**Reflexive Games of the Human Mind: People as Dolls and Dolls as People, People and Automata**

Victor Borsevici

Belarus

Anthropological and archaeological data corroboratively suggest that animism (i.e. human attempt to animate, or to attribute a soul to otherwise inanimate objects and concepts) is the earliest feature of human cultures. Dolls as cult objects play a special role.

There is not a big difference, as one may wrongly think at first glance, between the earliest finds of coarse stone or clay human and animal figurines, on the one hand, and modern electronic toys, such as Tamagotchi or Pokemon Go electronic characters, which have already generated a mass hysteria, on the other hand.

What is common between these stone, clay and electronic toys? And what is common between the earliest clay figurine of a thoughtful man and the well-known Rodin’s Thinker? They all have one thing in common: the capability of the human mind to animate what is inanimate.

And what happens when we see a dancer who reproduces movements of a dancing robot? Or when we see a voter who “automatically” votes for his political leader and who behaves like a “political puppet”?

And what is the meaning of Walt Disney’s famous Skeleton Dance and the modern concept of Disneyland in general, including the idea of a ‘political Disneyland’?

This is a manifestation of something absolutely opposite and unexpected: the human ability to transform themselves into dolls – animate or inanimate objects.

A few centuries ago the great philosopher Baruch Spinoza, in his immortal *Ethics, Demonstrated in Geometrical Order*, in a number of wonderful “theorems” showed a human as an ‘animated automat, driven by the laws of the mind'. And nowadays, another outstanding scientist Vladimir Lefevbre attempted to do the same in his “Algebra of the Conscience” based on his revolutionary theory of reflexivity.

What is in common between these two remarkable personalities, distanced from each other by several centuries, beside the fact that both of them belong to the same great tradition of Moses Maimonid, who became a link between Aristotle and modernity, as well as to the tradition of the first myth about “homunculus” – a clay Golem from Prague, who killed his creator?

The commonality between them is that one of them used the phenomenon of human reflexivity implicitly in his studies, by using the geometric (logical) method, while the other used reflexivity explicitly, by using the algebraic method. The latter defined reflexivity as a phenomenon whereas an individual has his own and the other’s image in ‘his head’, and this other will also have his own and others’ images in ‘his head’, etc.

Lefebvre’s notation was a remarkable breakthrough in the field of mathematic modeling of reflexivity. For example, let’s have two ‘observing’ subjects (X and Y) and one of many terms in this notation, e.g. Xyx. It means Xy imagined by X, whereas Xy is X as seen by Y.

However, in our opinion, under other conditions, this term can have another interpretation, whereas the term Xyx means X imagined by Yx, whereas Yx is an imaginary Y in X’s head. For example, if X are ‘Europeans’ and Y are ‘Russians’, then Xyx is ‘the imagined Europeans in the heads of the imagined Russians, as thought by the Europeans’.

It isnoteworthy how concise and precise Lefebvre’s notation is for the representation of reflexive images (which can be defined by computerized modeling or programs), in comparison to the very sophisticated and fuzzy verbal descriptions.

We offer to extend Lefebvre’s notation by complementing the “observing subjects” with the “managing (controlling) subjects” and mark the latter with an apostrophe (‘). For example, the term Xy’x will mean the following: subject X managed by subject Y as seen by X. In the latter case it is easy to imagine, for instance, a person realizing that he/she is managed (controlled) by Pokemon Go, or the European Union, realizing that it is managed (controlled) by its overseas partner, and so on.

Thus, our proposal to use the extended notation by Lefebvre enables us to describe and model reflexive systems and processes of conscientisation and management (control) with as many subjects as possible, both individual and collective, animated or imaginary. It also enables us to model their cooperation, conflicts and symbiosis within different social, economic, political and cultural interactions.

It seems that behavior of dolls and automats, sometimes, can be more human, than the acts and thoughts of human beings themselves.