

The Truth?

Working towards an epistemology of Visual Communications Design.

Simon Downs

*Loughborough University School of Art and Design, Loughborough, U.K., LE11 3TU
s.t.downs@lboro.ac.uk*

Abstract: This paper suggests that the visual communication design community does; it does not 'know' what it knows. Design has an abundance of rule of thumb beliefs that guide the designer, as long as the designer is operating within a familiar context. Design lacks a subject specific external guide, beyond our heuristics, outside our craft, that allows working designers to assess their work. In this paper the author examines some existing epistemologies of socially constructed domains, investigates the possibility of a vis com design epistemology toolbox.

Key words: *Visual Communication Design, Vis Com, Graphics, Theory into Practice, Knowledge, Epistemology, The Truth.*

1. Introduction

In the early eighteen hundreds a London apothecary John Hasslam took a long hard look at the world. He concluded that the British Government was being secretly steered by *influence machines*, devices that through the cunning broadcast of air currents would control the minds of parliamentarians, and through them control the world. Unsurprisingly Lord Liverpool, the Prime Minister at the time, did not agree. Poor Hasslam ended up in the Bedlam Hospital.

Like Hasslam, designers implicitly claim that a network of influence machines is shaping opinion; making the roads safer, helping people take the correct doses of their medications and performing a whole host of visual communications operations. How do we know if we are right in claims? Are we the heirs to John Hasslam?

Fine artists are clear that the pursuit of 'truth' and 'knowledge' is wrong (in all senses of the word). They revel in the plasticity of meaning and value afforded to the arts by post-structuralist critical and constructivist social theory. By contrast visual communicators work with and for others they understand that while fuzzy meanings and ambiguous artifice have a certain provocative charm, designers need to deliver on their promises.

Against appearances this paper is not attempting to do what Randy Nakamura defines as '... the attempt by its practitioners to raise design above its middlebrow pedigree to a "higher realm" away from the pejorative connotations of merely being "designer" or "stylish."' [20] [R. Nakamura, 2004]

By contrast research into an visual communication epistemology equips us with the potential for validating our operations as part of 'real-world' design practice. Acting within the range defined by what Alvin Goldman calls 'W-knowledge' [11] [A. Goldman, 2003] and Mansell and Silverstone characterise as 'Middle-range theories.'¹ are a class of deliberately restrained epistemologies that do not claim to be transcendental theories (i.e. universal meta truths equally valid in all circumstance), but address issues of local values of truth. For reasons I will touch on later in this paper deterministic and predictive über theories are unlikely to be valid or useful; but robust

¹ 'A 'middle-range theory' is a way of conceptually framing issues so as to bring salient research questions to the fore.' p.6 [17] [Mansell & Silverstone, 1996]

general principles may be possible.

For reasons of daily practice, honesty when dealing with clients and users, but most importantly validating the design artefacts; designers need to know if their end designs function as intended. So, while Nakamura roundly (and quite vehemently) rejects the application of 'big ideas' as investigations of design, he does finish his proposal with the following proposition:

'Perhaps designers have a unique and specific knowledge of making artifacts that embodies a huge array of processes both internal (cognitive, self-critical, creative and technical) and external (social organizations that are both hierarchical and nonhierarchical, fluid and uniquely self-organized, etc.).' p.8 [20] [R. Nakamura, 2004]

Which illustrates my point: Nakamura may be right in his assertions, he may be wrong – the statement seems flatteringly plausible to us as designers (naturally we feel design is special) – but how do designers evaluate Nakamura's proposition as more than a personally held belief: a deeply held myth that designers relate to one another? Happily Nakamura finishes his exposition with a useful suggestion, 'And what could designers learn from another discipline reflecting on design culture in a systematic and integrated way?' p.8 [20] [R. Nakamura, 2004] Quite so. Designers need to know; but designers also need guidance on how they are to know.

1.1 Knowledge Truth

By good fortune designer are far from being alone in pondering these questions of knowledge, belief and ignorance: there is a school of philosophy specifically concerned with uncovering the difference between belief and knowledge, truth and falsehood. It is called Epistemology, literally 'knowledge truth' (Episteme = knowledge, Logos = truth).

Within the greater field of Epistemology the lesser field of Social Epistemology directly deals with, amongst other things, communication and the formation of the social. As the Goldman notes in the Stanford Encyclopaedia of Philosophy: 'It (Social Epistemology) also has practical importance because of its possible role in the redesign of information-related social institutions.' [10] [A. Goldman, 2006]. Which would seem to make Visual Communications and Epistemology natural partners. "Social epistemology," says Shera, "is the study of knowledge in society.... The focus of this discipline should be upon the production, flow, integration, and consumption of all forms of communicated thought throughout the entire social fabric' [23] [J. Shera, 1970]²

Goldman states:

"In what respects is social epistemology social? First, it focuses on social paths or routes to knowledge. That is, considering believers taken one at a time, it looks at the many routes to belief that feature interactions with other agents, as contrasted with private or asocial routes to belief acquisition. This "social path" dimension is the principle dimension of sociality that concerns me here. Second, social epistemology does not restrict itself to believers taken singly. It often focuses on some sort of group entity—a team of co-workers, a set of voters in a political jurisdiction, or an entire society—and examines the spread of information or misinformation across the group's membership.' p.4 [11] [A. Goldman, 2003]

This paper will be addressing a traditional model of epistemology, that of justified belief, not any more contentious current positions. I am looking for tools that will aid in the practice of visual communication, not to turn the subject into a morass of abstract notions.

2 As quoted in A.Goldman, 2006. [10]

Justified belief is defined as:

'False propositions cannot be known. Therefore, knowledge requires truth. A proposition S doesn't even believe can't be a proposition that S knows. Therefore, knowledge requires belief. Finally, S's being correct in believing that p might merely be a matter of luck. Therefore, knowledge requires a third element, traditionally identified as justification. Thus we arrive at a tripartite analysis of knowledge as JTB: S knows that p if and only if p is true and S is justified in believing that p. According to this analysis, the three conditions — truth, belief, and justification — are individually necessary and jointly sufficient for knowledge.' [24] [M. Steup, 2005]

In pursuit of this aim the philosopher Alvin Goldman's notion of 'W-knowledge' is helpful. He notes:

'I shall distinguish two main senses of "knowledge": strong knowledge and weak knowledge (S-knowledge and W-knowledge). Most of the philosophical literature on knowledge is addressed to S-knowledge. It assumes that S-knowledge consists of true belief plus some additional element or elements, such as justification or warrant for the belief, and the exclusion of alternative possibilities.' p.23 [11] [A. Goldman, 2003]

Goldman defines the W-knowledge as the target of his 2003 book *Knowledge in a Social World*:

'It (the book) is devoted entirely to the prospects for W-knowledge, which is simply true belief. One reason I focus on W-knowledge is to circumvent the intricate issues that surround the notion of S-knowledge.... A second and more important reason is that people's dominant epistemic goal, I think, is to obtain true belief, plain and simple. They want to be informed (have true belief) rather than misinformed or uninformed.... But the rationale for getting such evidence is to get true belief. Hence, the entire focus of this book is on W-knowledge.' p.24 [11] [A. Goldman, 2003]

This concept of being 'informed' as a practitioner is the primary aim in suggesting an epistemology for visual communication design as a worthwhile pursuit. The design aim is producing functional artefacts. Assessing the effectiveness of our designs and of the conceptions that led to our designs is far from simple. The criteria with which we make our judgements are by their nature transitory and contextual. Any designer can be bamboozled by visual artefacts that refuse, in the field, to play the game we expect them to play (which can itself be fun, if we understand the context that the artefact is refusing to play by). If we design without a functional system of knowledge (truth, belief and justification) how can we identify our operating context?

If we look at Figure 1. we can see this proposition played out through the medium of Gadamer's Hermeneutic Spiral. In the diagram we see the process of learning/understanding played out with an individual initially existing in a state of pre-understanding: existing with ideas but without a context to test these ideas against. Through contact with world understanding, or in Meyer's (1999) interpretation 'reflection and abstraction', is achieved. This understanding however is provisional, forming another state of pre-understanding. In this model it is impossible to achieve 'true' understanding.

Co-opting the diagram by inserting a point of epistemological evaluation we come to a fork in the spiral. The process of moving from pre-understanding to understanding may take two paths. If an epistemological evaluation is made we can move forward along the hermeneutic spiral by achieving a contextual knowledge (not a transcendental truth) which becomes our next point of pre-understanding. By contrast a belief (a proposition not supported by evidence) feeds back into the previous state of pre-understanding: the believer's assumptions have not been challenged and thus no forward progress is possible.

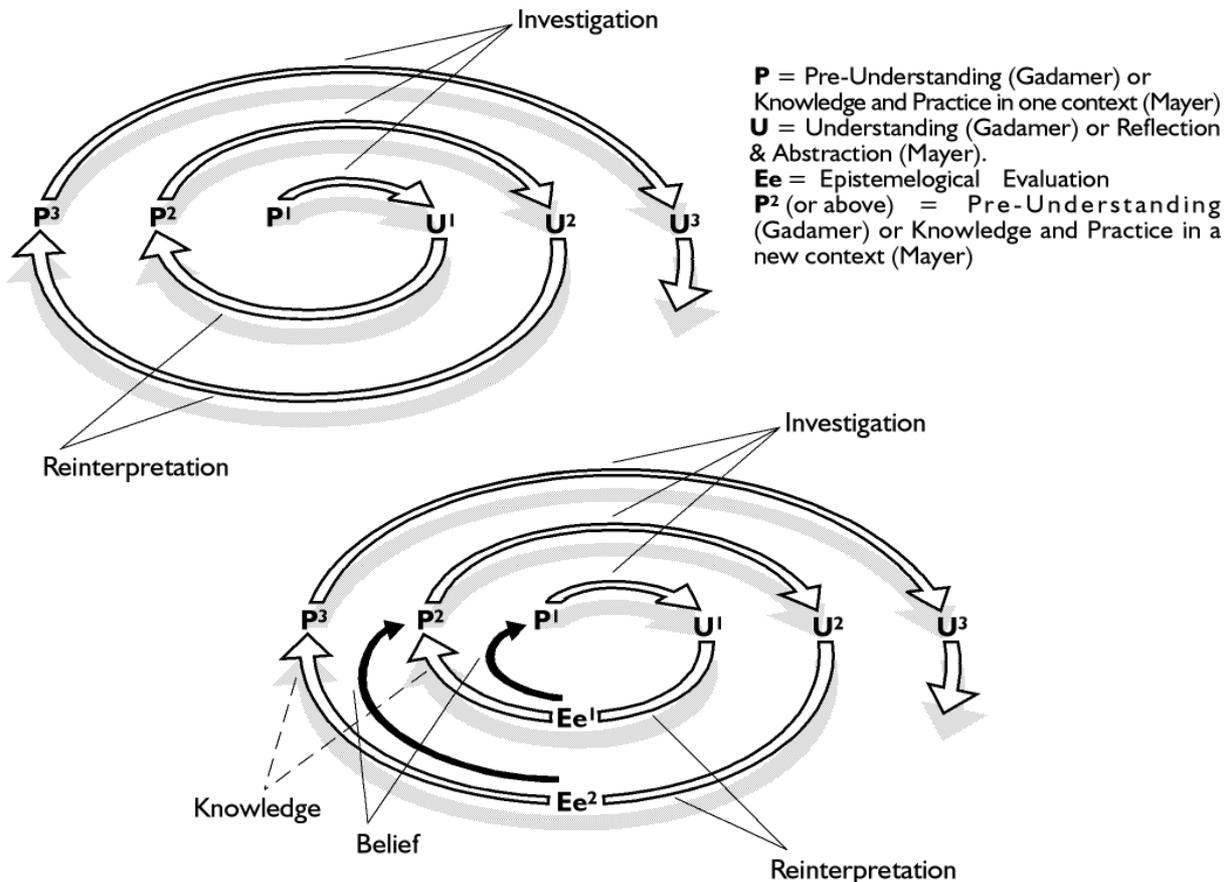


Figure 1 – Epistemological Evaluation as an aid to understanding.

Krippendorff [14] [1969, p.116] asserts that communication design, as opposed to communication science, cannot be predictive only retrodictive.

'Communication praxiologies might thus be said to retrodictively justify their objects, i.e., they evaluate prescriptive communication policies, in terms of both the situation in which they are to apply and the future states or goals to be achieved....

...In praxiological modes of inquiry, problematic situations then appear when objectives cannot be met, i.e., when the differences between the observable results of a policy and the retrodictions are too great to be acceptable. A science of communication, on the other hand, objectifies particular predictive theories and models of communication processes.'

As such any epistemology should not be seen as directive, let alone predictive. The biologist and emergence scientist Stuart Kauffman notes that there are a whole class of creative problems ('life' in this case) that cannot be modelled but must be addressed, one step at a time, in order to reach a solution.

'The theory of computation is replete with theorems. Amongst the most beautiful are those showing that, in most cases by far, there exists no shorter means to predict what an algorithm will do than to simply execute it, observing the succession of actions and states as they unfold. The algorithm itself is its own shortest description. It is, in the jargon of the field, incompressible.' [13] [Kauffmann, 1995, p.22]

It seems reasonable to regard design as such a problem: unpredictable, but formally assessable in terms of effectiveness once the design solution has been arrived at.

A visual communication epistemology does not represent a massive innovation, at least from the philosophical

context. Currently epistemologies address both large scale concerns (e.g. Social, Feminist, etc.) and local professional domains of knowledge (e.g. Medicine, Engineering or Law). Much of our current theory base is sympathetic to the enterprise. Many researchers regard all knowledge as being socially constructed, for example 'There are only practices, or positivities, which are constitutive of knowledge: the discursive practices of statements, or the non-discursive practices of visibilities.' p.44 [4] [Deleuze] (but in similar vein see Gettier, Foucault [9], Heylighen & Joslyn, and many others.) By using Goldman's principle of W-knowledge this paper aims at the modest target of assessing propositions in Visual Communication.

2. Does VisCom need an epistemology?

There was a time when the answer to the question 'Does visual communication need an epistemology?' would be a resounding 'no!' Our discipline operated if not in monocultures, then within a limited range of cultural contexts; methods were validated across decades by a combination of heuristics and intuitions. The turbulent nature of modern cultural exchange and the speed of technical change places strains on these historic systems.

Heuristics are experience based problem solving techniques (the word is of Greek origin, means discovery and is directly related to the word 'Eureka'). A designer informed by heuristics might well suppose that a potential design strategy is likely to work now because a similar strategy has worked in a similar circumstance in the past. Heuristics are extremely reliable as long as the context is moderately static. Intuition is used here in the strict philosophical sense of '...an immediate, non-inferential grasp, apprehension, or "seeing" that some proposition is necessarily true.' [22] [Russell, 2007] Intuition is essentially not limited by the presence of evidence: as such it is *A Priori* knowledge, independent of experience.³

The slow evolution of visual communication allowed heuristic craft skills to be treated as knowledge. By way of demonstration Jan Tschichold's comments in his 1928 book *The New Typography* that he views (with some justification) the whole of typography existing in one of three periods 1440–1850, 1850-1919 and 1919 -1928. Tschichold states:

'The history of typography shows a steady progress from its invention down to about the middle of the last century, but after that it is disturbed by disorganized movements and turned upside down by new technical inventions which decisively affected its course.' p.15 [26] [J. Tschichold, 1928]

From Tschichold perspective, as a trained printer who could have comfortably worked alongside Peter Schoeffer in the Guttenberg press, there were four centuries of no change followed by nearly seven decades of 'technical invention.' Over these time scales a practitioner could learn at the master's knee, and spend their entire life working in a slowly evolving industrial context, generating craft heuristics as they went, with their intuition maturing in step. We can see this in the vehemence of the 'new typographers' when discussing the practices of there more traditional predecessors:

'Let us examine the principles followed by prewar typography, The majestic traditional model knew of only one scheme of design—the medial axis, the axial symmetry whose plainest example was the title page. The whole of printed typography followed the scheme, whatever the immediate task might be, whether printing a newspaper or a circular, letterheads or advertisements.

Only in the postwar (1914-18 war) period did the dim realization dawn that all these were quite

3 'A priori justification is a type of epistemic justification that is, in some sense, independent of experience.' [22] [Russell, 2007]

'A proposition is knowable *a priori* if it can be known without experience of the specific course of events in the actual world.' ([3] Blackburn)

different tasks, making entirely different practical demands to be met by the typographer.'[27] [J. Tschichold, 1930]

Such institutional notions of truth '...seeing historically how effects of truth are produced within discourses which in themselves are neither true nor false.' p.118 [9] [M. Foucault, 1972] are powerful but vulnerable to massive disjunction that occurs when the strain of maintaining the truth of a heuristic or intuition that is no longer working. Foucault writes at length about the equivalent sequence of events in the biological sciences, where the internal 'truth' of the domain was undermined by exterior forces:

'In a science like medicine, for example, up to the end of the eighteenth century one has a certain type of discourse whose gradual transformation, within a period of twenty-five or thirty years, broke not only with the 'true' propositions which it had hitherto been possible to formulate but also, more profoundly, with the ways of speaking and seeing, the whole ensemble of practices which served as supports for medical knowledge. These are not simply new discoveries, there is a whole new 'regime' in discourse and forms of knowledge.' p.112 [9] [M. Foucault, 1972]

Deleuze [5] calls these institutional systems of belief 'domains of knowledge', and like Foucault sees them as being constructive of the very ways with which we perceive and engage with the world. A construction that tends to trap us in ways of doing, by limiting our ways of seeing.

Digital design and print tools, the web and personal communication conduits (narrowcasting), represent the kind of 'whole new 'regime' in discourse and forms of knowledge', a change in ways of seeing, that Foucault was referring to.

Other domains of knowledge of faced similar disjunctions in the past and have found improved epistemic models that have enabled them to move forward. For example Karl Popper's suggestion that a scientific theory could be identified by not by its ability to furnish a complete proof, but more usefully by the possibility that it might be proved false. Popper suggests that...

'...if a theory is incompatible with possible empirical observations it is scientific; conversely, a theory which is compatible with all such observations, either because, as in the case of Marxism, it has been modified solely to accommodate such observations, or because, as in the case of psychoanalytic theories, it is consistent with all possible observations, is unscientific.' [25] [S. Thornton, 2009]

Popper was well aware that absolute scientific proof is an impossibly difficult to arrive at in some circumstances, but that good enough evidence might be achievable. His proposal is that a proposition might be treated as a scientific theory if it had strong evidence supporting it, and held out the possibility of being proved false by better (if contradictory) evidence in the future. For example the existence of God is beyond unequivocal evidence, either for or against: thus it can't be considered a scientific theory. By contrast evolution could be shown to be wrong by the discovery of contradictory evidence, in which case a new theory would take its place. Unfortunately for us, successful as Popper's Falsifiability has been shown to be in the sciences it is probably not directly useful in the context of graphics and visual communications. Since visual communication is an inherently contextual system, depending for effect on the specific understanding and interpretation of a cultural milieu, a graphic communication could be locally effective in one milieu and nothing more than noise in another. No falsification would be shown to have happened.

3 Type samples and examples.

'The primary function of typography is to convey a message to the comprehension of the reader to whom it is addressed. Some of these readers may not be particularly interested in the message; hence it is necessary to set it out in type in such a manner that it may be read with the greatest possible ease and speed. Clarity is the essential feature of modern typography. Any form that does not first express the function of legibility is not in the true spirit of modern typography, no matter how striking or "modernistic" it may otherwise be.' p.40 [18] [McMurtrie, 1929]

While in no way disagreeing with McMurtrie's comments how can I know that my understanding of 'clarity' and 'legibility' are the same as McMurtrie? How does a designer know that these simple principles (a potential epistemic proposition in its own right) will work when addressing type set in Arabic, Chinese or looking at the works of David Carson?

In this section I will use selected writings addressing the issue of desirable functions in typography to demonstrate that the rules; as laid out for us by informed practitioners as daily guides to typographic practice; are not 'truths' but are manifestations of locally acceptable beliefs. In the following section one possible principle for distinguishing belief from knowledge is proposed.

So on the subject of legibility, potentially the most direct typographic function to test, we have...

William Morris in 1893 stating: 'To be short, the letters should be designed by an artist, and not by an engineer.' p.2 [19] [W. Morris, 1893]

Jan Tschichold begs to differ, some 35 years later he describes the admirable qualities for a 'new typographer' to pursue:

'There exemplars were the works of engineers, expressing purity and clarity in their construction and appearance, "Beauty" is no longer, to us, an end in itself, an autocratic entity, but a result, an attribute of of rightness and fitness in construction.' p.12 [26] [J. Tschichold, 1928]

In 1935 Herbert Bayer makes an demonstrates a clear awareness of the social construction of legibility:

'much has been written about the legibility of type, oculists can offer no definitive proofs, because their experiments are influenced by habits to which patients are accustomed. for example, it is found that old people with bad eyesight often read complicated gothic type more easily than clear roman type, because they are used to the former.' p.61 [1] [H. Bayer, 1935]

By 2001 Bernard, et al. find the position reversed in elderly people:

'Serif fonts, however, were generally preferred less than the sans serif fonts. Third, there was essentially no difference between the computer fonts and the print fonts. Thus, in light of these results, it is recommended to use 14-point sized fonts for presenting online text to older readers. However, a compromise must be made in deciding which font type to use. If speed of reading is paramount, then serif fonts are recommended.' p.2 [2] [M. Bernard, et al., 2001]

And finally De Lange, et al., generously list the known unknowns of legibility for us:

'With normal primary school readers, and under normal reading conditions, sans serifs and romans can be regarded as equally legible. Serifs do not appear to affect legibility, as measured by the tests employed in this study. The authors are of the opinion that it is not necessarily serifs or the lack thereof that increase or decrease legibility. It is rather a complex interaction of known and unknown factors that affect a subject's reading performance and the legibility of reading material. Subject-matter, the readers' interest in the material, intellectual ability, and their emotional and physical condition, can all

play a role in reading performance.' p.246 [7] [De Lange, et al., 1993]

We have five propositions on legibility in type. Some or all of them could plausibly be valid in specific circumstances, all are written with honest intent. How are we to know which is valid?

4- Consensus in Context

The very notion of context offers the core of a viable epistemology for Visual Communication design. It is after all our defining characteristic. Spinoza's *Joyfull Passions*, might provide a set of principles that can be applied to identify 'good' and 'bad' in specific contexts of design, in composition with specific cultures and societies.

'The only measure by which The Passions can be judged is that of acting or the power to act. As such each researcher or each user of technology sets the conditions of each new composition from within their own domain of knowledge, looking out towards the object of their study.' p.7 [8] [S. Downs, 2007]

This compositional regard for the design artefacts being assessed in their context is not new, but hints at a viable visual communication design epistemology. Design theorists like Ellen Lupton are well aware that context carries values that are essential to the form, values and success of a design artefact:

'In place of the classical model of typography as a crystal goblet for content, this alternative view assumes that content itself changes with each act of representation. Typography becomes a mode of interpretation, and the designer and reader (and designer-as-reader) competed with the traditional author for control of the text.' p.23 [16] [E.Lupton, 2004]

Donald Norman notes that problems that arise when context changes and the user is not addressed:

'Confirmatory evidence comes from the fact that although long-term residents of Britain still complain that they confuse the one-pound coin with the five-pence coin, newcomers (and children) do not have the same confusion. This is because the long-term residents are working with their original set of descriptions, which do not easily accommodate the distinctions between these two coins. Newcomers, however, start off with no preconceptions and must form a set of descriptions to distinguish among all the coins;...' p.222 [21] [D. Norman, 1988]

Klaus Krippendorff, the cybernetician and designer, offers an explanation, noting that context of compositions is mutually affective. The designer and the designed for are not independent agents in the act of communication each relies on a context they co-author:

'People do not merely respond to communications as do mechanical devices to physical events. They have minds, interpretative abilities, and interests and act accordingly. When a theory of society is proposed within that society, individuals take positions, especially since such a theory must refer to them as its object. Members of this society may behave either to confirm or to contradict this theory and thereby change the very object the theory claims to represent. Systems involving their observers are by their very nature self-referential; communication within such systems is circular and has a paradoxical quality absent from systems that are observed from the outside.' pp. 31-32 [15] [K.Krippendorff, 1984]

Habermass finds a degree of agreement with Krippendorff in explicitly addressing the epistemic nature of social truth, and its effect on communication and the acceptance of a communication as valid and meaningful by a target group:

' The consensus theory of truth, to which I now return having distinguished the different types of validity claims, picks up on the fact that reaching mutual understanding [Verständigung] is a normative concept. Wittgenstein remarks that the concept of reaching understanding is contained in the concept of language. Hence the claim that the purpose of linguistic communication is to reach mutual understanding is analytic. Every act of reaching mutual understanding is confirmed by a rationale consensus; otherwise it is not a "real" act of reaching understanding, as we say. Competent speakers know that any de facto consensus attained can be illusory; but their basis for the concept of an illusory (or simply forced) consensus is the concept of a rationale consensus. They know that an illusory consensus must be replaced with an actual one if communication is to lead to mutual understanding. As soon as we start communicating, we implicitly declare our desire to reach an understanding with one another about something. If consensus—even about a difference of opinion—can no longer be reasonably expected, communication breaks down. Yet if reaching understanding is not a descriptive concept, what is the criterion for a rationale consensus as opposed to a contingently established consensus that is not "sound"? A rational consensus, as we have said, is attained through discourse.'

p. 450 [12] [J. Habermass, 2002]

Habermass defines the conditions that must be met in order for a communication (in his example a spoken communication, but it works equally well for a visual communication) to be considered as justified by the recipients:

'The course of a communication runs smoothly (on the basis of a socially learned [eigenspielt] consensus) if speaking and acting subjects:

(a) render intelligible the pragmatic meaning of the intersubjective relation (which can be expressed in the meaning of a performative clause) as well as the meaning of the propositional component of their utterances;

(b) recognize the truth of the proposition stated within the speech act (or the existential presuppositions of the propositional content mentioned therein);

(c) acknowledge the normative rightness of the norm that the given speech act may be regarded as fulfilling; and

(d) do not cast doubt on the sincerity of the subjects involved.' p.448 [12] [J. Habermass, 2002]

If visual communication design represents a system made of contextual symbolism, then a viable epistemology for the subject might usefully be based around the principle of Fitness For Purpose; being as it is entirely of the system (the totality of designer, artefact, users and society) being assessing and encompassing as it does all the principles needed to assess all the value of a specific design.

And in many ways this might be the only test that can be shown as valid across the wide range of possible communication events that a designer might be involved in. Daniel Dennett in writing about the nature of consciousness has proposed that humans hold an Intentional Stance on each other:

'... we must treat the noise-emitter as an agent, indeed a rational agent, who harbours beliefs and desires and other mental states that exhibit intentionality or "aboutness," and whose actions can be explained (or predicted) on the basis of the content of these states.' p. 76 [6] [Dennett]

And in holding this intentional stance we are working towards a context (Habermass' ' consensus'), in assuming that a communication is there at all.

'Thus the uttered noises are to be interpreted as thing the subject wanted to say, of propositions they meant to assert, for instance, for various reasons.' p.76 [6] [Dennett]

If Dennett is correct and communication can only happen between actors who hold a position that regards the other as an intentional agents, then addressing their context and forming a consensus becomes an unavoidable necessity; Fitness for Purpose becomes a meaningful guide.

In Figure. 2 the act of communication design between a user and a creator has been mapped on the modified Hermeneutic Spiral from Figure 1.

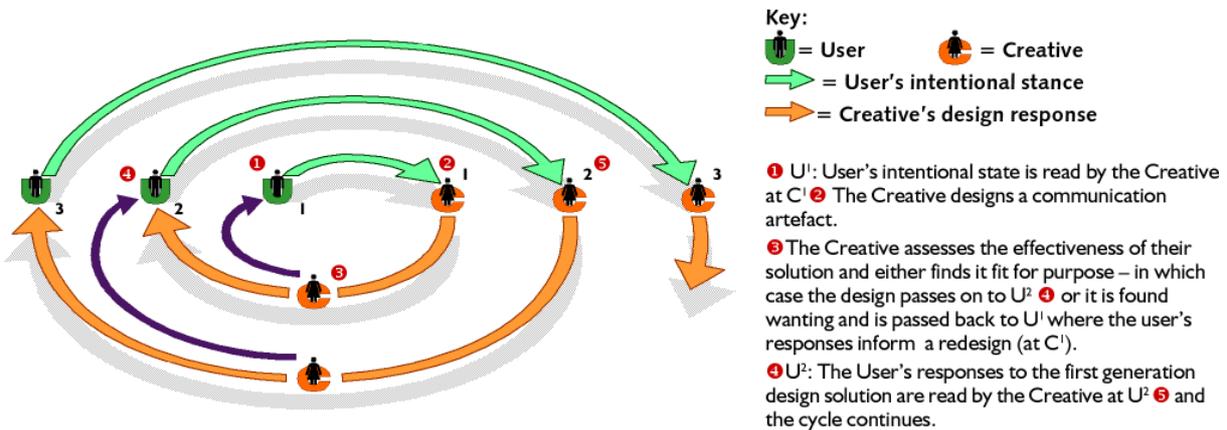


Figure 2 – Fitness for purpose in the design process.

Fitness for Purpose says absolutely nothing prescriptive about any specific visual communication: it is explicitly not reductionist or deterministic. It does not tell us if Jules Chéret or Abrahm Games was a better poster designer, but it might help us assess suitability of either designer for a specified task for a specified user group; it does not name the most legible font, but it certainly will instruct us to follow the existing good practice and rigorously research our audience before we design and test afterwards.

To be sure such a test imposes burdens on the practice of a designer. Designers operate from the position of intuitions; which is acceptable if we accept the corollary that our intuitions need to be tested. This is nothing more than the level of care design educators asks of every student. Call it a positive feedback loop, a hermeneutic circle, user-centred design or reflective practice, but designers must show that their work is more than boilerplate style but an effective response.

4. Conclusions

Incorporating a set of philosophical principles into the visual communication domain might be attacked as undervaluing the contribution of 'real world designers'. The alternative is an unexamined life in design.

This paper proposes that working designers, designer educators and design students might well benefit from a tool to assess the functionality of their design solutions. It would be conveniently tidy if their were deterministic, top down rules that we could utilize in our individual practice: it is not to be. Culture is a work in progress, a networked happening that changes under no direction except that of Adam Smith's Invisible Hand. The changes wrought by technology (itself another cultural operation with no trajectory, deterministic or otherwise, except that provided by the invisible hand) feed into our calculations, throwing off the comfortable shroud of heuristic knowledge we wrap ourselves in: craft can no longer be our childhood comforter. Each and every craft truism must be examined for fitness in the light of the job in hand. Whether the suggestion of 'fitness for purpose' finds favour or not, a system of assessing the worth of our practice knowledge will have to be found. One way or another visual communication will have its epistemology. We have to know.

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