Code, cartography and relational learning

a lecture by Luca Carrubba

short abstract

Can "softwarization" of media process currently underway define a new method of education?

Around this question I define a model of education for digital arts experimented during my academic courses and workshops. In the intersection between software culture, free and open source software and a cartographic methodology I suggest a different approach to education of digital artists.

The focus is on learning what happen behind, more over, the operation it self and not just a know how on specific software operations.

full abstract

Can "softwarization" of media process currently underway define a new method of education?

In the encounter between dataflow, live coding and cartography will high light the emergence of a new approach in learning digital art.

The need to manage this wealth of information in always more effective ways have determined the centrality of software in the cultural domain by creating a *de facto* "data hyper democracy" in which the media disappears and everything is translated into code.

Among the necessary conditions that have made that possible free software, also knows as FLOSS, is one of this.

FLOSS has first made evident the cultural and ethical inherent in the production of software, making of it a political campaign and generating the technical and political context in which different artists, researchers, hackers were able to freely experiment with different degrees of manipulation of digital data.

During this experimental season have been developed educational methods (and only after production methods) that have the ability to maintain different levels of abstraction simultaneously: graphical programming languages based on dataflow paradigm.

This approach allows developer to *draw* the software and then transform the conceptual diagram in code that, in the form of visual blocks are connected to each other through a relational logic. The logic diagram that follows does not distinguish between the physical world and data information and it seems to organize the incoming and outgoing information and process similar to what a mind map does.

It is precisely in the approach to a relational mapping method, in which the concepts and actions are correlated with each other in a visual way, just by giving priority to the relations between actors, it's possible to get good results both in terms of accessibility of computer science as of learning skills. Learning skills related to the possibility, entirely contemporary, to better understand the socio/ technology process behind the technology it self. If today digital knowledge is considered of strategic importance for advanced industrial cultures, it may not be considered just as the ability to handle procedures of a given computer program. It should be considered as a process of understanding what goes on behind a computer.

Putting together this approaches it's possible to imagine a different way to teach digital arts: where the market needs of know how to do a specific operation (learn a software) can cohabit together whit deep a understanding of what happen behind and more over the operation it self.