Interview with Lev Manovich

By Inna Razumova

Inna Razumova: In your essay, "Database as a Symbolic Form," we see a restructuring of the classical semiotic model of a syntagm intersected by the paradigmatic dimension in favor of a paradigm intersected with the syntagmatic dimension, such that the paradigm is the most visible model. You also talk about Peter Greenaway and Dziga Vertov as artists who minimize narrative (the syntagmatic axis) in favor of database (the paradigmatic axis). Do you believe that art exists at the intersection between these two axes?

Lev Manovich: The model of syntagm and paradigm was originally formulated by Ferdinand de Saussure to describe natural languages such as English; later it was expanded by Roland Barthes and others to apply to other sign systems (narrative, fashion, food, etc.), including art. According to this approach any artistic text has a syntagmatic and a paradigmatic dimension. Following its heroic period of the 1960 and 1970s, semiotics as a paradigm fell out of favor, at least in the U.S.; but that does not mean that we can't use particular semiotic concepts. So I felt that, in this particular case, the concepts of syntagm and paradigm can help us to conceptualize database - narrative opposition. In general, I think we should only use an older theoretical concept if it allows us to understand a given phenomenon better, to see some side of it we would not be able to see without it. I would not make a general statement that any art object has syntagmatic and paradigmatic dimensions, but if in a particular case these concepts turn out to reveal something new, let us use them!

Geri Wittig: In "The Database Logic," the first part of your "Database as a Symbolic Form," you wrote about the Web as database and later addressed issues of interactive narrative regarding "control of semantics". What are your thoughts on this type of control in regards to Pierre Levy's ideas in his essay "The Art of Cyberspace" concerning the reader/writer continuum?

LM: I don't have Levy's here with me, but I can offer some general observations regarding reader/writer relationship in new media. One of the differences between industrial and information society is that in the latter both work and leisure often involve the use of the same computer interfaces. This new, closer relationship between work and leisure is complemented by a closer relationship between authors and readers (or, more generally, between producers of cultural objects and their users). This does not mean that new media completely collapses the difference between producers and users, or that every new media text exemplifies Roland Barthes' concept of "readerly text." Rather, as we shift from industrial society to information society, from old media to new media, the overlap between producers and users becomes much larger. This holds for software the two groups use, their respective skills and expertise, the structure of typical media objects, and the operations they perform on computer data. While some software products are aimed at either professional producers or end users, other software is used by both groups: Web browsers and search engines, word processors, media editing applications such as Photoshop (the latter routinely employed in post-production of Hollywood feature films) or Dreamweaver. Further, the differences in functionality and pricing between professional and amateur software are quite small (a few hundred dollars or less) compared to the real gap between equipment and formats used by professionals and amateurs before new media. For instance, the

differences between 35mm and 8mm film equipment and cost of production, or between professional video (formats such as D-1 and BetaSP; editing decks, switchers, DVE, and other editing hardware) and amateur video (VHS) were in the hundreds of thousands of dollars. Similarly, the gap in skills between professionals and amateurs also got smaller. For instance, while employing Java or DHTML for Web design in the late 1990swas the domain of professionals, many Web users were also able to create a basic Web page using such programs as FrontPage, HomePage or Word. At the same time, new media does not change the nature of professional-amateur relationship. The gap became much smaller, but it still exists. And it will always exist, systematically maintained by the professional producers themselves in order to survive. With photography, film and video, this gap involved three key areas: technology, skills, and aesthetics. With new media, a new area has emerged. As the "professional" technology becomes accessible to amateurs, the new media professionals create new standards, formats and design expectations to maintain their status. Thus, the continuous introduction of new Web design "features" along with the techniques to create them following the public debut of HTML around 1993 - rollover buttons and pull-down menus, DHTML and XML, Javscript scripts and Java applets - can be in part explained as the strategy employed by the professionals to keep themselves ahead of home users. On the level of new media products, the overlapping between the producers and the users can be illustrated by computer games. Game companies often release so-called "level editors," the special software to allow the players to create their own game environments for the game they purchased. Other software to add or modify games is released by third parties or written by game fans themselves. This phenomenon is referred to as "gamepatching." As described by the writer, curator and a former CADRE student Anne-Marie Schleiner, "game patches, (or game add-ons, mods, levels, maps or wads), refer to the alterations of preexisting game source code in terms of graphics, game characters, architecture, sound and game play. Game patching in the 1990s has evolved into a kind of popular hacker art form with numerous shareware editors available on the Internet for modifying most games." Every commercial game is also expected to have an extensive "options" area where the player can customize various aspects of the game. Thus, a game player becomes somewhat of a game designer, although her creativity involves not making something from scratch but selecting combinations of different options.

IR: Is it possible for a database to be an art form on its own? If so, what kind of criteria or structural organization should a database have in order to construct its own language and operations? And if not, then what would be the minimal structure of its narrative component that would qualify it as such?

LM: Depending upon how broadly or how narrowly we define a narrative, almost every cultural object can be called a narrative, or just a few. In my article "Database as a Symbolic Form" I use the standard definition of a narrative by Mieke Bal which comes from literary theory. According to this definition, a narrative should contain both an actor and a narrator; it also should contain three distinct levels consisting of the text, the story, and the fabula; and its "contents" should be "a series of connected events caused or experienced by actors." Such a definition is appropriate for traditional literature but it may be too narrow for new media. In a catalog describing his interactive computer installation "Transitional Spaces" (1999), artist George Legrady quotes another, much broader definition by literary theorist Tzvetan Todorov. According to him minimal narrative involves the passage from "one equilibrium to another" (or, indifferent words, from one state to another.) Legrady's installation suggests that we can think of a subject's movement from one "stable" point in space to another (for instance, moving from a lobby to a building to an office), like a narrative; by analogy, we may also think of a transition from one state of a new media object to another (for instance, from a noisy image to a noise-free image) as a minimal narrative. For me, the second equitation is more problematic than the first, because, in contrast to literary narrative, it is hard to say what constitutes a "state of equilibrium" in a typical new

media object. Nevertheless, rather than concluding that Legrady's installation does not really create narratives, we should recognize it instead is an important example of a whole trend among new media artists: to explore the minimal condition of a narrative. Yet another way to think of a narrative is to equate it with a sequence. Then the problem becomes how to construct an art object which does not have a sequential organization - which is not that easy. One solution is too follow the trajectory of Peter Greenaway who went from sequential art of film to the spatial art of an installation. To come back to a database and the possibility of "database art", we can start by exploring the operations of commercial databases: retrieving records, classifying data based on different criteria, linking records together, and so on. What interests me about databases is that they ALREADY have what you called "structural organization, " language and interesting data! Database is a kind of meta ready-made. (In the 1910s Marcel Duchamp dragged a bicycle wheel into a gallery, but maybe he should have mass-produced new objects using an existing factory! That is what artists in Soviet Russia tried to do a little later by going into the industry and giving up conventional forms of art.)

Brett Stalbaum: You say in your essay "Database as a Symbolic Form", that "the database is a new cultural and symbolic form of the computer age." Perhaps the major impact that databases have had on contemporary culture in general is how they have been deployed in the economy, stimulating what many have called the third industrial revolution. The rise of just-in-time delivery systems mediated by databases have been part of this story, as well as the rise of data mining applications which allow businesses to do efficient predictions and to dominate marketplaces (Microsoft, Wal-Mart). What I am wondering is what do you see as the narrative of the business database, and is it more or less important to business than it is to artists? Is data mining a way of extracting the syntagm from a database? And if so, are artists following the lead of business?

LM: For me it is very important that new media art engages with the same structures and tools as the industry - and I believe that this is also the position of CADRE and Switch, which organized in 1999 the show where artists were using commercial game engines and game editors. Databases offer another possibility to do this. I would say that this opportunity is even better than the one provided by games; we can use the same technology that is used to "run" contemporary society, i.e. a computer database. Think of all these financial databases, consumer data databases, inventory databases. How shall we start? I think one important direction is to explore the new possibilities of scale offered by databases. A typical commercial database may contain millions of records. Can you name many contemporary art projects which have that many distinct elements? I don't mean words in a novel but distinct self-contained parts like shots in a movie, for instance. I also think database is an appropriate technology if artists want to represent complexity of modern networked global society. I would like to see artistic projects which, similar to commercial databases, also have millions of elements. I think that simply working with a large size database would by itself lead to interesting discoveries. Interesting questions would immediately emerge: what data to put in a database, how to classify it, how to display it. So simply taking a structure and a functionality of a commercial database and filling it with a different content would generate something new. For instance, let us say that HotBot or Yahoo has a database which contains records for 5 million users. There are thousands of records for every user which contain data on every ad she/he saw, plus all the purchases she/he made online, etc. Now, let us create a database which would be similar in scale but will have different data. For instance, a database of 5 million imaginary people that contains their random ideas and feelings. The industrialization of the 19th century was accompanied by new cultural forms whose scale and complexity reflected the site and complexity of a modern factory, a modern city, a transportation network. I am thinking first of all of novels by Balsac, Dickens, Dostoevsky, Tolstoy, Proust. If we are to adequately reflect our own times we have to take the next step, generating works larger in size, more complex, more multi-layered, more dense. A Web site consisting of a few pages

can't be an adequate reflection of a modern society. The only art form where I am finding enough complexity these days is contemporary architecture. Driven by complex programs, architects are coming up with complex solutions. We should follow the example of Rem Koolhaas in particular and start thinking about mega-projects, about new density and complexity.

BS: How are the ethics of database different from the ethics of narrative?

LM: Like new media in general, databases allow for coexistence of different points of view, different models of the world, different ontologies and, potentially, different ethics. Narrative, in contrast, offers a singular interpretation of the world, a single model. Of course, this is an extremely schematic opposition, which often does not hold. A classical Hollywood film may indeed offer a singular model, but novels by Dostoevsky, as analyzed by Bakhtin, allow for exactly the opposite: coexistence of different world views. So we should be careful not to assign any essential qualities to a database.

IR: You say in the same article that databases have a long history before modern times. Thus, Homer's "Iliad" is an example of linear narrative, whereas a post-classical Greek encyclopedia - a database. Considering that most narratives have traces of encyclopedia in them, would you consider the Greek mythology, with its vast regional and temporal variety and internal inconsistencies, to be the "imaginary encyclopedia" of the" Iliad"?

LM: This is a very interesting question; my first, tentative answer is "yes." So we may indeed consider Greek mythology as a database which "supports" Greek narratives; extending this logic, any iconographic system (such as Christian references of classical Western art) may be thought of as a database which allows for the generation of particular narratives.

IR: Do you think that Komar and Melamid's "The Most Wanted Paintings" and "Least Wanted Paintings" projects (which were based on professional market surveys, polls, and statistics) exist in the intersection of database and narrative?

LM: I like these projects, especially the fact that Komar and Melamid used professional market surveys. However, in my view, their final output (i.e., the paintings) did not do justice to the logic of statistics, which is also the logic of market-driven consumer society we live in. For instance, if their polls for a certain country indicated that 60% of people preferred a figure of a leader and 30% preferred a landscape, their painting would depict a figure in a landscape. But in reality such a painting would not be liked by anybody, because people indicated that they want either a figure or a landscape, not both! What perhaps they could have done instead is to create a whole set of paintings for every country, thus (to return to our topic) generating different narratives from the same database. Indeed, this is how consumer culture works. A company releases different versions of a product, so each consumer can select the version she or he prefers. They don't create a single product which would combine, in statistical proportions, the preferences of different groups. Where we do find the logic of conflation used by K & M is in Hollywood films. The Hollywood industry is structured around the collective and corporate authorship and decisions by committee; the focus groups and marketing pie charts rule over the Romantic genius. Therefore it produces films which are characterized by a bricolage, post-modern, or, to use more contemporary language, plug-in structure. In order to appeal to different market segments a single movie combines a number of genres and styles. Like Eisenstein's montage of attractions, a contemporary Hollywood product fires a sequence of unrelated stimuli into its audience, designed to hit whoever happens to be in the dark. A chase scene, a 70s reference, a love story sub-plot, a character borrowed from last year's hit, an early 80s reference, and so on. In short, Hollywood strategy is blanket bombing, not laser guided missiles.

IR: In some of your articles you wrote about Russian media culture. Have there

been any interesting developments/experimentation in the past several years? And how does the discourse in Russian electronic culture differ from that of Western Europe or the United States?

LM: In 1997 I published an article called "Behind the Screen / Russian New Media" where I made some proposals regarding the specificity of Russian media art. When later I talked to artists I wrote about, they actually objected to my analysis. They said that they feel that they belong to an international media scene and do not think of themselves as "Russian" artists. There is always something interesting happening in Russia, but I came to the conclusion that we should not expect to see some "national school" of Russian media art anymore, at least not on the Internet. The Internet functions as an agent of modernization, just as other means of communication did before it: railroad, post, telephone, motor car, air travel, radio. The Internet is a way for people to enter into a singular socio-linguistic space, defined by a certain Euro-English vocabulary. It is a way for people in different places to enter modernity-the space of homogeneity, of currency exchange shops, of Coca-Cola signs, of raves and techno clubs, of CDs, of constant youth. Itself the best symbol for movement and constant change, the symbol for leaving your roots and traditions behind, the space where everything can be converted into money signs, just like a computer can convert everything into bits. And this is why we, in the West, should not expect culturally-specific Internet art, should not wait for Internet dialects, for some national schools of net.art. This simply would be a contradiction in terms. To expect different countries to create their own national schools of Net artists is the same as to expect them to create their own customized brands of Coca-Cola. The sole meaning of Coca-Cola, its sole function, is that it is the same everywhere. The Net is an agent of modernization as well as a perfect metaphor for it. It is a post, a telephone, a motor car, plane travel, taken to the extreme. Thus, we should not be surprised that a typical Net art project, whether it is done in Seattle or in Bucharest, in Berlin or in Odessa, is about communication itself, is about the Internet. Net art projects are materialization of social networks. These projects make the networks visible and create them at the same time. It is a way for young people in Oslo and Warsaw, in Belgrade and Glasgow, to enter modernity and to become its agents for the rest of a society. And just as it would be naive to take seriously "the art of a gas station" (although of course we can imagine some serious museum show on the image of a gas station in modern landscape painting, and even thick art historical or anthropological monographs on the subject), the category of "net.art" may be a mistake. So-called net.art projects are simply manifestations of social, linguistic, and psychological networks being created or at least made visible by these very projects, of people entering the space of modernity, the space where old cities pay the price for entering the global economy by Disney-fying themselves. Where everybody is paying some price: exchanging person-to-person communication for virtual communication (telephone, fax, Internet); exchanging close groups for distributed virtual communities, which more often than not are like train stations, with everybody constantly coming and leaving, rather than the cozy cafes of the old avant-garde; exchanging decayed but warm interiors for shiny, bright, but cold surfaces. In short, exchanging the light of a candle for the light of an electric bulb, with all the consequences this exchange involves.

While we are on the subject of net.art, I would like to add another criticism of this concept. As the term itself implies, this is an art defined by its medium (i.e., the Net). But this is an old-fashioned logic of modernism! During modernism every art tried to find its unique language and define the essential properties of its medium. At least since the1960s (conceptualism, etc.) art moved beyond medium-specific boundaries. So from this perspective net.art is a step back, not forward. And what is the specificity of Net as a medium, as defined by classical net.art projects? On the one hand, these projects foreground material and logical properties of the Web and Web browsers: hyperlinking, frames, HTML code, the ability to refresh content, etc. On the other hand, the specificity of the Net as a medium means that Web sites never exist in isolation, but always in (logical, phenomenological and

material) relation to all the other Web sites. In other words, if a "correct" modernist painting was supposed to be completely self-contained, a "correct" net.art project has to be engaged with the open nature of the Web. To continue this line of reasoning, what would be a specificity of a database? This is something artists have to discover, but as one possible characteristic I would like return to such terms as scale, complexity, size and density, which I already discussed. For me, one essential difference between a computer database and earlier similar forms for organizing data, such as a picture album, catalog, an archive, a library, and encyclopedia, is that the earlier forms still have a human scale. They contain a limited number of records, which a user can directly access. One can turn the pages of an album, walk through an archive, browse through a library. In other words, the human body is still sufficient as an interface. But once we have millions of records, we can no longer see them all at once with our eyes, nor can we easily find a particular record just using our hands. We have to use computer techniques for searching, matching and sorting. For instance, we enter some terms into a search field and wait for a computer to find appropriate records. A typical database is so large that it can't be displayed all at once, it exists beyond the scale of human perception and cognition. For me, this new "non-human" scale represents one "essential" quality of a database, and something I would like to see artists explore.

DATABASE

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