought differently and brought attention to the relationship between forms of language and ways we perceive and think about the world. It was studying this relationship that partly led to my working with British philosopher J.G. Bennett (1897–1974) on the problem of language and the perception of wholeness. Bennett was particularly interested in time, believing that our ordinary language led us into wrong ways of thinking about temporal processes (Bennett 1956–1966). In my work with him, he proposed an experiment in which we adopted an artificial language that modified the way we describe simple actions and events (Bennett, Bortoft, and Pledge 1965).

The aim was to see how this different language might modify our perceptions. A key feature of the experiment was to avoid introducing what Bennett called “descriptive fictions”—i.e., factors introduced into descriptions that could not be found in experience. These factors often took the form of connecting linkages added to what was given directly in experience—for example, hypothetical entities functioning as hidden

causal mechanisms. Whereas *what* was connected entered directly into experience, these connections themselves did not because they were postulated speculatively.

The discipline required to describe actions and events, excluding all interpretive fictions and yet giving a thorough description, seemed to focus our thinking in a new, unfamiliar way (as well as evoking states of extreme irritation and exasperation). We began to experience “breakthroughs” into a new kind of perception. There was a transformation in the *mode of togetherness* of the elements. At first, we saw these elements only as separated from each other but, over time, we realized they were connected *directly*. In other words, they were connected at the start and, therefore, there was no need to propose some extra “connection” added on after the fact.

In seeing this mode of togetherness in this transformative way, we realized that one can see wholeness directly, where “seeing” means phenomenological seeing and not the empiricist’s reduction of seeing to just sense perception [1]. Although the context was different, we felt we had begun to learn how to do what Bohr had declared impossible: to see wholeness directly as it is in itself (Bortoft 1971).

Because nothing extra is added, this experience of transformation in the mode of togetherness can be described as a situation where “nothing has changed, but everything is different.” When we see that the connections are intrinsic rather than extrinsic, separation does not suddenly disappear. Rather, we have *both together*: both separation and wholeness. The experience is twofold but not dual.

One can make a parallel with reading. Consider the three letters “c,” “a,” and “t” as they appear in the word “cat.” Perceptually, the letters appear as separate, and we might attempt to overcome this separation by introducing external linkages as with “c-a-t.” This device, however, eclipses the possibility of reading. When we recognize the meaning “cat,” the letters remain separate but are also connected in a subtler way than linking them together by introducing an external connection of hyphens. This experience of seeing the meaning in complete words (rather than as separated but

connected letters) parallels the experience of seeing wholeness directly.

Although I didn’t know at the time, this way of seeing is in tune with Wittgenstein’s “new way of thinking.” What I also didn’t realize was that the transformation in Wittgenstein’s philosophy marking his later extraordinarily creative period was brought about by his encounter with the work of Goethe [2]. Wittgenstein’s later philosophy is concerned with “the understanding that consists in seeing connections,” which for him was a kind of seeing that did not need explanation because connections are encountered directly. This *direct* seeing of connections was crucial for Wittgenstein because he saw this kind of seeing as understanding so that seeing and understanding are one, and there is no need for explanation because it is replaced by seeing. Wittgenstein emphasized that to connect two things, we do not need a third because things connect directly—i.e., they already stand in connection with one another, and therefore there is no need to introduce some additional connection externally [3].

My first encounter with Goethe came later and happened, by a stroke of good fortune, when a friend mentioned a book he thought I might find interesting—philosopher Ernst Lehrs’ *Man or Matter* (Lehrs 1958), an introduction to Goethe’s way of science. In reading the book’s fifth chapter, “The Adventure of Reason,” I suddenly found myself feeling completely at home. The limitation that Kant put on the human cognitive capacity to know wholes—“Above all, it is not given to such a thinking to think ‘wholes’ in such a way that through an act of thought alone the single items contained in them can be conceived as parts springing from them by necessity” (Lehrs 1958, p. 82)—reminded me of Bohr’s strictures on our ability to understand quantum wholeness [4]. But here was Goethe declaring that he had done *in practice* the very thing that Kant declared impossible *in principle* for the human mind to know [5].

In his conversation with Schiller, Goethe had said that “there must certainly be another way altogether [rather than a piecemeal way] that did not treat of nature as di-

vided in pieces, but presented her as working and alive, striving out of the whole into the parts” (Lehrs 1958, p. 104). Goethe’s work on the metamorphosis of plants illustrated this movement from the whole into the parts, rather than aiming to move from the parts to the whole, in the way it showed all the different organs up to the stem as metamorphoses of one and the same plant organ (Goethe 1790/2009).

As I read Lehrs, it seemed evident to me that Goethe could *see the wholeness* in nature directly and, more so, had developed a set of specific practices that could lead to this holistic way of seeing. In fact, one of these methods—*exakte sinnliche phantaisie*, or “exact sensorial imagination”—was familiar to me already from working with Bennett. We had found that the practice of what we called “visualization” to be extremely valuable for using the mind in a way allowing us to disengage from the habitual activity of mental associations, a dominant characteristic of the ordinary, discursive mind [6].

Besides Goethe’s plant studies, there was also his work on color (Goethe 1810/1970). Here, his insistence on staying with the phenomenon and refusing to go “behind” it by the artifice of introducing hypothetical concepts or models seemed to be the aim of my work with Bennett, albeit our results were far inferior to Goethe’s efforts, which had produced what amounted to an entirely new way of doing science (Bortoft 1996; Seamon and Zajonc 1998).

I also immediately made a connection between Goethe’s work and quantum physics in that Goethe’s method pointed to the renouncement not only of classical models in physics but of all models as such. This is the positive side of Bohr’s understanding: by insisting that *all* models be renounced, he thereby returned physics to being truly phenomenological—in other words, returning to the original phenomena from which physics as a science arose.

Clearly, there was much to learn from Goethe, and I began to explore his work in detail (Bortoft 1985, 1986, 1996, 2012, 2013). At about the same time as I began this task, Bohm distributed draft versions of his two papers on the implicate order, in which he took the hologram as a metaphor for the kind of

wholeness that he saw as a fundamental new order in physics (Bohm 1980, chaps. 6 and 7). As with Goethe, here was another instance of going from the whole to the part. I realized that it should be possible to use this way of understanding to show how the radically new direction taken by Goethe was a reversal of our habitual way of thinking. At the same time, one could use Goethe’s approach to illuminate Bohm’s notion of an intrinsically implicate order. I was never able, however, to interest Bohm in the connection with Goethe, perhaps because he was not willing to see past scientists’ and philosophers’ typical stereotypical understanding of Goethe’s science.

Also at this time, I discovered phenomenology, which came as a revelation—an experience of stepping into a different dimension of mind, but one that is there in front of us all the while, only hidden from our customary assumptions. The fundamental insight of Husserl’s phenomenology is that we see the necessary structure of experience—the intrinsic necessity—and not just the discrete particulars of experience that empiricism assumes. Perception is twofold: simultaneously, an awareness of contingent particulars (just the facts as such) *and* perception of necessary structures, connections, and relations among the facts (the idea as such). Empiricism does not recognize this complementarity, collapsing the two into one, which it identifies with sense experience only. The result is endless confusion—e.g., the notion that experience itself is incomplete and requires something added by “the mind.”

The key point is that we *see directly* the way in which the particulars are *necessarily* connected. We do not infer the necessary connection by means of intellectual speculation *after* seeing. We see the necessary structure directly because to know *is* to see—this is Husserl’s fundamental insight and is not a metaphor. While we may say that seeing the necessary structure in the facts is analogous to the sensory seeing of the facts, it would be better to turn the phrasing around and say that sensory seeing is a particular species of seeing (instead of being the only *real* case of seeing, as is conventionally assumed).

It is the recognition of this integral togetherness of seeing and knowing that prompted Goethe’s reply to Schiller, who

had said, “That is no experience. That is an idea.” But Goethe responded, “I am glad to have ideas without knowing it, and to see them with my very eyes.”

Looking back via Husserl, we recognize that Goethe’s statement was an attempt to express the insight that only came later with phenomenology—namely, that we can and do *see* ideas directly, but that lacking an adequate basis for being able to say this, Goethe made the mistake of attributing this seeing to sense perception. There is both a positive and negative here: negative, in that Goethe was mistaken about knowing being a matter of sense perception; positive, in that he recognized a way of knowing that is seeing.

In one sense, Goethe was a phenomenologist, and phenomenology is a crucial way of understanding his work, since it has always been too easy to mistake his efforts as naïve empiricism, which is not the case at all. It is his phenomenological way of seeing that is exemplified to some degree by his science of color and his work on the morphology of plants. One finds more recent examples in the work of zoologist Wolfgang Schäd (1977) on the morphology of mammals; and the work of biologist Craig Holdrege (1998) on seeing animals whole. There is also the work of ecologist Mark Riegner (1993, 1998), who examines the wholeness of landscapes as revealed through their flora and fauna.

As my work proceeded, the discovery of an unsuspected affinity between Husserl’s phenomenology and Wittgenstein’s later philosophy was particularly astonishing, since many commentators claimed that the two thinkers were philosophical antipodes. What we realize today, however, is that both Husserl and Wittgenstein, in different ways, were working toward the same recognition: that there is a direct kind of *seeing* that *understands* without explaining—without the *need* to explain—because this way of understanding *is* seeing. For Husserl, to know *is* to see; this aim takes the form of seeing the necessary, intrinsic structures of the phenomenon. For Wittgenstein, there is a way of seeing that is also a way of understanding, which takes the form of seeing connections—the intensive interlinkages

wherein things are together directly because they “already stand in connection with one another.”

In this sense, the differences between Husserl and Wittgenstein are far less significant than their common ground: an experience of direct seeing likened metaphorically to another dimension of the phenomenon itself. In other words, what at the start is seen as only “two-dimensional” is suddenly seen as “three-dimensional” [7].

But only with the publication of Ray Monk’s Wittgenstein biography in 1990 (Monk 1990), did I first learn of the crucial influence that Goethe had on Wittgenstein’s emphasis on “the understanding that consists of connections.” Monk claims that this emphasis on *seeing* connections has no precedent in the Western philosophical tradition “unless one finds a place for Goethe... in that tradition” (Monk 1990, p. 316). In this sense, one might describe the Goethean way of seeing the wholeness of nature in the manner of either Husserl or Wittgenstein. For example, in his perceptive study of the horned mammals, Schad makes visible what he calls “the awesome inner logic of the organism” (Schad 1977, p. 118), which could just as easily be interpreted as seeing the necessary structure or principle (Husserl) or seeing the “grammar” of intensive connections (Wittgenstein).

Reflecting on the beginnings of my own interest in the question of wholeness, I realize that the work done by a small group of us with philosopher J. G. Bennett in the 1960s was unwittingly an initiation into a wider movement in modern consciousness. Our stumbling attempts to learn how to see wholeness directly in things, prepared a doorway for us to enter into a much more comprehensive cultural stream than any of us could have realized at the time. The pathway I have taken since then reveals certain unexpected affinities:

- Goethe’s way of seeing is illuminated by Husserl’s phenomenology, which among other things, shows us the difference between Goethe’s science and the phenomenalism for which superficially it can be mistaken;
- Wittgenstein’s later philosophy was inspired directly by his encounter with

Goethe’s way of seeing; consequently, Goethe’s way of seeing is illuminated by Wittgenstein, just as Wittgenstein’s “new way of thinking” is illuminated by Goethean science;

- Husserl and Wittgenstein were, each in his own way, really concerned with the same kind of seeing; thus, unexpectedly, one realizes an affinity between two thinkers long thought to be different in their ways of understanding.

As I hope the above discussion indicates, I am interested primarily in seeing and understanding wholeness, which necessarily requires a phenomenological science. My concern with Goethean science is the extent to which it contributes to this science of wholeness.

Notes

1. At the time, because we were not aware of the phenomenological perspective, we were not able to make this distinction between seeing directly and seeing reduced to sense perceptions.

2. And at the time, I knew nothing of Goethe either.

3. During the time I worked with Bennett, we were influenced by Wittgenstein in the approach we took toward language, but his influence was mostly limited to our emphasizing the ways in which language can “sleepwalk” us into using concepts inappropriate for a given situation, leading one into confusion that he or she then mistakes for some difficulty in the situation itself—for example, a “problem” to be “solved.” This alternative way of seeing was very much “in the air” in Britain in the 1960s, but we were unaware of Wittgenstein’s emphasis on a new kind of seeing—i.e., an understanding that sees connections and thus removes any need for explanation.

4. These strictures might have been because Bohr had absorbed the Kantian attitude.

5. Kant’s motivation here may well have been that he hoped to save Newtonian mathematical physics not only from the skepticism of Humean empiricism but also from the claims of Swedenborgian “spirit seeing,” which for Kant posed an equal threat to what he saw as the greatest achievement of human knowledge—mathematical physics.

6. The capacity to form mental images intentionally was crucial for Bennett, and he sometimes called the practice by the German word *vorstellung*.

7. At a 1986 seminar at London’s Goethe Institute, philosopher Hans-Georg Gadamer declared that “Wittgenstein has the same kind of phenomenological imagination as Husserl.” Philosopher John Heaton told me that people in Vienna who knew Wittgenstein in the 1930s said that he was really doing phenomenology (and this at a time when, according to the standard Wittgenstein narrative, he was a logical positivist!).

References

Bennett, J.G., 1956–1966. *The Dramatic Universe*, 4 vols. London: Hodder & Stoughton.

- Bennett, J.G., Bortoft, H., and Pledge, K. W., 1965. Towards an Objectively Complete Language, *Systematics*, 3(3): 185–229.
- Bohm, D., 1980. *Wholeness and the Implicate Order*. London: Routledge.
- Bohm, D., 2003. *The Essential David Bohm*, L. Nichol, ed. London: Routledge.
- Bortoft, H., 1971. The Whole: Counterfeit and Authentic, *Systematics*, 9 (2): 43–73.
- Bortoft, H., 1982. *A Non-Reductionist Perspective for the Quantum Theory* [thesis]. London: Department of Theoretical Physics, Birkbeck College.
- Bortoft, H., 1985. Counterfeit and Authentic Wholes: Finding a Means for Dwelling in Nature. In D. Seamon and R. Mugerauer, eds., *Dwelling, Place and Environment: Towards a Phenomenology of Person and World*. Dordrecht: Martinus-Nijhoff, pp. 289–330.
- Bortoft, H., 1986. *Goethe’s Scientific Consciousness*. Nottingham, UK: Russell Press.
- Bortoft, H., 1996. *The Wholeness of Nature*. Hudson, NY: Lindesfarne Press.
- Bortoft, H., 2012. *Taking Appearance Seriously*. Edinburgh: Floris Books.
- Bortoft, H., 2013. The Transformative Potential of Paradox, *Environmental and Architectural Phenomenology*, 24 (2):12–14.
- Gadamer, H.-G., 1989. *Truth and Method*. London: Sheed and Ward.
- Goethe, J.W. von, 1970. *Theory of Colours* (C.L. Eastlake, trans.). Cambridge: MIT Press [originally 1810].
- Goethe, J.W. von, 2009. *The Metamorphosis of Plants* (photographs by G. Miller, Jr.; D. Miller, trans.). Cambridge, MA: MIT Press [originally 1790].
- Holdrege, C., 1998. Seeing the Animal Whole: The Example of Horse and Lion. In D. Seamon and A. Zajonc, eds., *Goethe’s Way of Science: A Phenomenology of Nature*. Albany, NY: State Univ. of NY Press, pp. 213–32.
- Lehrs, M., 1958. *Man or Matter*. London: Faber & Faber.
- Monk, R., 1990. *Ludwig Wittgenstein: The Duty of Genius*. London: Penguin.
- Petersen, A. (1985). The Philosophy of Niels Bohr. In A.P. French, ed., *Niels Bohr: a Centenary Volume*. Cambridge, MA: Harvard Univ. Press, pp. 299–310.
- Riegner, M., 1993. Toward a Holistic Understanding of Place: Reading a Landscape Through its Flora and Fauna. In D. Seamon, ed., *Dwelling, Seeing, and Designing: Toward a Phenomenological Ecology*. Albany, NY: State Univ. of NY Press, pp. 181–215.
- Riegner, M., 1998. Horns, Hooves, Spots, and Stripes: Form and Pattern in Mammals. In D. Seamon and A. Zajonc, eds., *Goethe’s Way of Science*. Albany, NY: State Univ. of NY Press, pp. 177–212.
- Riegner, M., 2008. Parallel Evolution of Plumage Pattern and Coloration in Birds, *The Condor*, 110 (4): 599–614.
- Schad, W., 1977. *Man and Mammals: Toward a Biology of Form*. Garden City, NY: Waldorf Press.
- Seamon, D. and Zajonc, A., eds., 1998. *Goethe’s Way of Science: A Phenomenology of Nature*. Albany, NY: State Univ. of NY Press.
- Zajonc, A., 1995. *Catching the Light*. NY: Oxford Univ. Press.

Invitation to Interiority 1

Inside Canyons, Inside Oneself

John Cameron

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What is the felt experience of inner space? If asked to close your eyes and “go inside,” what does it feel like and what are the sensations? Where does this experience originate? Is it something purely internal and different for each person, or are there external influences as well? What does it feel like to be within a place? Do different places engender different experiences of inner-ness?

I raise these questions because of a recent trip to the sandstone canyon country northwest of Sydney, an experience that left me wondering about the relationship between the forms of the landscape we encounter and the sense of interiority within one’s self and body.

The Wollemi Wilderness Area is the largest designated wilderness area in Australia, covering 900,000 acres. This region is a deeply dissected plateau of predominantly Narrabeen and Hawkesbury sandstone beds laid down to a depth of 500 meters about 250 million years ago. Uplift of the plateau, which continues today, caused deep vertical joints in the rock that have been used by small streams to begin carving narrow canyons almost 100 million years ago, some of which are only several meters wide, yet hundreds of meters deep. Access is via rough walking tracks across the dry scrubby heathland at the top, while the vegetation at the bottom of the canyons is temperate rainforest with sassafras, coachwood, and tree ferns where there is insufficient light for trees to grow [1].

My first introduction to this country was 30 years ago. I vividly recall scrambling through scratchy bushland and across exposed rock ledges for hours, finding myself at the top of a rope ladder that seemed to



drop down into another realm. I clung to the ladder so tightly that I grazed my knuckles while descending the 20-meter cliff to the accompaniment of the walk leader’s encouraging comments that “it was worth it.”

As I stepped back from the rope at the bottom in relief, I discovered how right he was. A crystalline stream ran between the sandstone walls, creating an enclosed, moist, ferny world. Rainforest trees towered above us in a cathedral-like space. I looked about in wonder at this paradise I hadn’t known existed.

I couldn’t wait to return and, for the 17 years I lived in the Greater Sydney region, I was a regular visitor, alone and with others. Just before I left to live in Tasmania in 2005, I finally persuaded my sister Trish to allow me to show her the canyon country

on an overnight camp. She was immediately smitten and has since become a keen canyoneer and bush walker. On my annual visits to Sydney, she has returned the favor and introduced me to canyons in which I had never set foot. This year for the first time, we carried tents and sleeping bags so that we could camp for three days.

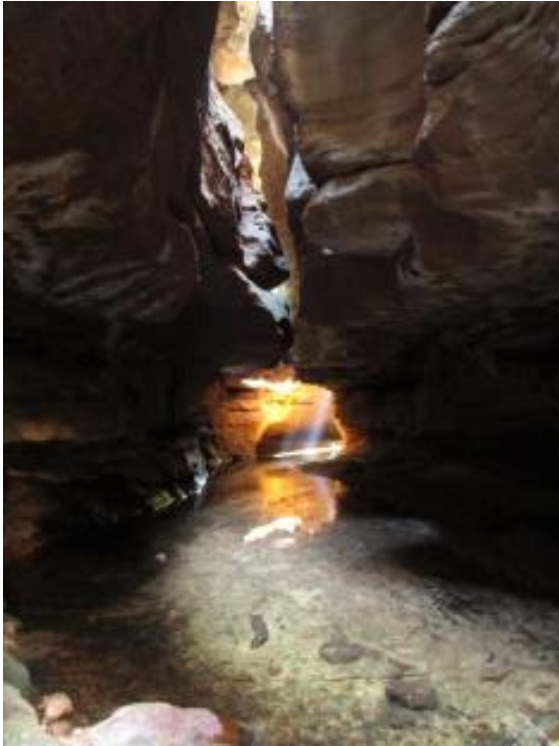
A fortnight before, I had been on an organized four-day walk on Bruny Island described as a “deep ecology *yatra*” [2]. The leaders of the walk, loosely based on Buddhist practices of walking meditation, guided us on a daily cycle of largely silent activity.

The day started at 6:30 am with an hour and a half of yoga and meditation aimed at guiding one’s physical actions and bodily attention via the breath. When we began walking, we were instructed to keep our attention on our feet through the rhythm of breath, then to extend it to the legs, the whole body, the vegetation and wildlife, the sky and birds, then back again.

By the end of the *yatra*, this rhythm had permeated the way I moved through the bushland. When I returned home to my Tasmanian home at Blackstone, the after-effects continued [3]. I moved more slowly, I noticed more, and familiar places felt more intensely like they were part of a connected whole. I suggested to Trish that we adopt on our walk a similar structure to the *yatra*, to which she readily agreed.

An immersion in place

Those three days were a total immersion in place. Even before setting foot into the canyon proper, we could feel the change in the air. From the blazing sun of an Australian summer day, it was only a few paces into coolness and instant relief to our sweaty, scratched skin. We sank into the



beamed down along golden shafts. Midway along the River Cave canyon, one of these shafts touched the stream, and I hastened toward it, knowing it would remain there only briefly. I stood in the shower of honeyed light, feeling the physicality of the rays as they poured down from the heights as if the proximity to the mass of cliffs on either side had given them added density. I turned and smiled at Trish, who pointed out the reflections of ripples on the underside of the rock ledge just above us.

As I gazed at the undulating patterns, I noticed, in the center, a zone of opacity. It took me several seconds to recognize my own shadow because it was unlike any I'd seen before—indistinct, constantly changing at the margins, and partially translucent in the middle where light caught the

edges of ripples. It wasn't person-shaped at all, but was stretching out and retracting fluidly like an active ghost figure. I seemed to be seeing the energy-form of my body.

At the end of the second day, as I sat on a stone next to the campfire, stirring the pot of freeze-dried kale and turkey for dinner, I was aware of strange rhythmical movements in the muscles of my limbs and trunk. It felt as if I was still in the water, or perhaps more accurately, as though the creek water was coursing through my body. We'd spent a long while at the top of a cascade and then beside a narrow channel, watching how the water wasn't flowing steadily, but in pulses, irregular but still rhythmic surges and retractions.

Now that I was externally at rest, I sensed an internal pulsing in sympathy with the rhythm of the stream. The nearest analogy I can give is the experience of gazing into a fast-flowing river for some time before transferring one's gaze to the riverbank and "seeing" the earth of the bank flowing into the river. In this case, though, it wasn't a trick of the

eye, but a distinct physical sensation, embodying the pulse of the falling water.

After dinner, we let the fire die down and stretched out, looking up at the thin strip of night sky strewn across with stars, appreciating the contrast between the warm ruby light glowing from the coals close by and the remote sapphire starlight. Trish glanced down and exclaimed, "What's that star doing down there?" Below us was a point of bluish light. I blinked uncomprehendingly at the impossibility of its location, my eyes still focused on the far distant sky.

Then we both remembered. Glow-worms! Earlier that day we'd been told that there might be glowworms in the camping cave, and here they were, masquerading as stars. As the night progressed, more worms began to glimmer until the cave walls seemed as densely lit as the night sky. In the darkness, I felt enveloped in the sensorium of the warmth of the fire, the soft plashing of the stream below, and the starlight near and far. We sat for a long while, not speaking. I let myself drift in this space where glow-worms and galaxies appeared equally distant, equally large.

Camping in the canyons deepens the immersion in its soundscape. In the curved, cavernous spaces, sounds are naturally amplified rather than dissipated as they are in flatlands. Just upstream of the camping cave, water poured evenly from a rock bowl several meters down into a deep hollow that resonated with a soft bass rumble. The echoes of a waterfall farther upstream produced one melody, while the small cascades below provided the splashing and gurgling treble notes. The effect of the whole was a rich and intimate soundscape with constant variations: auditory manifestations of the pulses in the water we'd seen



shadow and the refreshing moistness within it. We squeezed through crevices only a foot wide in places, flattening back, chest and arms against the rock to gain maximum traction, extending our hands into narrow fissures to grip a wedged stone to pull ourselves upwards.

Investigating a side ravine that had a 90-degree bend in it, I wormed my way forward on my belly, feeling every square inch of my body in contact with sandstone above and beneath me. Looking up at the narrow strip of sky a hundred meters above emphasized the feeling of being inside the rock. It was a different sense of "inside-ness" than being in a cave, where one is completely enclosed in rock but has no visual clues about how far beneath the earth's surface one is.

Occasionally, a large rockfall blocked a canyon and formed a pool extending from wall to wall so that the only way to proceed was through the water. We wore thermal vests over swimming costumes and were in and out of the water all day, swimming and wading, clambering up or under waterfalls. The canyon walls were constantly weeping in misty veils or seeps that dripped in synopated splashes onto rock platforms. We were surrounded by the sound and sensation of falling water.

The chasm floor was mostly in shadow, but, when the angle was right, sunlight

earlier. As I settled into my sleeping bag, the water music filled the cave and filled my body, a fitting accompaniment to the after-images of glimmering light.

The canyons reveal the dynamics between rock and water in myriad ways. Peering above me in the River Cave, I realized I was looking back through its 100-million-year history. The vertical slot at the top indicated the initial penetration of the jointing. The smooth hollow in the southern wall immediately below told of a bend in the young creek and a pool. After another narrowing, an irregular broadening of the gorge on both sides suggested a time when the stream widened into broad rapids. And so on through millions of years, the episodes of the past laid out vertically. I realized that it was similar in a way to the succession of different river environments we had encountered that day—pools and hollows, rapids and rock-falls, narrow slots and beaches. What we saw looking up through geological time mirrored what we could see looking back over the morning's journey.

We went back to the place where I'd first noticed the stream surges, and this time I was struck by the effect that small-scale features in the sandstone had on the patterns of water flow. A tiny ridge of harder ironstone cutting transversely across the platform sent the water to the left, resulting in a deeper channel on that side. As the water wore away the rock, the sandstone formed channels that guided the stream, which then further eroded the rock in a rhythmic pattern. This mutual influence created a set of "flowforms" across the rock platform, pulses of much longer duration being etched in stone [4].

High over our heads loomed cliffs that bore the imprint of a different water-rock interaction. When groundwater seeping downward hits an impermeable band of rock, it seeps out at the surface, dissolving small amounts of mineral. As the water trickles down the rock face, it evaporates and leaves a mineral stain behind—black for manganese oxides, brown for limonite, and red for hematite.

Some of these stains hung down like huge drapes over the cliffs, others took on living shapes. Trish pointed out several that looked like giant figures of Wandjina, the enigmatic spirit beings with great dark eyes and white faces that adorn ancient

rock art in the Kimberley region. The first piece of art I purchased, 40 years ago, was a Wandjina figure painted on bark by a contemporary Aboriginal painter. To have its uncanny presence writ large on the overhangs close to our camping cave brought the landscape even more fully alive for me.

The first night back after the trip, I dreamt heavily and deeply. I woke suddenly from a dream set by the water in bushland. Etched in my mind was the phrase, "invitation into interiority." This phrase came with an injunction to take it seriously, and I reached for pen and paper. I understood the words to mean that the experience of entering the canyons silently was like going inside oneself. The form of the land—large dark spaces, still pools, cascades, and flowforms—invites our own perceptions of inwardness.

Interiority and the physical body

The strength of this injunction stayed with me over the ensuing weeks and gave me direction for further inquiry. The first step was to look more closely at what I mean by the experience of interiority, or what might be termed the phenomenology of innerness. As I embarked on this exploration, I was acutely conscious of educator Bronwyn Davies' caution that

awareness of being embodied and, specifically, being embodied in relation to landscape, is something we have little practice in observing or articulating. 'The body' is generally understood as natural and as such is taken for granted [5].

Davies also warns of the dangers of theorizing about body-landscapes that becomes too cerebral and disembodied. There is a way of writing championed by Davies in which writing "takes place in a simultaneous separation from and immersion in the landscape" [6]. She cites the example of novelist Janet Turner Hospital who talks of the "eroticized desire to communicate" with and about place [7].

This desire goes two ways. First, it comes from the body's openness to the world, the atavistic urge to merge, the yearning to touch and be touched. Second, this desire comes from the land itself.



Years ago, I was part of a small group bushwalking in the Blue Mountains, south of the Wollemi, with a National Park ranger who had spent extensive time with Aboriginal people "in country," in the mountains and the desert. As we rested on a ledge overlooking a rugged valley, one of us raised the question of wilderness and whether it was better that some country remain untouched and unsullied by human presence.

The ranger disagreed, declaring in passionate tones that the land was "crying out" to be walked, to be sung, to be loved. The desire to communicate is eroticized, sensual but not sexual. I think of it as the force of *eros*, with its qualities of relationship, imagination, synthesis, and interdependence [8]. This desire is also outwardly oriented, out of that enfolded relationship and toward others, to engage with them in an imaginative, embodied way.

Going inside" is for me both an embodied and also a more-than-bodily experience. Having a physical body involves proprioception, the sense of "where our bodies and limbs are in space" [9]. Our bodies, however, are not solid objects in space. The human trunk and cranium contain significant spaces, which complicate the proprioceptive sense. The little-known sense of interoception, de-

defined as information about the body as perceived from within, refers to the information traveling to the brain from sensory receptors in the lungs, gut, bladder, and other organs [10].

Yet concentrated observation reveals a diversity of inner spaces that range in their accessibility to our awareness. A thousand sensations await the person, with her eyes closed, invited to put her attention solely on the internal spaces within her body.

I have attempted this mode of attention since the canyon trip, and my perceptions have sharpened in some instances but remain diffuse in others. I am aware of several of the spaces in my cranium—the channels inside my ears constantly ringing with tinnitus; the sinus cavities, especially those behind my upper left cheek that cause my teeth to ache slightly; my tongue resting in my mouth with a narrow connection through to my nasal passages that becomes more evident with a sharp intake of breath through the nostrils. Much more feebly, I can sense, by shaking my head vigorously, that my eyes and brain are held in fluids encased within bony hollows.

Within my trunk there is the chest cavity connected by my breath to the bottom of my belly, as well as the constricted channel of the throat dropping into the stomach and the gut below that. I am usually only vaguely aware of the bladder as a hollow space but can be acutely conscious of it when it is full.

Of the other organs disposed around the two major cavity systems, pulmonary and digestive, I have virtually no felt sense, just the knowledge they exist. The beating heart is evident and, with practice, one can discern the pulse of the arterial flow into more and more precise points in the body. If, in just a few months, I have noticed some small improvement in my “inner spatial proprioception,” I can only imagine how developed it must be in lifetime practitioners of yoga, Feldenkrais, and other body-centered disciplines.

These soft spaces and channels are supported by the bones and muscles of the skull, ribcage, spine, legs, and arms. The overall sensation is of fluid hollowness enclosed in flexible solidity [11]. In turn, these internal spaces are changing dynamically at different frequencies. The most obvious is the rhythmic expansion and contraction of the lungs and

gut every ten seconds with the movement of the breath.

Like all beginning meditators, I was taught to pay attention to the breath, and particularly to the small movements in the body with each inhalation and exhalation. These movements are less and less pronounced the farther one moves from the chest, but on occasion they become subtly discernible even in the extremities of legs and arms. I slowly realized that we breathe with our entire bodies, not just our lungs [12]. Similarly, the sense of space opening up within the body with each breath attenuates away from the lungs, but after prolonged quiet sitting, the small sensations of expansion of inner space can permeate the whole body.

On a longer cycle, the periodic filling and emptying of the bladder every few hours is evident, but for me the rumbling emptiness before a meal followed by repletion afterward is more dramatic. There are interactive dynamics, too. A full gut restricts the internal space available for the breath. When I’m afraid, my breath becomes shallower, and I feel an overwhelming hollowness in my “innards.” The heart’s beating can accentuate these sensations; a pounding pulse seems to echo throughout my inner cavities at such times.

Interiority and self

The sculptor Antony Gormley has spent decades producing life-sized casts of his own body to convey what it feels like to inhabit a human body. His partner would encase him completely in plaster, except for a thin straw through which he breathed. During the hours spent while the plaster set, Gormley reported that in contrast to the extreme confinement of his body, he had a sense of a vast space within himself. It took him back to a childhood state experienced when he was locked in a hot bedroom:

I would have to lie in this single bed not moving with my eyes closed. I felt held in this tiny prison behind my eyes. After a while, I got to grips with this space, I



learned how to dwell in it. This tight claustrophobic oppressive hot space would become darker and cooler and bigger until I was highly conscious but floating in this deep blue dark infinity [13].

Via this experience, Gormley learned to inhabit inner space at a very early age. The *objective* space within his body, within the bounds of the spatial fluctuations brought about by bodily processes, didn’t change. What did change, however, was his *subjective* sense of space from hot, tight confinement to cool, effortless expansiveness [14].

Without such enforced impetus, I have been far slower to plumb inner space. Nowadays, the space that feels deepest inside is behind the solar plexus, deep within the base of the lungs and extending into the top of the belly. The sense of spaciousness I feel is not limited to the expanding and contracting cubic centimeters therein. Sometimes this lived quality feels as though “inside” is a vast, resounding cavern and, at other times, an expanse of clear sky or a still pool. The feeling intimates a mobile space, sometimes quiet, sometimes alive with memories and fleeting sensations, responsive to the quality of attention I give it, and in turn generating more spacious attentiveness.

I’ve not always had such impressions. Indeed, quite the opposite. Earlier in life, I was far from introspective. At age 28, I was an ambitious young man in a hurry, with a high-powered job with a multi-national minerals company, when a change in circumstances led to my living in a cabin high in the Colorado Rockies with time on my hands.

Heavy snowfalls closed our small mining operation for the winter, and I took to snowshoeing through the forests of Douglas Fir and Engelmann Spruce in the sparkling stillness of freshly fallen snow [15]. Over the next few years, I developed a strong feeling for these magnificent trees and the rocky crags, their substance and presence. I recall saying to a friend that, in contrast with these great beings, I lacked any sense of my own inner being. I felt empty. I had a PhD and other achievements, but there was nothing inside.

I remember distinctly the combination of a physical sensation of hollow-ness in my chest and gut, and an intangible sense of lacking something essential. This was not an abstract impression but a core existential experience that propelled me into radical changes in my profession and location, into spiritual groups, and then Buddhist practice. The impetus was my apprehension of the disconnection between the fundamental being, the “is-ness” of the trees and escarpments, and my own sense of self. My being was all “out there” and not “in here.” Not for the last time, events in my life led me into activities for which I was ill-equipped [16].

Maps of human interiority

There are many maps of human interiority to guide the voyager within, but the most well developed derive from Eastern spirituality. This is not an accidental occurrence. Diagrams of *chakras* and of *chi* energy have evolved from centuries of diligent observation and practice within cultures highly valuing inner experience. *Chakra*—meaning “wheel” in Sanskrit—refers to nodes of subtle energy located at various points in the physical body.

The simplest diagram identifies seven *chakras* ascending from the base of the spine to the top of the head. In the Tibetan system, there are three elements of a *subtle body* locatable within the physical body—first, channels (*tsa*); second, inner air or winds (*lung*); and, third, subtle energy (*tigle*). Tibetan lama Sogyal Rinpoche describes this subtle body as a “psycho-physical system” of channels through which flow the inner winds that carry thoughts and sense impressions [17]. Subtle energies are concentrated at various points in the channels. Through advanced yoga practices, this system is visualized pre-

cisely and, by directing the mind to a particular point in the body, the practitioner can begin to purify negative thought patterns and awaken the true nature of mind.

Although I am not an advanced practitioner, I have found that years of meditation and visualization practice have activated my sense of inner space. The felt sense I most associate with that “deepest inside” physical space beneath the solar plexus is what is called “heart-mind”—open-heartedness merged with open-mindedness, related to such qualities as compassion, generosity, and gratitude.

The feeling of barren nothingness inside is now thankfully gone. At times, the experiences of inner-ness for which I have used the metaphors of cavern, sky, or pool are charged with potentiality or animated by sheer delight in being alive.

In the West, physical and psychological interiority are typically treated as separate. There are many maps of the psyche within the field of psychology. Archetypal psychology, for instance, with archetypes of the masculine and feminine, and the individual and collective unconscious, proposes quite a different psychic structure than the Freudian model of the id, ego, superego, and the various complexes.

Yet again, psychosynthesis posits an “egg diagram,” with an aware self sitting within a field of consciousness surrounded by three levels of unconsciousness, the lower of which contains a constellation of un-integrated sub-personalities and the Higher Self at the crown of the egg [18]. As far as I know, none of the schools of psychology map these structures of awareness onto the human body, internally or externally.

Goethe’s way of science is relevant here because the different stages of inquiry use different mental and intuitive faculties centered on different parts of the body [19]. At the outset, the eyes and the hand are employed in perceiving and drawing the phenomenon under study. Then follows exact sensate imagination, an imagination of the real in which the entire life span of the phenomenon is visualized mentally. Intuiting the essential nature, or “gesture” of the phenomenon occurs after prolonged familiarity, and the locus of bodily attention shifts to the heart center. The final stage,

being of service to the phenomenon, involves acting out of compassion, ever more deeply centered within oneself.

It seems equally possible to approach the inner/outer experience without recourse to spiritual, psychological, or other systems of thought. Paying close attention to one’s interior spaces with a quiet mind is an undertaking open to all.

My experiences so far incline me to the view that the motto, “space, the final frontier,” is just as applicable to inner space as it is to outer space. As Antony Gormley explains, “When we close our eyes, we are in a space that is immeasurable and is equivalent to the deep space of the cosmos” [20].

Landscape and inner-ness

Is it possible to relate these different types of human interiority to the form of the land and the qualities of the places we encounter? To return to the aftermath of my dream, in what ways do the canyon landforms resonate with my perceptions of inner space? In the first instance, the physical description of my internal bodily spaces—a sequence of organic cavities variously filled with tissue, fluids, or air connected by channels and held within a bony structure—is reminiscent of the canyon structure of a series of rock pools joined by flowing or falling water and held within narrow walls [21].

As with the human body, the perception of interior spaces in a canyon is dynamic. Physiologically, the dynamism relates to the periodic filling and emptying of breath, food, and waste products. In a canyon, because they are weather-dependent, the movements are more erratic. A sudden downpour fills a narrow chasm with ten feet of raging water within minutes, and lives have been lost as a result. A fierce wind howls through a ravine and blasts away the barrier between the soft moist world “down here, in here” and the harsh dry world “up there, out there.”

The analogy between body and canyon can only be partial. For example, the human body has a network of interacting circulatory systems with many fluids flowing in many directions, whereas the canyon has only one fluid always flowing downhill. The body is highly mobile and undergoes significant changes on a scale of a few years, whereas equivalent changes to geological formations often require tens or

hundreds of millions of years. Nonetheless, the structural similarities have a metaphorical strength greater than their literal validity. Sitting in the camping cave after several days' immersion, I did feel resonances between the internal structure of my body, the processes within it, and the configuration of the canyon.

Structural sympathies such as these can only penetrate one's awareness if one allows them to. Philosopher Val Plumwood argued that two key criteria relating to place relationships were much more significant than declarations of love for that place: the attitude, or disposition that one has toward the more-than-human world; and the readiness to take action in response to the place by training one's senses and directing one's attention [22].

Plumwood's claims are directly relevant to the activity of canyoning. Trish and I were very atypical canyoneers. A recent article on the Blue Mountains canyons described a day trip into the Danae Brook Canyon in the Kanangra region to the south of Wollemi [23]. It consisted of a hectic day of heart-stopping abseiling down waterfalls, audacious plunges into deep pools, and furious boulder hopping at the bottom:

Several short rappels and two huge jumps follow. Robens throws himself off the stone, howling like a free man, arms and legs spread wide in the air, closing them like a butterfly right before he hits the water 20 feet below. When we reach the bottom, the Danae becomes a steep boulder field, which Robens, naked but for his pack and tennies, practically runs across. He leaps, lands on a slimy, snot-slick stone, almost loses his balance, finds his balance, and leaps again, all in one fluid motion. It's amazing to watch, like witnessing the movements of some earlier, better adapted human. In an hour we cover a distance that typically requires three. Stumbling and falling, I watch Robens dancing and hopscotching as if he'd been born for it.

The exuberant physicality of this type of canyoning is attractive, but it involves a very different disposition toward the canyon than Trish and I had. The former attitude might be summarized as "nature as outdoor gymnasium." Few canyoneers camp in the gorges overnight, which requires a good amount of gear that encumbers descents and ascents. Even fewer

would begin their day with yoga and meditation, and spend much of their time in silence.

Late one afternoon, I swam across a wide cold pool rimmed with water-worn ledges and sat in a ferny grotto next to a gushing waterfall. "Ha!" I exclaimed. The satisfying echo suggested to me that I explore the acoustics of the place further, and I gave voice to one of the Tibetan Buddhist chants I had been taught. The bell-shaped hollows and towering walls proved to be excellent sounding chambers, and the effect was akin to an unaccompanied choral voice in a cathedral.

Its rich resonance encouraged me to cast reserve aside and chant at full volume. When I finished and sat back, resting again in the canyon soundscape of falling waters, it seemed as though the chanting continued to reverberate inwardly as well as within the mossy recesses around me. The translation of two lines of the chant reads:

*Immense yin, dimension of inner space
With the radiant clarity of the sun and the moon [24].*

Although within Buddhism, these words are directed toward the state of ultimate realization, they also ring true at a simpler level. There have been times when I have glimpsed a connection between the outer appearance of the world as cliffs, cascades, and tree ferns, and an inner world vibrating with potentiality, on the brink of manifesting visually. It makes sense to me that these vibrations are pictured as clear and as radiant as moonlight. The interiority includes my inner being but is vast in scope. I've approached this apperception before. Once, after a late evening visit to the shores of Blackstone, I wrote:

Just as the mushroom rock radiated its particular "rock-ness" and Mount Wellington with its prominent brow radiated its particular "mountain-ness," so did I, quietly sitting there, radiate my own human-ness. All three beings had an interior aspect, and I felt a sense of spaciousness opening up within me and beyond me [25].

The phrase "immense yin," or vast inner-ness, also connects with the perspective of depth psychology. Psychologists and writers in the Jungian tradition such as James

Hillman are concerned with modern perceptions of the world as soul-less, a situation that may lead to a profound sense of alienation and disengagement from natural and humanmade worlds. If soul is only considered to be the domain of the human psyche, there is no place for *anima mundi*, the ancient Greek conception of the world soul. Writer Peter Bishop argues that "the term 'inner' has become confused spatially as meaning inside me or you rather than as a form of perception which sees the inside of everything" [26].

This contention is worth a closer look. If everything has inner-ness, then everything in the world is participating in *anima mundi*, which might well be described as "immense yin." If inner-ness *only* means "inside me" or "inside you," then it becomes exclusive and therefore problematic.

Bishop's thoughts were stimulated by an encounter he'd had on the edge of a salt lake in the arid interior of South Australia. A harassed family from suburban Melbourne arrived late in the evening in their four-wheel-drive vehicle, and the father stretched out by the fire, gazed up at the night sky and commented how therapeutic it was. Bishop is concerned about the psychologizing of the world in which the stars or the desert landscape become mere tools for modern humanity's therapeutic benefit. Viewing the world as an arena for personal psychological growth seemed to him to be puerile compared with "the ancient sublime complexity" of the Aboriginal worldview [27].

In my search for understanding, I am interested in the connection between the world inside a person and the interiority of the world, physical and metaphysical. I suggest that the process of opening to one's interiority in an actively receptive way might also be an opening into the inner-ness of all things. In this sense, the term "inner" could mean *both* "inside me or you" and a "form of perception" or even a way of "being in the world."

My essential point is that the relationship between the qualities of a place and one's own interiority is not a passive one: it is enacted, requiring, at the least, an active receptivity to place and to one's inner states. If there is any inherent structural connection between the two, then Plumwood's

two criteria of disposition and physical action must be met if we are to experience that connection. Psychologist John Shotter coins the terms “with-ness thinking” (the capacity to think *with* natural phenomena, rather than thinking *about* them from the outside), and “with-ness action” (acting in concert with wild things rather than acting upon them) [28].

There are numerous Eastern and Western traditions of body-centered awareness that incorporate aspects of natural elements, and indigenous cultures are particularly predisposed toward these relationships [29]. Many nature-oriented poets also invoke this mode of engagement—Gerard Manley Hopkins, Rainer Maria Rilke, and Walt Whitman come to mind. Whitman’s majestic “Song of Myself” is one long paean to the extended self and its inextricability with the natural world [30].

As a writer, I am primarily influenced by the written word, but other creative artists are equally immersed in the natural world and internalize its presence to express the connection they feel. Philosopher Edward Casey offers a striking example from the history of Chinese landscape painting:

To begin with, the ancient painter identifies not with a person but with the landscape through which he wanders for years in preparation for painting; the purpose of the wandering is not just to note and observe but to make himself one with what he has moved through... Moreover, this identification involves a strong factor of internalization, even to the point of pathology: the serious painters of previous centuries, says Shen Kua (A.D. 1031-95), “had streams and rocks in their vitals, and clouds and mists as a chronic illness.” But the internalization of the landscape, whatever its risks, remains necessary so far as painting is concerned [31].

Casey goes on to quote a maxim of T’ang Hou (active c. 1320-30): “Unless there are hills and valleys in your heart as expansive as immeasurable waves, it will not be easy to depict it” [32].

If the same were said of writers, the standard would be set rather high. In the next essay in this series, I examine how several writers have approached the interiority of the self and the world, and how the two might be related.

Notes

1. Coachwood (*Ceratopetalum apetalum*) and Sassafras (*Doryphora sassafras*) are the primary species of trees growing in rainforest pockets in the Wollemi canyons.
2. *Yatra* is the Sanskrit word for pilgrimage.
3. “Blackstone” is the name of the 55 acres of land on Bruny Island, Tasmania. For an account of my experiences in settling on Blackstone, see J. Cameron, *Blackstone Chronicles*, Bruny Island, Tasmania: Blackstone Press, 2016.
4. Riegner and Wilkes describe an alternating pattern of left and right deviation and rotation of flow in water that they term a “vortical meander.” See M. Riegner and J. Wilkes, *Flowforms and the Language of Water*, in D. Seamon, D. & A. Zajonc, eds., *Goethe’s Way of Science*. Albany, NY, State Univ. of NY Press, 1998.
5. B. Davies, *(In)scribing Body/Landscape Relations*, Walnut Creek, CA: AltaMira Press, 1999, pp. 14–15.
6. *Ibid.*, p. 61.
7. J. Turner Hospital, *The Last of the Hapsburgs, Collected Stories*, St. Lucia: Univ. of Queensland Press, 1995; quoted in Davies, p. 237.
8. Lewis Hyde sets up the dynamic between *eros* and *logos* that is the force of analytic thought, logic, and market exchange in *The Gift*, London: Vintage, 1999.
9. N. Doidge, *The Brain’s Way of Healing*, London: Allen Lane, 2016, p. 22.
10. From the Lab of Action and Body, Royal Holloway, Univ. of London website: pc.rhul.ac.uk (accessed April 18, 2016).
11. Women, obviously, have a womb, that fertile interior within which new life is nurtured. Arguably, this gives women a richer sense of physical interiority than men, especially in light of the experiences of the fetus *in utero*, which are shared to some degree by the pregnant mother.
12. If one considers that the intake of breath adds oxygen to the blood circulating throughout the body in the arteries, then it is literally true that we breathe with our whole bodies.
13. Speaking in the BBC documentary, *Imagine: Antony Gormley: Being Human*, first broadcast November 3, 2013.
14. The dynamic between objective and subjective spatiality is a key aspect of Jeff Malpas’ philosophical topography of place; see J. Malpas, *Place and Experience*, 2nd edn., London: Routledge, 2018.
15. Douglas Fir (*Pseudotsuga menziesii*) and Engelmann Spruce (*Picea engelmannii*) are large subalpine trees growing high in the Colorado Rocky Mountains.
16. In chapters 4 and 6 of *Blackstone Chronicles* (see note 3), I describe how, in taking on the practical management of a large area of degraded rural land, I had to overcome my lack of technical aptitude and habitual inattentiveness.

17. S. Rinpoche, *The Tibetan Book of Living and Dying*, London: Rider, 1992, pp. 248–249.
18. See R. Assagioli, *Psychosynthesis*, NY: Viking, 1965.
19. Goethe developed a form of scientific inquiry into elements of the natural world that combined prolonged observation with trained intuition (see Seamon and Zajonc, note 4).
20. See note 5.
21. Although I’m writing here about the dynamic between human interiority and the inside of canyons, there is a much larger physical interiority at play as well—the interior of the Earth. Canyons and other crustal phenomena ultimately have their origin in forces deep within the Earth. I am particularly interested in the molten iron-nickel heart of the Earth that may be considered as its inner ocean. Its enormous flux and surges affect everything on the surface ranging from plate tectonic movements of continents to the variability in the Earth’s magnetic field that protects all life from the ravages of cosmic radiation and is an orienting force for many living creatures. Knowledge of the inner ocean and its effect provides a larger perspective on canyonlands being folds in the surface of an Earth with a dynamic, fluid interior.
22. V. Plumwood, *Environmental Culture*, London: Routledge, 2002.
23. M. Jenkins, Australia’s Slot Canyons, *National Geographic*, October 2011.
24. The word *yin* in Chinese philosophy relates to the feminine principle in nature and has the connotations of being hidden, overcast and concealed. Norbu Rinpoche composed the *Song of Vajra* with several aims in mind, one of which was to activate the subtle energy centers in the body with different sustained tones. The attention is put partly on the areas of the psycho-physical body that resonate with each tone chanted in the original Sanskrit, and partly on the meaning of the words themselves.
25. *Blackstone Chronicles*, p. 130 (see note 3).
26. P. Bishop, Tasting the Salt: Country, Reconciliation and Dream’ in J. Cameron, ed., *Changing Places: Re-imagining Australia*, Sydney: Longueville Press, 2003, p. 100.
27. *Ibid.*, p. 102.
28. J. Shotter, Goethe and the Refiguring of Intellectual Inquiry, *Janus Head* 8.1 (1998), p. 154.
29. For example, in the East, *Tai chi* involves the internal circulation of *chi* energy, or life force, as a result of physical movements, while *Qigong* emphasises the control of *chi* energy through deep rhythmic breathing and moving meditation. In the West, the Feldenkrais technique, for example, develops body awareness through attention to ineffective habitual movement patterns and the learning of new patterns through slow, repeated movements.
30. W. Whitman, *Leaves of Grass*, London: J.M. Dent, 1957, pp. 23–78.
31. E. Casey, *Representing Place*, Minneapolis: Univ. of Minnesota Press, 2002, p. 107.
32. *Ibid.*, p. 108.

Questions relating to environmental and architectural phenomenology (from EAP, 2014 [vol. 25, no. 3, p. 4])

Questions relating to phenomenology and related interpretive approaches and methods:

- ❖ What is phenomenology and what does it offer to whom?
- ❖ What is the state of phenomenological research today? What are your hopes and concerns regarding phenomenology?
- ❖ Does phenomenology continue to have relevance in examining human experience in relation to world?
- ❖ Are there various conceptual and methodological modes of phenomenology and, if so, how can they be categorized and described?
- ❖ Has phenomenological research been superseded by other conceptual approaches—e.g., post-structuralism, social-constructionism, critical theory, relationalist and non-representational perspectives, the various conceptual “turns,” and so forth?
- ❖ Can phenomenology contribute to making a better world? If so, what are the most crucial phenomena and topics to be explored phenomenologically?
- ❖ Can phenomenological research offer practical results in terms of design, planning, policy, and advocacy?
- ❖ How might phenomenological insights be broadcast in non-typical academic ways—e.g., through artistic expression, theatrical presentation, digital evocation, virtual realities, and so forth?
- ❖ What are the most important aims for future phenomenological research?
- ❖ Do the various post-structural and social-constructionist criticisms of phenomenology—that it is essentialist, masculinist, authoritative, voluntarist, ignorant of power structures, and so forth—point toward its demise?

Questions relating to the natural world and environmental and ecological concerns:

- ❖ Can there be a phenomenology of nature and the natural world?
- ❖ What can phenomenology offer the intensifying environmental and ecological crises we face today?
- ❖ Can phenomenology contribute to more sustainable actions and worlds?
- ❖ Can one speak of a sustainable life-world?
- ❖ What is a phenomenology of a *lived* environmental ethic and who are the key contributors?

- ❖ Do the “sacred” and the “holy” have a role in caring for the natural world? For places? For lifeworlds broadly?
- ❖ Can phenomenology contribute to environmental education? If so, in what ways?
- ❖ Can there be a phenomenology of the two laws of thermodynamics, especially the second law claiming that all activities, left to their own devices, tend toward greater disorder and fewer possibilities? Are there ways whereby phenomenological understanding of life-world might help to reduce the accelerating disordering of natural and human worlds?

Questions relating to place, place experience, and place meaning:

- ❖ Why has the topic of place become an important phenomenological topic?
- ❖ Can a phenomenological understanding of place contribute to better place making?
- ❖ Can phenomenology contribute to a generative understanding of place and place making?
- ❖ What roles do bodily regularity and habitual inertia play in the constitution of place and place experience?
- ❖ What are the lived relationships between place, sustainability, and a responsive environmental ethic?
- ❖ How are phenomenological accounts to respond to post-structural interpretations of space and place as rhizomic and a “meshwork of paths” (Ingold)?
- ❖ Can phenomenological accounts incorporate a “progressive sense of place” argued for by critical theorists like Doreen Massey?
- ❖ Can phenomenological explications of space and place account for human differences—gender, sexuality, less-abledness, social class, cultural background, and so forth?
- ❖ Can phenomenology contribute to the politics and ideology of place?
- ❖ Can a phenomenological understanding of lived embodiment and habitual inertia be drawn upon to facilitate robust places and to generate mutual support and understanding among places, especially places that are considerably different (e.g., different ethnic neighborhoods or regions)?
- ❖ Can phenomenology contribute to mobility, the nature of “flows,” rhizomic spaces, the places of mobility, non-

spaces and their relationship to mobility and movement?

Questions relating to architecture and environmental design and policy:

- ❖ Can there be a phenomenology of architecture and architectural experience and meaning?
- ❖ Can phenomenology contribute to better architectural design?
- ❖ How do qualities of the designable world—spatiality, materiality, lived aesthetics, environmental embodiment etc.—contribute to lifeworlds?
- ❖ What are the most pertinent environmental and architectural features contributing to a lifeworld’s being one way rather than another?
- ❖ What role will cyberspace and digital technologies have in 21st-century lifeworlds? How will they play a role in shaping designed environments, particularly architecture?
- ❖ What impact will digital advances and virtual realities have on physical embodiment, architectural design, and real-world places? Will virtual reality eventually be able to simulate “real reality” entirely? If so, how does such a development transform the nature of lifeworld, natural attitude, place, and architecture?
- ❖ Can virtual worlds become so “real” that they are lived as “real” worlds?

Other potential questions:

- ❖ What is the lived relationship between people and the worlds in which they find themselves?
- ❖ Can lifeworlds be made to happen self-consciously? If so, how? Through what individual efforts? Through what group efforts?
- ❖ Can a phenomenological education in lifeworld, place, and environmental embodiment assist citizens and professionals in better understand the workings and needs of real-world places and thereby contribute to their envisioning and making?
- ❖ Is it possible to speak of human-rights-in-place or place justice? If so, would such a possibility move attention and supportive efforts toward improving the places in which people and other living beings find themselves, rather than focusing only on the rights and needs of individuals and groups without consideration of their place context?



Environmental & Architectural Phenomenology

Published digitally two times a year, **EAP** is a forum and clearing house for research and design that incorporate a qualitative approach to environmental and architectural experience, actions, and meanings.

One key concern of **EAP** is design, education, policy, and advocacy supporting and strengthening natural and built places that sustain human and environmental wellbeing. Realizing that a clear conceptual stance is integral to informed research and design, the editor emphasizes phenomenological approaches but also gives attention to related styles of qualitative research. **EAP** welcomes essays, letters, reviews, conference information, and so forth. Forward submissions to the editor.

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Exemplary Themes

- The nature of environmental and architectural experience;
- Sense of place, including place identity and place attachment;
- Architectural and landscape meaning;
- The environmental, architectural, spatial, and material dimensions of lifeworlds;
- Changing conceptions of space, place, and nature;
- Home, dwelling, journey, and mobility;
- Environmental encounter and its relation to environmental responsibility and action;
- Environmental and architectural atmospheres and ambiances;
- Environmental design as place making;
- Sacred space, landscape, and architecture;
- The role of everyday things—furnishings, tools, clothing, interior design, landscape features, and so forth—in supporting

people's sense of environmental wellbeing;

- The progressive impact of virtual reality on human life and how it might transform the lived nature of "real" places, buildings, and lifeworlds;
- The practice of a *lived* environmental ethic.

For additional themes and topics, see the preceding page, which outlines a series of relevant questions originally published in the 25th-anniversary issue of **EAP** in 2014 (vol. 25, no. 3, p. 4).

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