

# **Affect, Emotion and Rationality. Contradictory variables in the aspiration for object longevity?**

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## **Abstract**

This paper explores the human/object relationship as focused on *meaning* during *the first encounter*<sup>1</sup>, which is normally dominated by an affective reaction followed by a body expression and continued by *a relationship build-up* in a cognitive process, which it is argued, is a balancing act between affective and reflected decision-making (Bastick, 2003, Borjesson, 2006). Reflection is normally regarded as the catalyst for a decision as whether the object is appropriate for *an action* (for example a buy) and further for *an established relationship*, an attachment, or not. However, with reference to current research there is evidence that the preconditions for the longevity of the relationship are not dependent on the object's physical qualities<sup>2</sup> (Borjesson, 2006, Krippendorff, 2006) and are not necessarily entirely rational: the subconscious may play an active role in the decision leading up to this situation. Moreover, affective decision-making is here claimed to add value to reflected decisions, as it is not confined to the conscious mind and hence represents more dimensions including feelings, emotions and moods, which all extends beyond the physical qualities of objects (Damasio, 1999). Finally, cultural codes as represented by traditions become integrated over time in our mind and thus also exert affective influence.

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<sup>1</sup> The phases of the relationship build-up as expressed in this paper do not necessarily happen in an immediate time sequence.

<sup>2</sup> Krippendorff argues that 'Aesthetic has to do with form, not with meaning' (p. 129) and it is not clear if he therefore includes them in 'physical qualities'. The authors value these qualities beyond the physical.

## Introduction

Could what we call *irrationality* be re-thought as added value? Is our subconscious mind contributing rather than disturbing? These questions were raised in the periodical *New Scientist* in an article<sup>3</sup> entitled: “The subconscious mind. Your unsung hero.” The author, Kate Douglas, refers to current research in several academic journals and also to an earlier interview with a psychologist from the University of Amsterdam, Ap Dijksterhuis. Her research has convinced her that ‘subconscious thought processes are superior in many situations – including most social interactions – because they allow us to integrate complex information in a more holistic way than can be managed by rational processes’ (p. 45). Dennett (1996) with his demystification of human consciousness and his scepticism about traditional philosophy could together with Damasio (1994, 1999) be regarded as a gate opener to these new lines of inquiry within neuroscience, which has developed over the last decade. Their works and that of followers like Wilson (2002) do not of course go unchallenged. Gluck (2008) for one ‘opposes the inference from scientific findings in ontological and metaphysical systems’ and there is still much to explore and clarify. Love (2002) suggests that emotions and feelings are often regarded as not only synonymous but also as non-rational. However, some important conclusions for design can already be drawn on the basis of the referred advances in neuroscience and by adopting an extended multidisciplinary approach, involving not only design theory but also philosophy, cognitive psychology, anthropology and sociology.

## Meaning

There is a multitude of interpretations regarding how emotions should be linked to design and not least to designing. Furthermore, differentiation between emotions and feelings often appears unclear in current discourse, not least in terms of the role of the conscious and the subconscious and their respective influence on decision-making. Neither is it clear whether subconscious decisions are to be regarded as irrational, which is mainly understood as negative, or non-rational, which would indicate ‘not reflected’ and which gives rise to less negative associations. It is increasingly claimed (for example Krippendorf, 2006) that it is not the physical quality of objects, but what they mean to us, which determines how we see and act in relation to them. Gärdenfors (2006) argues that to look for meaning is to try to identify patterns. If we do not understand there is no meaning and if meaning is not immediately referable to the self it does not make sense. Self-awareness and ‘qualia’, subjective sensations, are probably unique to humans and closely linked. Ramachandran (2003) for example, notes that people with certain brain damage have a disrupted contact with the self and hence cannot create meaning.

Van Pattern (2008) argues that ‘StrangeMaking’, for example how to make one toothbrush look different from another is valued over ‘SenseMaking’ in most design education, which would explain some of our waste culture: too many objects have little identifiable meaning, they do not make sense, they are not understood and may

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<sup>3</sup> Issue 2632, 01 December 2007, pp 42-46.

just as well be wasted. As consumers often are selective, attention to SenseMaking early in the design process could prevent certain objects from at all being produced instead of wasted as 'shelf-warmers' or being bought but not consumed (see fig. 1, p. 6).

Is the creation of meaning then a predominantly conscious and reflected act or does our pattern forming bypass our conscious mind? The logical question to follow would then be: in which situations is our respectively conscious and subconscious mind involved? Let us go on to suppose that we have become attached to an object: we have seen a pattern, understood it and decided that the object means something positive to us. Van Pattern calls this 'VisualSenseMaking': we are able to create an image, either from a text or an object, which makes sense to us. According to Gärdenfors, meaning is closely linked to the human ability of thinking ahead and absorbing the future consequences of ones actions. When we decide that something has 'no meaning', it has evidently no future in the subjective sense. Gärdenfors goes on to claim that it is basically biologically determined mechanisms, which firmly influence how we see the world. These become complemented by cultural codes, which in turn guide how we interpret cultural products as well as artifacts. These codes eventually become integrated in our mind through exposure and experience and we use them not only to understand but also to judge.

In summary: how we *see or understand* an object or a thing is biologically determined and hence predominantly subconscious. How we *judge* it is initially reflected or conscious, but with lived experience, which involves repeated exposure to an escalating amount of cultural references, judgements also become more and more un-reflected. Since we share most of the biological mechanisms and also the relevant cultural codes, a great deal of our subconscious decision-making can be understood if studied over time through our acts. This would indicate not only how human/object relations are built up but also how they have become manifest over time as shown through traditions and objects which have retained their relevance over time in a changing human context. Developing an existing pathway in your brain is much easier than creating an entirely new one, claim researchers Ryan and Markova, authors respectively of the books 'This year I will ...' and 'The Open Mind'.<sup>4</sup> They continue to argue that the current emphasis on consumer testing favours an analytical and procedural way to meet challenges in the form of the new: tackling them, at the cost of a more collaborative and innovative way: being fascinated by them. Even if the necessary redirection of thought has to be consciously made the successful result is then a new habit, which has chance to overrule an old one. As Wilson (2002), points out, the unconscious<sup>5</sup> unlearns very slowly and habits are only broken by contextual challenges. However, it is unclear to what extent this adaptation is conscious or subconscious. Referring to research from the 1960<sup>s</sup>, Ryan and Markova claim that our culture influences our relationship with challenges and becomes established at a young age. Living in a predominantly rational society favours a procedural rather than innovative approach, which is applied without thinking. The meaning of things might according to this reasoning become static and inhibit innovation if not continuously challenged, not by the new, which demands a new

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<sup>4</sup> Le Monde/The New York Times, 10 May 2008, pp. 1 and 4. The referred books are more popular than academic.

<sup>5</sup> The denominations unconscious, subconscious, non-conscious and pre-conscious are interchangeable and the referred authors are using them according to their preference. The authors of this paper prefer the denomination *subconscious*.

pathway in our brain but by the developed, which can use an existing pathway to learning. These challenges are of course a function of context: fast development in affluent societies demands constant adjustments, whilst slower development in poor societies provides neither the means nor the freedom to experiment.

### **The first encounter**

The affective state in the first encounter between human and object can be reinforced or weakened by cognition as part of the relationship build up. The impact of cognition appears to depend on the extent to which lived experience (intuition) coincides with learned experience, our rational self (Bastick, 2003, Dewey, 1934/1980, Borjesson, 2006). Furthermore, as Wilson (2002) points out, the unconscious, our inner self, adapts to repeated experiences, which we live. Dewey noticed early on the effect of repeated experiences on the judgment of art: aesthetic is a lived experience. On the other hand, the conscious is in a constant flow of information. We learn while moving through the flow but lack of stability, contradictions and rapid change make it difficult to judge the information. It is in this milieu, feelings and emotions interact to form an affective response and the decision to establish a relationship with the object is taken (fig.1, p.6). The cognitive component in our emotional set (Bastick, 2003) might thus just as well allow for a strong and long-lasting relationship, as a strong and short-lasting one or a weak and short-lasting one. Emotional design might thus warrant a human/object relation but not necessarily of a durable kind. It is the affective component, which has a determining impact on longevity. Ticineto Clough & Halley (2007) argue that affect is pre-individual and pre-conscious but not pre-social, which would mean that it depends on cultural codes (see also above: Gärdenfors, 2006). Whilst the conscious learns and unlearns in a continuous process, the subconscious unlearns very slowly once it has learned, as already noted above (Wilson, 2002). It relies on repeated, lived experience and guides the human without reflection; we understand immediately what to do and in which direction to move. This direction might be changed by cognition, which at the time may well appear rational but in reality is guided by something temporary. Norman (2004) was acclaimed when he first explained how design works on three levels of sophistication: the visceral, the behavioural and the reflective. He states that design for the reflective level risk becoming easily dated due to continual fluctuation in the context. He prefers to call design on the visceral level 'wired in' and 'attractive, even if somewhat simple' (p.67). However, simplicity was since the modernist influence and thus long before Norman's statement regarded as a shortcut to durable design. This is where the importance of including the findings from neuroscience is particularly relevant: the visceral level is much more sophisticated than originally thought. Norman argues that it is the bonds between the senses and our emotions, or rather our emotional set (Bastick, 2003), which determines the simplicity of the visceral design. Whitfield (2008) points directly to this misconception: the existing low esteem, or at least confidence, in everything emotional has made us believe in the myth of simplicity. Where are the roots of this misconception to be found? Primarily in the ignorance concerning cognition: the belief that it always takes place consciously. Sternberg (1996) differentiates 'direct perception' from 'constructive perception' to indicate that even if perception bypasses reflection, we learn. How fast we learn is relative. Wilson (2002) claims, as mentioned above, that 'the unconscious learns fast'

whilst Dewey (1934) is using the expression ‘repeated encounters’. Furthermore, whether the differentiation between direct and constructive perception is still relevant is a matter for discussion. Is the former limited to physical features whilst the latter also understands and learns the more complicated? Whitfield actualises the design principle of ‘the mere exposure effect’: mere exposure to a design determines its attraction, which he, referring to studies by Zajonc in the 1970<sup>th</sup>, claims are culturally invariant and includes shapes, colours and words as well as sensory experiences like sounds, flavours and texture. This would be what Norman calls ‘the visceral level’ and is according to Whitfield a constant. This implies that when one or more of these parameters change due to for example, aging, attraction might fade off. Of great interest here is how far perception will take us in understanding. As Whitfield as well as Gärdenfors (2006) point out, the brain interprets information in pattern recognition which is based on experience: our ability to recognise improves over time and with it our ability to take action. Is the general criterion for perception then recognition? Simplicity as such does not warrant recognition or association. Following Norman, nothing sophisticated<sup>6</sup>, with a few exceptions, will survive: only the simple has a chance to sustain. Norman claims that the exceptions are based on a great gift. This ‘mysterious’ (authors’ remark) gift might partly lie in the creators understanding of simplification: it is about recognition and association, which only to certain degree is enhanced by simplicity. If a design is void of conspicuous details, recognition and associations is made difficult: there are few references other than for those who are the most experienced in the field (Borjesson, 2006). It is no surprise that minimalism has been accused of being elitist.

Before moving on from the phase of the first encounter, the issue of cultural influence has to be addressed. Culture is about context and may exert influence in several ways: according to Gärdenfors (2006) and as mentioned above, certain cultural codes become incorporated and we follow them without reflection. Other cultural expressions are very temporal: they are what we usually call trends<sup>7</sup>. Finally there are cultural tendencies that mature and tell us about future changes, which might become more established, possibly even becoming cultural codes. There are reasons to believe that the factors deciding the result of the first encounter between subject and object are more complex than often claimed. Affect is, as stated above, pre-individual but not pre-social. We are conditioned to be affective, to mix conscious experiences with subconscious, to act outwards; show emotions, and to act inwards; have feelings, but it is not clear to what extent respective experiences influence affect, only that we cannot control how affect in its turn influences decision-making (fig. 1, p.6). Design on the visceral level might very well look alike across cultures, but this is not due to lack of cultural influences but due to the fact that many human societies share a number of similar cultural codes that have been subconsciously accepted by us humans even if constantly in a process of adaptation.

*To design for attraction at first sight, which is often a precondition for a continued relationship, is thus not solely about physical features and simplicity. It is about regard to familiarity with and awareness of cultural codes, which will allow recognition through simplification.*

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<sup>6</sup> It is, and has since the modernist influence been argued that simplicity is sophistication. From the context, it becomes evident that Norman talks about sophistication as elaboration.

<sup>7</sup> According to Tham (2007) the analysis of trends enables sustainability in e.g. fashion. The authors use the word *tendencies* for these analysed trends.



for authenticity is according to Graffman to re-connect, not to objects but to values and human ways of being, which have been ‘lost in translation’ (authors’ interpretation) and which are often culturally adapted rather than defined.

There is reason to believe that the phase between recognition and the decision to acquire or buy marks an important starting point for the relationship build up. Neither Krippendorff nor Chapman pays much attention to this phase. However, a reflected decision as opposed to one by *impulse* does not ensure a continued relationship. During a workshop<sup>8</sup> with postgraduate design students, the participants admitted when presented with a small hand-held vacuum cleaner, that they would probably have bought it due to it appearing new and innovative. However, as the workshop proceeded, they already felt like abandoning it due to its lack of authenticity: it lacked meaning even if it would prove ‘meaningful’, function well. As shown in figure 1 on page 6: even if an object is purchased, it might be wasted before being consumed, abandoned shortly after being consumed or eventually kept. It is well-known that food and fashion items are often wasted before being consumed or shortly after but there is probably less awareness about the same fate often hitting consumer durables.

It is at this stage appropriate to explain in detail the notions of *human ways of being* versus *human ways of living* (see figure 2. p. 8). These notions are the result of a doctoral research project where timelessness was deconstructed in an effort to conceptualise this ambiguous quality (Borjesson, 2006). The research concluded in timelessness being reconstructed as *affective sustainability* with directions for designers how to rethink when aiming at this quality. Regards to *human ways of being*, which are pre-individual are key in this rethought design process. Human ways of being are constantly adapting to a changing context. On the other hand, *human ways of living* are more individual and, which is even more important, fast changing due to social, economic and cultural influence. Ways of living could be compared to ‘projects’ with a clear start and end. Humans are aware of their lifestyles and they are therefore relatively easy to identify and study. Ways of being are ongoing processes of which humans are less aware. They have to be identified by study over time and also by observing human thoughtless acts. One conclusion drawn from the research was that a long-lasting human/object relationship is not possible if an object is designed for a lifestyle or certain way of living. This is bound to change whilst the object still is functionally relevant (Borjesson, 2006).

As argued by Whitfield (2008), the human brain is not concerned with the process of decision-making, only with the actual decision. This means that we feel the decision without being aware of what has lead up to it. In a situation, which poses a threat, this feeling would most likely have ruled and made us act accordingly and fast. This represents a human way of being. In situations where speed of action is not important, our reflection sets in and our decision becomes for example influenced by something very temporal, a trend or some cultural attitude: human ways of living. As a consequence we take the decision to buy the vacuum cleaner, which viscerally associates to newness and innovation. But as affect encompasses emotion, which is favoured by the brain over rationality, discouragement sets in and we rapidly waste the object or at least long before its physical lifespan has come to an end<sup>9</sup>.

It is obvious that the issue of meaning is very critical for the build up phase. Mugge (2007) concludes that the personalisation of products [where this is possible]

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<sup>8</sup> Conducted by first author, Borjesson, at Central Saint Martins College, UAL, February 21, 2008. The referred findings were confirmed at a second workshop, June 18.

<sup>9</sup> Sartre’s useful distinction: being-in-itself and being-for-itself, add to the understanding of respectively human ways of being and living (d’Anjou, 2005)

enhances what it means for its owner. She admits, however, that personalisation does not automatically result in a durable relation, which is confirmed by Chapman (2005). He has found that even if a person for example takes part in the design of a new mobile phone, which then initially means something special and creates an emotional attachment, this fades as soon as a technically more advanced or aesthetically more attractive model enters the market.

How is it then possible for designers to address the pitfalls of the build up phase? It is worth citing Krippendorf here:

'Users ability to create meanings for their surroundings and act on them is not radically different from designers' ability to develop a design and encourage its implementation by others.' (2006, p. 145)

As indicated in figure 1 on page 6, designers are both 'we' and 'them' but with the difference that they have a more adequate ability, through predisposition/interest and training to interpret their context as 'them'. This mixture of lived and learned experience would, as Whitfield also points out, make it almost impossible to report on the basis of a design decision. Why did I choose this solution? Intuition is primarily based on lived experience, which is not accessible for introspection (Bastick, 2003). The amygdale, the part of the brain, which acts as a moderator between cognition, feeling and emotion and thus creates affect, is not concerned with the process, only with the resulting decision (Damasio, 1994).

*What an object means to its presumed user is very critical for a relation build up and not to be confused with 'meaningful', which is dependent on usability. We create meaning by pattern recognition: features of more familiar artifacts, and designers can act as their own arbiters to moderate the impact of temporal contextual conditions. The interaction between 'meaning' and 'meaningful' is not clear but there are indications that lack of meaning inhibits usability.<sup>10</sup>*

## **Action**

The four phases in the human/object relation can be related to Peirce's theory of signs, which encompasses three dimensions: presentation, representation and interpretation (Oakley, 2007). In given order these dimensions coincide with first encounter; sign vehicle – something is there; relationship build up; sign object - there is an object and finally; relationship established; sign affect - what this object means to me. In semiotics, action is dependent on establishing what an object means: not until meaning is established do we know how to act or react. The reasoning within semiotics is mainly based on cognitive processes: on thinking and knowing. Brandt (2007) acknowledges that our consciousness can reach more reality than what 'meets the eye and ears of present experience' (p. 54). He refers here to our memory, which is structured around 'Others and Objects acting as aids'. 'Therefore we think through signs' (p. 54)

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<sup>10</sup> The label: Furniture Facts (Möbelfakta) , which reported functional testing, was abandoned in Sweden in the 1990<sup>th</sup> due to it proving to be a poor indicator of overall quality from a consumer attractiveness point of view. Unverified sources claim that also consumer durables suffer from a certain buy-resistance even if they score high in functional testing but low on pattern recognition, e.g. Dyson vacuum cleaner (Borjesson, 2006).



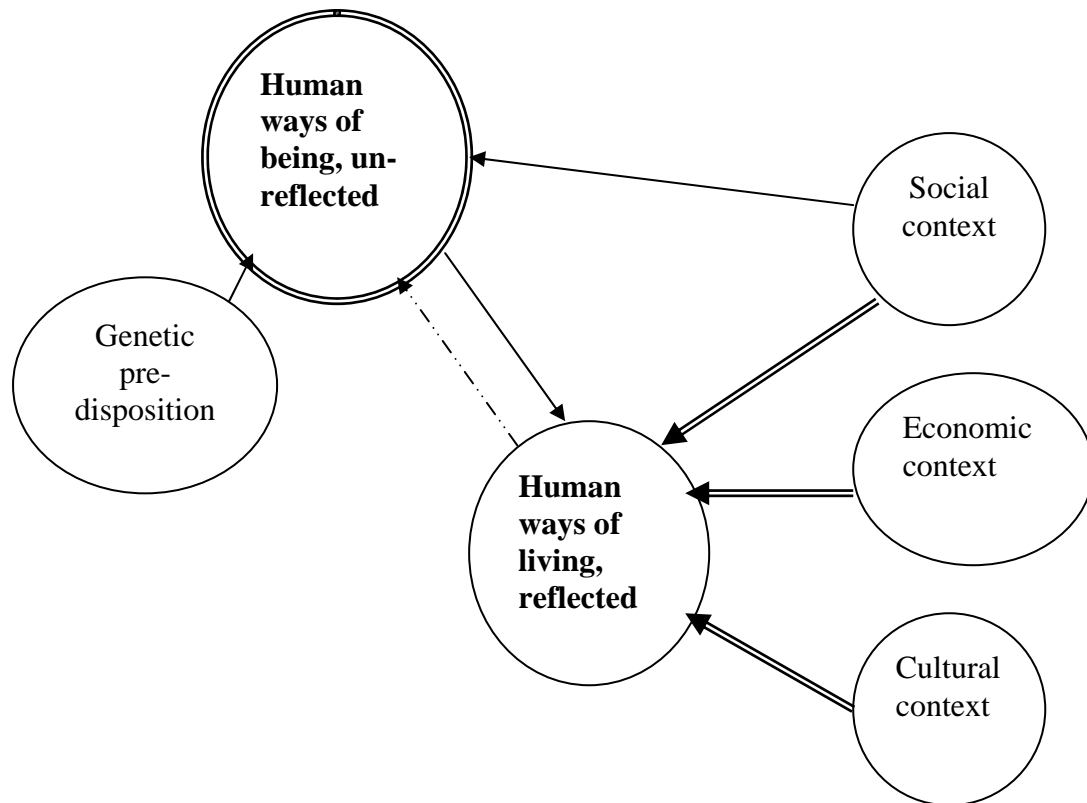


Figure 2. Human ways of being are more sustainable than human ways of living.  
 ==> indicates fast impact, change    -.-.-> indicates slow impact, adaptation

These references are merely samples of cognitive theories, but they point even though to the fact that action as a reaction to representation is often overlooked, which risks having far-reaching effects not only on design, but also on how to be proactive in preparation for human behaviour in general. One reason for this is according to Pöppel (2007) the success of rationalism, which has made us apply this way of thinking as a method: to look for *a* reason and go for the simplest, the unambiguous. If rationality is closely related to reflection, there is no reason to overrate the former in situations where the input is uncontrolled. Reflection is calculation with a controlled input. Action will thus often forego interpretation and exploration and be either strengthened; continued or discouraged; discontinued by it. A discontinued action often results in a wasted object or a refused service.

Un-reflected or thoughtless acts (Sulton Furi, 2005) appear to stem more from feelings than from emotions, as we are normally aware of the nature of the latter [even if we cannot always control them]. The thoughtless acts are thus carriers of information on object longevity as they are more influenced by established cultural codes than by temporal cultural phenomena, which are mostly conscious. It is important to note that thoughtless acts as referred to by Sulton Furi are not habits, even if they are influenced by cultural codes. They represent subconscious problem solving to a posed challenge. If the act is successful: it helps us to go on and we will repeat it. If not it will be replaced by a different act.

When does a new act demand reflection? It is of course impossible to answer this question and probably not even useful: the vital knowledge appears instead to be that it is more rewarding to build on the information conveyed by thoughtless acts and

develop this also for acts, which presumably will demand reflection. Returning to the quote from Ryan and Markova (2008) above: it is far easier to explore an existing pathway than to create a new one.

*Actions taken before exploration and interpretation are thus carriers of important information on how a relationship is established.*

### **Establishing a relationship**

To explore an object is mainly about trying out its usability and thereby to judge it as *meaningful* or not. On the other hand, the interpretation of an object is about a continued search for *meaning*. Returning to Peirce's theory of signs (Oakley, 2007) interpretation is about association, designation and argumentation: we must recognise, be able to understand and finally decide the object's value for us.

Recognition is about fitting into a pattern: familiarity. Designation is about giving the object a name and realise its possible interactions with other objects and artifacts in the context. Finally, argumentation is concerned with the object's contribution to our lives: well-being, identity, facilitation. Attachment does not warrant longevity as noted by Mugge (2007) and already addressed above: the creation of meaning is to look for patterns and discontinued meaning results in an object being readily abandoned or replaced (Gärdenfors, 2006). What happens when the pattern is in place? Are we then content with the relationship and attached to the object? As we have already argued; obviously not. For a prolonged attachment it is imperative that the object invites continued interpretation that it has several layers, which continuously add to meaning. This reasoning would in addition provide an explanation for the fact that personalised products do not show a more durable attachment 'rate' than other objects which possess the ability to rise emotions and create bonds (Mugge, 2007). This does [of course] not necessarily mean that the object itself has a multi-layered narrative but rather that it fits into the narrative of other objects and artifacts and thereby continues to contribute: to care for our needs and us.

Designers aiming at durable attachment with their designs and the resulting positive impact on sustainability must thus have raised awareness concerning a number of important distinctions:

- There are two forms of experience, lived and learned.
- Lived experience is the foundation for intuition whilst learned experience is the foundation for reflected thought, which includes but is not equal to rationality. The latter is based on controlled input, which most state of affairs cannot offer.
- Intuition thus enhances intellectual thought: it adds more dimensions, as it accesses the subconscious mind, but it does not promote rational thinking in its scientific sense.
- Human ways of being adapt continuously through influence from lived experiences and unlearn slowly. Once adapted, they thus inform our being from a developed basis.
- Human ways of living changes fast: they both learn and unlearn relatively rapidly.

- The subconscious is the ‘host’ of lived experience and human ways of being. It is thus not static but adapts continuously, which means that our ‘self’ is constantly developing even if not changing.
- Certain ingredients of our culture, among them those that are manifest as traditions, become adapted by the subconscious as cultural codes and lived experiences. These are sometimes overlapping. Some cultural codes, like the importance assigned to newness are counteracting sustainability with all the apparent power of the subconscious.
- Affect is neither feelings nor emotions. Affect is the moderator of emotions [which are outward] and feelings [which are inward]. Affective decision-making is thus not totally un-reflected as emotions have a cognitive component. It is this component, which makes emotions unstable and hence emotional design less sustainable.
- Meaning is created through patterns, which are reliant on conspicuous details to make sense. Simplification rather than simplicity facilitates the search for meaning of an object.

*If notice is taken of these distinctions there is good chance of arriving at affective sustainability in design: objects that retain their significance over time and in a changing human context. ‘Newness’ as a cultural code has to be replaced by ‘sustainability’, which would be a fundamental project not least for design education.*

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