Learning as becoming a node of the Scientific Mind

Our praxis (manipulations) with electronic memories force us to admit that memory is not a thing but a process, whether that process involves computer hardware or our bodies. This praxis forces us to admit that there is no hard core within each of us which somehow mysteriously governs that process, but that the process of acquiring, storing and transmitting information flows through us and involves not only all of present and past society but also the whole of what we call 'the world'. We are but knots within a universal network of information flux that receive, process and transmit information. Our praxis with electronic memories forces us to admit that what each of us calls 'I' is a knot of relations that, when unraveled, reveals itself to have no hook on which those relations may hang (like the proverbial onion).
Vilém Flusser On Memory (Electronic or Otherwise) The MIT Press, Leonardo, Vol. 23, No. 4 (1990), pp. 397-399

Question 1: (Jan)

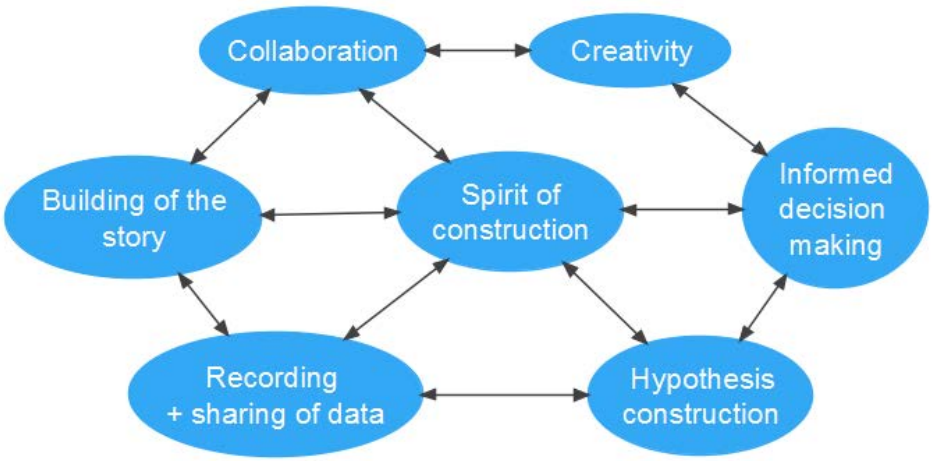
Building the scientific mind is a lifelong process of human development to acquire a way of being in and of the world, inspired by the heritage of the millennia-long history of the human pursuit of knowledge (scientia) for the advancement of understanding and wisdom.

What is learning and what is a Scientific Mind?

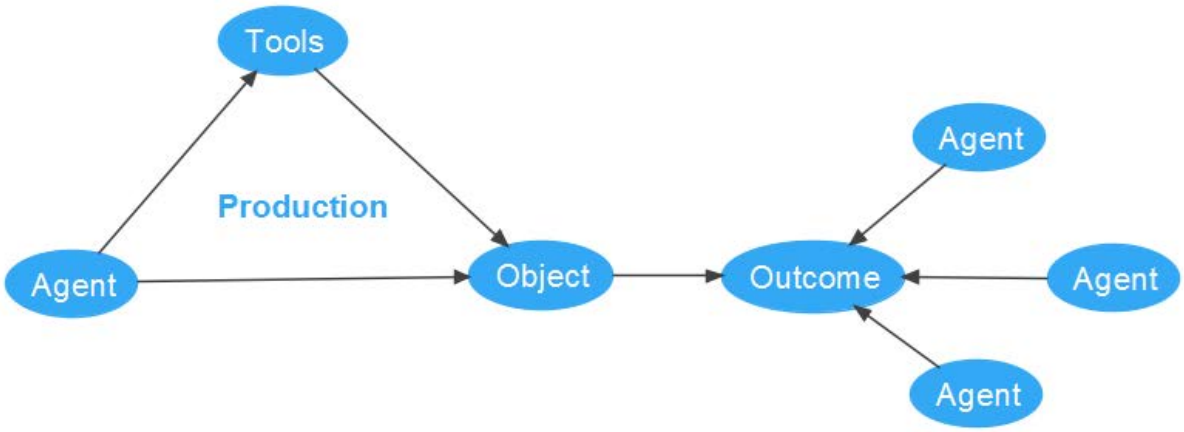
Learning = building the scientific mind?

According to that description, building the scientific mind is something that we build and construct inside ourselves. From other point of view learning is a process of becoming - the process of gradual inclusion in activity. The starting point for learning occurs when knowledge is actuated through the process of a learner connecting to and feeding information into a learning community Siemens (2004) - Learning as Network-Creation http://www.elearnspace.org/Articles/networks.htm

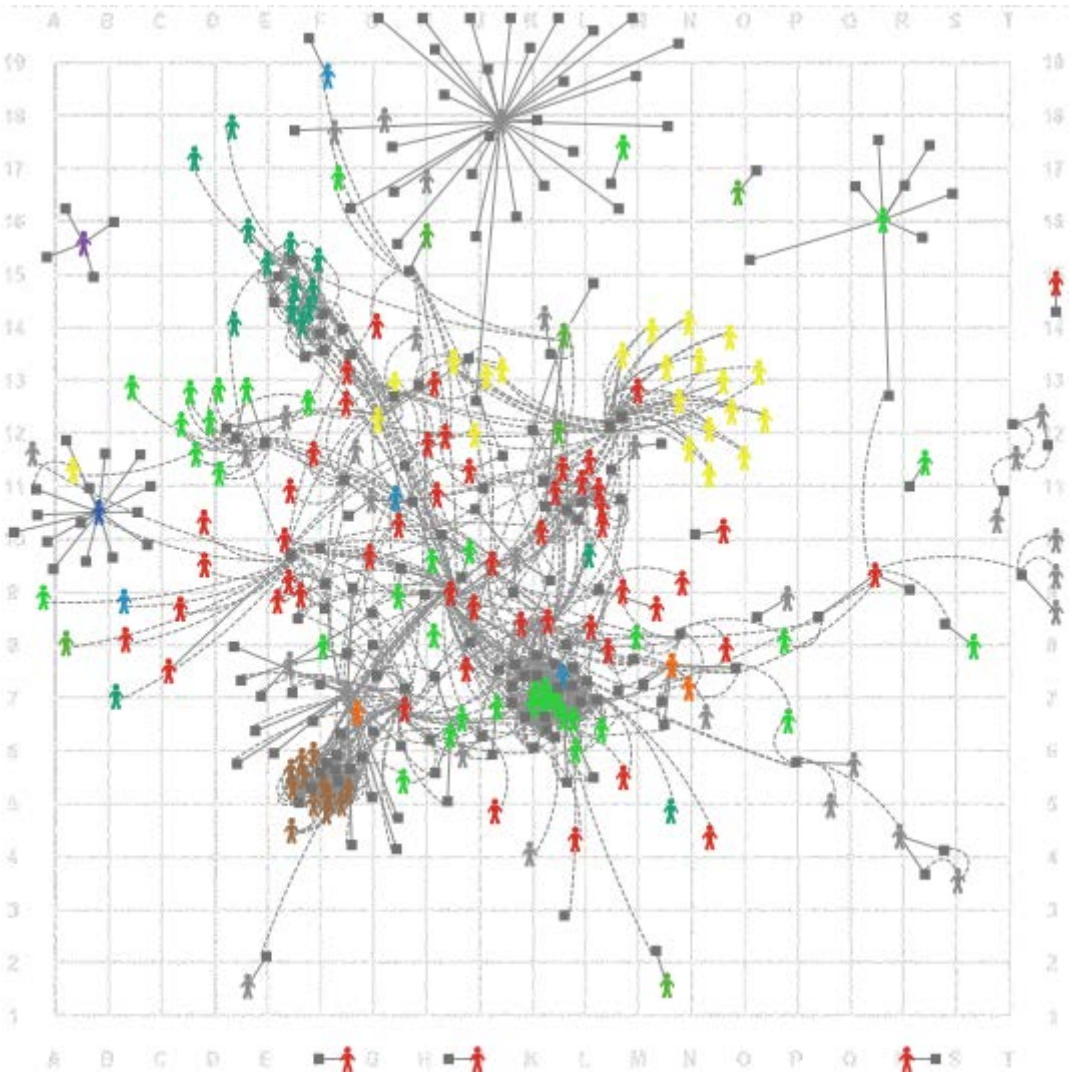
Moreover, learning as human development is by-product of activity. Creativity, collaboration, data sharing and other conception in Jan multidimensional concept of the Scientific Mind from our point of view are organized around the Spirit of construction. But, what is the object of construction?



The relationship and connections between people is always mediated by the objects that are created by people. As an example - we create new outcomes as a reaction to the objects created by Jan and Lya.



The fact that the creation of objects takes place in an electronic environment allows us to observe the activity and see how people are gradually becoming more and more important nodes of this activity.



Question 2: (Lya)

In building the scientific mind as defined I wonder what the influence is of the many visual images in the media. To what extent can these enhance or distract from meaningful and active learning? Using narratives and metaphors seems easier than using visual imagery. What's your experience?

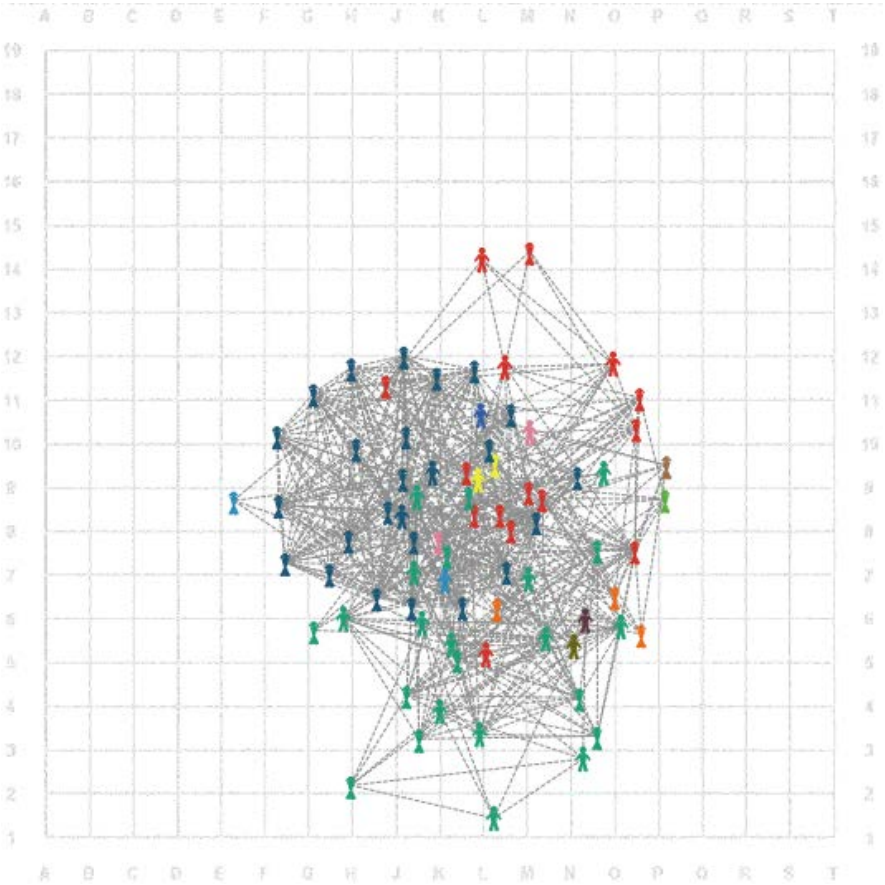
The leading idea of our concept is the following: the collaborative network activity and the network cooperation of the learning agents are aimed at the creation of various types of learning products which in general could be marked by a widely recognized term "digital story". The digital story and the constituent elements of it could be used by other participants of the collaborative activity in creation of new stories. The role of narration and the meaning of the practice of narration for various fields of activity were stressed by J.S. Bruner (Bruner 2003 - *Making stories: law, literature, life*). When the computer technologies started to be used the variety of forms for creation of digital stories emerged (digital storytelling). Modern research (Gee 2007 - *What video games have to teach us about learning and literacy*; Grobstein 2005 - *Revisiting science in culture: Science as storytelling and story revisiting*) allowed to widen our understanding of the variety of the modern digital story modifications. In the frame of the given research the term "digital story" comprises the variety of forms of narrative texts creation which are worked out within the computer environment (hypertexts, articles in electronic encyclopedias, video-topics, games, simulation models, mental maps etc.).

The analysis of the activity of each participant inside the acting community allows to link the act of activity and the development of one participant with the development of the whole community. In order to investigate the links between the agents and the objects of the network activity within the framework of the given research special tools for visualization of links between the authors and the pages were developed which represent the relations between actors in the form of a network, the units of which are the pages and the participants creating these pages. The network environment in which the modern collaborative activity is carried out allows to follow the links which occur between the agents and objects of activity. As a rule modern socio-technical systems in which the collaborative activity is carried out, store the full history of all activities.

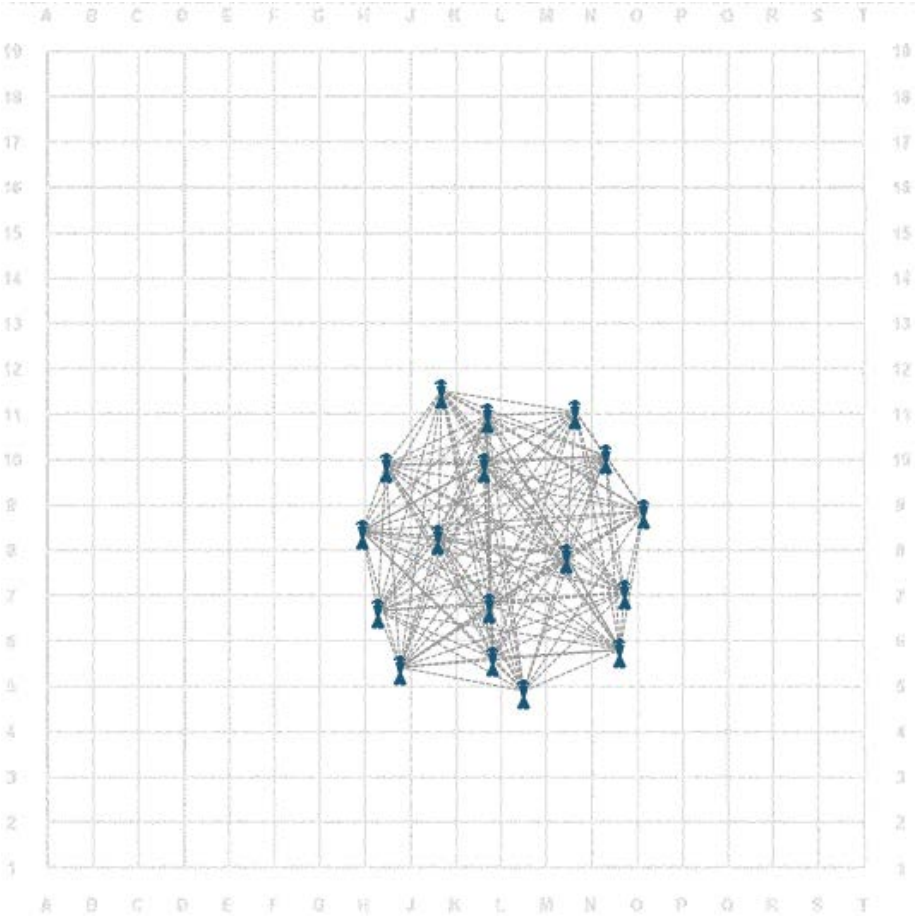
In general terms, this history can be presented as a record of a chess or go game, consisting of many moves.

With the help of models and maps we can analyze individual moves and the overall situation in the field of collaborative activities.

We can find the key players and stable groups.



We may suddenly find that the maximum clique included only women who live in the same city.



And most importantly in this story is that it is based on real events, real actions of participants.

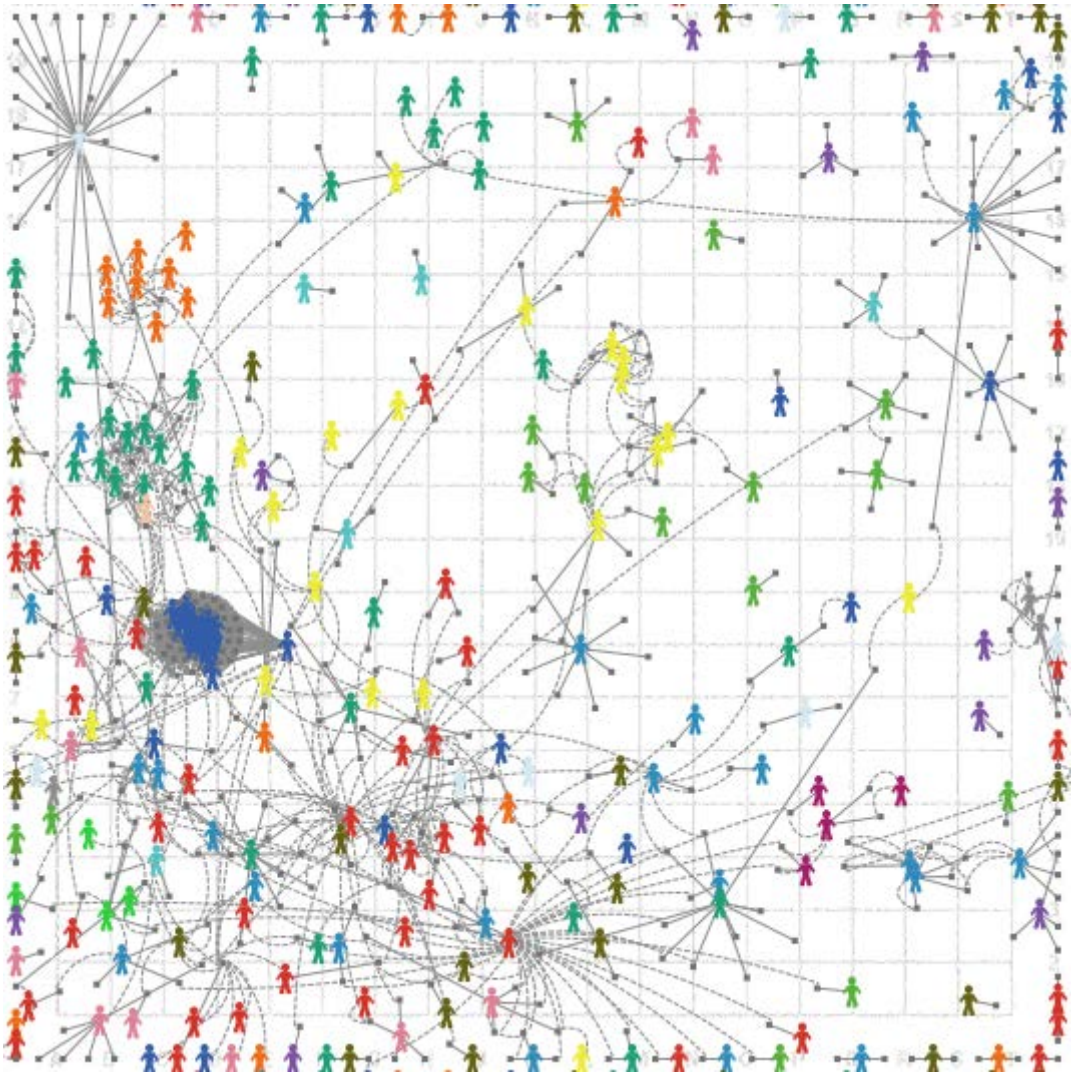
Question 3:

“Since wars begin in the minds of men, it is in the minds of men that the defenses of peace must be constructed’.

“Wars begin in the minds of men” Does it mean that wars don't begin in the minds of women? Does it mean that collective minds of women and men are not the same?

It is a hypothesis. And this hypothesis we can not only discuss, but also to check.

Men’s mind



Women's mind