Accounting for the unseen:  
A multi-sensory perspective

by Donald Welch

Experience of space and place cannot be reduced to visual perception alone. Vision is detached and distancing, and may be shut off by the blink of an eyelid, whereas senses such as touch and smell are immediate, involuntary, pervasive and invasive. The dominance of the visual, and the aesthetic valuing of the visual, has increasingly detached us from the immediacy and reality of the living world and is complicit in treating the Earth as another disposal asset, as though it were replaceable; something 'out there'. The designer culture has coated all manufactured items, real and virtual, with eye-appeal. Automobiles, white goods, furniture and fittings, clothing, computer games, information graphics, all derived from computer-generated shapes of astounding subtlety and complexity and with visually seductive surfaces. Interiors are no exception. Recall the feeling of vague unease upon entering an office block or public building where the use of materials, proportions, lighting and surface treatment alienate the visitor. And when inside, even the smell of many structures, both large and small, is discreetly offensive. It does not have to be like this. This paper will argue that responsively designed interior spaces may begin to connect interiority with exteriority through awareness of all our senses. The experience of interior spaces should be neither alienating nor patronizing, rather it should be enriching through the conscious inclusion of factors that are frequently subjugated to the visual.

Place and landscapes of the mind

In western urban culture, vision dominates the other senses. Consciously, intellectually, we come to know our world through sight and in doing so, form particular 'mental maps' that are overwhelmingly visual representation of space. Our individual mindscape, however, provides a connectivity with place that extends beyond the boundaries of a topographic map and includes aspects that are absent from an architect's floor plan. Place and space may communicate to us in ways we are not always fully conscious of and in ways that sidestep the 'objectivity' of the visual.

Porteous explores the alienation of urbanized humanity from primary experience through 'smellscape' and 'soundscape', and further, into landscapes of metaphor such as 'bodyscape, childscape and deathscape'. The spaces the privileged city dweller occupies have been sanitized to the point of sterility. The few primal sensory experiences now come to us through the alluring smell of freshly brewed coffee, or the distasteful background reek of plastics and adhesives.

Mental maps are infused with memories, emotions and histories that unconsciously, subjectively, compound the subtle and compelling elements of touch, smell, sound and taste. This social and sensory richness may be interpreted through what has been termed 'deep mapping' an approach that attempts to connect personal and social narrative with the domestic, commercial and institutional spaces we occupy. It does so by recognizing and accepting the sensory mix that comes with being human, with having bodies, and thus how interiority is inextricably entwined with exteriority. This opens the door into a territory many of us have almost forgotten or ignored; for in reality, it is all around us—the sensorium we occupy.

One means of entering this territory would be to attempt to synthesize the range of sensory input in a manner that comes naturally to synaesthetes. Synaesthesia means 'joined sensation'. For example, when someone talks or music is played, the sounds may be seen as colours, experienced as physical touch, or tasted. While most of us are not natural synaesthetes we may, with a little effort, aspire to become what may be termed 'sympathetic synaesthetes'. Exploring 'sympathetic synaesthesia' through consciously attuning ourselves to the full range of
sensory impressions would deepen our understanding of the multi-sensory nature of consciousness. This would help ground the animate in the design of the built environment.

A politics of space
We learn how to conceptualise space and this process cannot be separated from the social, political and religious influences that frame the spaces we occupy and move between. For Lefebvre, Absolute space comprised natural sites such as caves, mountain tops, rivers and springs, which were inevitably stripped of their natural uniqueness and taken over by political forces expressed through architecture. Importantly, the commingling of the religious and political, and associated bloodlines of the powerful, was transposed to the city. Absolute space was thus relativised into Historical space, and, as the forces of production became dominant, reduced finally to Abstract space, the real ‘subject’ of which is state political power, wherein the lived experience is crushed, 'history experienced as nostalgia, and nature as regret'. Abstract space is the product of capitalism and neocapitalism, and is associated with the commodification of our lives. This is why ‘affectivity, which, along with the sensory/sensual realm, cannot accede to and nature as regret’. Abstract space is the product of capitalism and neocapitalism, and is associated with the commodification of our lives. This is why ‘affectivity, which, along with the sensory/sensual realm, cannot accede to

A sense of place
Archeology pieces together an understanding of how people lived in earlier times by relying strongly on evidence provided by the physical remains of structures and artifacts. Many ancient sites have other attributes, less tangible but no less real. The significance of the acoustic qualities of certain places and structures in particular is being re-evaluated. Although there were some famous examples in the ancient world, such as the ‘singing’ colossi of Memnon in Egypt, modern archeological conventions in recording and publishing are not sympathetic to portraying such aspects. Two-dimensional, black and white line drawings and plans define what is relevant and meaningful. The tools of measurement, such as the surveyor's tape, exclude features that are not amenable to such means of recording. Consequently, three-dimensional impressions of sites are very poorly portrayed and many important features, such as texture, acoustics, smell, etc., are lost. The overwhelming importance of place, of the relationship of a site to the surrounding landscape, is omitted, replaced, as Watson has ruefully observed, with the margins of the page. While archeological sites are attended by experts of various kinds in pottery, jewelry, weaponry, etc., 'less regard [is] given to the architectural, experiential or aesthetic characteristics of a site'. The sonic attributes of a site may, for example, reveal a great deal about the reasons for its construction.

It is difficult for modern industrial society to explore the importance of soundscape in our built environment. Not until we take away the bombardment of extraneous artificial sound that fills both our social and personal aural environment do we appreciate, for example, how weak is the unaided human voice. At the same time, we rediscover how impressive the natural soundscape can be, both quiet and loud, and how particular places that amplify or channel sound may fill us with awe and even dread. There is a growing interest in the significance of soundscape in archaeology and how naturally resonant spaces held special significance for many people and how structures were built to create resonance or other sound effects. The primary resonance frequencies associated with many ancient structures appear to have been 'tuned' to specific frequencies mostly at the 110–112 Hz range. It has been speculated this could suggest a deactivation of language centres in the prefrontal cortex to allow other mental processes more prominence and may 'play a role in altered-state ritual-driven experiences'. Along with features such as sonic resonance, the reasons for the selection of the site of many ancient structures are not always clear, and here again there may be factors that are not obvious.

Dowsers have for long claimed the disposition of stones in ancient sites reflects the subtle influence of what have been termed ‘geodetic lines’. Underwood's investigations into this phenomenon in Britain led him to map the layout not only of neolithic stone structures and giant images cut into chalk hillsides, but also medieval cathedrals in relation to lines of force he termed track lines, water lines and aquastats. Chichester Cathedral, for example, is a remarkably irregular structure with hardly a corner that is rectangular or a line that is straight in the whole building. Also, the belfry is separated entirely from the main structure. Clearly, the masons who built these extraordinary gothic cathedrals were not inept. They were, instead, ensuring the walls enclosed the water lines and aquastats, the holy lines, and the detached belfry is built over a powerful underground spring. Beneficial health effects are associated with physically being within such defined locations. Perhaps we are ignoring features that should be considered in planning structures and which could result in 'healthier' dwellings. Millions of Chinese take a similar approach when they employ feng shui consultants. There is intriguing evidence that Marion and Walter Griffin were strongly influenced by feng shui in the design and layout of Canberra, and that Giurgola's siting of Parliament House resonates with the Griffin's geomantic order.
Mindscapes

Our visual response to place and space is so dominant it filters out a great deal of other sensory input and yet the unconscious continually insinuates itself into discussions over responses to the environment, natural and artificial. Pallasmaa highlights the importance of sensory impressions, especially those other than vision, considered in relationship to architecture. He explains how touch is the fundamental means by which we respond to the environment and how vision follows on to reinforce what we learn from the haptic sense:

‘Vision reveals what the touch already knows. We could think of the sense of touch as the unconscious of vision. Our eyes stroke distant surfaces, contours and edges, and the unconscious tactile sensation determines the agreeableness or unpleasantness of the experience.’

Sensory references inhabit our memory, waiting to be tapped. Evidence of the influence of the unconscious over our ‘conscious’ decision-making is now becoming irrefutable. Even in science, that purportedly most objective of disciplines, the importance, and power, of the irrational is being exposed. While there are ways to consciously access aspects of our unconscious in terms of focusing our consciousness one may increase awareness of other senses through the simple expedient of a blindfold.

In guiding blindfolded participants along an unfamiliar route they are simultaneously disoriented and exposed to a gamut of tactile, olfactory and auditory stimuli. Taking part in such an activity for the first time can be a surprisingly powerful and dramatic experience. Stepping into strong sunlight from shade feels as though an oven door has just been opened, and even a moderate slope gives the impression of a considerable incline. Road traffic seems so much louder and vehicles starting close when you are unable to visually identify shapes, optically calculate distances and connect sounds to their origins. Without vision our world is suddenly and dramatically altered from the distant to the immediate, from the objective to the intimate, and we are made to refocus on some of the other ‘scapes’, besides landscape, such as soundscape and smellscape. Our own internal reality, the inscape, that furnishes links between the external world and our personal psychological understanding of it, gains greater prominence. Our inscape is where our conscious and subconscious overlap and contains its own symbolism. This particular exercise imposes a sensory experience different from what the majority of us regard as the norm and has the potential to activate an awareness between the inscape and what may be broadly termed the ‘outscape’, between the conscious and the unconscious.

Hundreds of Design students of Griffith University Queensland College of Art have participated in this activity. Students who have undertaken this exercise have often fundamentally changed their perception of space and how they conceive of and design interior spaces after re-tuning their sensory awareness. The way we sense the world provides the basis for how we conceptualize the world. The sensory engagement of children is much more immediate, more varied and far less mediated than that of adults, and the dulling of senses in adulthood has been considered more than a loss of acuity with wider ecological implications. The negative effects of the dulling of our senses is all around us:

‘The wide, open spaces of contemporary streets do not return sound, and in the interiors of today’s buildings echoes are absorbed and censored. The programmed recorded music of shopping malls and public spaces eliminates the possibility of grasping the acoustic volume of space. Our ears have been blinded.’

A feeling for space and place

This wider understanding of the environment, of the physical and mental spaces we occupy on Earth and how we construe them, was the subject matter of Wright's humanist approach to what he termed 'Geosophy', described by Wright as 'the study of geographical knowledge from any or all points of view'. Within the framework of geosophy constructs of geographical knowledge arise out of our own individual response to both social and personal history and are framed by cultural, temporal and spatial dimensions, with mental geography given equal validity as that ascribed to physical geography. Of particular interest is the importance Wright gave to the imagination in creating our individual constructs of geography and especially in regard to our mental terrae incognitae. The overlaying of intensely personal impressions that may combine the unconscious with the observed world have produced highly perceptive ways of interpreting and re-envisioning our surroundings.

The term 'Topophilia' was coined by Tuan to express similar impressions of place, and is 'the affective bond between people and place or setting. Diffuse as concept, vivid and concrete as personal experience...’. Tuan includes all the senses in our response to place. The effect on our sensibilities of often unlooked-for aesthetic experience can be sudden, piercing and highly personal:

‘Intense awareness of environmental beauty normally comes as a sudden revelation. Such awareness is least affected by received opinions and it also seems to be largely independent of the character of the environment.'
Homely and even drab scenes can reveal aspects of themselves that went unnoticed before, and this new insight into the real is sometimes experienced as beauty.

Identifying a term that expresses the multifarious aspects of place and space is not easy. Encompassing, as they do, so many aspects of the psychological—especially the unconscious—as well as the physical, the words geosophy and topophilia would seem to comfortably accommodate the mindscapes explored by Porteous. Neither term, however, has received wide recognition or usage. Geosophy, as Wright himself observed, smacks of Madame Blavatsky and theosophy, while topophilia, albeit with impeccable Greek credentials, has not gained currency. The term 'topoanalysis' doesn't quite hit the mark, neither does the 'sensographic' approach linking perception, our bodies, objects and the environment fully manage it, nor, while promising a comprehensive typology, does 'Environmental Symbology'. Maybe the closest way of describing an holistic approach that conflates our experience of place and space is the term 'Deep mapping'.

**To conclude: Spaced out [and tuned in]**

Space is defined by the substantial, along with all the texture, odour and colour that accompanies the solid. Interior space is contained and thus controlled; but think of it another way and the space contained within structures is as important as the structure itself. The insubstantial could be considered as the essence of the 'real', that which, by contrast, defines the solid. Then space, and place, is no longer quite so biddable. Perhaps we should attune ourselves more carefully to that which slips through our fingers yet resonates in our minds, and to that which touches our skin, may be smelt, yet cannot be seen. Music is of this nature and, to a large extent, so are dreams. The idea of 'objectivity' is alluring but ultimately illusory, as all impressions of place are filtered through and mediated by the senses, by memory, by cultural conditioning. Beyond two-dimensional black-and-white diagrams and maps we could be turning towards mapping the sensory to deepen the way we interiorly configure the world. The conceptual framework that might support such a venture has to recognise the centrality of emotions and by implication our senses in our lives, as well as negotiating the meaning of the visual. The growing awareness and interest in synaesthesia offers the majority of us who are not natural synaesthetes one possible means of enhancing our sensory awareness. The value of synaesthesia lies in its multimodality. It evades compartmentalizing sensory input in the way many of us have been conditioned to do so.

Most people are not peripatetic and instead have a strong affinity to place. With this comes an associated concern with their immediate location and with the quality of life afforded by that environment. In this instance, the 'environment' includes the dwelling, the workplace and the limited amount of open space immediately accessible to the individual. People live much of their lives in small enclosed interior spaces. Designers, who are frequently implicated in shaping the environment, therefore need to develop empathy with people and place and to reject the degradation and commodification of the environment and thus reject Abstract Space. The approach to interior environments that treats place, space, materials, and people as ephemeral elements whose primary utility is profit has to be replaced with a new paradigm. Who defines the terms defines the discourse, and while the term 'designer culture' remains synonymous with the dominant consumerist discourse the corollary is, as Oscar Wilde so aptly put it, that we 'know the price of everything and the value of nothing'. A meta/design/futures approach has to resuscitate our sensory connection with our environment to reconnect with our senses and our emotions to design the built environment in a way that reflects such a commitment.

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