

INTER-VIEW : Designing Interfaces and Inter- facing Design

by Ranulph Glanville and madeleine AkTyPI

[inter-view is in fact the result of a four month e-mail conversation between Ranulph Glanville and madeleine AKTyPI, the whole of which can be read at www.anomos.org]

*“Design, as interpreted here, is a (the) process of making the new. {...}
The means by which we make this new may be explained through a metaphor. We start wandering, purposelessly, in the countryside. We get absorbed, lost. We sense the environment and the events in it. Probably we have a lovely time. At some point, we find ourselves in some particular place where we are caught by a sudden realization: we recognise that we’ve arrived, we’re here. Now we can make sense of our wandering, the events en route: the wander has become a walk. The process is quite magical, beyond our ability to explain as a logical, mechanistic process. If we could explain it, we would not have newness.
Ranulph Glanville, *Variety in Design*¹*

madeleine AkTyPI : *Anomalie* is published mainly in France and there are many people (t)here who are not familiar with your way of thinking design, of designing design and of your propositions. What would you feel like saying as a personal introduction and invitation to those who do not yet know your work?

Ranulph Glanville : Before I tell you a bit more about me and my ideas, let me thank you and your readers for inviting me to this interview (inter-view). I look forward to finding where we will go together.

I have an unusual background, not fixed within one subject: I went to architecture school but spent my time performing and writing electronic music; I did a PhD in cybernetics and a second in human learning; I’ve taught mainly (but not exclusively) in design schools, but what I teach is something like the shape of ideas: mostly it’s the shape of the ideas of others, but sometimes I examine how ideas could have shape at all, and sometimes the ideas I am trying to shape are my own (which is when I do art and may be why I’m sometimes called the poet of cybernetics). In a recent interview the British architect Kathryn Findlay was quoted saying I had taught her “formlessness had some kind of order²”. I think that’s quite a good summary of a kernel of my interest.

Given this rather eclectic background, I’d like to start by trying to bring together some of what I mean when I talk of design—especially how thinking is a design activity; and how both share their outlook with the preoccupations of that more

¹ Glanville, R (1994) *Variety in Design*, Systems Research vol 11 no 3. Also at: <http://www.univie.ac.at/constructivism/papers/glanville/glanville94-variety.pdf>

² Melvin, J (2002) The Ripple Effect, London, Architects’ Journal, 18/07/2002

recent and philosophic version of cybernetics, “second order cybernetics:” a cybernetics which takes reflexivity and circularity seriously.

I think there is a general difficulty in the term “design.” Like a lot of terms I use, it is explicitly ambiguous (and I often use them for this reason). In English, “design” is both verb and noun, so it’s both activity and the outcome of that activity. There are several meanings. If, for instance, someone says “he has designs on her” they often mean that he would like to get her into bed. So “design” is a confusing bunch of phonemes!

And, in English, it is often taken to mean style—to deal with appearance where all that matters is the appearance, leading to the idea of design as the beautiful surface.

I prefer to use the word design primarily as a verb, to indicate a way of acting. I think of how designers work. My characterisation goes thus. We handle the imprecise and the undecided, and do so through a process in which we draw (whether by hand or in some other way), then look at the drawing and find that it’s telling us something we’d not thought of when we were drawing it. Thus, we enter into a sort of conversation with ourselves through the pencil and paper, or whatever it is we chose to use. It is very rare that we start with fully-fledged ideas and find we can keep them just as they came to us.

So I see design as this circular, conversational, feeding back activity, a very powerful method and an amazing way of dealing with problems (I’d rather not call it problem solving, but I can’t go into that here). Through designing, we come up with new understandings, which we didn’t have before; and resulting objects, which are new to us, at least. This is how the process of designing is sustained in the metaphor of wandering that you quoted. I see this process as akin to wandering, with us designers absorbed in where we are, deciding at each instant how to proceed: and then finding we’ve arrived and the whole process of our wandering suddenly making sense, becoming a progress.

When I design I go through this process/progress. But I also think about it. And, when I think about how I think about things, I see myself as designing, too.

This idea is both tricky and important.

M.A.: Would you like to develop this point? What happens between thinking and designing, how do they interact?

R.G.: When we think, we often form concepts. These concepts become stable: that is, they can be identified and reproduced; and new thoughts and observations can be attached to them. But these concepts are not given: we compose them, or, put another way, we design them. We also design how we fit them together. They

usually don't just fall into place: we have to fit them—and doing so we change them and we change what they are fitted to, and this changes everything we know: in other words, there are knock-on effects. This is how thinking can be characterised as a design activity. I believe we undertake this design process both individually and in groups making up societies.

And what I am doing now is I am thinking about thinking. (This is a second order, recursive activity, which is what the sort of cybernetics I am involved in deals with.) Yet I've just argued thinking is designing. Therefore, when thinking about designing, I am designing designing. This too is a second order, recursive activity. In other areas, such as genetic algorithms, this is known as self-similarity. Although I am not very often explicitly aware of how I design when I design (any more than I am aware of how I think when I think), I am sometimes aware at the moment I'm doing it (designing), and also after I have done it, when I'm learning from my experience in doing it.

I think (about) thinking and I design designing. So design, as I mean it, is very far from superficial: it's a fundamental human activity—perhaps the fundamental human activity. We have no understanding of life without our thinking, and our thinking is primarily a design activity. This is not to deny the power of, for instance, deductive “logical” thinking: just to remind us that it is some sort of specialised idealisation, which may not be a higher sort of thinking at all. In my view, it's a thinking that goes with explanation of an event after that event, that is, with post-rationalisation.

M.A.: If “design constitutes our way of thinking³”, as you have said, how do we think in a totally designed, invented, space and time, such as cyberspace?

R.G.: I'm not sure I can agree with your assumption that cyberspace is totally designed. I'd have thought that what's interesting and important about cyberspace is that it's hardly designed at all. Possibility is designed, in a rather bizarre way. Much of what goes into—web sites—it is designed. But it is not designed. Tim Berners-Lee's⁴ refusal to own the web is a fascinating management strategy, wonderfully in contrast with so many current models which demand more and more “restriction.” Let's come back to this later.

Actually, I admit I'm not really sure what cyberspace is. In its current manifestations it seems to me to be remarkably ordinary! If anything, it removes some constraints: the question “where are you?” often has a pretty strange answer nowadays. I'd have expected something markedly different, after reading *Neuromancer*⁵.

I think there may be two components to this “ordinariness,” both worth exploring.

³ Glanville, R (1998) *Researching Design and Designing Research*, Design Issues vol. 15 no 2. Also at: <http://www.univie.ac.at/constructivism/papers/glanville/glanville98-design.pdf>

⁴ Berners-Lee, T with Fischetti, M (1999) *Weaving the Web*, London, Orion Business Books.

⁵ Gibson, W (1984) *Neuromancer*, London, Victor Gollancz.

M.A.:Which are...?

R.G.:The first is our insistence on using rather mundane metaphors. I am astounded that Xerox PARC's graphic interface (initially helpful, but now rather tired) as made universally available through the Mac and later Windows can still be considered state of the art. It's astonishing that Apple's OS X can be sold as "new;" that nearly 30 years on, we are using the same old metaphors (and building on a really old technology—UNIX). Nothing else in computing has remained as unchanged as this. Perhaps it follows, in part, from the power of the metaphor as much as from the technology itself, but whatever it is, it amazes me.

The second is that each of us is limited by and largely contained in our own imagination. I am always surprised when I visit people from supposedly very different cultures (such as the Australian aboriginals). Everything looks so normal when it should be extraordinary. I've wondered about this for a long time, and I now understand this ordinariness as a reflection of me: what I see (perceive) seems ordinary because I'm seeing it and I see what and as I see: which, of course, I'm familiar with because I live with it full-time. What I see is what I am able to see, which depends on my seeing, and that's my norm.

So maybe the ordinariness of cyberspace is due to the ordinariness, to me, of what I see—my perceptions. It's my normality, and it's formed in my thinking. (Think of the extraordinary familiarity of the beings we create in science fiction, most of which are either anthropoid or octopus-like.) Not that this means I can't be surprised, feel a sense of wonder and so on. (In fact, I would hazard a guess that one way you could measure the creativity potential of people is by looking at their ability to find wonder.)

M.A.: But it may also be that you could have "afforded" even more extraordinary encounters, your ordinariness as you call it being the result of a surplus rather than a lack or a limit. You could be expecting, even hoping for more variety than what you end up finding, or rather re-cognising, amongst the Australian aboriginals or elsewhere...

R.G.: That's generous of you! Taking the line you give, I would like to think that (being in) cyberspace might encourage us to broaden the ways we think and what we think of: that it might take a role like the (good) teacher, who—in the liberal Anglo-Saxon tradition of Froebel and Dewey, etc—liberates the potential of the student. It's not so much how we think in cyberspace as how cyberspace might encourage us to expand the range of our thinking!

M.A.: In opposition to what you have been saying and designing, in France, even more than in England I believe, design is quite often regarded as "mere" *graphics*, as *aesthetics*, which comes to mean, as you pointed it out earlier, an obsession with the surface beautiful, a secondary aspect in comparison to content, which remains primary. Sometimes that attitude may not change even when web design comes into question. In web design though, the creativity exercised coincides with the creation

of the interface, which is a kind of world in which to act, the only one for a non-programmer user. What is the role of web interface design in your opinion?

R.G.: As you indicate, I think I may have already responded to the first part of this question. Design does appear to be a word of many meanings. The “style” meaning and the “beautiful surface” you refer to, are not the meanings that I intend, but are nevertheless legitimate and may even form a special case of my intended meaning. I must stress, there’s nothing wrong with a beautiful surface, though I usually look for something more than that. However, I see design as a process and the outcome as something unpredictable and, thus, new—although I think the outcome and the process can often be described after the event so this process appears logical, even inevitable. The experience is of inventing the new but the account is of the machine-like operation of the old. Confusing these two has been a problem for science in general, and has led to very confusing studies of what (my sense of) design is and what designers do. In fact, when I was a student I was instructed that post-rationalisation was a sin, whereas what I’ve found is that it’s the only possibility!

However, the main point in your question lies, I believe, in the consideration of interface. I have come to the conclusion that the notion “interface” is often misunderstood. Interface is where (at least) two faces meet, or, rather, it’s the space needed between those faces. In a conversation, the interface consists of the “space between” in which we can converse (this is a conversational space, although it may have a physical aspect). An image I use to help me understand comes from the Wayang Theatre: a shadow puppet theatre from Indonesia where what is is, we believe, a projection onto the screen of what we cannot see but believe is behind it (I will not, here, consider any privileged position in which we believe we can see behind the screen). Given that none of us really knows what is going on in the head of any other (perhaps even in our own heads), the interface is the space in which we meet and where we can behave, observe and interact. It is, therefore, a shared and incompletely occupied space into which each participant can place his/her contributions to the conversation. It is the only access we have to what (we assume) is behind the faces that bound the space and allow us to participate in the interaction.

The interface is crucial, because it is where the “faces” meet, and it allows and sustains interaction.

Note that this interpretation is different from that we have learnt from our GUIs. GUIs are essentially flat planes. The notion is of pressing a button with the result that an action is carried out: stimulus-response, if you like, or a control panel. I consider this interpretation as trivial, mechanistic and inhibiting. “Inter” suggests betweenness, and that demands space and some sort of mutualism and sharing. What is crucial is not so much my ignorance of what’s going on behind the screen the computer presents me (at some level, not even the computing theorists know what’s happening there, just as we don’t know what’s happening in each others’ heads), but that the model used is of stimulus-response or control, rather than interaction.

(Of course, given the agrandissement of computing, complicated and fast acting stimulus response is called interactive, just as the homogenised presentation on screen is called multimedia.)

M.A.: And to summarise all that dense thinking?

R.G.: What I'm trying to say is that the design of interface is essentially important, but the current approach is very restrictive/restricted, even mis-conceived. The web, cyberspace and so on could be places of involvement, exchange and interaction: not places of multiple choice and of control/ordering. The seductiveness of the graphic styling (that limited notion of design you have referred to), the cunningness of the movement and other flash tricks, only helps disguise the paucity of the so-called interface. It's not really an interface at all. It's still trapped in that metaphor Xerox gave us in about 1975.

M.A.: You are right! However, so-called web interfaces are the issue here, so I have another question concerning them: web interface design has to take into account the "user" as a necessary entity in the process of creation. Could the "user" be a new type of what second order cybernetics called the *observer*? If so, how would you comment the role of that particular "observer", the "user" of the User Interface? Is he/she the *active agent*⁵ or not? If not, where would you situate the observer as far as web interfaces are concerned?

R.G.: Perhaps I should start my response by talking a bit about what I understand when using the term the "observer." The observer, in second order cybernetics, takes on a "new" role—for the observer is *involved*. The classical paradigm worked hard to deny observer participation. For many reasons, this position is difficult to hold nowadays: and it turns out there are advantages in this. It is odd, for instance, to contemplate studies of human societies by human beings, which pretend that the behaviour observed in members of that society is of a different (and excluding) type to the observer's.

In (my version of) second order cybernetics we talk of the active and involved observer. So the observation is permitted to depend on and belong to the observer. However, not only is the observer making up his/her mind about the observations he/she is making: but the act of observing changes both what is observed and the observer. The observation no longer belongs exclusively to the observer, nor is it just of the observed: the observation comes from an interaction between both, and exists between them. It's dynamic.

As an example, think of how we decide other humans are intelligent. We interact with them (remember: observing creates changes), and recognise the quality of

⁵ In *Re-searching Design and Designing Research*, op.cit.

intelligence in them. But this quality of intelligence is not in them: it's in the interaction. When I say you are intelligent, I also say I am!⁶

What about the user? The argument I was putting forward earlier presented the interface as constituting a shared space between at least two participants, rather than (as is the current general case) some sort of panel on which we press buttons, giving us a kind of stimulus-response relationship which the user controls. In my interpretation, the user is active. That is, the user takes part in some sort of interaction, in the broadest sense, with the machine.

So I see action between the computer (fronting the web) and the user. In fact, there is at least an attempt at explicit interaction between them. For me, the problem is that web (interface) designers often see the user as given permission (by the designers) to use the web as they have programmed it. In effect, their interfaces control the user into using them as panels with buttons — without the space between that I hold is necessary to support interaction.

M.A.: I couldn't agree more despite some exceptions coming from experimental interfaces that one could think of. So what would you suggest?

R.G.: I believe that if we want a truly interesting and beneficial involvement with the web, we need to think not so much of the user as active—fitting the second order cybernetic observer paradigm—as to think of the interface as supporting interaction, with the user helping create and then participate in an interface sustaining a space (of interaction) between.

Some fear what they see as implied here—the liberation of the computer. As far as I can see, danger comes when we make slaves of others: thus, ourselves, becoming slaves of their enslavement while also creating repression that may lead to insurrection. If we want to get the best we can out of computers and the web, I believe we should welcome the computer as a partner rather than a slave, and learn to interact (as with all interactions) with it to our mutual benefit.

M.A.: This is an absolutely crucial point. How is that achieved as far as web interfaces are concerned?

R.G.: Like many good questions, this is a difficult one. How do I believe such an interface could be made? The major quality it will have is an ability to take part in such a way that it contributes something of its own. This is what happens when we have this space between. We ourselves need to recognise the possibility, and we need to program for the sort of uncertainty that we find in a true interaction. Maybe some extraordinarily fast programs give a semblance of this sort of behaviour. However, I believe that, since it is we who recognise the originality of the contribution of others, we will have to learn to think this way, that is, to recognise not

⁶ Glanville, R (2001) *An Intelligent Architecture*, Convergence vol. 7, no 2.

only our own contributions but those of others (including the computer). And we will need to design the interface to encourage and support this.

In this I may appear to advocate anthropomorphism. I don't, at least in any traditional sense! But I do recognize that, insofar as my thinking is human, I will always see the world in and through (my) anthropomorphic ways.

Some may say that Goedel's incompleteness theorem denies the possibility of the "really" intelligent computer. I don't want to argue that here and now. Perhaps it does, when we think of axiomatic systems. But we can think in other ways. For instance, a computer error (when the computer does not do what we want it to do) might also often be seen as a computer choosing to do something different. And, anyhow, intelligence is not in the computer (or in me): it lies in the space between, in interaction.

M.A.: What you just said reminds me of a phrase by some writer of the 20th century, saying that any typographical error is virtually a new word... Taking the other into account, conversing with it... So could an interface really be a "conversational partner"⁷?

R.G.: I think there are many people who've had insights like this: maybe it's something that happens again and again as media appear. Error is found to be liberating, to increase what we can do. (I was just reading a similar comment made by an English composer, Colin Riley, who is questioning the composer's obsession with control when there is so much to be gained from the "accidental" contributions of the performers.)

What I was saying earlier is that not only can an interface be a "conversational partner," it must be. (This is in contrast to understanding it as a means of control limiting our imagination. I hope you'll let me expound on this a bit later.) However, this is not quite right, either. The interface is where participants in a conversation meet, and where the conversation is supported. The interface is where different participants get together to do whatever it is they wish to do.

In fact, I think I must own up to some confusion myself. I'm still trying to decide whether the space between actually is the interface, or whether the space between supports (permits) the interface to be of the sort I have described—either as a conversation or as a type of shared action space. Perhaps there is no difference. My difficulty comes about, I think, because I've arrived at my position using several approaches and arguments, and I'm not quite sure, myself, how these fit together, and whether I'm creating confusions by using similar terms to contain the resolutions of these different arguments. While this might perhaps sound sloppy or indecisive, I hope that it will rather both sound honest and be recognized by your readers as

⁷ Glanville, R (1997) *The Value of Being Unmanageable: Value and Creativity in CyberSpace*, in Eichman, H, Hochgerner, J and Nahrada, J (eds) (2000) *Netzwerke: Kooperation in Arbeit, Wirtschaft und Verwaltung*, Vienna, Falter Verlagln. Also at : <http://www.univie.ac.at/constructivism/papers/glanville/glanville97-unmanageable.pdf>

reflecting how we think (and, indeed, the design process in thinking). Anyhow, this is how I see it at the moment.

I should point out that in the sort of interaction I indicate, the onus is on each participant: and whether you have taken part in the conversation depends not only on your efforts but also on my appreciation of them (and vice versa, reciprocally and mutually). Whether I understand a conversation as taking place is my determination: and if I determine that there is conversation, that you are in conversation with me, then, to all intents and purposes, you are. Maybe I should elaborate this a bit—because I can only determine this for me. Thus, what I understand must be my responsibility. It is I who does this understanding, and I can no more be absent from it than I can I have your understanding. My understanding is neither your understanding nor your intention. We can only be responsible for what is ours. But we must be responsible for that, for no one else can be! If there is no responsibility we live in a world of alienation, outside happiness. The importance and location of responsibility is a central point, especially when we are dealing with and through conversation. This is all the more so in today's buck-passing world. We seem to somehow forget our responsibility. I really can't emphasise this too much.

However, we do offer what we say into the space between, which we share in order to interact in the conversation. You offer what you say both in the form you chose and in response to what I have said (assuming a conversation with only the minimum of 2 participants). This is the opportunity afforded by, and as, our interaction. The decision that you are intelligent and participating in the conversation is, for me, my decision, deriving from (my valuing of) our interaction. Yet you influence this. (When politicians say "I have made it perfectly clear" they are talking nonsense!) This is why the notion of interaction (conversation) and our understanding of it is so crucial, and why we need to move to correct the appalling misrepresentation, appropriation and trivialisation of these notions by such as the computer industry.

M.A.: So, have you ever actually met a "conversational" interface on the Internet? A circular, constructive and interactive interface, which is not based on the action-reaction model?

R.G.: Have I ever met a conversational interface on the Internet? My answer must be understood in the light of the above, which will no doubt make it seem evasive! The obligation to determine (recognise) the conversation is mine, and I have to contribute to it myself. It is not just (or even principally) a matter of the interface-as-presented. It is a matter of making the space between and taking part. The interface as I describe it is, I believe, necessary, but it is not sufficient.

That said, there are some so-called interfaces that are more obviously conversational than others. I have found some, although (rather laxly) I didn't note them and I can't bring any to mind at the moment. In my experience, they are rare. Of course, most so-called interfaces are actually designed to control, direct and

determine, and are not really interested in (the openness of) conversation. Most of the conversational ones have, in my mind, come about through openness and through errors that introduce the unexpected, that which is out of control, the new.

By the way, it occurs to me that I've not yet stated (although it must be obvious) that in my view the conversation is the essential paradigm for interaction. As a formal notion it was extensively studied by one of the great, imaginative and original thinkers of the twentieth century, my (second-order) cybernetics professor Gordon Pask. His thinking about conversation was itself influenced by the psychologist RD Laing. In English, conversation is more-or-less a synonym for dialogue: hence, a tie up with dialogue and dialogics.

M.A.: Since "control is understood to exist when the behaviour of one system is determined by another", and since "the control does not exist in one system or the other within the control system: it exists between them"⁸, what is the function of the interface? Does it materialise that betweenness? Since you even say that "betweenness is the source of interaction and is also its mode and its site"⁹. Would betweenness be another word for interface? What would that imply?

R.G.: I think this is exactly the point. You've come to the heart of the matter. You first mention control. I use control as an example not only because control is a key concept from the birth of cybernetics, but also because we live in a world that is full of notions of control. And these notions are almost all linear: X controls Y (perhaps with a little feedback to help it in case something unwished for happens, or to better help the achievement of the controller's aims). What I have discovered is that control is not (causally) linear. Cases where it appears to be linear are special cases where particular restraints are applied. Control is circular and, given that, the roles of the controller and the controlled are relative: while X controls Y, Y in turn controls X. Thus, a teacher may control a class, but a class's behaviour will control how the teacher controls that class; just as the heat switch on the wall in a central heating system determines when the boiler (furnace) is turned on, but whether and when it switches is controlled by the heat supplied by that same boiler.

The actuality of any control act can rarely, if ever, exist in one or other "participant." So control must exist between them: and that description accords with our experience. (Please excuse me from going into cases where we feel forced to do things, etc here.) The point I'd like to make is that even control is circular. Those old roles of "controller" and "controlled" are at best arbitrarily attributed. Control happens circularly and between participants.

You next mention behaviour. Behaviour is, in my view, all we have to communicate with the other. It is the evidence. What I mean is this. I cannot observe what's going on in your head, but I can observe you behaving and, from this, I can draw my own conclusions that explain to me what I observe. Thus, I can explain "as if" I knew what

⁸ *ibid.*

⁹ *ibid.*

you were thinking, but that cannot be the same as what you were thinking. There is a difference between “as if” and “as.” Here I’m observing your behaviour and treating this “as if” it actually were as I explain it. I believe that, while it’s very helpful to treat the “as if” of science as if it were “as,” we should always remember science makes explanations that are based on very carefully constructed descriptions. Science does not necessarily reveal what is (although, by coincidence, it might). Science gives us explanations for descriptions of observed behaviours that we treat “as” what happens when, strictly speaking, it is only “as if” it happened. This is important not only because it helps us remember the status of what we claim to know, but also because it shows us that what we do know is arbitrary and is created through a circular involvement in behaviours.

You ask, in this context, about the function of the interface. I think you put it rather nicely. For me, what we deal with is behaviours: and we attribute to these mechanism, cause, etc. What we need, when (as I argue) these mechanisms are circular, is a space for meeting. It is the space where behaviours can co-exist. I can enact mine there, and you can enact yours there (and molecules can enact theirs there, and so on). There’s space for each to display the behaviours that present these enactments and participate in circular activity. The interface is thus crucial. I don’t think it quite materializes the betweenness. After all, space is usually understood as the lack of material that may be found between bits of material. Rather, interface allows and provides a home for that betweenness. The interface can admit circular activity and the creation of the new. Seen in this light, it is indeed both the site and a source of interaction.

Yet many of the so-called (computer) interfaces we have today allow only for that stimulus-response, push button sort of action. This typifies linear systems, that is, systems where a cause produces a regular and repeatable associated effect, which is deeply restricting and restrictive. It’s true GUI’s allow a semblance of more interactivity because they’re faster and we don’t need to so consciously learn how to instruct a particular behaviour. It’s perhaps hard nowadays to remember what a revolution they were. And it’s true that as computers get faster and faster, the semblance of immediate and complex response lets us delude ourselves that there’s interaction. But there isn’t, at least in the sense I’ve been discussing.

Betweenness isn’t another word for interface. The space between is where we can enter into conversation because we have left space between what we say and what others in the conversation say. Betweenness makes the interface possible. But understanding the relationship between interface and betweenness may help us not to restrict unnecessarily what we permit, may allow us to accommodate and encourage interaction.

M.A.: When then does the wander become a walk on the Internet?

Wandering is a sort of purposeless activity. I don't think we go wandering with the idea of getting to anywhere in particular. We just go along, seeing what we see and deciding moment by moment where we will go. Being in wandering is what's important. This is not to say there may not be some point to what we are doing while wandering. For instance, we may want to have a picnic, and have a hamper with us, but we can still wander until we happen upon a place that seems just right. Wandering is purposeless—or at least the purpose in wandering is just to (keep on) wander(ing)—and the only way we know we've arrived is because suddenly we sense that this is so. We say to ourselves, "This looks like a nice spot," or, "This is just the place." And having done that, we may settle down to our picnic.

I believe it is much the same with design. The process of designing, while it may have many tasks to satisfactorily complete, is essentially aimless. We do not know where we're going (that's how the new comes about). But we keep on, following ideas, backtracking, changing direction. And then there is that moment when it all makes sense, we feel we've somehow arrived; everything jells, just as with the actual perambulatory wander!

At this instant, in terms of this metaphor, we are able to say that we have arrived. But we are able to say something more: for we can now make sense of our wandering, finding direction and sense in what we've just done. So we now understand what we did to have logic and purpose. But this understanding is not the one we had when we were wandering: it is a post-rationalisation, an explanation of an event after that event. We can even test whether we have arrived, or we were mistaken.

You ask when such a wander becomes a walk on the internet, and I would say that it happens whenever we, having browsed and drifted, end at some point where we say to ourselves, this is a wonderful place to be, this is where I can stay, where and when I have a sense of arrival and of rightness. And when, following that, we can make a sense of the browsing and linking we did (the directions we chose) so that there is an explanation of the wandering, a post-rationalisation that makes sense of what we've been doing, and shows the process leading naturally (logically) to the point where we stopped. (You might join me in thinking that this post-rationalisation is in principle unknowable before we have wandered to the point where we recognize our arrival, if you wanted to complete a loop here!)

I imagine most Internet users have had this experience many times. When we wander in the Internet we arrive and then we make sense of this and stop. We don't design the sites, we don't design the options, but we do design the path we follow through the choices we make, which bring a coherence and wholeness to our journeys. As to knowing when you've arrived, that's a matter of recognition. And there's mystery, wonder and magic in that!

Thank you for organizing that I could go on this wander with you and end up sharing some space between us at this magical place!

M.A.: Thank *you* for leading the conversation onto it!

June - September 2002

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