From the field...

by Jerry Diethelm

I suppose to some of my colleagues my approach to theory will seem backwards, like reading from right to left on the page. But I count myself among those who insist that environmental design theory must be intimately associated with practice in the broadest sense. The usual abbreviation for this discourse is theory/practice. I would just reverse it: practice/theory. Even better I think is, practice/theory/practice in order to convey the alternating mental current of action and reflection that is theory making in the field.

This isn't meant to be contrary or dyslexic, just reflective, a desire to conceive theory as what thoughtful designers do to improve performance and to learn from professional experience. The cyclic pause can take many forms: one might think of it as an occasional freeze-frame in the process; a "stopping by the (theory) woods on a snowy evening;" ("Whose thoughts these are I think I know...") a time for toolmaking reflections in the window of a rainy afternoon.

Making Models

My position is that theory-making means forging intellectual concepts, models and tools at multiple levels of abstraction that are useful and satisfying - not truthful or falsifiable, since theories are never true anyway. It satisfies me greatly to search for more general ways of explaining, modeling and relating design ideas. And I think concepts, such as the old Hubbard and Kimball, "formal/natural," or Colquhon's formal/figural should be recycled when it becomes clear that the terms are tattered and worn out.

I like the image of filling an invisible mental tool box, a big one always open and accessible, full of all the digested experience I can find, and not just my own. My box opens out with multiple levels, trays filled with a growing variety of nested intellectual models – the poet Goethe called them mental organs - that planners and designers can choose to think through and apply, but only when they promise to do so with openness, flexibility, and imagination.

On this view the collection is an ongoing construction of rich ways of thinking and working whose purpose is to guide and further the high-level functioning demanded of complex creative work.

The models are considered successful if they can help the designer achieve better, more satisfying and more successful outcomes more of the time. This doesn't mean abandoning all creative insight and intuition to some rigid process - far from it - just not always being quite so seat-of-the-pants or half of what's inside.

American Pragmatism & Continental Philosophy

Philosophically this approach is grounded in an amalgam of American Pragmatism and so-called Continental Philosophy. In Pragmatism the practice/ theory question is always a bidirectional both/and in the form of a whole system as in the old Model T ad, "It gets ya' there and back again," or complexly interdependent as in Aldo Leopold's "round river."

Most importantly, the

Fig. 1
Lodge's Cogwheel Model of the Ether. The spinning cogwheels represent a magnetic field.

parts of a process are never prior to the whole activity. Being is ever fused with doing, thought entwined with action. People (and other creatures) are always interwoven into places. There is no need to speak of interfaces between cultural and natural systems because they are not conceived as separate - and separable - worlds from the beginning.

Pragmatically, we don't act because we have ideas and beliefs; we have ideas because we must act, and "we act to achieve ends" (Dewey)

We don't design because we have ideas; we have ideas, concepts, and create theory models because they are integral products of the intentional process of making things, places, and landscapes.

I share with John Dewey - our prototypical American pragmatist - the belief that we inhabit, an open, plastic, responsive universe, consisting of "material for change," to be remolded and reshaped by expressive human effort.

This is the view that no place is new or unfinished and that designing is always a form of remodeling places that "need a little or a lot of changing." From this perspective, American democracy is not all done either, and the most ideal, supportive, sustainable and beautiful human habitats are always just over an ever receding horizon.

Changing existing situations into preferred ones

What I think of as designing is a complex of processes, not a singularity as in "The design process,", but processes as complex as we are for intentionally "changing existing situations into preferred ones," (Simon).

There is considerable appreciation and agreement in the field with Herbert Simon's phrase, especially with regard to the normative nature of "preferred situations". Needs, goals, ideals, hopes, dreams and desires are all first citizens of this realm of human valuing.

There is less agreement about the degree of valuing inherent in "existing conditions." There are holdout, leftover positivists with hangovers from the last century who still believe it is possible to say "how it really is."

Most of us have noticed, informally if not philosophically, that "how it really is" really depends on who is telling the story. Experience has taught me to suspect all claims for an unalloyed objectivity, knowing such prouncements to be the smiling masks of unspoken agendas and hidden interests.

It is easy to overlook the inherent intentionality of existing situations and fail to remark that they are existing to some degree because we have focused our interest on them. Environmental design situations come to our attention because they are problematic, because they contain unresolved issues, or because they

present special opportunities. They are "stained with our interests" (Derrida) and alive with our concerns. Such involvement makes them easily recognizable as belonging to a valuing process.

This complex, interpretative and evaluative process as it more pointedly relates to planning, architecture, and landscape architecture, grows out of what I will call an ongoing critique of environmental praxis .

Social Praxis

Praxis in Continental philosophy, according to Simon Critchley, is an expression of the belief in "our historically embedded life as a finite species in a world that is of our own making." This position has lead to a series of internal critiques of present conditions (existing conditions), the description of crises related to focused sets of concerns, and toward a demand for what he calls prescriptions for emancipation.

The formulation: critique -> crisis-> emancipation leads among the "Continentals" to some very large projects indeed.

The crisis for Heidegger, for example, is the forgetfulness of being; for Adorno, the hegemony of instrumental rationality and the domination of science; for Marx, economic and social justice in capitalist society; for Nietzsche, nihilism. And from each crisis in its turn comes a philosopher's prescrip-

tion for emancipation. These social critiques and their proposed solutions have long dominated our lives.

If there is one preeminent environmental crisis of our time, it is the belief that humans and human culture exist at some transcendental, Archimedean point outside of nature and the delusion that we can continuously lever the world without ever being on the other end.

A possible emancipation from this kind of destructive thinking is the pragmatic strategy of creating a new conceptual vocabulary and another way of telling the human/environment story.

Environmental Praxis

Critchley's is "a critique of existing *social* praxis that aspires toward some goal of individual or collective emancipation." I want to propose an *environmental* praxis, i.e. an environmentally situated critique - lets substitute the insider terms interpretation and evaluation for critique - which compares a socially constructed understanding of existing environmental conditions with desirable possibilities, that admits and requires critical judgment, and that leads to proposals for environmental transformation and expression.

It should be immediately apparent that environment in this model is not being used as an objective and technical concept (as in early Tuan or later Berque and now increas-

ingly the postmodern straw goats of such discussions) but a deeply cultural formulation.

Culture here is being used in both the broader sense and the narrower sense. This ranges from the anthropological all there is about a people (broader) to the best of the best of their productions (narrower) – the best gardens, the best songs, the best films, the best towns, books, poems, and paintings... - and not the popular Sunday kind of culture (Hardin) we turn to when the

fig. 2   First Position

work is done.

The borrowed and expanded Continental model, environmental praxis, is intended to be spread across the full landscape of cultural creation and production.

Environment, on this view, can not be successfully collapsed or usefully cut up – there are no congruent linguistic joints (Rorty) - into the distinctly technical, social, ecological, historical, or cultural except as a series of vantage points into the larger whole.

The parts, however instrumentally conceived, are not prior to the whole.

This is the socially con-

structed concept of environment of the environmental planning and design I practice and am licensed as a landscape architect and architect to profess.

Landscape, in this formulation, is landschaft, the insider landscape of those who dwell (Jackson, Tuan, Norberg-Shultz, Cosgrove, Corner, Spirn...). A landscape is a portion of environment of perceived wholeness and identity. Attempts to claim cultural superiority for the term

are, I believe, professionally motivated, mistaken and misplaced. If I were not a pragmatist, I might be more easily lured into a discussion of whether there really was such a thing as an "outsider" environment, landscape, place or setting.

From the field...

By situated I mean that I am taking the working position that I am embedded in what I am calling an environmental field.

I am constructing this explanation then, this interpretation, from first position (see fig. 2), that is, from within the field where I am both embed-

ded and aware.

I am intimately nestled in a field, in a culture, in a landscape, in a language, in a specialized and systematic discourse, the other way around and through and through.

I am aware that I am selectively aware. This includes the many well-known limitations of my gender, other relevant aspects of the social construction of my identity, my life experience, personal failings and modest gifts.

Nevertheless, I have climbed to the top of a hill in this field on a clear and quiet day to widen my perspective and to speculate (from the Greek, theros, spectator: probably thea, a viewing + -oros, seeing). I pause to think about and to and to work on a few of my favorite theoretical models. I climb up to a position where I can further fashion a working vocabulary in which to think, generalize and report.

From the hill I metaphorically perceive the wonder and fullness of the field as a flowing interwoven matrix of matter, information and energy (Shepard, Bateson). I imagine it and experience it as flowing through a valuing mind having a valuing experience. I am floating on a raft in the Round River.

I know it is customary to think of a field (scientifically)

as a conditioned space, which has the potential to produce a force. It is now well-established that a moving charge produces a surrounding electromagnetic field and that energy is both stored and transmitted through that field. Induced currents magically appear in nearby conductors.

The early attempts in England to model this idea are interesting examples of the role of metaphoric expression in theoretical development. Leading thinkers thought through the prevailing metaphors of their time, which were typically of industrial strength. Fig. 1 shows a late 19th Century attempt to model the idea of an electromagnetic field mechanically. The little gears

$$\operatorname{div} \epsilon \mathbf{E} = 0 \qquad \operatorname{curl} \mathbf{H} = \epsilon \dot{\mathbf{E}}$$
$$\operatorname{div} \mu \mathbf{H} = 0 \qquad -\operatorname{curl} \mathbf{E} = \mu \dot{\mathbf{H}}.$$

Fig. 3
Maxwell's Equations for an Electromagnetic Field

portray the influence in and through the "ether" caused by a moving charge.

Fig.3 is a later mathematical model. This is Oliver Heaviside's famous four equations known today as Maxwell's Equations. It is forgotten now that Heaviside was a telegrapher, a practitio-

ner, and a gifted, amateur mathematician. His need to account for the unexplained electromagnetic phenomena of long distance telegraphically cut through the academic ether of his time.

The air is clearer...

The air is clearer today and from first position I believe I am uniquely situated to see the nature of the conditioning potential of the field that I am in.

I experience an environmental field as a value-conditioned space, which can be described as an environment, a region, a landscape, a place, or in Susanne Langer's term (in *Feeling and Form*) an "ethnic domain".

In all its informational splendor, I perceive a moving "charge" of interest in the field as a constructed "difference that make a difference" (Bateson), i.e. a difference that matters. Gregory Bateson called such perceptions of difference ideas. Attention, or more actively, attending to..., directs, coordinates and focuses the charge of interest in the field.

Such differences that matter create and animate an

CLOSE TO HOME

LEMON AUTO SALE
VINCE LEMON, OWNER

"Well, the third-quarter numbers are in. Sales are down 40 percent since the new owner took over."

environmental field, which to borrow from Lodge, might be imaged as whirling pools of perceived potential, induced ideas for directing change, and geared intentional movement.

Information is stored up in the DNA of the field in the customary ways but also in the customs, institutions, beliefs and desires of its active social structure.

The field is animated and transformed by both evolutionary processes and the actions that grow out of perceptions of environmental difference. My insight is just that, an insider's view of a coevolutionary process.

From this field perspective, I dwell and think, feel and desire, plan and design in a place conditioned by the indi-vidual and normative valuing of a culture. Like the buyers in the above cartoon, I expect that my behavior would also be altered by the concept "lemon" in this environmental field.

Representing the field...

I see no way for this perceived environmental difference to be immediately collapsed or transcoded into a single specialized language or logic without serious loss of existential meaning. To those who have taken the "language turn," (Rorty) who believe that thinking is only through lan-guage, I can only say, I do not think so. I do not think *so*.

The experience of the valuing mind is far more like opera, more *Alexandria Quartet* (Durrell) than a simple story,

more video collage and MP3 - more interlaced and interwoven with associations - more like a string quartet than words on a string.

I experience my attending to existing situations as com-plexly plural and simulta-neously present collections of immediate and stored up experience (cf. Nabokov in *Speak Memory*).

I am anxious to collect and find ways to better represent these associated ideas, sensa-tions, relationships, memories and reflections, not to boil them down too quickly or to lose their flavor.

If anything, I am some-times too sympathetic and empathetic to the chattering life around me and often "go home (like Keats) not me" from too much mentally invasive and symbolically displacing wordi-ness.

My professional hopes, like my everyday experiences, are vividly present, eidetic; they grow into and become movies of the mind. I am used to moving in and out of them using the classical model of the four ways of looking at a Chinese landscape painting: see; travel; ramble; dwell.

I know my environmental evaluations are filtered through a beehive library of associated memories, interests and con-cerns. I know my constructions are metaphorically based, and here I am referring to the contemporary theory of meta-phor (Lakoff, Johnson) as a basic structure of thought, not

rhetoric. I think through images and concepts. I pump qualities back and forth between metaphoric expressions. I think so. I think *so*.

Field observations...

Information in the field is always interpreted, always filtered and felt through many personal descriptions, from many points of view, through many valuing minds.

Some longer term information in the field is genetically encoded; some is reified in more recent symbolic constructions, projects, activities and places of all kinds. Some is powerfully discursive, but a large majority of it is not. Its non-discursive meaning is heavily dependent on context and unreferenced - and largely unreferencable.

Some information is sensuously and viscerally felt and transmitted, such as the warmth of a sunny smile, a haunting melody, a pulsating rhythm, or a furtive nod that says it's time to go.

There are many forms of knowledge in an environmental field. There is practical knowledge of the ways of the field, such as interpretation, evaluation, and expression. There is theoretical knowledge that fuels its discourse and models its secrets; empirical knowledge, which enables its successful and satisfactory transformation; and ethical knowledge that helps to guide behavior in the field. There is knowledge that is joy and sorrow, wonder:
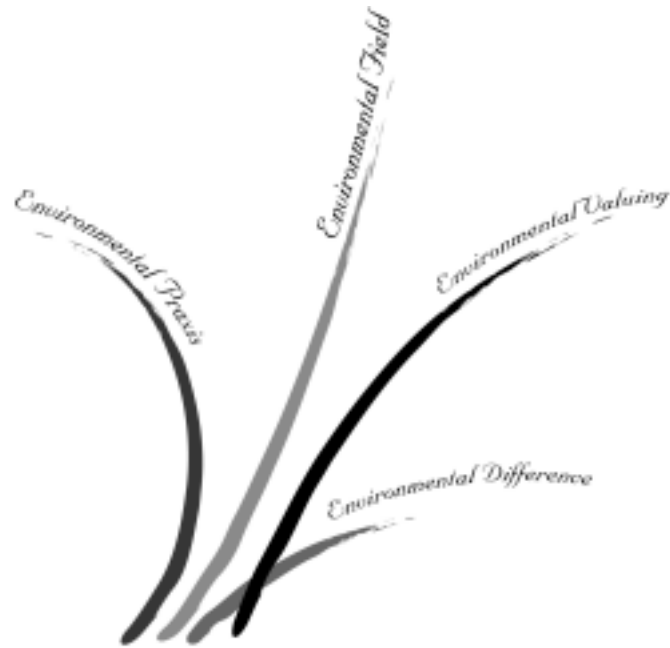

Fig.4 Flowers of the field...

passion and delight light up the field.

Climbing higher...

Environmental praxis, then, models a valuing experience in an environmental field. An environmental field is a value-conditioned region, and environmental valuing is the way the field is consciously and intentionally experienced, evaluated and transformed.

Field qualifications...

I am professionally prepared to help determine and to act on perceived environmental difference in an environmental field.

The concept, perceived environmental difference, combines three important ideas. First, that an environmental evaluation (or critique) is a social construction. It is a situated construction from

points of view that come laden with their own repertoire of interests, desires, concerns, needs, fears, hopes, dreams, and goals.

Included in this notion is the acceptance that the person or group doing the construction is also, at least to some degree, socially constructed. There is no known vaccine against this situated, constructed valuing condition.

The second is that there is always a gap between a perceived present state of things and a desired state, and that it is the designers role to help draw out and articulate the gap and to create and share possibilities.

A desired state is also clearly a valuing construction. It can be described in a full array of possible transformations, from short-term practical modifications and revisions to longer term projections of

hopes, needs, dreams, and visions. The articulated gap between these states is an interpretation of "what needs doing," what "wants (Kahn)" to be done. Upon some acceptable degree of agreement, designers and planners unfold their many strategies for how to get from here to there.

A third idea is that the environmental difference has to be large enough – serious enough, significant enough, pressing enough - to create the energy, motivation and mutual commitment required to overcome the local inertia of the field. The bigger the perceived gap, the more ambitious the desired transformation, the more environmental inertia there is to overcome, and the more difficult it will be to build a transformative consensus.

The hidden field...
In everyday practice one works toward agreement about what "needs" to be done without overtly referring to such models as environmental praxis or talking about critiques, crises, emancipation, environmental valuing or environmental fields. I speak less about art and form and more about the practice of making things and places satisfying, sustainable and special.

I do not tell anyone I am working to promote a ripeness in the field that will overturn its inertia. I know my field equations, both "Maxwellian" and amusing to me, and modeled after rotational moment

theory in structural engineering are better kept to myself. More directly I try to lessen the fear of change (negative moment) and promote a shared, wanted and possible vision (positive moment). I try to increase excitement and forward movement through tangible rehearsals of mutually desirable, value-expressive futures. I try to create a surplus of positive movement by convincingly showing how it is possible to build tangible bridges to desirable, achievable shores.

I say nothing about attending to an environmental field or reveal that I believe that human attention is richly parallel and polysemous. I burden no one with the belief that human attention and what I call attending to... is actively and relationally selective, and that we are focusing on the things (ideas, concerns, needs, hopes, dissatisfactions, dreams) that we think matter.

I don't reveal or discuss my epistemological position that "mattering" is the broadest and most common face of meaning in a human valuing experience, or that I think it is a constant and reciprocal activity of valuing and attending to… in an environmental field.

It is easier to just say we pay attention to and care about the things that matter, then go about the business of saying what they are.

I don't emphasize that the descriptions of the present state of things are more accurately (theoretically) descriptions/

evaluations and interpretations and welcome the availability and use of good factual information.

People need to feel comfortable and convinced about the normality of having interests, concerns and opinions. I want them to be able to help them shape these points of view into a shared expression of environmental difference so that I can gather support and agreement about what needs doing.

I strive to be the best agent I can for the selection, articulation and interpretation of the critically active interests of the attentional world that is being shared, which includes my own opinions and professional experience.

To be a good guide, however, one needs a good map and a few good models of what is, indisputable in everyday practice, tender axiological territory. Designers need to bring useful ways to think about the valuing process to the table, and especially when they are working with those who have yet to recognize it as such. It would be handy to have a more common language of environmental valuing to communicate with ones self and others about the path one takes from a socially constructed here to there.

Following the advice of Terrance Love of the Design Research society (DRS) I have sorted my toolbox of theoretical constructions into three nested levels of abstraction. (See

Modeling the Models: Three Levels of Abstraction

1. Meta-models that characterize the "ontology, epistemology and general theories" (T. Love) of designing

Environmental Field
First Position
Environmental Valuing

Environmental Praxis
Environmental Design Problems

Perceived Environmental Difference
Environmental Inertia
Environmental Ripeness
Environmental Information

A Metaphysical Map
The Valuing Mind
Complementarity
Field Equations
Ten Field Propositions
Forms of Knowledge
The parts of a process
are never prior to the
whole.
Valuing/Meaning in Experience
Mattering: that/how/what
Meaning-fullness

2. Mid-level Structure and Process Models

Designing in Four Phases: A/I/F/M:
Attending to... • ,,,Intending toward.../,,,Forming out of... • Meaning in experience

The 3 Axis Model: The Axis of Interest
The Axis of Intention
The Axis of Agency

Richly parallel,
& polysemous attention
Selection & interpretation
Problem/opportunity
construction
Evaluation of what
needs doing

Metaphoric expression
Constructed Meaning

The Quality Project: Intimate, Metaphoric & Catechresic
Qualities in Design

3. Collections of Smaller Models, Tools & Devices

Designer PiE: Ways of Thinking About Design

Goal Array
The Dilemma of the Trains
Problem Signatures

The Four Phases:
The Nine Questions: (that always have to be asked at each level)
The Many Ways: e.g. The Fan of Values - The Fan of Intentions
Vivid Presence - Envisioning
Type & Architype
Intimacy: People & Place
Center, Sine Qua Non
Namiing & Numbers
Issues & Inertia
From Here to There - Intentional & Formative Strategies
Image/Place
Field & Focus

Vannus valereus

chart.) On the first level are the meta-models, those concepts that characterize the "ontology, epistemology, and general theories of designing," such as environmental praxis and environmental field. This is the area of design theory he says needs the most work, since no one, especially in the postmodern period, seems willing to take a stab at it. Stab. Stab.

The second level holds the mid-range operational, structural and process models, such as Attending to... • ...Intending toward.../...Forming out of... • Meaning in experience. These are taken up in two other publications, *"Designing in an Environmental Field,"* and "The Quality Project."

The third level is a collection of the many smaller models I've been using with design students now for over thirty years. These are contained in the digital, "Designer PiE: Ways of Thinking About Design and its subsequent digital extensions and commentaries.

Coming down...

But when I come down from the hill and merge back into the field of theory-using practice, I put these many "flowers of the field" back into their mental basket.

I put environmental field, environmental valuing, environmental praxis, environmental inertia, perceived environmental difference, Attending to..., Meaning in experience, Intending toward.../...Forming

out of, my Fan of Values and Fan of Intentions, Vivid Presence, Designer PiE and all the many other "mental organs" that I carry, back to rest and ready in the mind. Building such models is part of the rhythm that is the pulse and habit of designing.

I know I will continue to consciously feel/think/see through these filters, using them for purposes of interpretation, evaluation, representation and expression, until I've constructed fresh concepts that are yet more effective, useful and productive.

And I know I will consciously strive to hide the models - and urge students who hope to practice to do the same - in a more common, less specialized and pretentious vocabulary that is as friendly as a letter home. I think it is far more effective to call something interesting, stimulating, moving, and beautifully expressed than "aesthetic." I find the response is warmer if you use "epistemological," "axiological" and "praxis," very sparingly.

Talking about theory does have a tendency to make the collective eyes roll up, and people start to worry that you take designing and yourself too seriously. My way is to hide behind humor and then sneak in another important point.

If pressed for example about the window metaphor I used at the beginning of the essay (note the A-B-A formal structure of returning to the

beginning) I would describe the reflection of my foreshortened hands as "short paws for theoretical construction."

Induced reflections...

Most designers live and learn, others just live (and still do quite well some of the time).

A few do theory and make models, because they want to be able to leverage their experience and raise the odds of "getting it just right," no small task. And so they stop periodically and consciously climb the hill.

Here then is some famous advice. I have it on the highest apocryphal authority that Goethe's famous deathbed utterance was seriously abkürzt.

He did as reported say "More light," but then added a heartfelt plea, "More models - more models and concepts for designing."

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