3DIMCaad: A proposal of iconic map on Computer Aided Architectural Design

During the development of my graduation thesis* I had to propose a subdivision of informatics technologies for architectural design into several research fields, each of them characterized by specific aims.

This kind of subdivision was originally configured as an orientation tool inside the wide CAAD discipline, and only in a second time it took the features of a complete organization layout in which it is understandable not only the position of each single discipline in comparison with the others but, above all, the connections and interactions between them.

The model, obtained as the result of many handlings but undefined yet, has been named 3DIMCaad (3 Dimensional Iconic Map on Computer Aided Architectural Design) and, in according to an initial hypothesis it could be regarded as a map of the sectors pointed out by my proposal, in fact, it is a iconic model of the connections and differences between the informatic main topics that I analysed.

Every main topic is represented by a spheric nucleus linked to the others by a connection line (the "pipe"), the dimension of which, quite generous, makes the observer understand the numerous interactions and exchange presents if two main topics are linked.

The principal nucleus I pointed out are six:

a) Models and Simulation

b) Feedback Device and Virtual Reality

c) Expert Systems

d) Decision Support Systems

e) Computer Aided Drafting, Solid Modelling and Photorealism

f) Image Analysis

The connections between these nucleus, along which multidisciplinary ambits are defined, are very interesting from an application point of view and make use, as parts and components, of several integrate approaches.

In fact smaller nucleus with a certain autonomy are located along the main connections, the distance of which from the main topics fields, similarly to the force of gravitational attraction, are the direct expression of the relation presents between this new element and the spheric nucleus.

These smaller nucleus are named "cursors" according to their mobility along the pipes as a consequence of their major or minor relations with the main nucleus.

The 3DIMCaad has been designed in accordance with the X,Y and Z axis system, where each axis represents a different conceptual dimension.

In this way it is possible to resort to a frame of reference that can give the localization of each topic area or cursor by tri-dimensional coordinates, and this localization represents the worse or better respondance at the problems expressed by X,Y and Z axis.

The model is still subjected to variations and changes as it is still being studied and tested.

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* U. Caturano (a cura di), *Tecnologie Informatiche* per la *Progettazione Assistita*, Tesi di Laurea di C. Sanseverino di Marcellinara, 1992, Giannini, Napoli.

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3DIMCaad - 3Dimensional Iconic Map on Caad

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