

MODULE TITLE: Cultural Context of Architecture I

MODULE CODE: ARC115B1

HAND OUT No: 1.2

Essential Book/s to take a look at:

- **Gibson J J**, The Ecological Approach to Visual Perception, Lawrence Erlbaum Assocs, London, New Jersey, 1986
- **Norman D A**, Design of Everyday Things, New York, Doubleday, 1990
- **Merleau Ponty M**, The World of Perception, London, Routledge, 2004

JJ Gibson is very useful to architects because of his "affordances" which is to say the material allows or provides (affords) a relationship between a phenomenon such as a seat and an understanding of it by someone looking at the seat that it can be sat upon.

Perception of a phenomenon in psychology text books (Canter & Brown, 1970) (Cave, 1998) is split into what is referred to as the distal (the seat providing the image on the eye) and the proximal (the image on the retina) to provide a relationship between the individual and the reception of an image provided by rays of light and so on, density to touch and so on, stimulated by the interaction between the individual and spatial phenomena (such as seats, chairs, stools, couches, sofas and so on).

[http://en.wikipedia.org/wiki/J.\\_J.\\_Gibson](http://en.wikipedia.org/wiki/J._J._Gibson)

It remains to be determined, HOWEVER, exactly how affordances work because we can stand on a seat to say change a lamp in a lamp holder and we can use a computer as a dead weight to tether a balloon, for example. In addition and perhaps less trivially we can NOT SIT on a chair or sit only if asked to do so, in someone else's office or house for example. This does not deny the affordance of sitting but it denies the automatic interaction between an affordance and an action.

You all think you see a seat, for example, and imagine that it is for sitting on. Thus in Gibson's theory, which is what it is, the object (seat) has an affordance for sitting on that offers sitting on to the perceiver. However it is the individual that sits on the seat and thus the determination is at the very least a combination of the individual and the object (disregarding for a moment the producers of the object who may be an individual craftsperson or some money making institution offering, on this occasion, chair objects in exchange for cash).

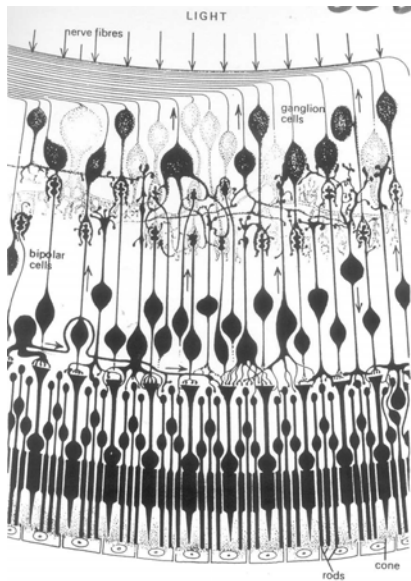
Perception then is far from simply encountering spatial phenomena because there is some thinking and also some protocols for doing, some ways of doing that can and cannot be done.

Merleau Ponty's book is an invitation to consider the extent to which perception and being human bring all humanity together.

<http://www.iep.utm.edu/m/merleau.htm>

and the book by Norman, who worked with Gibson, is an invitation to the more pragmatic amongst us to turn more easily to deterministic and rational design approaches in connection with the functionality of products designed for a purpose, such as arrays of light switches relating to the lights they are actually connected to, for example, rather than as abstract geometrics having strong links to affordance theory

You will see from time to time illustrations of our sense organs and their cells connected via axons and synaptic clefts to other cells, the so called mental objects that we relate to material objects outside us and are still the subject of debate amongst those who study cognitive science (Barrs, 1990).



here you can see that light falls not on the actual cells that measure but on the axons that carry what is measured to the cortex, the main lump of cells in the head, so that associated inputs from previous and internal sources can be added to the mix of perturbations and chemical changes.

You have to ask yourself if connections such as these can possibly be interpreting the affordance of sitting or whether the affordance is more likely to be a mix of personal discovery, exposure to the affordance possibility by others, or even a name applied to a behavioural relationships so that it can be referred to when an individual performs a behavioural construct in a certain way that coincidentally conforms to the verbal construct that relies upon the being of a term affordance. Thus whilst Gibson is seeking to generalise a relationship between material form and perception he is in fact simply adding a verbal emphasis to the

possibility of a hegemony which is an influence that asserts itself very strongly.

Thus both clients and architects/designers as well as other individuals who avail of the convenience contained within an idea such as that of affordances may use them because their use paves the way to larger agendas, usually the winning of discursive arguments that use the same argument as journalists, that because people read a text, it must be right. In the same way architect, client or journalist bothers to ask the question about what? What they are right about is that the desire exists however the role of perception is more complex so that what an affordance actually achieves might become consciously or unconsciously relevant.

This is an important and yet complicated hypothesis, which is that we design space and thus we could add an affordance to our design, however the affordance is not guaranteed to invoke any particular response on its own, even though it appears to be inevitable that it should. Other factors influence our thinking and doing. This understanding must be applied also to Norman's methods that treat spatial relationships in a similar way to Gibson's hypothesis. What we are beginning to discuss is that behaviour is not necessarily or at all linked to spatial form in terms of what things are for because the kind of links that we could call structured between form and behaviour have to be processed by the individual. The tendency to remove ambiguity and equivocation is the clue to it, and this is a tendency produced by time, the actual event, the actual thought. Thus the affordance does not DO something (the whole time) and thus it is not deterministic as to behaviour (although it is when it is).

## **Bibliography**

- Barrs, B. J. (1990). *A Cognitive Theory of Consciousness*. Cambridge: Cambridge University Press.
- Canter, D., & Brown, C. (1970). *Architectural Psychology*. London: RIBA Publications.
- Cave, S. (1998). *Applying Psychology to the Environment*. Hodder & Stoughton.