«Today the interactive media asks us to click on an underlined phrase in order to pass to another one. We are asked to follow pre-programmed associations, that do and don’t exist, in other words [...] we exchange the mental structure of others with our own. [...] Interactive media asks us to identify ourselves with someone else’s mental structure.»

In 1999 with these words Lev Manovich closed the paragraph dedicated to the “myth of interactivity” in his book The Language of New Media. This affirmation purposely goes against a rather naive diffused enthusiasm regarding the potentials in digital media; however the questions brought up, aside from the controversy, are still now decisive: To what extent does the interactivity of new media limit as opposed to extend, our freedom of thought and action? To what extent does it contribute to forgetting the real interactive potentials of traditional media, that don’t perform by moving a joystick or clicking a link, but by writing text- that could be a book, film or a drawing- that we have before us? And how much does the unconditional exaltation of interactivity penalize the development of a true interaction between man and the machine, and between man and man through the machine?
DQ. In *The Language of New Media*, talking about interaction between the user and the ‘medial object’, you distinguish between closed and open interactivity. Can you explain the meaning of this difference?

LM. These two terms was my attempt to begin making some distinctions, since I tend to think of “interactivity” as a kind of “umbrella” concept that covers a number of very different things.

The ‘closed’ interactivity refers to selection from a set of pre-defined choices – for instance, selecting which scene to play from a movie on the DVD, or selecting the section of a web site. The ‘open interactivity” refers to a more complex interaction between a human and a computer in which the content (or at least, not all of the content) is not pre-determined but is generated in real time in response to user’s actions.

This of course is the most basic distinction – I still think that the interactivity remains the most difficult among the new cultural dimensions brought about by computerization – I still have not seen anybody developing any systematic theory of interactivity.

DQ. Talking about interactivity as a myth, you refer in particular to Interactive arts and to their claim to turn the viewer into the co-author of the work. Do you think, with Gerald Blain (alias 01.org), that we can become co-author of a work of art only ‘usurping’ it with an action not foreseen by the author?

LM. I should say that my somewhat aggressive take on interactivity in the book (which was finished in 1999) was a response to the discussions of the 1990s in which interactivity was celebrated as the single defining characteristic of new media at the expense of everything else. So I wanted people to start thinking about other equally crucial characteristics and developments (in my view only, of course), such as
Another development of the 1990s to which my analysis of interactivity has reacted was the obsession with “interactive narrative.” It seems to me that “interactive narrative” never happened at the end. What we have instead is a very mature form of computer games with its languages, conventions, genres, etc. – and also much more limited and yet also important interactivity of DVDs (where the user can go to any scene of a movie, watch “making of” and even sometimes select which camera view is shown) and of Digital Video Recorders which allow consumers to turn television from a linear medium into a media database which they can access when they want and in order which they want.

DVR may sound like a very trivial thing and yet historically it is a very important development. All this discourse around “interactive narrative” in the 1990s was quite elitist. Everybody on the other hand uses DVDs and DVRs. Logically they make perfect sense – they represent a particular stage in computerisation of culture in which the already established economic/cultural forms such as linear feature films and linear television programming are slowly being taken apart into their constitutive elements. This to me seems to be a necessary and healthy development – a required stage before we get to some completely new forms such “interactive narrative.” (Note that similar “lego-lisation” – the term I made up from Lego – is happening in music industry: if before a record or a CD was the industry unit, today under the influence of online music stores such as iTunes the unit is a single track/song.)

DQ. With interaction design, computer becomes an interface between man and other things. In your opinion, how will our relationship with the world changes with the mediation, even if moderate, of this sort of ‘computable veil’?

LM. I think we are entering a new and important stage – you can describe it using already well-established terms such as “ubiquitous computing,” or maybe new
terms will become necessary. The bottom line is that computation, telecommunication and interface are slowly being incorporated into a variety of objects and spaces, rather than being confined to very particular types of objects such as desktop computer or a telephone. So I think that slowly our ages old concept of an object as something “dead” and “passive” will change, as more and more objects will become “smart.” So one day traditional “dump” objects may become an exception rather than the norm. In the same manner, if today dynamic screens constitute a small percentage of any surfaces in any space, one day every surface may potentially every surface may function as screen connected to networks.

This future is closer than you may think. Nissan design studio located here in San Diego has already developed a prototype car shown in 2004 Detroit car show in which the whole ceiling of the car interior functioned as a screen. And already last year (2003), Gillette announced its plan to purchase 500 million RFID tags to place its products.

We appear to live in an interesting period in which science fiction has caught up with the present. We no longer have to travel to distant planets in search of new alien civilizations, because our own planet is rapidly turning into one.

DQ. Digital media not only allow us to interact with them, but also, through them, with other people. With this mediation, is interaction between people leveled or boosted?

LM. Today we see lots of energy and interest in the area of “social software” – Web sites such as friendster.com and orkut.com, chat and IRC software, emerging mobility and location services for creation of temporary communities, etc. I was at Emerging Technology conference in San Diego a month ago, and probably a half of conference was devoted to the various “social software” topics.

We can say that first modernization has destroyed traditional close-knit
communities – growth of cities in the nineteenth century and new modes of work has lead to alienation. Now we see the desire to create technologies which repair this basic alienation – but not simply returning us back to pre-modern communities defined by social stability and geographical communities, but new types of mobile, temporary, distributed communities appropriate for the age of airline travel, economic globalization, and flexible work patterns.

**Lev Manovich**

Lev Manovich was born in Moscow and moved to New York in 1981. He studied fine arts, architecture, animation, and programming before starting to work with computer media in 1984. Since mid 1990s, his projects have been shown in the key international exhibitions of new media art; in 2003 ICA London presented a retrospective of his works entitled “Lev Manovich: Adventures in Digital Cinema.” Currently he is working on a five year project Soft Cinema which was supported by commissions from ZKM and BALTIC.

Manovich is an Associate Professor in the Visual Arts Department, University of California, San Diego where he teaches courses in new media art and theory. He is the author of *The Language of New Media* (The MIT Press, 2001), *Tekstura: Russian Essays on Visual Culture* (Chicago University Press, 1993) as well as many articles.

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This article proposes that the practice of information visualisation (infovis), from its beginnings in the second part of the eighteenth century until today, relied on two key principles. The first principle is reduction. (Fernanda B. Viégas and Martin Wattenberg, in an interview for infosthetics.com, May 2010). Lev Manovich is the author of Software Takes Command (released under CC licence, 2008), Soft Cinema: Navigating the Database (MIT Press, 2005) and The Language of New Media (MIT Press, 2001), which is hailed as the most suggestive and broad-ranging media history since Marshall McLuhan. Lev Manovich’s 2006 article “The poetics of augmented space” published in Visual Communication (which he had apparently been working on since 2002) is the earliest that I am aware of anyone using the term “augmented reality” in the broader sociological context of social interaction that flows between digital and physical (as opposed to the more limited computer science definition that describes it as merely the overlaying of digital information on the physical environment). I will use the term “augmented space” to refer to this new kind of physical space. As I have already mentioned, this overlaying is often made possible by the tracking and monitoring of users. Lev Manovich’s Software Studies Initiative collected and analyzed 2.3 million Instagram images from New York, Tokyo, Bangkok, San-Francisco and eleven other global cities. This allowed the lab to observe the temporal rhythms that define the life of big cities: how different is the life of one city as compared to the other, when does Manhattan go to sleep and when it wakes up, etc. These are the kinds of systematic studies of cultural processes that my lab has been involved in for the last seven years. Exclusive interviews with leading experts and the latest research, news, and events from Strelka Institute delivered straight to your inbox. Strelka Mag. Exploring new urban conditions.