

# SENSING THINGS: MERLEAU-PONTY, SYNAESTHESIA & HUMAN-CENTREDNESS

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## ABSTRACT

Sensoriality is an increasingly important theme within design discourse and practice. However, despite current and previous enthusiasms, there have been few attempts within mainstream design to construct an ongoing critical engagement with sensory experience. In this paper I argue that a phenomenological approach to the senses throws light on current debates about sensoriality in general and the theme of human-centredness in particular. I dramatise this argument by discussing cross-modal or, as it is more commonly known, synaesthetic perception. I use this discussion to prepare the ground for a broader, phenomenologically informed and speculative discussion about design and human-centredness.

KEYWORDS: sensoriality, phenomenology, human-centredness.

## I THE SENSES REDISCOVERED

Periodically, design 'rediscovers' the senses. For example, in the 1960's and 70's, Italian designers celebrated and explored the sensory potential of new materials and processes. Designers such as Gaetano Pesce and Joe Columbo anticipated Memphis and its rejection of the cold, geometric and ocularcentric forms characteristic of late modernism. Seen in this light, we might unconventionally consider Pesce's Up-Chair as an exploration of the sensory potential of furniture as well as – as is more usually the case – a critique of the visual conservatism of the design establishment and a hymn to emerging tastes and lifestyles (see Fig. 1).



Figure 1 Gaetano Pesce, Up 5. 1969

Some years later, design discovered the work of the psychologist James Jerome Gibson (Gibson 1986). Subsequently, important work was done in exploring and applying Gibson's theory of affordances to various aspects of design. Indeed, apart perhaps from the principles of perceptual organisation proposed by the Gestalt school, few if any ideas from perceptual psychology have entered the field of design with such fanfare or force. Like Gestalt, affordance retains high status in the conceptual armoury of design. Arguably though, it entered the field through the filter of a tradition alien to it – namely cognitive psychology – and in the process was cut adrift from the complex and powerful philosophy and theorisation of perceptual experience that gave birth to it, and within which it makes most sense.

Like Memphis before it, our current sensorial rediscovery is at once a rejection and a celebration. Rejected is the linguistic bankruptcy that finished for postmodernism and, arguably, mainstream product semantics.

Celebrated are the possibilities brought into play by exciting new materials and the emergence of immateriality.

Marion Verbrucken, for example, talks up design's need to embrace a 'new sensoriality' as a response to the next great social transformation or, as Philips Design describe it, the 'new everyday'. This new everyday – put simply digitally enhanced and richly interconnected people, objects, places and spaces – is driven, says Verbrucken, by our growing desire for 'more intensive experiences and deeper meanings'. "We are moving," she says, "towards a highly sensorial culture that will be strongly focused on all our senses" (Verbrucken 2003). Minus the hyperbole, many others from within or adjacent to design's orbit, have recently professed views about the need to renew or initiate conversations with the senses (see for example Jordan 2002, Moggridge 2006).

It is easy to be cynical. In an impossibly crowded and cutthroat marketplace, sensory experiences have fast become significant market differentiators and status markers for products. The senses are celebrated in advertising and all aspects of design – from engineering to styling – are increasingly mined for potential sensory deposits. Consider, for example, the following description of sensory detailing in a sports car:

"The engine sound can be controlled by how one designs the air filter for the air intake sound, which is a sound that is appreciated. We also have a compressor on the engine which gives a jet-like sound. That gives a special character to the car. The door sound is also important. We have aimed for a controlled, mechanical click without too much resonance and rattle, a muffled, solid sound." (Crafoord 2001)

Yet despite, or perhaps because of, this cyclical return to the senses, design appears no nearer to constructing a critical engagement with them; no nearer to taking the sensorial and remaking it in the light of our own needs as designers and those of our users; no nearer to speculating what a deeper understanding of the sensory will mean for design as theory and practice. If this is – as I hope to demonstrate – a worthy ambition, we are still faced with a difficult question; where to begin? An obvious place to begin would be with human-centred design. Yet at the centre of this increasingly influential movement, the senses are reduced to a set of variables to be factored into a design research checklist; things to pick up and drop as and when needed. We need to start at places where the senses are more than occasional visitors from the experimental provinces of the natural sciences. We need to visit places where the senses are seen as rich, complex, and perplexing phenomena both in their own right and because of where they lead us. Things to be played with, deconstructed, challenged. It is therefore, at the borders – of philosophy, psychology, art and design – that we are most likely to find the stuff we need to help fashion this long overdue critical engagement.

## 2 TWO WAYS TO PERCEIVE A SCRUBBING BRUSH

To begin, a ubiquitous domestic object as seen by the Japanese designer Kenya Hara.



Fig. 2 Scrubbing brush

“Take a scrubbing brush for example. Just by looking at it I know what would happen if I put it in my mouth without actually doing it.” (Hara 2004)

Looked at in the mirror of mainstream psychology Hara’s observation is uncontroversial, trivial even. It is quite possible to read into it the conventional cognitive narrative that portrays fleeting and impoverished sensations being transformed into fully-fledged thoughts by noble mental operations; association, inference, categorisation and various forms of logic. Perception is transformed into a trick of memory. A rationalist, empiricist, inferentialist or contemporary cognitivist might tell it differently in the details, but the story’s deep structure would remain essentially the same.

Mainstream approaches to perception embody and make familiar a number of powerful assumptions about sensory experience. At the risk of oversimplification, I will characterise these as: Balkanisation; underestimation; and disembodiment. The treatment of the senses as physiologically and phenomenologically discrete has its roots in the Ancient Greece. In *De Anima*, for example, Aristotle states the “each sense judges the object peculiar to it and is never deceived by the existence of the colour or sound that it perceives ... Thus colour is an object peculiar to sight, sound to hearing and flavour to taste.”

Growing interest in sensory cooperation – which Aristotle characterised as ‘common sensibles’ – notwithstanding, sensory discreteness dominates the theory and practice of perceptual psychology. Mistrust of the veracity of sensory information led both Empiricists and Rationalists to characterise sensory information as impoverished, requiring the respective application of association or reason to construct

reliable representations of the world. The mind-body dualism implied by the former and sanctified by the latter became a cornerstone of the hegemonic force in contemporary psychology, cognitivism. Here sensory information has, in the mainstream at least, been treated as raw data to be processed and enriched by a disembodied computational brain.

But let us return to Hara. Later in the same piece he develops his argument and, in doing so, challenges us to rethink both the commonsense and mainstream psychological interpretations outlined above:

“Suppose for example, that we see something that looks so delicious that we start to salivate. Based on sight alone we perceive it as delicious, seeing it is a thrill, and seeing it can provoke the very tactile quality of simply drooling.” (Hara, 2004)

Here Hara is making a radical claim about the nature of sensory experience. As we have seen, accepted wisdom portrays sensations as fragmentary and dissociated and the senses as discrete and highly specialised data channels (see Nunez 2001). Hara, on the contrary, suggests that phenomenologically speaking, sensory experience is more complex and messier than this and that discrete boundaries between the senses are not always easy to define. In this instance, sight brings forth gustatory experience; we actually salivate when we encounter delicious things (see figure 3).



Fig. 3 Fried egg

Here then, Hara is implying that perception is not simply multimodal – whereby the various sensory modalities combine to provide different or redundant information about the same event – but genuinely, cross, or intermodal. At the risk of clouding the issue I will adopt a widely used term as a short hand for the kinds of experience suggested by this: synaesthesia. The term itself is less important to me than what a discussion of it enables me to do. That it is, to suggest an alternative way of considering sensoriality, thinking through the meaning of this and suggesting some implications for design.

### 3 THE SENSE OF THINGS

Synaesthesia is usually described as a form of sensory slippage (Cytowicz 1994, Harrison 1996). Sensory experience with one modality involuntarily triggers percepts in another. In extreme cases, synaesthetes are variously reported to perceive colours on seeing certain shapes or letterforms, have powerful taste sensations on hearing particular words and feel textures in response to sounds. Synaesthesia also has strong connections with the arts. Over the years, many artists, writers and composers have described cross-modal perception and explored synaesthetic experiences in their work. The vast majority of the literature on synaesthesia focuses either on the relatively rare clinical examples of the condition noted above or anecdotes from the pantheon of creative heavyweights.

For the philosopher Maurice Merleau-Ponty however, synaesthesia was not some perceptual sideshow but the main attraction; a fundamental fact of how we engage the world and its objects in our everyday lives.

“ ... synaesthetic perception is the rule, and we are unaware of it only because scientific knowledge shifts the centre of gravity of experience, so that we have unlearned how to see, hear, and generally speaking feel...” (Merleau-Ponty 1962)

To explain this admittedly counter-intuitive position, Merleau-Ponty elaborates:

“One sees the hardness and brittleness of glass, and when with a tinkling sound it breaks this sound is conveyed by the visible glass. One sees the springiness of steel and the ductility of red hot steel, the hardness of a plane blade, the softness of shavings ... We see the depth, speed, softness and hardness of objects – Cezanne says we even see their odour.” (Merleau-Ponty 1962)

In this way, Merleau-Ponty argues, our senses interact by implying and invoking each other; they overlap, blur, segue and transgress. The cleaving of one sense from another is a fact of experimental psychology rather than a fact of everyday perception. As Merleau-Ponty’s contemporary Jean-Paul Sartre put it:

“The lemon is extended throughout its qualities, and each of its qualities is extended throughout each of the others. It is the sourness of the lemon which is yellow, it is the yellow of the lemon which is sour” (Sartre 1990).



Fig. 4 Lemons

To grasp the structure and nature of the thing perceived requires us to engage with the qualities of that thing that are absent but implied, as well as those that present themselves directly to our senses. Indeed, Merleau-Ponty goes so far as to claim that sensory experience as it usually understood is “...alien to natural perception which we achieve with our whole body all at once, and which opens onto a world of interacting senses.” (Merleau-Ponty 2004)

Seen in this way synaesthesia is not some medical novelty or quirk of creative people (although the former is of great interest and the latter will be discussed obliquely later on). Rather it is part of phenomenological reality; the way in which, moment by moment living beings reconstitute and recreate their world; a world in which they are reflexively and inescapably immersed; a world experienced as a stream of pre-reflective encounters that are simultaneously situated in and constitutive of, everyday lives.

Merleau-Ponty addresses perception not in order to explain it away by reducing it to a set of mechanisms or functions. His aim is to lay the senses bare, to unconceal their richness, messiness and complexity. His work is an invitation to reject the common sense and the given and to re-experience the lived-worlds that our senses open up for us, to appreciate the intimate connections and interactions between sense, body and imagination, and to glimpse the reciprocal and ambiguous ways in which the senses simultaneously bind us to our world and bind our world to us.

#### 4 THE DESIGN OF THE ‘SENSE’ OF THINGS

Merleau-Ponty’s work on perception offers a rich, complex and often difficult picture of our sensory mode of being. It has been possible to touch on but a tiny fragment of his ideas and approaches in the discussion above. A number of other writers have attempted to see this picture reflected in the mirror of design (see for example Dourish 2001). Yet whilst these efforts are welcome and valuable, most have attempted to ‘apply’ Merleau-Ponty to the design of this or that genre of artefact or system.

For my part, I see Merleau-Ponty’s significance in somewhat different terms. These terms are orientational rather than pragmatic, implicational rather than applicational. To clarify what I mean by this and to begin the process of bringing this paper to a close, I need to ask and suggest some answers to a simple question; ‘what does all this mean for design?’

Merleau-Ponty’s work forces lived-experience to the centre of our concerns. He directs our attention to the structure and nature of our everyday encounters with things. He emphasises the impossibility of cleaving these from the shifting grounds of culture, history, situation and identity, against which all things always and only ‘show up’ for us:

“Our relationship with things is not a distant one: each speaks to our body and to the way we live. They are clothed in human characteristics (whether docile, soft, hostile or resistant) and conversely they dwell within us as emblems of forms of life we either love or hate. (Merleau-Ponty 2004)

For design, this insight implies a new – or perhaps renewed – kind of human-centredness; one less confident in ‘the truth’ of its processes and prescriptions, more critically aware of its reflexive relationships with its work and its audiences, and one more able to live with and through the ambiguous, contingent and provisional character of human experience as it is lived. Such a human-centredness is, I believe, already widely practiced and builds upon a remarkably rich foundation of artistic exploration. But it has yet to assert itself forcefully within the broader human-centred and design research communities.

At present these communities are infused with assumptions drawn from the natural sciences (these have been alluded to briefly in the discussion of mainstream psychology above but for a more substantial critique refer to Winograd and Flores 1986). Not surprisingly therefore, at conference after conference, we find messy and complex creative processes instrumentalised and reduced to sets of methods, insights from other disciplines stripped of nuance and explanatory power in order to uncover ‘quick and dirty’ methods, and clients courted with claims of a design process based on ‘quicker, cheaper and better’ design methods. Such approaches are, perhaps, understandable in the context of design-as-practiced. But they are problematic given the phenomenological orientation that I am struggling to give shape to in this paper.

An alternative – or, perhaps, parallel – human-centredness, thrives on a different interpretation of method. The etymological root ‘methodos’, implies finding a path rather than applying a set of tools. And it is this act of path finding – of opening up territories for exploration – that an implicitly understood or reorientated human-centredness addresses itself towards. What is a designer? Someone who makes plans for something that will be manufactured or constructed? Someone who plays a role in the making of things that meet or create human needs? Of course, but is that all? What else might there be? What might it mean to be a human-centred designer, in the sense that I am trying to draw out of this discussion?

Let me propose a description. A designer is someone who – through the combination of skill, sensibility and pathic intelligence – brings forth and models a vision or even a premonition of a future situation. Someone who is able to imagine and live-in-advance the to-be-lived-experience of others. In anticipating, rehearsing, interpreting and sometimes rejecting the possible, the designer draws on all manner of skills and approaches, tools and methods. But at the heart of these is, I believe, a way of opening onto the world dialectically; a way that oscillates between the distinctive and common, the subjective and intersubjective, the critical and empathic.

Let’s look more closely. Design as I understand it is predicated on a desire and ability to unravel things, to find wonder or meaning in the ordinary, to develop a heightened sensitivity to the textures and rhythms of the everyday; to find meaning in contradiction and to live with and through ambiguity. Design-as-lived –

in contrast than design-as-practiced – should not be seen in terms of particular outcomes or collapsed into a set of distinct projects as journalists and historians are sometimes wont to do. Rather, design-as-lived is an orientation; a particular way of posing probing questions to the world and a distinctive way of fashioning unconventional answers.

It is a truism that user-research brings designers closer to their audience and we should not underestimate its importance. But neither we should forget that designers are already close to, indeed already 'are', their audience in one crucial way. Designers share with users a particular corporeality through which the world is experienced and which – recursively – sets up and constrains how that world 'can be' experienced. This is not to suggest that designers 'design for themselves', but that they recognise themselves – and through this other selves – in the things that they design.

A significant part of this recognition is, I believe, a sensorial intelligence akin to Merleau-Ponty's description of synaesthesia introduced above. This is a form of human-centredness that has been implicitly understood and traditionally nurtured in the young designer through careful guidance in the design studio. It is certainly one that Merleau-Ponty values in the myriad artists whom he uses as evidence for the development of his arguments.

Arguably then, the unity, interpenetration and interaction of the senses is a given for artists and designers. As Daniel Stern puts it:

"Most poetry could not work without the tacit assumption that cross sensory analogies and metaphors are immediately apparent to everyone" (Stern 1985 p158)

Gerda Smets refers to the designer's uncanny ability to express non-obvious and absent sensory information as 'design synaesthesia' (Smets 1994). Hummels and Overbeeke argue that synaesthesia is " ... a powerful tool for the designer during the early stages of the design process" (Hummels & Overbeeke 2006). They illustrate their argument with two sets of sketches by well-known designers Luigi Collani and Ron Arad (see figures 5 & 6).

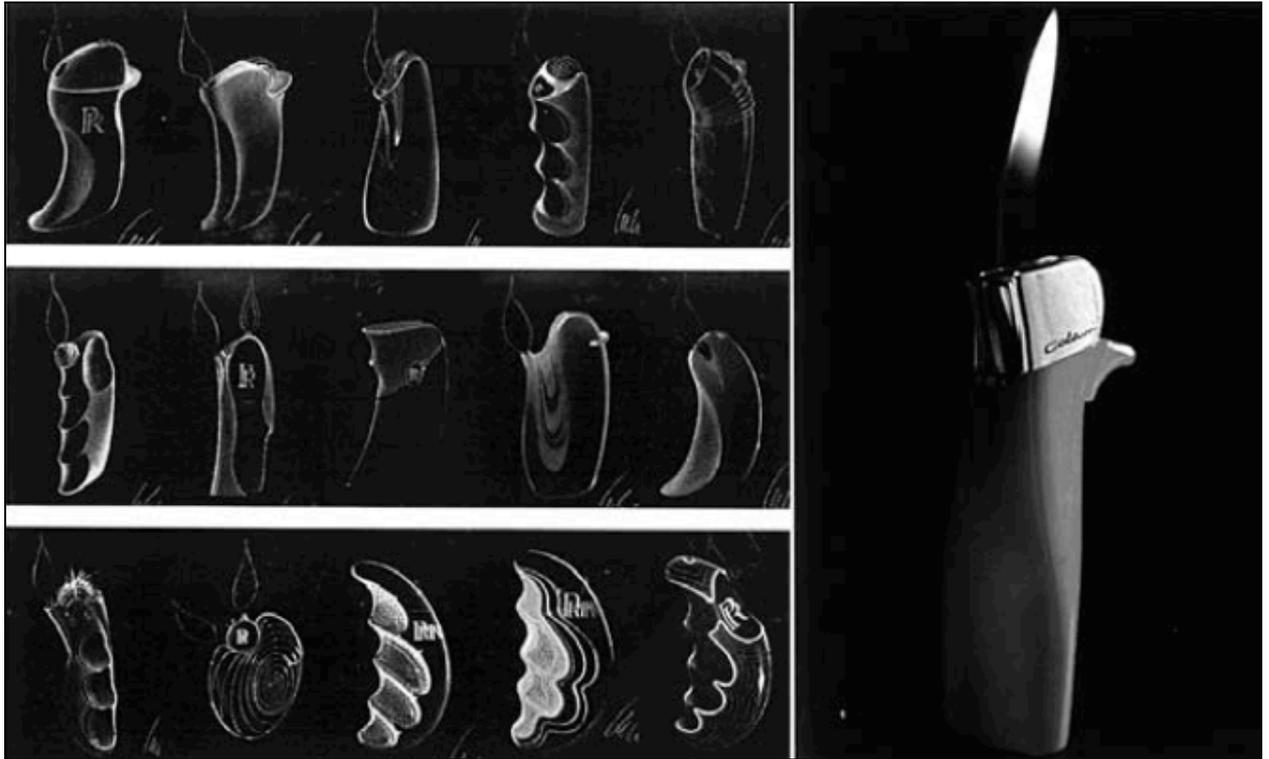


Fig. 5 Sketches and product by Collani (from Hummels 2006)



Fig. 6 Sketches and product by Arad (from Hummels 2006)

In a description redolent of Merleau-Ponty, they suggest that for Collani and Arad “... their views on design and the products which they develop are interwoven with their perceptual-motor skills. These drawings and models are not just made by Ron Arad and Luigi Collani. They are Arad and Collani.” (Hummels & Overbeeke 2004) It is here perhaps – at those moments where a designer struggles to give shape to things – that a fragile but important thread unites conception with perception and fuses designer with user. This moment is a distinctive feature of design’s traditional and essential human-centredness. It is one that we, the design community, would do well to cherish and nurture.

## 4 PAPER: IN PLACE OF A CONCLUSION

The 2004 Takeo Paper took as its theme 'Haptic'. The terms itself means to be palpable, accessible to the sense of touch. In an accompanying publication the event director Kenya Hara elaborated on his theme:

"To me 'Haptic' refers not only to what we sense through our skins or fingertips but instead to anything that on sight evokes all the senses, engages the body as a whole. Take a scrubbing brush for example. Just by looking at it I know what would happen if I put it in my mouth without actually doing it." (Hara, 2004)

The echoes of Merleau-Ponty are unmistakable. What is more, under Hara's influence, they reverberate beyond the written introduction and throughout the exhibits themselves. Rich, poetic and playful explorations of sensoriality abound (see figures 7, 8, 9 & 10 for examples.). Common sense and habitual perceptions are challenged by careful combinations of materials and forms; a gel doorknob that gives way in our grasp. The liminal regions of perception and language brought to life by a lamp made of hair, a wastepaper basket that is itself waste paper. Throughout, the interplay of the senses, the overlapping of the senses, sensory transgression, the synaesthetic reality of natural perception is explored in ways that ask and sometimes suggest answers to the questions and ideas raised in this paper.

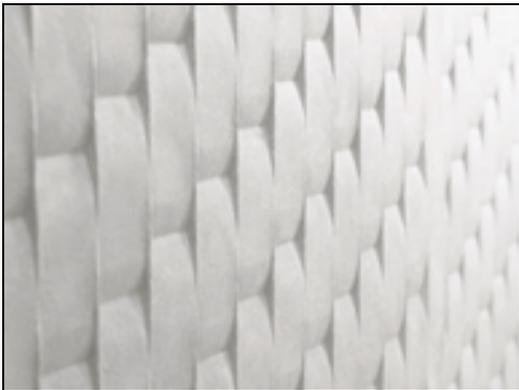


Fig. 7 Hiroshi Ota



Fig. 8 Yasuhiro Suzuki

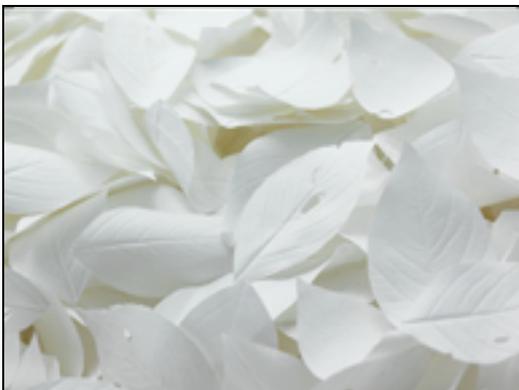


Fig. 9 Yasuhiro Suzuki



Fig. 10 Kami Tama

(all images courtesy of Kenya Hara and the named artists)

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