

TOWARDS A VIRTUAL DESIGN MEDIA MUSEUM?

The 2003 EAEA Workshop Initiative Reviewed

IDENTIFYING, STRUCTURING AND PRESENTING DESIGN AND (RE)PRESENTATION MEDIA ARTEFACTS
EXPERIENCES AND FINDINGS ON THE BASIS OF AN EXPLORATIVE EXERCISE WITH SIMULATION EXPERTS

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Introduction

Designing is largely a process of (inter)active *imaging*.

The evolution of a design concept from preliminary design *proposal* towards *spatial* and *material environment* generally follows an uncertain path through uncharted landscape; a journey of exploration which requires both rational *and* creative consideration, frequently involving the *interchange* of information within a design team and *collaboration* with representatives from different contributing disciplines.

Designs are conceived, worked out and specified step by step (roughly speaking from 'rough to fine') in *iterative* design 'loops'. All the time the designer tries to determine which 'course' should be taken, by considering *reference* material, by reflecting on conceptions developed *previously* and by generating specific *options* aimed at furthering the 'concretisation' of the end product. In the course of such a trajectory, *visual information* is continually being developed, selected, tested, and subsequently either discarded or perfected.

From early times architects have been considered not only as knowledgeable 'experts' in the field of building as a craft, but also as 'creative directors' of such development processes. The architect should be capable of not only conjuring up *visions* of the future spatial and material *form* of the building, but also of *conveying* these to the other 'actors' involved in the initiation and building process. Such 'sharing' of information is necessary in order to generate sufficient understanding, consensus, enthusiasm, as well as means. To become more than 'figments of the imagination', the designer's ideas need to be 'pinned down' (even if they are not yet entirely finished) and communicated by using some form of reliable – and preferably readable – 'language' for design development and communication...

Identifying Media Applications – digital and physical

The most prominent form of *notation* was (and arguably still *is*) the *drawing*. For generations students of architecture have learnt to become *skillful* in the understanding and production of different types of architectural drawings, such as: plans; sections; elevations; isometric projections; perspectives – from explorative freehand sketches to precisely measured, technical drawings.

However, designers have not relied solely on drawings. They have proved inventive in developing or adapting a wide range of other design 'instruments' for their aims, such as: *models* (both physical and conceptual); *schemes*; *diagrams*; *collages*; *photomontages*; *video productions*; employing various *codes*, *symbols* and *legends*.

In recent years, the scope of design has been expanded enormously through the introduction of *computer driven* platforms. However, the computer as such – primarily a piece of ‘hardware’ – should not be considered as one medium for design driven enquiry, but rather as a *framework* which can house several *different* types of instruments, or design and representation *media*...

Whereas *digital drafting* may have initially attracted most attention, in recent years various forms of *virtual modeling* and *image manipulation* have greatly expanded the creative ‘palette’ of the contemporary designer.

Interestingly, the introduction of such tools has led to more personalized and varied working methods, whereby active use can be made of different *combinations* of digital techniques.

Familiar *physical media* have not been wiped away by computerized design media, as was predicted by many ‘experts’ some years ago. Although it is undoubtedly true that computer driven media have taken over the role of certain techniques, such that of as traditional technical drawing, proven design media, such as sketching and physical modeling, still play an important role; in design *education* as well as in *practice*. In fact in recent years we witness a renaissance of ‘traditional’ modes of representation, often in *combination* with computer-based means of expression...

In this context one of the most interesting things to become evident in recent years is that there appears to be an increasing tendency towards working with *different sorts* of media in conjunction, digital *as well as* physical. Trend-setting designers – but also students of architecture - freely mix their tools, which have thereby become truly *interactive* media...

Mapping Media

In order to gain more clarity concerning the different kinds of design oriented media and their relationships, an attempt was made to ‘map’ media applications.

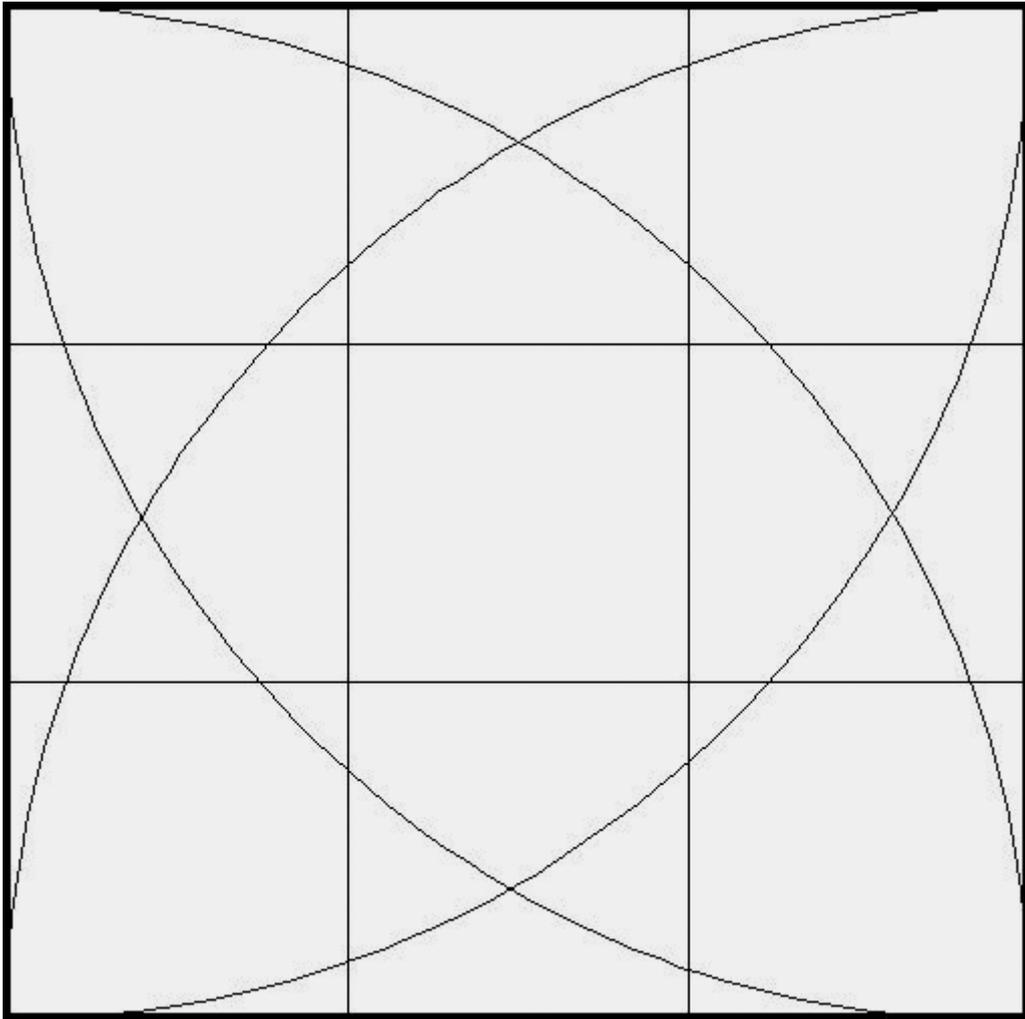
Several configurations were considered and tested, but eventually a system was devised, whereby four ‘cornerstones’ could be identified and positioned within a grid structure, whereby the elementary ‘types’ could be grouped relative to each other. The basic format: a square or rectangle divided into nine identical fields, in a 3 X 3 grid organization.

Initially a distinction was made between physical and computer-based modes, but it was soon recognized that there is no *essential* differences, between, say physical modeling and computer modeling, but that these differences are intrinsically a question of *instrumentality* (which naturally influences the working *methods*).

In the next phase of development four elementary media types were used to identify four different ‘layers’: Drawing – Image – Model – Symbol. Within each of these levels instruments of design may be grouped which use physical or digital platforms for their modes of operation.

(See schemes 1 and 2)

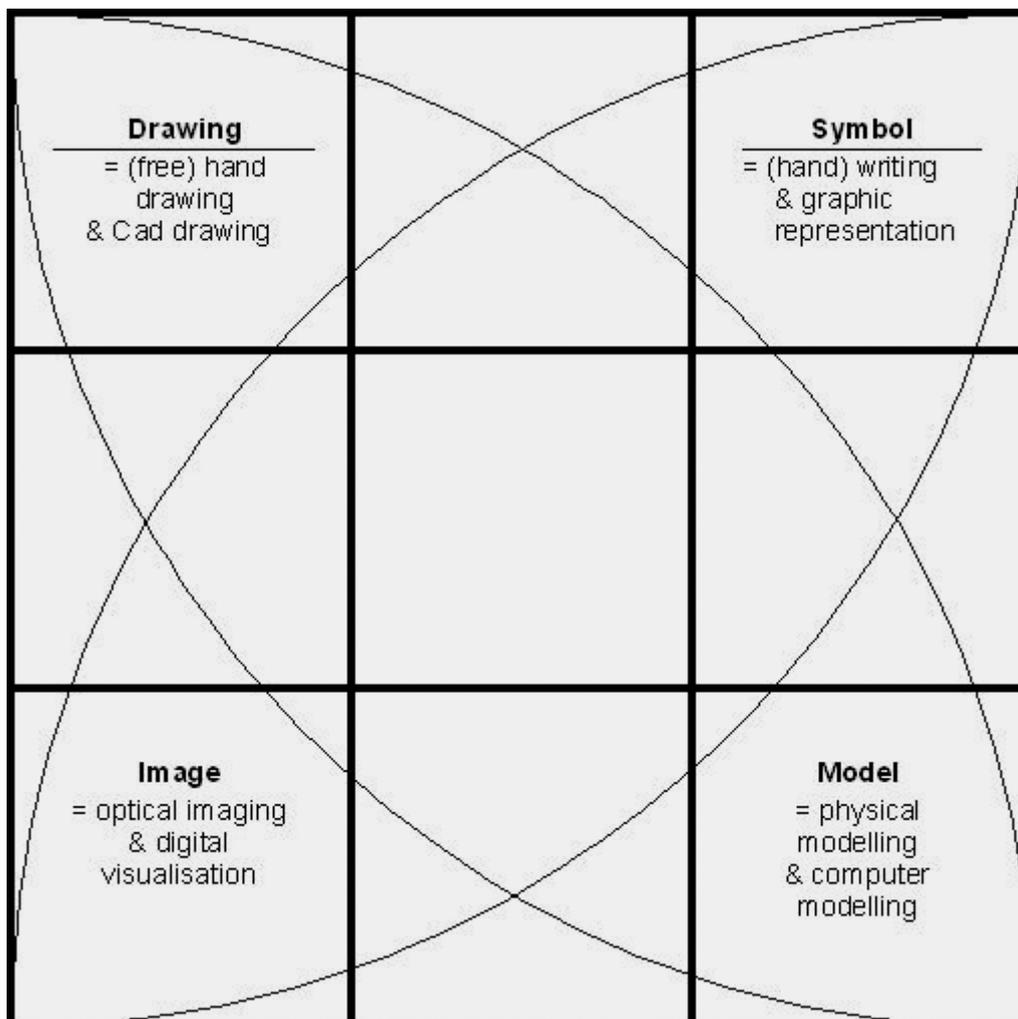
Per layer, media applications can be ‘positioned’ within four rotating, interrelated levels. Four ‘cornerstones’ are used to identify the levels: Each of these levels in turn can be imagined as a circle segment within a square, with one of the four central conceptions as its own (‘active’) cornerstone. On each layer a cluster of ‘tools’ is specified and positioned in relation to the other three ‘corner conceptions’.



Scheme 1: Basic configuration

On such a layer the 'active' corner conception is placed and five of the remaining eight fields are defined. To each of these a number of specific applications can be 'attached'. In principle – if the system were to be used as a Database – each of these fields could house a collection of design media artifacts: examples to illustrate the specific tools and their potentials. As such the ensemble of layers might acquire the function of a kind of Media 'reference library'...

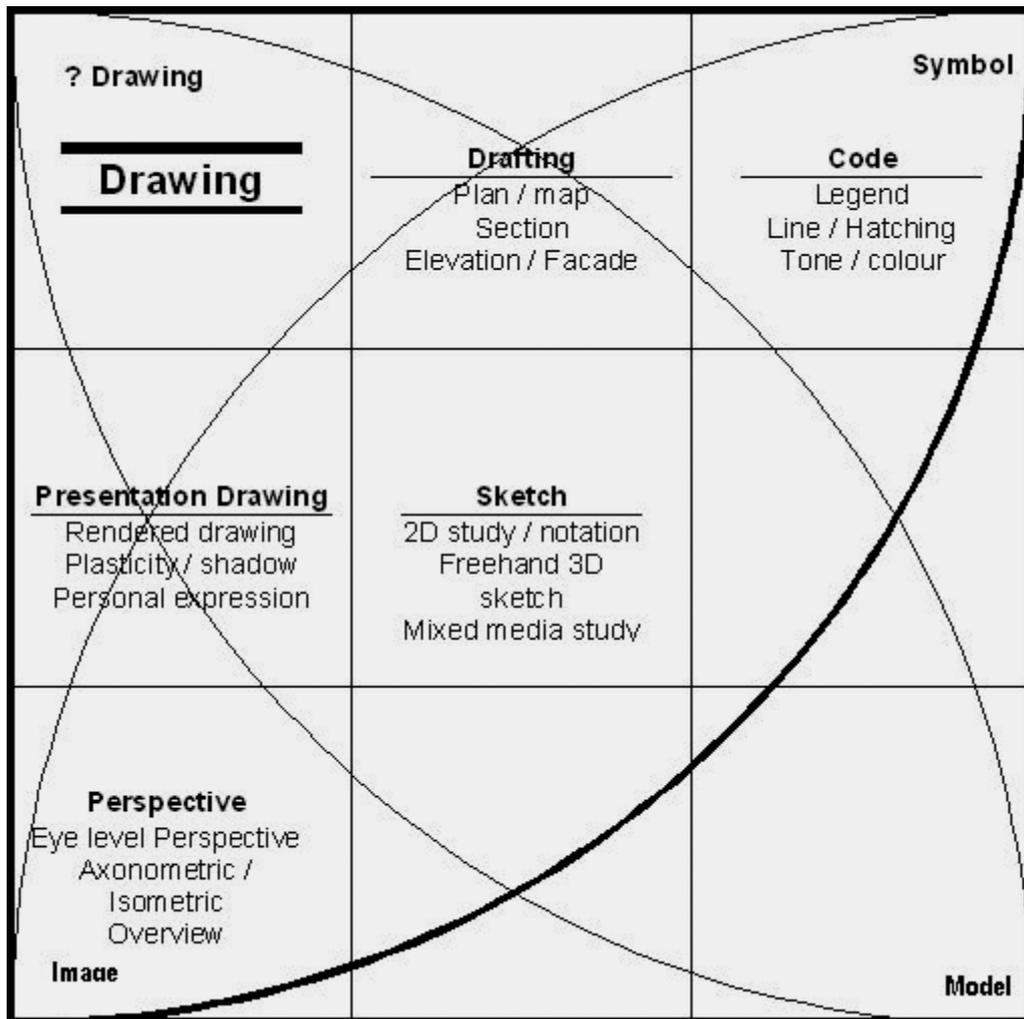
In this context it is worthwhile to consider the structure not solely as a collection of two dimensional grid 'maps', but potentially as a matrix organization, introducing the possibility of it being considered as a *three-dimensional* 'data structure'...



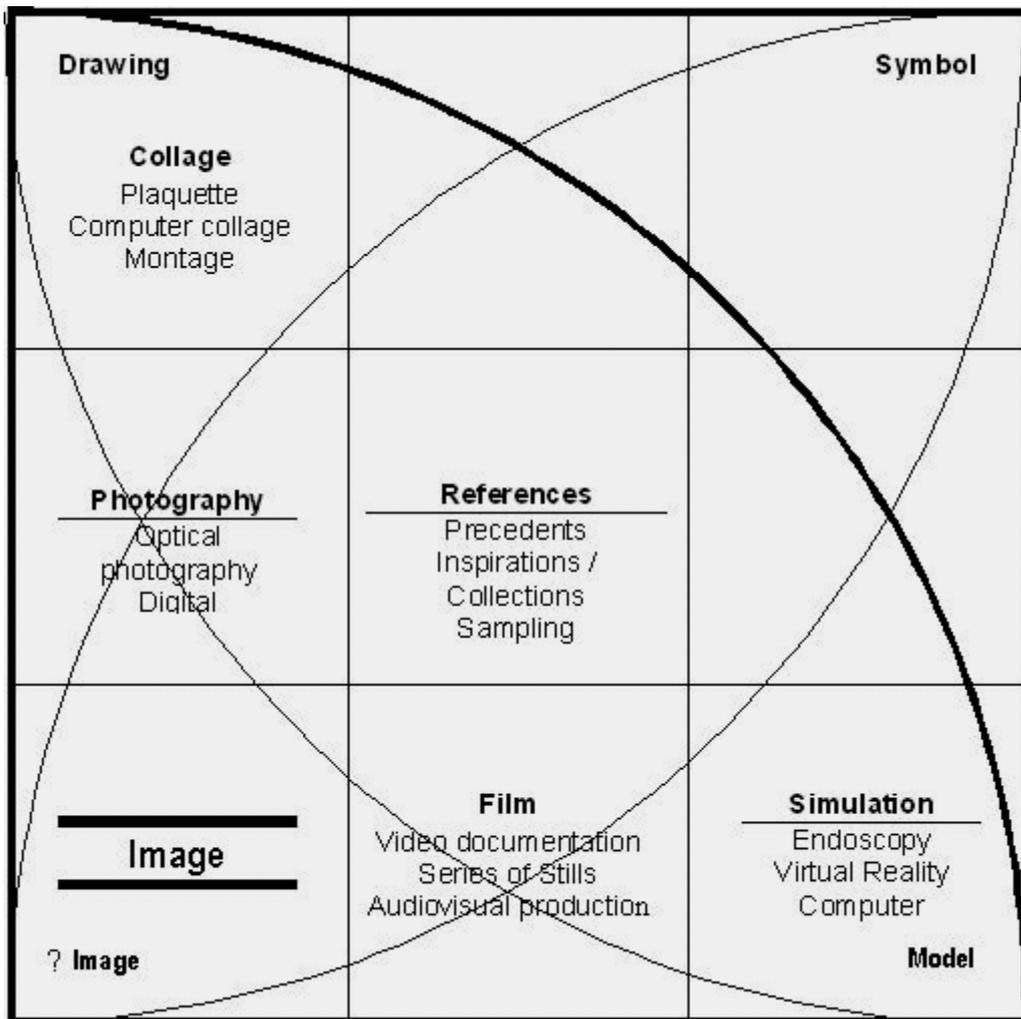
Scheme 2: Physical and Digital Approaches

The conceptual system which is launched here is by no means intended as a static 'end product'. On the contrary, there have been several different versions, with different groupings of techniques in the 'testing phase' of the past few years. In the context of this 'work in progress', the infill per layer presented here (see schemes) is open to improvement. As such suggestions for change and/or expansion from media experts are welcomed.

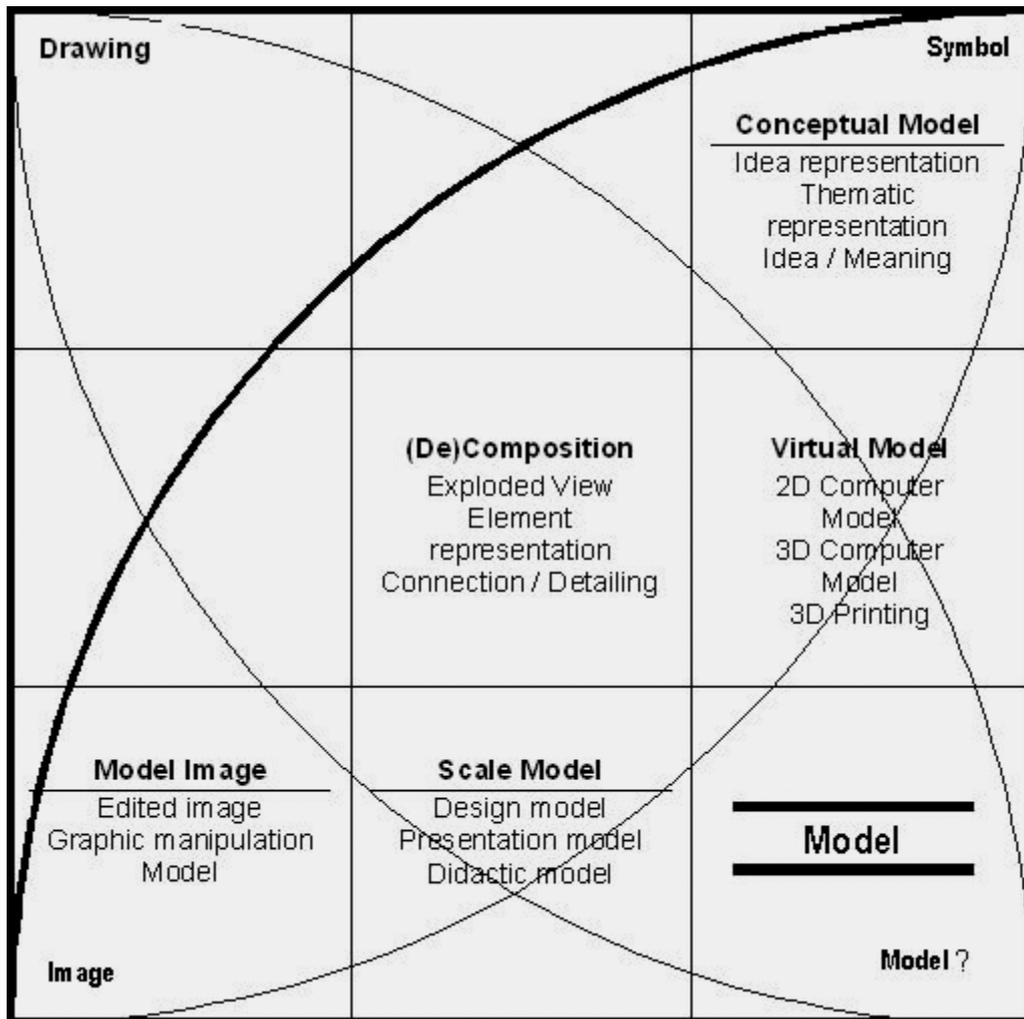
(See schemes 3, 4, 5 and 6)



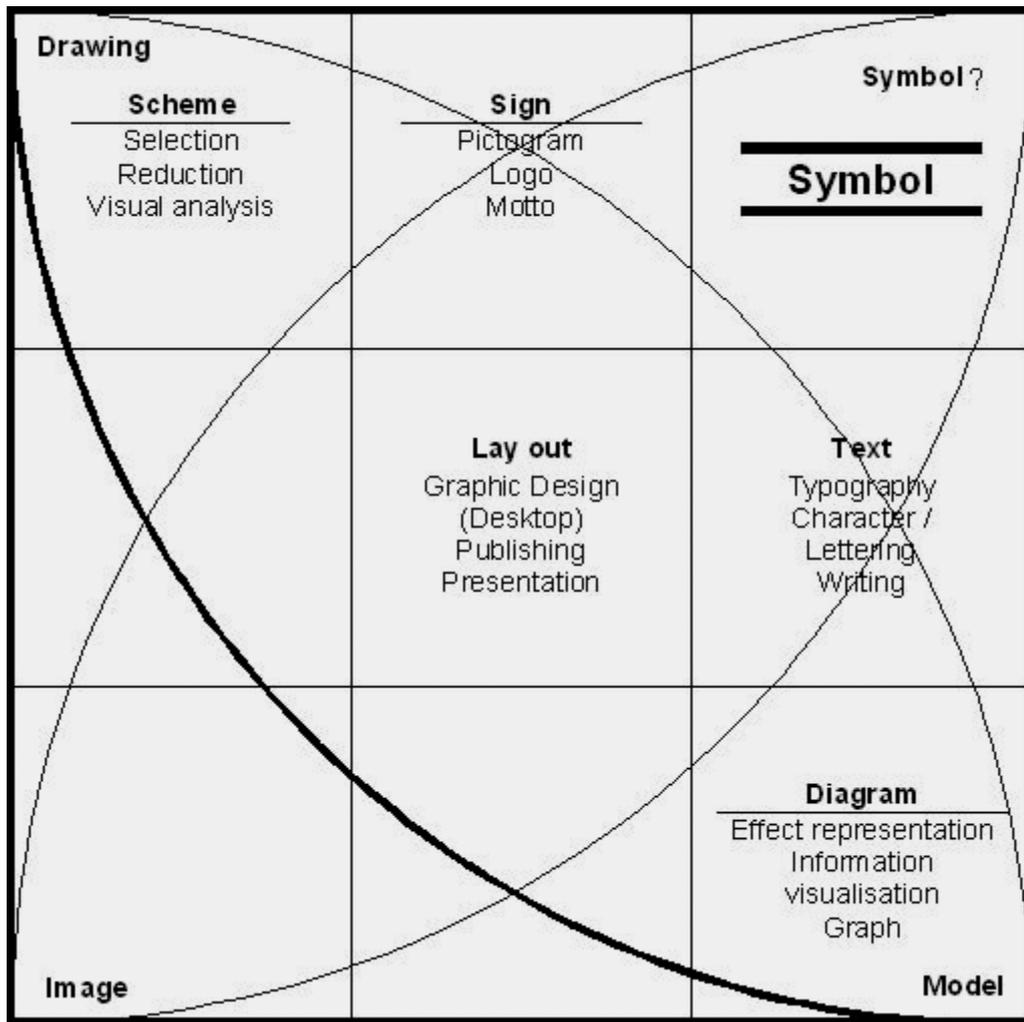
Scheme 3: MEDIA Overview 1: DRAWING layer



Scheme 4: MEDIA Overview 2: IMAGE layer



Scheme 5: MEDIA Overview 3: MODEL layer



Scheme 6: MEDIA Overview 4: SYMBOL layer

Potentials and Further Initiatives

In the first instance the proposed structure might be considered useful as a Typology (or possibly: as a Taxonomy) for design based modes of expression and enquiry.

In this sense the system has been used in order to offer insights about the kinds of media, which are available to the designer, and to give an impression of the kinds of results which using such media might offer. Confrontations with students (first year as well as diploma phase participants) and groups of professionals have indicated that the system has the potential of effectiveness as a basis for presentations.

However, there is another potential worth considering and exploring. This would involve developing the system further as a kind of a virtual 'construction'. Which might house a growing 'collection' of design media artifacts.

An on-line 'museum space' for the benefit of an interested public (specifically the fields of education and practice), through which visitors might be able to navigate freely, referring to exemplary pieces, which might be contributed by various institutions as well as by individual design practitioners and students for the benefit of *information* and of *inspiration*?

What kind of (virtual) form might such a Virtual Media Museum take? Should it resemble a simple 3D cube, consisting of four 'department' layers? Or would there be other opportunities which would make visiting this 'Centre for Media' a perceptually interesting occasion?

If so, how ought the – Drawing – Image – Model – Symbol – levels be placed relative to each other? How should the complex be 'entered', should there be some form of communal (information) space? How would one move from place to place and then retrieve, view and study artifacts belonging to the collection and 'ink' to other relevant examples?

Questions that would require further – collaborative – study.

A beginning might be made by addressing the potentials of a Virtual Media Museum during a meeting of design visualization and simulation specialists, such as an EAEA conference workshop...

The EAEA Workshop Initiative

The workshop at the Bratislava conference fits into a series of such activities, going back to the very first conference in Tampere, Finland, which took place in 1993.

Successive undertakings, whereby the conference participants were required to be actively involved in designerly simulation studies, were the following conference workshops:

- Vienna, Austria, 1995: the (in)visible city project;
- Delft, The Netherlands, 1997: Imaging Imagination;
- Dresden, Germany, 1999: Innovation centre interior.

The only conference without a specific workshop activity was the one held in Essen, Germany, in 2001, which was compensated by an extensive excursion programme.

The workshop section of the Bratislava conference consisted of a number of project presentations, rounded off by an active and lively discussion and development session, focusing on the Virtual Design Media Museum concept.

Prior to the conference sets of working materials had been prepared, consisting of the following items:

- a group questionnaire;
- an explication of the workshop tasks, broken down into three subtasks;
- an underlay for a storyboard;
- a collection of nine museum 'levels' (including the four basic department) fixed onto a cardboard background.

Three groups were formed more or less spontaneously, identified by one of its members:

- Group Walz (Borg, Lacroix & Walz);
- Group Schmidt (Martens, Giró, Toulouse, Gorczyca & Schmidt);
- Group Ohno (Kardoš, Soeda, Kubinský & Ohno).

Participant Dominik Lengyel decided to follow a hunch, splitting himself off from one of the teams, becoming a one-man 'group'. Thereby four proposals were generated, each of which was presented and discussed in a plenary session.

Virtual Museum Concept

What were the initial responses of these groups to the Virtual Media Museum proposal?

A brief overview:

Initial responses (feasibility of Virtual Media Museum concept):				
Group:	Walz et al	Schmidt et al	Ohno et al	Lengyel
Potentially useful system?	Try to understand	Positive	Positive (temporarily)	Positive
What improvements?	2D > 2D	Note: this is a typology	+/-	Seems complete (?)
What is missing?	Process model	Time component?	+/-	+/-
VMM: interesting idea?	Positive	Clarification needed (Pos.)	+/-	+/-
VMM: willing to contribute?	Positive	Positive	Positive / Symbol level	Positive: Models out of drawings

Some notes and remarks from the workshop sessions:

Workshop responses ('spatial' organisation of a potential Virtual Media Museum):				
Group:	Walz et al	Schmidt et al	Ohno et al	Lengyel
Organization of 'department'?	Interactive departments	Floating navigation topology	----- - Model -----	Clean & direct
Organization of 'museum'?	Space, time, response and decision	Scale / gravity / distance?	- Drawing ----- - Image < Entry*	Good overview
Simulation of concept?	Hierarchy: not a black box	Orientation / Interaction	----- - Symbol -----	Steps of 6 element 'groups' (zoom in)

Findings and Conclusions

Clearly the workshop was too limited in scope to warrant any 'hard' conclusions. However the initiative and the responses generated by the above groups of experts did make a number of things clear.

Firstly, the 'surprise' working sessions led to intensely active interaction and rapid evolution of ideas. Not only did the Virtual Media Museum concept lead to animated discussions within the groups (once the underlying ideas and intentions began to sink in) but also to concentrated realization in the form of model making sessions, whereby the group concepts were made 'tangible', sometimes in playful ways. All of the participants indicated afterwards that they had experienced this workshop session as an uplifting experience and that they had enjoyed working together actively.

Secondly, the idea of a layout of media applications and artifacts in four *corresponding layers* could count on considerable support (at least for the time being). The groups tended to stress the importance of a truly spatial configuration, whereby the means of orientation, ways of identifying one's place and the possibilities of truly interactive 'movement' would be of primary importance, if such a scheme were to be developed further.

Each group managed to fabricate a specific, suggestive 'model', which could be more or less *metaphoric* (including alternative conceptions of joystick and screen), *symbolic* (interaction expressed sculpturally as intertwining, three dimensional shapes) or structurally *systematic* (taking the 'footprint' of the layers as a basic element for the generation of information patterns in space).

The proposal which came the closest to actually presenting an 'architectural' solution for the typological framework of media (and thereby coming up with a kind of solution which the author had secretly been hoping for) was developed by Group Ohno.

This group devised a spiraling structure in four layers, allowing for a visual contact and physical connections between the different levels. What made this proposal particularly interesting was the care which went into determining the relative *position* of each of the four layers in the overall 'construction' and the argumentation behind this. The entrance of the 'building' would be on street level and lead directly into the *Image* platform, being the most directly open to the public. From this level one might move downwards towards the *Symbol* level or upwards to the *Drawing* level. From there one would be able to reach the uppermost *Model* department. An imaginative and elegantly realized conception (complete with 'cues' for camera positions and movements), created via an efficient, synergetic group process in a surprisingly short period of time.

All in all the Virtual media Museum generated such lively responses and images that the author feels it would be worthwhile pursuing the VMM idea further...