LOCAL VALUES
in a
NETWORKED
DESIGN WORLD

ADDED VALUE OF COMPUTER AIDED
ARCHITECTURAL DESIGN

DUP Science
Statements for the workshop

Local values in a networked design world

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‘Digital’ versus ‘direct’ information

I am not convinced that the problem of competition between digital and direct information worlds actually exists. The experience gained in my work as a design architect indicates that the two information types are mutually supportive and complementary, or even actively interlock, one with the other. I will try to explain in the following.

Communication appears to me to be the most important prerequisite to enable creative output, because it is only the mutual exchange of thoughts and the ‘feed-back’ within a team that enables the creation of the field of tension which is invaluable for any creative activity.

Owing to the spatial distance which often exists between individual members or groups of a team, such direct face-to-face discussions are not always possible, however. Hence, I take great advantage of the possibilities offered by the World Wide Web to have remote access to opinions and also data of other team members, and also to view myself as a part of this pool of information.

I can also identify advantages of digital information acquisition in the analysis phase of a project. Competition projects in particular have a very tight timeframe and the project location is often far away from the office concerned. This means that there is often only very little time to view the site itself and collect key information essential for the draft process. Additional information is then required to supplement the data gathered at the location. This information can have a dominant effect on the draft process, or even be the sole controlling influence. In one of my course projects the noise-emission values of a road where traffic was heavy became the primary aspect influencing the structure of the neighbouring housing estate.

In addition, the distance away from the project location makes integration of local conditions, i.e. an exact and high-quality simulation of the project environment, absolutely necessary. In my work this mainly occurs through the implementation of 3D CAD models which enable fast and very precise testing, correction and possibly rejection of draft
variants. A plastic model remains indispensable at the end of the process, in my opinion, as its physical presence is closer to the object to be planned and is thus able to make a stronger statement.

**Globality versus locality**

I also find it impossible to answer the question of whether globality or locality will come out on top in the future. Here again I can identify clear synergy effects and the interlocking of the two aspects rather than a simple opposition situation. The interesting point will be whether the two information types can be combined, and how the interfaces are defined and exploited. Just two examples illustrating possible tendencies.

The technical development of means of transport in the last century, coupled with the extension of the appropriate infrastructure, caused a comprehensive change in mankind’s mobility structure. A new, globally active species appeared on the scene: the ‘urban nomad’.

It would now be interesting to examine closely how the urban nomad can join local networks or how he can gain access to local information. At the present time he is a visitor in a strange town and therefore dependent on stationary information media (e.g. tourist information centres, local people) or on previously acquired information (town maps, travel guides, website printouts etc.). The ideal concept would be one enabling the visitor to call for information at any point in the town which was far more comprehensive than any current information supply. Potential sources would be wireless-lans now being set up in cities.

A further example of how ‘direct and digital’ information might be more closely combined would be in town planning.

In Germany, development plans mainly determine the building forms for residential zones. Building density, number of storeys, distance between buildings or positioning of buildings on the individual plot are clearly fixed. This generally occurs on the basis of shadow guidelines, and this in turn leads to the customary housing patterns we all know so well, with more or less identical plot widths and an extremely homogenous appearance. The division of large areas into plots could be performed by computer programs in future. These programs would continue to be based on the applicable local building regulations, but would be supplemented by additional criteria, such as the individual requirements of the interested parties, general demand, or the outline form of the area to be divided up. If all these factors were to be combined, much more heterogeneous plans could be developed. These would consider requirements placed on the land-plot much more closely than is the case in current regulations.

The improvement in transfer speeds and the setting-up of further wireless-lans will promote integration in architecture. The computer and the Internet will not be used solely for pure visualization purposes, but also increasingly for the evaluation and distribution of data. It remains to be seen whether this data will then be used to allow all the persons involved in a project simultaneous access or whether it will be implemented to generate new drafting methods. There will still be sufficient room for new developments.