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A Brief History of CAAD in Italy

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Twenty years of revolution, from the middle '70 to the middle '90. Many things have changed since the origins of computer graphics and computer aided design in architecture. We started teaching drafting on terminals which connected to mini computers, complex procedures or sets of graphics libraries working with keywords, vectors and storage screens. The next step was devoted to the discovery of workstations in the early '80's, where the user sat face on to the whole power of a multitasking system. At that time to use up to 16 time sharing processes running on the same work station seemed to have no practical use at all. Fortunately someone (ie Xerox PARC laboratories) at the same time started to develop the so-called GUI. Graphical user interface started a revolution in human/machine interface (ie Smalltalk). The desktop metaphor, the use of multiple windows and dialogues joined with icons and pop up menus let the user manage more applications and, even more important, created a standard in application/user interface (CUA). In the meantime focus had moved from hardware to software, systems being chosen from the software running. The true revolution we have seen starting from that base and involving an ever increasing number of users was the birth of PC based applications for CAAD.

Generally speaking nowadays there are three main technologies concerning teaching: communication, multimedia and virtual reality.

The first is the real base for future revolution. In the recent past we have started to learn how to manage information by computers. Now we can start to communicate and share information all over the world in real time. The new age opened by fax, followed by personal communication systems and networks is the entry point for a real revolution. We can work in the virtual office, meet in virtual space and cooperate in workgroups. ATM and ISDN based teleconferencing will provide a real working tool for many. The ever increasing number of e-mail addresses and network connections is carrying us towards the so called 'global village'. The future merger between personal digital assistant and personal communication will be fascinating.

Multi & HyperMedia technology is, like a part of VR, a powerful way to share and transfer information in a structured form. We do not need to put things in a serial form removing links because we can transfer knowledge as is. Another interesting and fundamental aspect typical of VR applications is the capability to change cognitive processes from secondary (symbolic - reconstructive) to primary (perceptive - motory). In this way we can learn by direct experience, by experiment as opposed to reading books.

All these things will affect not only ways of working but also ways of studying and teaching. Digital communications, multimedia and VR will help students, multimedia titles will provide different kinds of information directly at home using text, images, video clips and sounds. Obviously all those things will not substitute human relationship as a multimedia title does not compete against a book but it helps.

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