User Experience in the Threshold Matrix of Public Space

Design Intervention in a Complex Environment

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Abstract: Designers seek to create environments that offer their inhabitants comfortable, desirable, meaningful or other qualified positive forms of experience. In some successful models, solutions involve a synthesis of space and person, such that they are mutually constitutive. Often as well, models involve an understanding of space, person and their union as dynamic. Models of space design which recognize such a dynamic relationship are said to view space as *relational*. In this paper, we claim space as relational. We also present the case that emergent in actualizing the relational idiom is the idea of *threshold*. Threshold is many things and complex. It symbolizes crossing but also pause, end but also beginning, a brief moment but also extended duration. In the paper, we explore the concept of threshold within physical, perceptual and rational frames. We attempt to foster a rich awareness of threshold, link it to a fertile, generative picture of public space, connect it to enrichment of inhabitants' experience of the city and articulate roles for the designer. City and cultural spaces have pleasures embedded in the idea of threshold. Through analysis and intervention the designer can tap into those pleasures for the benefit of the user.

Keywords: Threshold, affect, complexity, public space

1. INTRODUCTION

Designers consistently explore models and concepts for facilitating human experience in urban public space. In this critical-analytical paper, we will hold that public space is relational, human-centered and performed, that performed space is dynamic (or indeterminate) and that performed space is networked (or *mesh-worked*, as we shall point out). In these re-framings, we transcend a "sedentary metaphysics" of space (Anderson, 2012).

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Somewhat containing all these structural dimensions is *threshold*. Threshold is an in-between--a place, a duration, an experience. Thresholds are physical and psychic locales of human performance. Thresholds can be sojourned-in or crossed. As sojourn, they are temporary pauses in an experiential journey across time-space (Anderson, 2012). As places of movement (Stevens, 2007), they "regulate and give meaning to the act of crossing" (Stavrides, 2010, p. 13). That thresholds symbolize non-finality, however, means they also entail possibility. They "present distinctive perceptual, behavioral, social and symbolic affordances" (Stevens, 2007, p. 152).

If there is one pre-eminent observation at this point, it is that threshold is a complex idea. It is exceedingly rich and thereby presents a range of opportunities for the designer to exploit it. It is a construct that is of value to designers interested in questions surrounding designing space for human inhabitation and those interested in exploring the interface between space and human. Through analysis and intervention, the designer can tap into the *possibilities* it offers in order to facilitate user experience. This paper purposes to frame that generative picture of possibilities in public space.

2. CITY AS THRESHOLD

2.1. City experience as dynamic

The city, according to Wirth (1969/1938), may be defined as "a relatively large, dense, and permanent settlement of socially heterogeneous individuals" (p. 148). The gathering of human bodies, all active in performance, is core to the urban condition. The city is also space which harbors these embodied agents. Coupling these two dimensions, Stavrides (2010) urged us not to consider urban space as merely a container, but as a "formative element of social practices" (p. 13). Camponeschi (2010) echoed that view and also highlighted the salient idea of experience in urban space: "Public space is better understood not as a predetermined physical place, but as an experience created by the interaction between people" (p. 11).

Brighenti (2009) extended the conceptualization. She noted that "territories are better imagined as processes than objects" (p. 64). Spaces or places in the city are first demarcated, but they become what they are through a combination of their past, present and intentional histories/trajectories of inhabitation. Threshold, as we saw above, is such a territory that is defined by a synthesis of space, human and performance.

Extending yet one step, Stavrides (2010) re-enlisted the now-prominent idea that the city is not simply an aggregation of static points, but a "network of flows" (p. 28). It is possible, then, to conceive of the city as a constellation of points/places being continuously traversed by humans and in which a vast range of dynamic engagements occur. The city can be conceptualized as a network of thresholds.

In an argument about boundaries (which we are unable to discuss extensively here due to space limitations), Cilliers (2001) proposed that in a complex system, its components are richly interconnected such that there is a short route from inside to outside and "everything is always interacting and interfacing with [other components] and the environment." It would be as if the boundary was folded in or "perhaps, the system consist[ed] of boundaries only" (p. 142). If one considered thresholds (in one of their idealizations) as "boundary breachers" (in the sense that

¹ For sociological purposes

² These are grouped by category here, not ordered according to any other criterion--e.g. Nathanson (1992)

they might span boundaries), then the city could be seen as a continuous meshwork of thresholds rendering in flux insides and outsides or melding dynamically contiguous environments that are, in one sense of actuality, neighboring systems. So, every moment or point is a charged instance surrounded by its own field of influence, but that field is made up as a configuration of other charged points, each surrounded by its own field. There is constant overlap in an unbroken dialectic across space. Describing movement across space, Ingold (2005) wrote that while on the trail (and we could say, while moving through the city), "the wayfarer [as opposed to a person transported] is always somewhere, yet every 'somewhere' is on the way to somewhere else" (p. 47).

If the city is seen as a continuous connection of thresholds, then it is easy to embrace Stavrides' (2010) point of view of understanding thresholds as "always being crossed" (p. 36). This conceptualization seems to represent the city well on the elemental, physical level, but we also intend it at a higher creative level (as did Stavrides) of inhabitants doing the crossing as engaged continuously in the simultaneous production and "consumption" of experiences. It is a useful strategy for a designer to consider city space creation from the viewpoint of a meshwork of experiential scripts. The wayfarer, Ingold (2006) continued, "is [her or his] own movement...instantiated in the world as a line of travel" (p. 24). The designer should not see people moving across the fabric of the city as simply connecting points, but creating a narrative as they go, each person as her own movement, instantiated in the world by a history precipitated in movement.

2.2. Dense, dynamic space

Anderson (2012) urged us to move beyond conceptualizations of site and space as fixed and static, "part of a 'sedentary metaphysics'...which seeks to 'divide the world up into clearly bounded territorial units'" (p. 572). Employing figuration of surfing, he enticed us to transcend a useful, but not *total*, portrait of assemblage ("surfers, boards, and waves are 'connected' together to form one coherent unit for the lifetime of the ride") and reach, in addition, towards the generative (even if transient) sphere of convergence ("surfed wave becomes a place whose constituent parts are not simply connected together but, rather, become blended and blurred into a converged entity/process") (p. 571).

2.2.1. Meshwork

Ingold (2005, 2006) has described movements of persons in space. In order to contemplate *meaningful* inhabitation of environments, we should consider, Ingold suggested, their movement in terms of the walk rather than the assembly. He distinguished between lines connecting points (an assembly) and the fluid line which narrates a *walk*. He discarded the term, network (of lines simply connecting points), for *meshwork*. Instead of thinking of an interconnection of points (which emaciated lines of the network suggest), we should be thinking of interconnected lines in a meshwork (since each line embeds a narrative, represents a packaged history). The lines of the meshwork, he wrote, "are the trails *along* [emphasis in original, in contrast to "across"] which life is lived." It is in "the entanglement of lines, not in the connecting of points, that the mesh is constituted" (2006, p. 26).

In movement within a meshwork, movement that is a *walk*, points or nodes take on a different significance. They are not a constellation of termini (opposed by Ingold, 2005, 2006), but places of pause. They are no longer simply geographical, but temporal, wrote Anderson (2012): "A place is now. It is permanently in the present, only temporarily 'fixed', and now something else" (p. 574). Places should be seen by the designer as in-betweens along *walks*.

The idea of meshwork points our attention to one of its superordinate paradigms, *relational thinking*.

2.2.2. The relational turn

In relational thinking, space is defined in terms of "object(s) and/or processes...considered in space and time" (Jones, 2009, p. 490). These objects and processes are deployed in a meshwork that reveals interdependencies and flows between them. The *relational turn* pivots towards understanding places as not static, but shaped by openness, conditionality and emergence (Anderson, 2012). It "not only encourages us to consider traditional (terrestrial) places in new ways (eg, towns, neighbourhoods, parks, or plazas) but also enables the consideration of new 'coming togethers' as 'places'" (p. 571). It is an "interdependent epistemology" (Anderson, 2012) that recognizes a "hybridity of subjects, identities and spaces" (Watson, 2003, p.145; also in Anderson, 2012).

Relational thinking, according to Anderson (2012), "marks a rejection of a static ontology of 'being-in-the-world'...and an embracing of a more emergent and emerging ontology of 'becoming-in-the-world'" (p. 573). Space is seen as an actor-centred becoming (Jones, 2009), created through "inhabiting practices" (Stavrides, 2010, p. 23). In this new paradigm, threshold plays an active role (in its conative association with *becoming*). Within a network topology, wrote Massey (2006), landscape is "a constellation of ongoing trajectories" (p. 92). In travelling across space, Massey continued, we are not simply travelling across landscape, but across stories.

2.3. Role of affect in stories and narratives of experience

In order to link experience of the city with affect, we draw on the work of psychologist, Silvan Tomkins. Echoing Massey above, Tomkins understood human existence as "sequences of scenes animated by emotion and linked to form stories about lives" (Nathanson, 2008, p. xi).

To the extant model of human behavior as a stimulus-response dyad, Tomkins added affect as a mediating mechanism. No stimulus, he argued, can trigger a response "unless and until it triggers an affect," which then brings the stimulus to the attention of the organism and mobilizes a response (Nathanson, 2008, p.xiii). Thus, he depicted life as stimulus-affect-response sequences organized into a series of scenes.

Tomkins presented a palette of nine innate affects: two are positive affects, six (four "negative" plus two "displeasure") are negative and one is a reset affect (Lövheim, 2012; Nathanson, 2008).

Table 1: Affect systems as proposed by Tomkins (Tomkins, 2008; also Nathanson, 1992)²

Positive	Interest-excitement
	Enjoyment-joy
Negative	Fear-terror
	Distress-anguish
	Anger-rage
	Shame-humiliation
Displeasures	Dissmell
	Disgust
Neutral re-set	Surprise-startle

He proposed the term, "minding system," for a combination of human cognition and affect. The special function of the minding system "is the ability to convert the raw texts of affect and cognition into the compelling poetry of scripts, which provide the rules that turn data into language with grammar, semantics, and ways of living" (Nathanson, 2008, p. xxv).

Tomkins continued his elaboration: Consciousness is a state "created by the assembly of an event (percept, cognition, scene retrieved from memory, etc.) with the affect it triggered" (Nathanson, 2008, p. xxi). When we receive stimuli, they are brought to our awareness "as colored by affect" (p. xiv). "The world we know is a dream, a series of images colored by our life experience of whatever scenes affect brought to our attention and assembled as scripts" (p. xi).

According to Tomkins, our cognitions, when coassembled with affects become hot and urgent (Nathanson, 2008, p. xxv). Amplified by affect, he noted, anything becomes important. Affect "makes good things better and bad things worse" (p. xii).

The "scenes" of day-to-day life in the metropolis could be conceptualized in terms of the ways the inhabitant encounters the city--which affect amplifies for her or him. We are motivated, proposed Tomkins, "to accept, savor, and seek out the two positive affects because they are 'inherently rewarding,' and motivated to avoid, quash, and rebel against the six negative affects because they are 'inherently punishing'" (Nathanson, 2008, p. xx). There is a lesson for the designer--that designing places and objects in order to be received well by the user should be a habitual, dedicated strategy, where the goal of positive reception becomes part of experience augmentation.

2.4. Complexity of "threshold"

Threshold is a complex idea. It is so both on account of its range being vast as well as of the intricacy of some of the internal/interior ideas it affords. For example, Cilliers' (2001) argument was presented above that, in a complex system, the boundary could be indeterminate, that due to the rich network, it could be as if the boundary was folded in or "perhaps, the system consist[ed] of boundaries only" (p. 142). Indeed, Cilliers (2007) chose to discriminate between boundary and

² These are grouped by category here, not ordered according to any other criterion--e.g. Nathanson (1992) noted that shame is the most recent affect to develop through the process of evolution (p. 136).

limit. Although boundary could be complex, so also is limit. Limit, he argued, is knowable only from one side (while boundary has two easy-to-conceptualize sides). Since one does not know the extent of what is beyond the limit, then it becomes hard to know when one has reached the limit. Boundary and limit are both threshold constructs. Another spatial example of the complexity of threshold is what this author refers to as a *telescoped skin/envelope*³ of a system. If, say, an institution within the city had a satellite, branch or affiliate at another location within the city, where is the limit/boundary/envelope of the institution--especially considering that other independent spatial entities exist between the mother and satellite? How, then, is its threshold to be mapped?

Continuing the insight, Stavrides (2010) wrote that threshold is a "complicated social artifact" (p. 15). Stevens (2007) wrote that "threshold spaces are always, by their very nature, only partly defensible and also partly unregulated and disordered, shared with strangers, other activities and unfamiliar experiences which are always in motion." Thresholds, he said, "can be both physically and existentially slippery" (Stevens, 2007, p. 177).

The nature of threshold is that it exists in both material and intellectual domains. In figure 1, we attempt to convey the deployment of constructs of threshold on so-called continua of materiality and ideation, using a few examples. In the next section, we will lay out a range of conceptualizations of threshold.

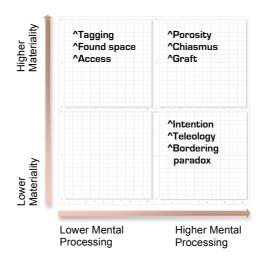


Figure 1: Reifications of threshold: Ideation, experience and materiality

2.4.1. Concepts of threshold

In this section, we present conceptualizations delineating physical, idealized or experiential forms or states of threshold. We have grouped these into three categories based on how they might be described as sourced:

Geometric (G): Threshold can be imposed via diagramming or management (e.g. time use) by a designer or other.

Intuitive-direct (ID): Threshold actualizes as a result of user current experience, recognition from prior experience or effortlessly-inferred user experience.

Intuitive-indirect (IR): Threshold actualization is mediated by rationalization (logical, poetic,

³ It is the space between that gets compressed, hence the notion of *telescoping*.

allegoric, etc.).

Geometric can be pre-ordained by designer. Many of the intuitive-direct and intuitive-indirect require a user frame or user implant, but they are also useful for the designer because they can serve as anticipated narratives for framing design. The categories are not mutually exclusive.4 The list is not exhaustive.

Table 2: Conceptualizations of threshold

Category			Conceptualization	Brief description
G	ID	IR	_	
X	X		Access	Zone through which entry is gained
	X	X	Bordering paradox	Extending a thought from Bernardes (2010): the beach as threshold is a "border"/field that separates desire (desirable water with which to make contact) on one side and "impossible total experience" (p. 219) (total annihilation by that same water) on the other. Paradox: what is desired will also annihilate.
		X	Boundary/limit	Aristotle: Limit is "the last point of each thing, i.e. the first not possible to find any part, and the first point within which every part is" (in Barnes, 1984, p. 1163).
		X	Caesura	Dis-stabling break, pause, interruption(idea instigated by Teyssot [2005], but used differently by Teyssotsee #17 below)
	X	X	Chiastic space	Chiasmus, inversion, crossing; Goodwin's (2003-2005a, b) "experiments" with private-public space interpenetration
		X	Context for elaboration, synthesis, correction/modification/re-adjustment	Kuhn (1970/1962) painted this picture: Emergence of scientific paradigms often follows a trajectory: multiple theories/hypotheses/ conjectures; then one theory emerges which accounts for the different observable effects; that theory unites the field and subsequent work becomes built upon it. The consequential theory represents the thresholdthe intellectual (in our case, physical) space and condition that facilitates what is to follow. What was in the past is either (i) reinforced (ii) integrated or (iii) corrected. As for the future, if it is not fully seen or comprehended, at least, a vision is afforded. The physical threshold can be designed as a space in which the past that brought the current occupier/inhabitant to it is either elaborated, reintegrated or corrected. For illustration: Correction phase: An arduous trek up a hill to a temple might have been a hard experience for the pilgrim. At the summit or close to it, an opportunity to pause and cast a grand view over the landscape might afford a comprehensive review which leads to a requalification of experience; weariness yields to appreciation. Threshold is space of metamorphosis. ** Purgatory: where venial sin is eroded in preparation for entry into paradise (Radding & Clark, 1992)
	G	G ID X X X	G ID IR X X X X X X	G ID IR X X Access X Bordering paradox X Boundary/limit X Caesura X Chiastic space X Context for elaboration, synthesis, correction/ modification/

⁴ Groupings and integration are also not necessarily in a final state. The "matrix" is necessarily

Table 2: Conceptualizations of threshold (continued)

	Category			Conceptualization	Brief description
7		X	X	Dialogue in space	Space of encountering the other and engaging in dialogue/negotiations (Stavrides, 2010)
8	X	X		Diffusion	Hybridization Zone of blending; (also Benjamin [Weber, 2003])
9	X	X		Extension	Penetration into environment or auratic zone
10			X	Fiction, whimsy	In <i>The City and the City</i> : travelling (unseen) within in-between spaces, contested or unclaimed spaces between two overlapping cities ("alterspaces," dissensi" [pp.45, 172]); membrane between cities" (p.253). As the two cities had grown together, "places, spaces had opened between them, or failed to be claimed, or been those controversial <i>dissensi</i> " (p.257). (Mieville, 2009).
11			X	Hypotheses	Time-travel/dimensional-teleportation; being here and elsewhere; worm holes
12			X	Immanence	e.g. Our transactions with buildings and their parts are rooted in not only direct perceptual encounters, but also in other significances grounded in the symbolic, spiritual, primitive/visceral, communitarian, etc.
					A building is a use-object and human engagement of it for use is necessarily through a point of entry. So, an entry threshold is, arguably, an <i>a-priori</i> condition; hierarchy manifested
13		X	X	Intention •User aspiration	Goals, aspirationsheld in present, but consummated in future; threshold is temporal; suspension in time
				_	e.g. person in race not thinking about race, though completely involved, but thinking "I'm going to win" (Author's data)
14			X	Inversion •Boundary erased	Boundary is folded into system in networked, complex system; inside-outside blurred (Cilliers, 2001, 2007).
					Boundaries are sometimes not perimeters, but "functional constitutive components," and so where is boundary? (Zeleny in Cilliers, 2001, p. 141); limit: as discussed in this paper
15		X	X	Liminal space	Ritual space, transition, communitas (Turner, 1969)
16	X	X	X	Loose space •Found space •Neglected space	Spaces with less restrictions in the city; public space (Franck & Stevens, 2007); skaters and <i>found</i> city spaces (Borden, 1998); neglected space (Camponeschi, 2010)
17		X	X	Moment when phenomena are about to dissolve	e.g. Awakening as well as moment of "fading out" (of memory, into sleep or even death (Teyssot, 2005)
18			X	Narrative	A narrative, while ongoing, is <i>aspiring</i> to finality Threshold: End of a narrative or beginning of one? Do old narratives become obsolete? (Viljoen & van der Merwe, 2007)
19			X	Network	(See "Non-linearity" below)
20			X	Non-finality	Intermediary zone of "doubt, ambivalence, hybridity" (Stavrides, 2010, p. 18); zone of indeterminacy, emergence

Table 2: Conceptualizations of threshold (continued)

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	Cate	gory		Conceptualization	Brief description
				_	
21			X	Non-linearity	Complex systems: non-linear interactions; causality not easily delimited (Cilliers, 2007)
22			X	Passageway	In threshold, "passage towards otherness" might take place (Stavrides, 2010, p. 14).
23		X	X	Peripatetic technologies	Mobile technologies that render space fluid
24			X	Poetic-prosaic medium	According to Ricoeur (Poetry, 1991), one of the functions of ordinary language should be to mediate between the univocity (one sense; precise meaning) of scientific/technological language and the richness of poetry in avoidance of "reduction to utility" (p. 449). Prose mediates between the fixed/rigid and rich; threshold mediates between the fixed/rigid, existential-brute past and possibility (richness; literally hard-to-delimit options due to contingencies) implied in future.
25	X	X	X	Porosity • Penetration • Interpenetration	Penetration of one space type into another (e.g. Goodwin, 2003-2005a, b)
26			X	Possibility	Indeterminateness, dynamism, emergence embeds possibilities; a condition of possibilities = threshold
27			X	Rhythmic in-between	Threshold as chaos period mediating between two "spaces" of order (Stavrides, 2010, p. 32); or vice versa
28			X	Schwellen	After Benjamin: <i>Schwellen</i> , not <i>Grenze</i> ; Benjamin's threshold "indicates a crisis in the function of containment." Instead of containment, there is movement and extension (Weber, 2003, pp. 23-24).
29			X	Shiftable [elements of] form	Surfed wave as place; surf shifts, place shifts; place not static (Anderson, 2012)
30		X	X	Shifting user	User in movement; zone of influence is not static
31	X	X	X	Space in-between (punctuating urban fabric)	Spaces that "punctuate the urban territory"; "intervals" within incessant pace of urban life ([La] Varra, 2000, p. 431)
32	X	X		Space in-between (transition)	Vestibule, foyer, porch (Mugerauer, 1993)
33	X	X	X	Space re-writing •Graft •Time transparency	<i>Graft</i> : "mode of alteration of the territory" characterized by "insertions," whereby elements of the territory are replaced (Boeri, 2000). During periods of temporary disuse, "temporary rewriting of the urban space" ([La] Varra. 2000, p. 428).
34			X	- Stage	Locale of performance that fronts a backstage
35		X	X	States of suspension	Pause (waiting); hope/anticipation; revelation/discovery; anonymity; metamorphosis; incredulity (not knowing what to accept); illusion; escap <i>ing</i> ; in repository of the unresolved (e.g. aliens or not?)

Table 2: Conceptualizations of threshold (continued)

Category			Table 2. Conceptualizations of timeshold (continued)			
			Conceptualization	Brief description		
X	X		Tagging	Along strips of spacee.g persons using window ledge for sitting		
	X	X	Teleology •Event anticipation	Thinking-to "Performative threshold": threshold incipient at nascency of anticipatione.g. of a visualized spacee.g. "home" and warmth begin to be anticipated three minutes from arriving at front door e.g. Previewed photographs present to the viewer a framework		
				(or a system) for <i>beginning to experience in present</i> what is yet to be encountered (e.g. a building), something that can be incorporated into framing true experience during real visit; images build expectations about experience		
	X	X	Temporality: either-or	Goodwin's (2003-2005a, b) chiastic spaces: threshold is either-or: each episode ends and is repeated. Once invader discovered, the separation ends and she either becomes part of the inside or is forced outside; threshold delimited by period of invasion		
X	X	X	Temporality: constantly there	Threshold <i>is constantly present</i> . e.g. Urilift (n.d.) toilet: shows or is not shown, but as indeterminate space, it is always there.		
		X	Time (in-between)	Threshold is an in-between period" (Stavrides, 2010, p. 32).		
X	X	X	Transparency •Use transparency •Time transparency	Simultaneity, interpenetration, ambivalence; two phenomena can overlap or interpenetrate each other as long as there is no real destruction of the one by the other. Space, Kepes noted, "fluctuates" (Rowe & Slutzky, 1963, p. 45).		
				Use transparency : Multiple simultaneous uses of a space can be observed, e.g. used for both dining and listening to a lecture without one destroying the other. One use penetrates the other within the same space.		
				Time transparency : Different uses of space at different times; time is "seen through."		
				Transparency enables transcendence of a single or static definition/delimitation. It also uncovers the complexity inherent in the notion of spatial limit.		
	X	X	User state	User in threshold state: dream, hallucination, flow (Csikszentmihalyi, 1975); could be sustained or/and active (e.g. flow), so different from moment of dissolution (see "Moment when phenomena are about to dissolve" above)		
X	X		Virtual sidelines	Hot spots		
	X	X	Zone of blending	(See "Liminal space" above); social classes blurred		
	X	X	Zone of reconnaissance with otherness	Threshold allows an individual to "depart from [herself or himself] to be somebody else [and be able to show] this temporary transformation as a gesture" (Stavrides, 2010, p. 18)		
	X	X	Zone of re-constitution	Threshold as "space" of returning to the stable old order after disruption (Stavrides, 2010, p. 33)		
	X X	X	X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X	X X Teleology *Event anticipation X X Temporality: either-or X X X Temporality: constantly there X Time (in-between) X X X Transparency *Use transparency *Time transparency		

Threshold is, indeed, complex. As Cilliers (2007) noted, "when we try to understand the world we are always dealing with ontological and epistemological issues simultaneously" (p. 84). Obviously, a designer cannot concurrently attend to all of the possibilities expounded or identified above, but she or he can bracket ideas for use. Therein, then, lies a bit of relief for our attempts to manage complex problems: problem boundaries, degrees of articulation, are constructions we impose (Cilliers, 2007). We can regulate that epistemological dimension of working with complexity.

3. CONCLUSION

3.1. Designer role

3.1.1. Exploitation of threshold

By its nature, the idea of threshold is rich. Accordingly, a designer might be able to exploit it inventively. The designer might, for instance, re-set a problem within framing parameters such as space, time or experience. That, in itself, has multiple possibilities. A designer might also creatively recognize and assume *instability* as a characteristic inherent in threshold and so approach some design problems as those of performance under dynamic conditions. A designer could, furthermore, create threshold to be experienced bodily (e.g. changing conditions as one moves from one space to another) or to be, in addition, constructed by the user with attendant rationalizations (e.g. crossing the threshold from profane into a sacred space).

What this means is that the idea of threshold presents a fertile solution space for exploring solutions to one of the enduring problems of the human-environment system: places hold meaning for people and the designer aspires to contribute creatively and positively to that meaning-making. This has ethical implications, but before we outline a few roles along those lines for the designer below, we first ground the argument of meaningful human-space interaction.

3.1.2. Humans, emotional⁵ link to spaces they value and mutual constitution

Humans have an emotional bond with places and that has importance in qualifying the character of human existence (Giuliani, 2003). Meaningfulness of the environment emerges from a positive evaluation of the environment (Rapoport, 1982; also Tomkins on appeal of positive affects, in Nathanson, 2008). Intensity of bond is "determined by the physical and social characteristics of the environment, by individual needs and peculiarities, and by evaluation of the present situations vis-a-vis the possible alternatives and the effective possibility of making a choice" (Giuliani, 2003, p. 149). The general lessons to be observed here are that factors such as (1) ability of the environment to meet personal and social needs, (2) potential to make choices in the environment, and ability of both (1) and (2) to contribute to one's physical and mental well-being might be valuable considerations in evaluating a desirable environment. To be attached to an environment in which one is located is to "make [it] a part of [one's] extended self" (Belk, quoted in Giuliani, 2003, p. 151). Giuliani added that feelings we experience towards certain places "and to the communities that the places help to define and that are themselves defined by the places" certainly have a positive effect in "defining our identity, in filling our life with meaning, in enriching it with values, goals and significance" (pp. 137-138).

Following the above, the argument is tenable that the relationship between human and environment is mutually constitutive, each one affecting, shaping and re-shaping the other

⁵ Emotion understood as at a stage progressed beyond the trigger of affect (see Nathanson, 1992)

(Descola & Palsson in Strang, 2005). People make objects, but those material components of material culture are also activated by their being construed as *actants*. Components of built physical space--and the quality of space defined by those components--act to frame or modulate the experience of the human. We make objects, but as Heidegger has noted, "our 'dealings' with things in the world in which we are immersed in everyday life" leads those things to acquire ontological significance for us (in Dant, 2005, p. 85). Realizing the power and value of objects as actants, the designer aims to employ objects which constitute the built environment as tools to accomplish ends which facilitate the inhabitation of space. Artifacts, observed Vermaas and Houkes (2006), are both products as well as means of intentional human action. Both designers and users, they claim, manipulate artifacts for attaining desired ends.

3.1.3. Moral-ethical engagement

Many theories on urban culture, wrote de Waal (2008), "are not neutral [analyses] but rather ethical stances" (paragraph 32). Employing that awareness, some designer goals which embed moral implications should be sought and constituted intentionally that way. A few examples are provided as follows:

- 1. In general, a designer's interventions should be aimed at creating (positive) value in the metropolis so as to advance enhancement of quality of urban experience.
- 2. In exploiting city-as-threshold, it should be designed to focus on encounter rather than separated identities (Stavrides, 2010).
- 3. Exploiting its instability/dynamism for user benefit, the threshold should be designed as an opportunity for negotiation among social actors. Goal should be opening up dialogue rather than conflict (Stavrides, 2010).
- 4. Threshold should, however, also not resist desire for self-exploration:
 - But people unavoidably acquire a very important social dexterity: to be able to become other, to be able to be in someone else's place. It is here that the power of inhabiting thresholds, in-between space-time, lies. To be able to experience a change in identity, to be able to rehearse, test, check and visit otherness means potentially to acquire the power, to negotiate with otherness. (Stavrides, 2010, p. 40)
- 5. The environment perceived by persons in the city, wrote Dewey, does not exist solely outside the perceiver. "It extends the 'inner landscape...into the world" (see Burns, 2000). A designer has a responsibility not to knowingly rupture that relationship and does better to facilitate it in the meshwork of thresholds.
- 6. Tomkins (2008) observed that humans are motivated to savor and seek out the positive affects. The designer can define contrasts (positive/negative affect, arousal/boredom, health/ailment), attach values to each and design the positive over or into the negative.

Norberg-Schulz (1988) wrote that architecture (and one could say building the physical environment, generally) "means the creation of meaningful places" (p. 16). Participating in making the city ought to be about making meaningful places.

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