Design - the blind spot of theory
or
Visuality | Discursivity
or
Theory - the blind spot of design

Gui Bonsiepe

Since practice is an irreducible theoretical moment, no practice takes place without presupposing itself as an example of a more or less powerful theory.

theory and practice

Gayatri Chakravorty Spivak (1990)

theory   practice
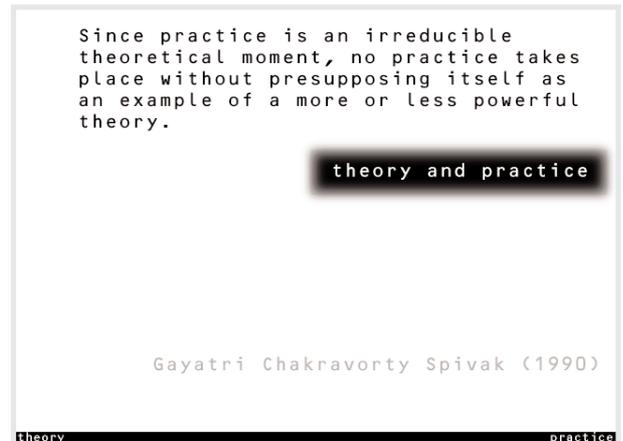
[Spivak, Gayatri Chakravorty: The Post-Colonial Critic: –
Interviews, Strategies, Dialogues. Edited by Sarah
Harasym. New York/London: Routledge 1990.p. 2]

The title of this conference "Design - the blind spot of theory" can be reversed into "Theory - the blind spot of design". So both issues will be addressed. The first part will focus on design theory. The second part deals with New Media. Both questions apparently are disconnected. But as will be shown the consolidation of design in the field of New Media depends heavily on theoretical contributions because the issue we face in New Media is complex and cannot be addressed successfully within the standard frame of reference of graphic design.

Design theory and design practice

The relationship between theory and practice in design is a thorny question that generally provokes visceral negative reactions when the topic of theory appears on the agenda of practising designers. Theory and practice are considered as opposites. Therefore one might be inclined to replace the word "and" with the word "or". Either theory or practice … as mutually exclusive activities. But theory and practice are not as separated in self-contained domains as common sense claims. Practice that considers itself unaffected by theory suffers from a strong error of perception. Theory permeates practice, though generally unnoticed.

Only at a late date did design become a subject which philosophers and scientists reflected upon. For reasons yet to be explained they did not direct their attention to one of the central phenomena of modernity: the issue of design understood here emphatically in the sense of *progetto, Entwurf, ontwerp.*

As early as the late 1960s, Herbert A. Simon published his fundamental work on design theory by positioning design within a general theory of artifacts.

[Simon, H. A.: The Sciences of the Artificial. Cambridge: MIT Press 1981, 2nd edition]

He set the standards for deliberations on design theory from a scientific and therefore precise viewpoint. The approaches from other worlds of discourse have a harder time of it, particularly approaches that want to access the domain of design within the categories of art history.

Characterisation of design
Approaches to treating design as manifestation of art should today be considered questionable given that after 70 years the central philosophical concepts to distinguish between the two are available. I refer to Heidegger's notions of ready-to-hand *(Zuhandenheit)* and present-at-hand *(Vorhandenheit).* Design is the domain of transforming present-at-hand into ready-to-hand. The notion of ready-to-hand is constitutive of design - and in this central aspect it differs from both art and science, constituting a domain of its own right.
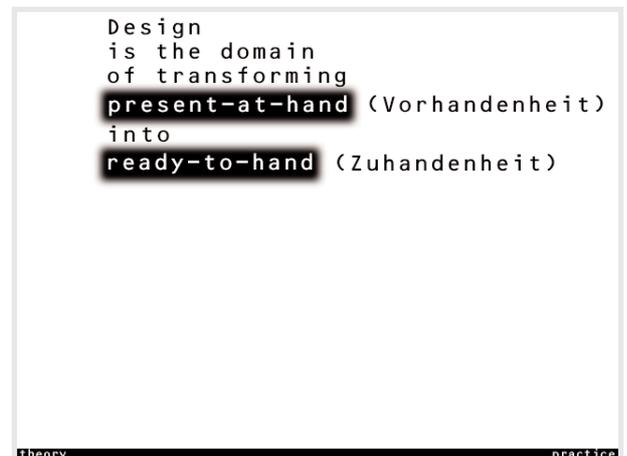
Borrowing a notion from computer sciences I call this domain "interface". I interpret design as interface design, that is: a domain where the interaction between users and artifacts is structured, both instrumental physical artifacts in form of products and semiotic artifacts in forms of signs. Admittedly each instrumental artifact has also a semiotic facet, but nonetheless the instrumental value is the core for effective action. Interface is the central concern of design activities. I consider the venerable notion of designers as form givers outright obsolete. Particularly in the domain of New Media we can observe a shift from the concern for form to the concern for structure. Designers thus structure action spaces for users through their intervention in the material and semiotic universe.

The distinctive domain of design
is
the interface.

Graphic design +
industrial design
are essentially
interface design

Shift from the focus on
form
to **action**

With each step
you fall slightly forward.
And then catch yourself
from falling.

design theory

Laurie Anderson
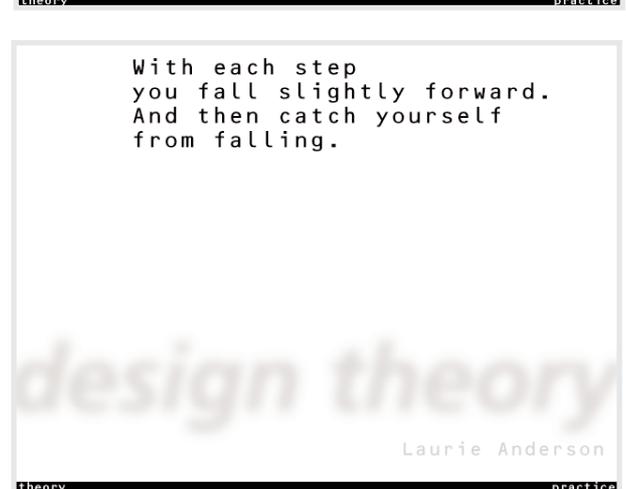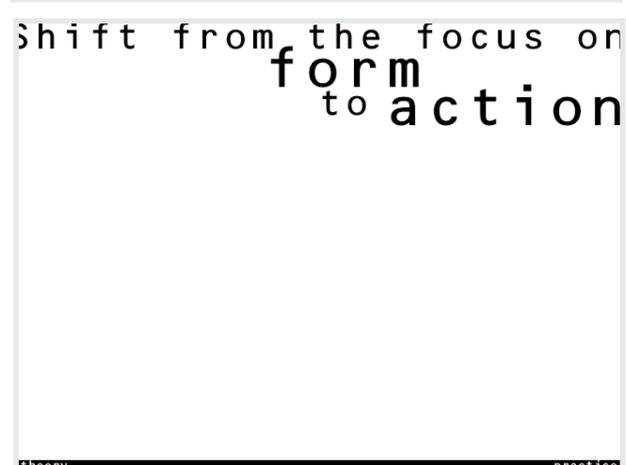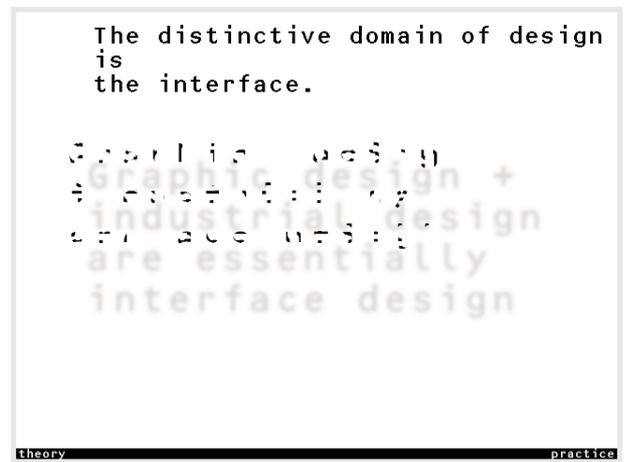
Characterisation of theory

Theory as contemplative behaviour turns the object of contemplation
into precisely that: an object. There is something of the voyeuristic
trait about theory. What Walter Benjamin said of polemics, namely
that they treat an object as lovingly as a cannibal treats an infant, is
also true of objectifying theory. It voraciously consumes actual
design. Theoretical discourse is also a discourse of power, a discourse
of appropriation. Thus, theory constantly gets caught up in a compul-
sion to legitimate itself. It emerges in the duality of contemplation
and action. Theory presumes the materiality of what it is theorising
about. Practice therefore initially has priority over theory. In other
words, theory at first impression always arrives too late. But this
impression is misleading, for theory affects all design practice. There
is no design practice without theoretical components.

Obviously, theory and practice are different. Theories are not directly applicable to practice, and practice is not an application of a theory. The relationship between these two fields is more complex and makes mutual instrumentalisation prohibitive. Theory needs to avoid the danger of abstractness and head for the purported lower levels of practice. Practice, in turn, must not isolate itself in contingency and one-sided directness. Precisely action which obstinately insists on practice and practice only and sets itself as the imperial standard, succumbs to blind opinionating. This is all the more the case when practice blushes as it hears the word theory. Anyone who barks against theory in fact unconsciously falls victim to it. Anyone who thinks that theory is some leisure-time occupation for the discerning bereft of any relevance for practice, shunts himself onto the sidings of history with the signal on "No Future". Any demand that theory should be simple, in keeping with the motto of Apple's computers *for the rest of us,* is likely to take on board a populist prejudice. Theory is as differentiated as the practice on which it reflects. This is, as is well known, a decidedly complex matter. Were it not to be, then theory would be unnecessary.

Legimitisation of theory

Why do we need theory, let alone design theory? What is theory good for? Why not spare practice of all theoretical considerations? From where does theory's legitimation come? Does design need a theory specific to it? What can one hope to get from it (and what should one not hope for)? What criteria are there for deciding the relevance of theory?

We cannot expect there to be unanimous answers to these questions. However much the meaning and purpose of theory may be doubted in design, there is at least one firm argument in favour of design theory. All practice is embedded in a world of discourse, a domain of linguistic distinctions that form an indispensable part of practice, even if many repress or deny the fact. Worlds of discourse vary in terms of degree of differentiation and stringency. Things are not good when it comes to design. Compared with other realms, the design discourse stands out neither through differentiation nor through stringency.

Theory can be characterised as the domain in which distinctions are made that contribute to practice having a reflected understanding of itself; in other words, it can help practice be regarded as a problematic issue. Put in a nutshell: Theory renders that explicit which is already implicit in practice as theory. This is why theory is irksome: it casts into question things taken for granted. An approach of this kind does not produce broad sympathy. Theory can be rather discomforting.

In his recently published book *Che cos' è un intellectuale?* (What is an intellectual?), Tomás Maldonado introduced a subtle distinction between *"pensiero operante"* (operational knowledge) and *"pensiero discorrente"* (critical knowledge). Based on this distinction, we can put forward the following interpretation: design practice as *pensiero operante* is rooted in the domain of social production and communica-

Theory reveals theory
that is hidden in praxis
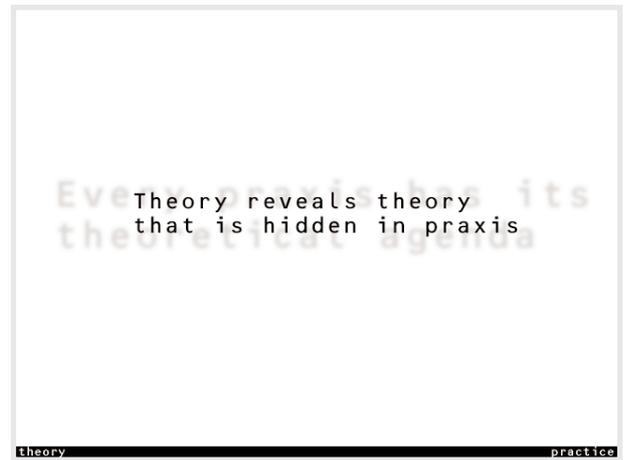
tion. Design theory as *pensiero discorrente* – as thinking against the grain, as critical thinking – is rooted in the domain of social discourse and thus, in the final instance, in that of politics, where the question is: In what sort of a society do the members of that society wish to live? Let me stress that this emphatic concept of politics in design theory has nothing to do with notions of professional politics or party politics.

Visuality

Given that theory constitutes itself in language and lives in discursivity, it has a tense relationship to visuality, a central category of design. This is the case although epistemology has, since the beginning of classical philosophy, been permeated with visual metaphors – a fact that has been termed the "imperialism of an ocular-centric philosophy".

> [Levin, David Michael (ed.): Modernity and the hegemony of vision. University of California Press, Berkeley/Los Angeles/London 1993. p.10.]

Things might easily be given an anti-visual bias if theory privileges language and possibly declares it the only form of cognition. At latest since the recent visual turn in the natural sciences, resulting from the development of digital technology, the visual domain has been recognized as a domain that helps constitute cognition. This undermines language's claim to absolute predominance as a primordial basis of knowledge, thus attacking a powerful tradition of discursivity. The latter has a difficult time dealing with visuality.

One can only hope that a New Academy, a New University will overcome the division between discursivity and visuality. Design theory could be brought to bear fruitfully in investigating the links between visuality and discursivity. Then words would be brought to images, and images to words; discursive intelligence and visual intelligence would be brought together.

A new approach to design education would then probably emerge. We are still in the pre-history of design, in a transition period. Design might - and with caution I would say - will become one of the foundations of higher learning in the New Academies of the 21st century, establishing itself as a fourth domain in addition to science, technol-

ogy and art. There is a reason for this ambitious - perhaps too ambitious - claim: project-oriented action is possible in all domains of human experience. It is an ontological cornerstone of our existence, in the same way as language.

New Media

The breathless expansion of New Media poses some questions about design, language, visuality and theory. The concern with these issues, particularly design for on-line and off-line digital documents - known under the popular marketing term "multimedia" - has been voiced repeatedly by design educators and professionals.

There is probably a consensus that design education, in particular graphic design education, is not in its best shape today and needs some drastic overhauling. Recently a group of young media designers found hard words for our educational system characterising it as dequalification mills. Why this provocative statement? I suppose that it results from the recognition that in the field of New Media professional practice is advancing so fast that the courses in design departments simply cannot cope with the rate of innovation and are already obsolete from the moment that they are inaugurated.

a voice of radical change

schools should be changed
into public real-estate agencies,
that...offer space and infrastructure
to interested designers
eclat 1997

theory   practice
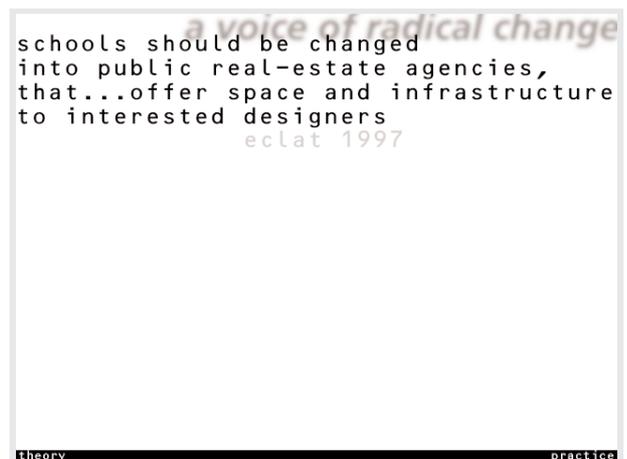
Sometimes in a mood of resignation the declaration is made, that anybody 20 years or older has already passed the phase for mastering the new realities - the Net as the arena for whiz teens and whiz-subteens. I would prefer empirical studies to generalising statements without proper evidence. Certainly, a generation that has grown up spending hours in front of staccato-like mtv with 100 visual changes per minute, gaining a mastery in vision/body reactions in video games, and hacking around days and nights in front of a computer monitor, has gained a particular experience that is literally engrained into their bodies. Nobody will deny that. However, a question not yet answered so far is, if that base of experience is suited for understanding what is happening and to develop a critical stance against the technology so passionately employed. Only through reflection the danger is averted to credulously swallow everything that is propagated through the megaphones of New Media magazines and media conglomerates with their insatiable appetite to privatise the public

domain, if not simply move it into oblivion with only one institution as all-over regulating institution: the Market.

We have been told, that the Great Narratives are dead. That is the hallmark of the post-modern condition. But where formerly we had various competing narratives, we face now - on world-scale - the propagation of One Meganarrative, called The Market. As any totalising and universalising claim this is a cause for concern.
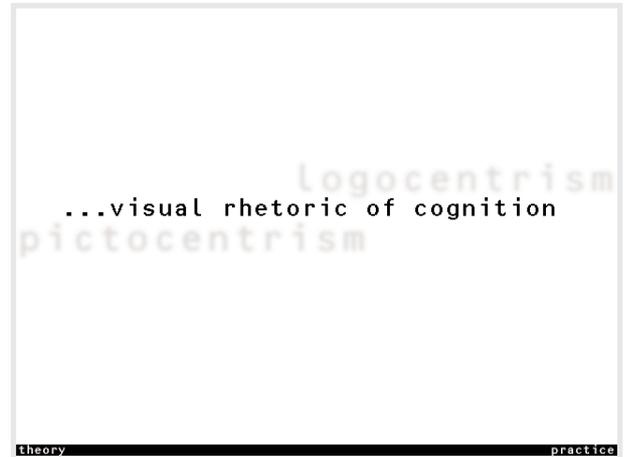
New Media pose an interesting question with regard to the relation between graphic design and cognition. A new category of graphic design is going to gain its proper profile step by step. This is known under various names infodesign, information design and information management. It is still in the making and not yet clearly defined. Infodesign can build on small but exemplary tradition, among which I would quote Otto Neurath who made fundamental contributions to what I call the visual rhetoric of cognition. He stated - in the beginning of the 20ies - that a visualizer alone is not sufficient and that - as he called her/him - a transformer would be required.

Traditional graphic design is characterised by a strict division between verbal and visual, between text and image. The visual domain is predominant and the capacity for visualisation considered the core of graphic design. This paradigm went unchallenged until the New Media appeared. New games are played today. New players have entered the arena of what traditionally has been considered to be the exclusive domain of graphic design. We find gut reactions
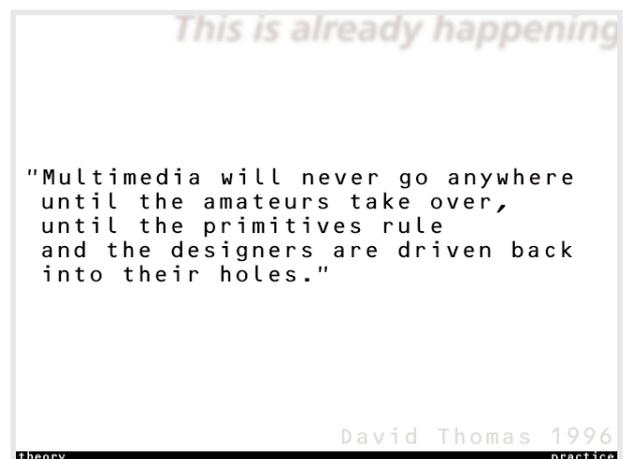
[Thomas, David, "It bytes". In: emigre, 39 (1996) :
45-46]

Is this a manifestation of bad humour of a musician? Maybe, but it misses its point: what it predicts in conditional form, is today already happening.

What are the new competences required from the graphic designer today? Though the term interactivity is exposed to overuse, I quote it as the central issue of New Media. Of course, a book, too, is an inter-active device, and a brilliant one at that. But interactivity in hyper-media goes beyond the degree of interactivity as it is materialised in books or printed works. Interactivity in digital documents means that the user can choose his own path through a non-linear structure made-up of text in visual form, text in audio form, images, video sequences, animations, music and sound. And not only choose her or his path, but also choose between different levels of complexity. To write a book for different publics is counterintuitive, but in digital documents this is possible and mandatory. That is new and exceeds the boundaries of traditional graphic design, and of film-making and writing. It touches issues of user scenarios (in that aspect similar to theatre play and film), and the handling of perceptual and aesthetic variables other than letter form, composition, printed colour - though nobody would deny their importance and sophistication.

The Net

Compared to traditional forms of media the Net is a fundamentally different medium. As early as 1970 H.M. Enzensberger characterised the difference between the New Media and Old Media (Print) in the following way: New Media are action- and short-term oriented where-as Old Media are oriented towards contemplation and tradition.

> "Their (the New Media) relation to time is opposed to that of bourgeois culture that wants possession, that is permanence, at best eternity."

[Enzensberger, H.M.: Baukasten zu einer
Theorie der Medien. Kursbuch 20, (March
1970): 159-186]

Established media are basically monologic and one-directional forms of communication that distinguish between producer and consumer, between sender and receiver, between author and public. The Net on the other hand - known also as the Matrix (William Gibson) - is a dialogic medium.

The Net with its browsers for home pages and sites changes the predominant paradigm of the designer who controls the variables that make up a design. Design once controlled from the centre, now it moves to the periphery. As is well-known, in the Net the user has the choice among variables that determine how type and colour appear on his monitor screen. The role of the designer as the controlling instance of all design variables is thus changing. We do not yet have a special term for this situation that designers are facing. Perhaps we could call it open-ended design or fluid design.

"Print stays itself,
 electronic text replaces itself."

Michael Joyce 1995

theory   practice
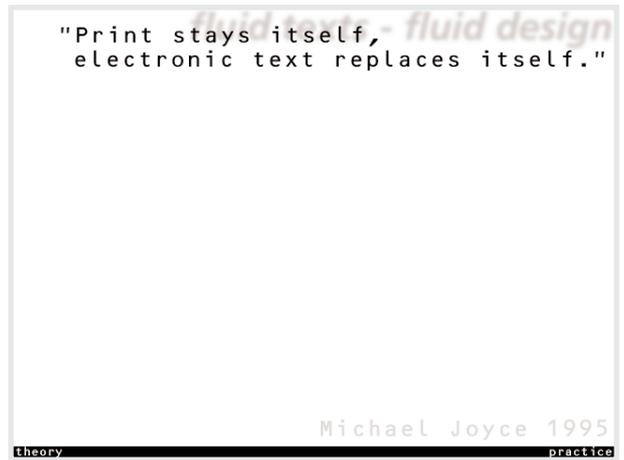
[Joyce, M.: Of two minds - hypertext, pedagogy and
poetics. Ann Arbor: The University of Michigan 1995.
p. 232]

Documents distributed and made available in the Net undermine the
traditional paradigm of the monumental closed Text. The printed book
is frozen, closed. Electronic documents however have a fluid charac-
ter. Accordingly the role of the designer becomes more "fluid", less
imposing.

The reader of a hypertext
not only chooses the order
of what she reads, but her
choices, in fact, become
what it is.
          Michael Joyce (1995)

theory   practice

theory   practice

    ... data
    is just noise
    if we can't decide
    what matters and
    what doesn't.

Michael Joyce (1995)
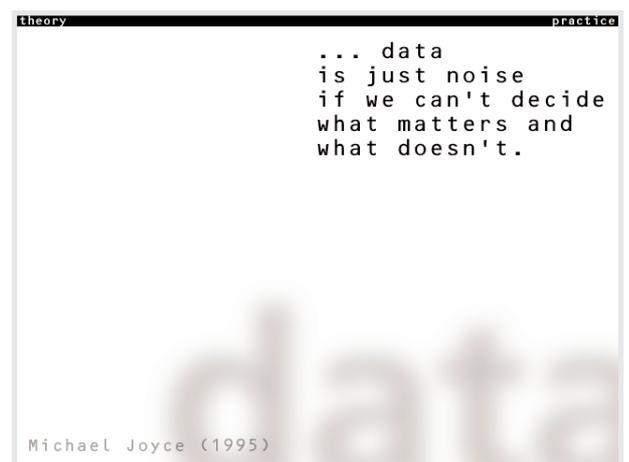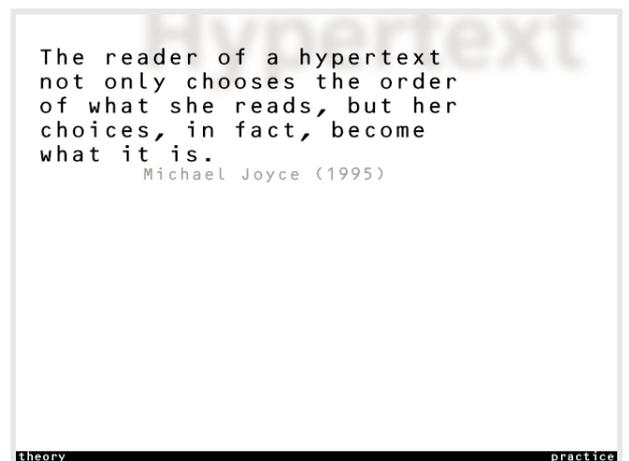
What makes hypermedia interesting? Certainly not the feverish click-
ing from one screen to the next, but the play of visuality and discur-
sivity. This we find also in other media, e.g. film. But what we don't
have there - and even less so in tv - is a dialogic interaction.

Let me quote two characterisations of hypertext and hypermedia.

> "Hypertext has been called the revenge of text on television since under its sway the screen image becomes subject to the laws of syntax, allusion, and association, which characterise language."

[op.cit. p. 23]

> "Print literally gives way on hypermedia screens to digitised sound, animation, video, virtual reality, and computer networks or databases that are linked to it. Thus images can be "read" as texts, and vice versa. Any hypertext holds the prospect of representing on the screen the sights, sounds, and experience of movement through virtual worlds that language previously only evoked in the imagination. "

[Michael Joyce, 1995]

This is a strong claim: the possibility of substituting language-based literature with hypermedia; and I would say that it runs the peril of overpromising. But it points to an important tendency: the importance of the visual domain for text, not simply as a translation into the visual domain, but as constitutive for the meaning of text.

This claim puts into question the canon of literary standards and education that treats e.g. typography as an addition to the text, but not as constitutive of the text. To this paradigm shift the notion of post-literacy is referring. In this new environment, visual competence is mandatory. We should however be careful and not get hooked up on our skills, because professions based predominantly on skills are very vulnerable when inserted in an environment with fast pace of technological innovations. So we need to go beyond further if we want to consolidate our profession.

Designrelevant research

Design is not known for being an area where new knowledge is produced. This deficit is dangerous, because professions that do not produce new knowledge are pushed to the margin in an innovation-intensive period such as ours. Research generally does not form part of our design education programs. We would need to set up an agenda of relevant design research. This would require a more intensive contact with other domains of human knowledge and experience to create a sensibility or *Problembewußtsein* in researchers to focus on design issues. This proposal does not mean to transform design into a science. Such endeavours have not recognised the fundamental difference between design innovation and scientific innovation. But it would require that designers and design students get more literate and develop research and reading practices that would permit them to participate more actively in the design discourse and the broader cultural discourse.

An example can serve as illustraton. If we take a look at the booming field of educational software, we discover that the immanent possibil-

ities of digital networks are hardly used. The most comfortable - and secure - way is to continue on the tracks of the traditional paradigm: networks functioning for the electronic delivery of documents where the teacher fulfils the role of an information provider and the student the role of an information consumer. Networked education or network-based educational environments open up - and I would say require - a new understanding of teaching and learning. The teacher would less be a knowledge provider than a coach who orients the student to find and gather information and knowledge. These new learning environments will have to be invented and designed. Here the designer could come to terms with his mission: to be a provider of tools. But in order to cope with this issue he needs to offer more than visual expertise if he does not want to run the risk to be pushed into an ancillary role of visualising concepts provided by others.
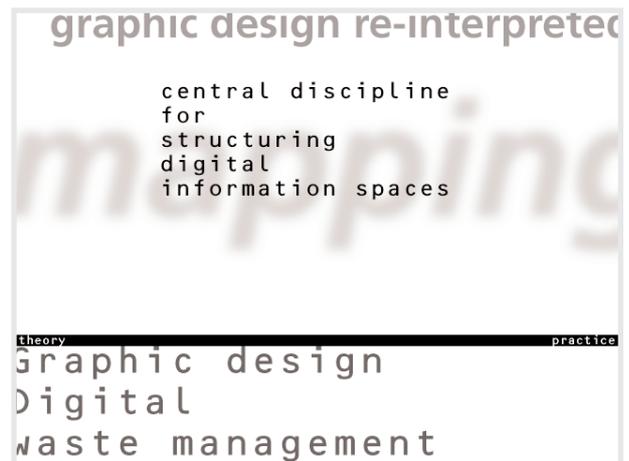
Today we often hear the complaint about information glut, about too extensive information exposure with its anaesthisizing effect on the public. Richard Wurman coined the term "information anxiety" for this phenomenon. Here a new area for professional action turns up for designers. They could use their competence in visual distinctions to reduce the complexity that produces perplexity in the public. The reduction of cognitive overload could become a major field of professional action. For lack of a better term we could use the already mentioned term information design. The designer would work as an information vacuum cleaner (as Bilwet has named it). Obviously
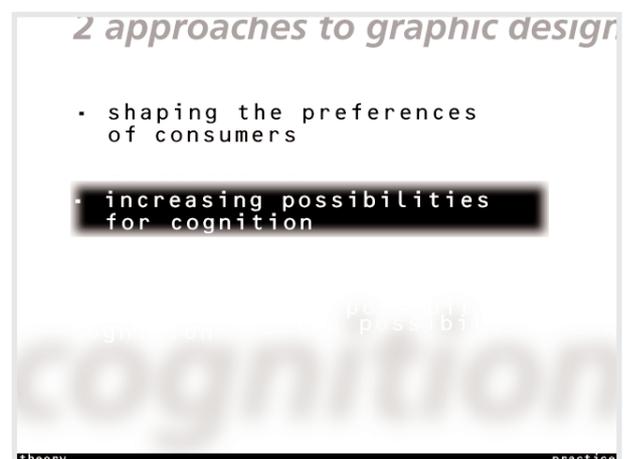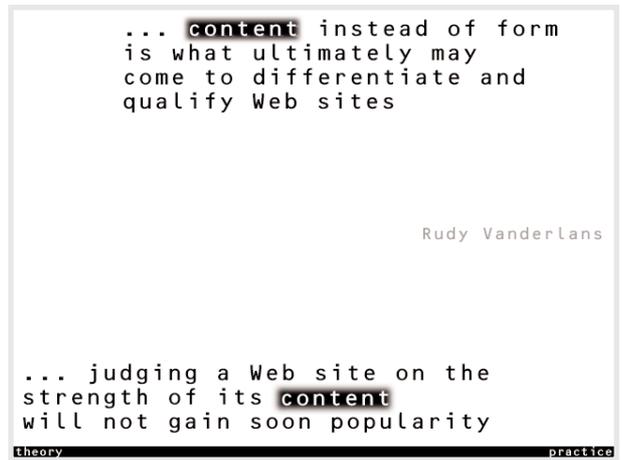
working in this still undefined area requires cognitive endeavours
that opposes the all-to-often self-referential habitus or our profes-
sion. The cognitive rhetoric of graphics is still a speculative possibili-
ty, but inevitable if we want to understand the interaction of text
(discursivity) and image (visuality), not excluding sound. But it
certainly would contribute to "break down the barriers between form
and content" as Lorraine Wild the promise of multimedia.

[Wild, Lorraine: That was then, and this is now: but
what is next? In: emigre 39 (summer 1996): 18-33]

Our western culture is characterised by a deep schism between logo-
centrism and pictocentrism. This split is deeply engrained in our
institutions of higher learning. Today for the first time in history it
has become technologically feasible to overcome this divided culture.
It might be worthwhile to persue this possiblity.