Memetics as a New Methodology at Social Media Investigation

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# **Abstract**

This study is devoted to the process of transferring such social practice as social political movements to the cyberspace. This process was analyzed through the case of the political and civil actions unfolded in Russia in winter of 2011/2012 and then continued in spring 2012. Using the methods of network analysis, netnographical analysis and content analysis the capacity of the digital social network for mobilizing the new members for social movement and for spreading the new ideas was described at some level. Due to the hypothesis that Internet can generate a special perception framework for community members and a special envieronment to create new solidarities, in this research a cognitive approach and a subculture concept were used. Also a memetics theory as the main concept of methodological design and strategy was tested in order to systematize multiple variables of such complicated phenomenon and to unite different methods to perform finally a harmonious and logical study.

**Keywords:** social movements, Russian protests, Internet, Facebook, digital social network, meme, memetics, social media, network analysis, netnographical analysis, cognitive approach.

# 1. INTRODUCTION

# 1.1 Problem statement

Some recent events (i.e., the political and civil actions which unfolded in Russia in winter of 2011/2012 and then continued in spring, 2012) have resulted in booming studies of public protest movements with particular attention to the role of the modern technologies in the emergence and development of a movement (Passy, 2003; Diani, 2000; McAdam, 1996; Howard & Hussain, 2013; Castells, 2013; Rheingold, 1993; Diani, 2000; Kavada, 2005; Della Porta & Mosca, 2005; etc). This also makes the issue of the basics of the new solidarities, formed in the Internet very interesting. What makes the people unite with other protesters in symbolic terms, what common do they share and what are the borders of the "friends" community?

The process of transferring different social practices to the cyberspace whips on reflection on how the Internet environment influences the nature of these social practices. Most notably, the scientific community has acknowledged the fact that the technological progress requires us to precise such basic notions of social sciences as personality, identity and solidarity.

Emile Durkheim's understanding of solidarity as an abstract category of social "glue" that forms the basis of any society has been theoretically modified over time (Durkheim, 1997). Modern sociologists have provided new definitions of the notion "solidarity". Talcott Parsons understands solidarity as a certain consensus, which unites the interests of all citizens. According to Talcott solidarity is the result of the internationalization of values and norms and a pre-requisite for the stability of the society. This solidarity is based on the consent of all of the members of the society to participate in the social system and on the acceptance of the norms of social order (Talcott, 1966). Jürgen Habermas links the solidarity practice directly to the communication practice of modern society. Solidarity is born in the practice of communication in the environment of developing liberal culture thanks to such institutions as, for instance, the elected official bodies and media. And the discursive model of the social order is dependent on this process (in Lee, 2007). Habermas notion of solidarity is teamed up with an equal category of fairness and justice (Habermas,

1998).

# 1.2 Research question

The fact that the major role of the new technologies in the mobilization of social movements consists mostly in the provision of a convenient channel of communication and information transmission does not seem to require any additional proof. However, for this particular study I defined the following research question that still was not fully disclosed and reperesents the interest for modern researches:

Is the Internet also a space that generates the framework of perception common for the members of the community and the environment in which the discourse of new solidarities is formed?

# 1.3 Goals of the research

Thus, my main task in this study is to define the new type of solidarity that we observe today and to describe the influence of the new means of communication on the forming of this type.

Also for this research I'm looking forward to archive the following goals:

- Test the memetics concept as a framework for better understanding the role of the new Internet technologies in the mobilization of social movements;
- Follow the cognitive approach in the study of the role of the new Internet technologies in the mobilization of social movements;
- Define at what level social media networks can be used for protest mobilization proceses;
- Define what social media strategies can be effectively used;
- Describe what the protest movement does live with;
- Define the typology of users in protest communities.

# 1.4 Object of study

In order to respond the research question and archive the goals that were defined the political and civil actions unfolded in Russia in winter of 2011/2012 and then continued in spring 2012 were choosen as the object of study.

So, I define the object of my study as following:

Russian protesters' solidarity formed in the period of 2011-2012 years via computer mediated communication. This will be further explained in the third chapter of this paper in the paragraph "Choosing the object of research".

# 1.5 State of the art

The study of social movements represents one of the main scientific interests for the modern sociology. The most leading sociologists not only systematically studied these movements in their diversity over the past 25 years, but also created during this time a number of basic theoretical works that help us understand better the nature of this phenomenon and its evolution. In the list of the members of this cluster of the scholars specialized in this topic we can include Benford (1997), Castells (2000; 2007; 2013), Della Porta (Della Porta & Mosca, 2005; Della Porta & Diani, 2009), Diani (1990; 1992; Diani & McAdam, 2000), Jenkins (1983), Klandermans (1984; 1988; Klandermans & Tarrow, 1988; 1996), Kriesi (1995), McAdam (1992; McAdam, McCarthy & Zald, 1988; McAdam et al, 1996), Morris (2000), Passy (2003), Rucht (1990), Tilly (2005), Snow (Snow et al, 1986; Snow & Benford, 1988; Snow, Zurcher & Ekland-Olson, 1980), Tarrow (1988; Tarrow & Tollefson, 1994), Tilly (2005), Touraine (1981) etc.

The theorized part of the paper combines several disciplines - primarily sociology of social movements and cognitive anthropology.

## 1.5.1 Evolution of the "social movement" concept

Social movements became the subject of the intense scrutiny for the sociologists in the first decades of existence of sociology as a field of science. But despite this fact only in the 60s of the XX century Social Movements sociological studies started to be considered as a special research area (McAdam, McCarthy & Zald, 1988).

Like any scientific discipline, sociology of social movements started with a strict definition of its research subject in order to limit its field of interest. So, the understanding of the movements as a definite form of social action, being the dominating concept in studies of social movements over the past 30 years, became the starting point in the process of defining frontiers in this science field (Turner & Killian, 1957; Gamson, 1975). This definition also meets the interest of all the supporters of the collective behavior theory, although some of them stressed the extra-institutional and reactionary

nature of social movements, while the others underlined its rational and organized nature (Jenkins, 1983; McAdam, McCarthy & Zald, 1988).

However, the total agreement was achieved regarding the global research question of the studies in this filed. The scholars are trying to respond to the following questions:

- Why people choose or do not choose the scenario of social movement to achieve their political goals?
- What the consequences entails such a choice in different conditions?

This prudent definition of the main subject and of the research question provided several decades of the rapid development of the discipline, but it also imposed several significant limitations in order to explain its features.

The first limitation is concluded in the perception of social movements as a specific strategy of behavior associated with a particular political system. The fight against this system or the attempts to support this system were the main goals of the social movements. This state of affairs originated in Europe in modern times, so we can't talk about social movements in the earlier periods or in the non-European societies. Of course, in the case of the earlier periods and/or the non-European societies always it's possible to find functionally similar forms and study them in a comparative study entrusted to a new discipline – let's say, to a special branch of social anthropology that will be in charge of this type of researches.

But within the Western societies sociology of social movements could not respond to all the questions. For example, was discovered that the choice of a certain strategy of behavior is not always correlated to the goal toward which this strategy is oriented. So, arguing that the development and success of a social movement depends on the amount of resources available to its organizers, McCarthy and Zald (1977) recognized that this model starts to work only when the movement already exists. It seems to be a little bit cynical to assume that with sufficient resources it's possible organize a succefull support to any idea or to any movement. And this kind of thoughst is not supported by the majority of the theorists of social mobilization.

Another two basic questions that the social movements scholars care about are:

- How the social movements are being born?
- Where come from those who are willing to participate in them?

In this case we can mention two main theories that offer an explanation of the process of participation - the concept of relative deprivation (Gurr, 1972) and the concept of rational choice (Klandermans, 1984). But these theories provide only a partial response to the mentioned questions. In the case of both theories, the variables that represent evaluation, definition and perception of the social situation by the potential participants play the key role in the researches. Meanwhile, the social world vision is the main battleground between movements and countermovements (Eyerman & Jamisson, 1991; Melucci, 1988; Melucci, 1989). Conventional definition of social movements leaves aside the questions like who and why wins this fight.

A second limitation lies in the focus of researchers exclusively interested in the political activities of movements. The resource mobilization theory, replacing the paradigm of collective behavior, considers that the activists can choose both institutional and non-institutional strategies - depending on the expectations regarding its performance. However, taken as a basis the mentioned definition of the research subject complicates the studing of cases where political means were rejected as the less effective in the process of society change in comparison with the non-political. The researcher of social movements who pays attention only to the political dimension of this phenomenon and ignores all other aspects, has a risk to get an oversimplified picture, as we can see in the case of studing of the youth social movements (Parsons, 1965).

Finally, a phenomenon that Lofland named as a "mass behavior", opposed to the "crowd behavior" term, was discovered (Lofland, 1981). The difference is that the "mass behavior" does not imply the simultaneous presence of many people in one place. It does not even require the people awareness of the others' actions. It means that the mass behavior takes place when the people are completely independent doing the same thing. Such processes play a very important role in the fate of social movements. The efforts of ideologists and organizers never can be so successful to cover all the variety of possible life situations that can get their associates. The fate of the social movement depends on the ability of its associates to determine which actions will bring the most benefit to the movement. So, the theory of social movements should have a conceptual apparatus for describing the collective actions of organized groups as well as the spontaneous actions undertaken by their members without any prior discussion with others. As in the case of

political and non-political means, we have to deal with different aspects of the social movements' activities and each of them is important for understanding the phenomenon in general.

All these difficulties have led to the fact that every day more and more scientists explicitly or implicitly use the new definitions of the social movements that allows them treat the mention scientific questions staying within the boundaries of their science. One of the very new interests of scholars in this field became the study of social movements in its correlation with subcultures (Klandermans & Tarrow, 1988; Melucci, 1989), in correlation with the informal communication networks that link the activists (Tarrow, 1983; Diani, 1990). Another fast growing scientific interest in this field is the studying of interpretations of social reality spread through these networks (Eyerman & Jamisson, 1991; Kendrick, 1991).

It was recognized that such concepts as subcultures and social networks should be included in the definition of social movements as well as the concept of collective action - it was made for example by Diani in his famous article (Diani, 1992). Moreover, other authors have insisted that the new styles of life (Melucci, 1989), the alternatives of social perception (Melucci, 1988), the "liberal ways of feeling" (Groves, 1992) and, finally, the use of cultural codes, that are different from the dominant culture codes (Tourain, 1981) should also be considered as the elements of social movements.

Alberto Melucci summed up this kind of scientific searches, stating that any movement has two the most meaningful dimensions:

- visible dimension of collective actions;
- latent dimension where the daily practice takes place and the experience are being formed (Melucci, 1989).

The events that take part in the "molecular" dimension of the personal lives are as important for the development of the social movements as challenging political institutions. Every social movement is going through its birth (or latent) step and only sometimes ago any of them become "classical". At any given moment of time the society is "pregnant" with its future opposition. It inhabits the public unconscious. It implies the new challenges for the social movement researches.

Although the changes in understanding of social movements revealed new possibilities for researchers, at the same time they both jeopardized the very existence of the theory of social movements that was considered by McCarthy and Zald (1973) as a middle-range theory 25 years ago.

Indeed, it is not entirely clear what sociologists of social movements should study (and what they should not to study), if the concept of social movements covered almost everything that falls under the concept of society in general. The necessity for a new basic definition, which would outline the subject of the discipline and its essential goals, was one of the main tasks of theoretical studies of social movement in the last 20 years. Two Sweden scientists Eyerman and Jamisson (1989; 1991) proposed very original and promising approach that I'd like to expose in continuation.

## 1.5.2 Cognitivist interpretation of social movements

The contribution of Eyerman and Jamison (1989) consists primarily in the fact that they were the first ones who linked the perspectives of development of sociology of social movements with the consequences of the "cognitive revolution". It was the shift in the methodology of study of social movements, the shift of social sciences to the studying of structures and processes of thinking. It was stimulated by the breakthroughs in psychology, linguistics and computer science. The interest to how people receive, use, store, translate and foget an information is a very common for all the "cognitive" scientists (Cicourel, 1974; Albersnagel, 1987; Hirst, 1988).

The starting point in this approach is a statement that any activity executed by human, requires the existence in his mind of some representations that define human's behavior. And this process can be both conscious and automatically. The term "theory" is usually used as a metaphor for the cognitive structures that people normally use to organize their knowledge about the world and construct a new knowledge (Frake, 1961; Cicourel, 1974). For example, to be able to speak, we need to have a "language theory", to be able to communicate we need know the theory of personality, although the scientists have to recreate the both theories as they are unconscious.

Evolution of the theories - in science and in everyday life - happens due to the process of conservation of ways of thinking, that were proven to be effective in the process of assimilation of new experiences and in the accommodation of the ineffective

structures (Neisser, 1976; Wertsch, 1991). In accordance with this idea Eyerman and Jamisson, social movements are being primarily determined as the producers of new knowledge and its success depends on the capacity of intellectuals to create and distribute the alternative visions of social situation. Without denying the importance of performances and organizational structures that were in focus of the scientists' attention in the past decades, Eyerman and Jamisson (1989), nevertheless, were convinced that these variables play only a supporting role in the processes of social movement compared to the changes in the collective mental representations. Social movements determined according to the traditional definition, as a form of the social action, arise, evolve and disappear depending on how evolve the representations of these social movements and the representations of its goals. The social movements appear because something changes in the views of participants about the social world. Melucci (1989) pointed out that that the starting point of a social movement is always an emergence of new identities that in its very broadest sense may mean the goal-setting processes.

McAdam (1992) enriched the theory with a new concept that he called "cognitive liberation". Cognitive liberation represents a process when people stop to perceive the existing order as something permanent and unchanging. Instead, they see it now as something arbitrary that was created by others and that they have all the rights to change it.

In the both concepts, of McAdamd (1992) and of Melucci (1989), the change of vision of situation (change of representation) always precedes an action and, moreover, it generates an action. The feedback is also very important - once the action was taken, it leads to the change of representations involved in its design, and these representations can be confirmed or rejected, but are unlikely can remain quite the same. Thus, the success of collective action leads to the confidence of organizers that they have chose the right strategy. Likely, the observers also can conclude the same and try to adopt that strategy and repeat the experience of others (Gurr, 1979).

Cognitive changes not only precede the social movements and accompany its evolution. Cognitive changes represent the main means and the goal of the fight.

The key characteristic of the social movements that provide the power and influence to it is its mass character, it's a scale of spreading of its ideas and views and it's

a number of people who can be encouraged by the movement to perform an action, from voting to riots.

The influence of social movements is also defined by perceptions of a movement that exist in the society: what the society thinks about its objectives and opportunities. The sociology of social movements repeatedly studies the process of development of social movements from this perspective. So, Snow (1986) and his colleagues used the theory of interpretive frames to analyze the processes of recruitment in social movements. Klandermans (1984) considered the participation in collective action as a derivative of the evaluation of goals and chances for success.

Eyerman and Jamisson (1989), considering this perspective, defined a social movement as a cognitive phenomenon. Earlier, the mentalist definitions such as "social movement is a system of ideas and perceptions about the desirability or undesirability of certain social changes" were very popular (McCarty & Zald, 1973). But the formula introduced by Eyerman and Jamisson (1991) says that social movement is not a static combination of beliefs, it's a "form of cognitive practices" moving through the time and space.

The concept of social movement in terms of Eyerman and Jamisson (1991) differs from the concept of "ideology", thought, both concepts play a very important role. The concept of ideology contains the theory of nature, society and the theory of the individual. On the basis of these theories is redefined the social reality. Any social order is based on some theories. The ideologies of social movements offer an alternative to the social order. Social movements represent a process of functioning of ideologies - their development and interaction with an intelligent environment. The main property of social movements is their ability to generate new ideas in all new situations, to generate new interpretations, to influence the way of thinking of its participants in a wide rage of life situations. Thus, a social movement is a practice of definition and redefinition of social reality according to a theory that represent an alternative to those that form the "cognitive order" of society.

Social movement is a statement of the fact that the existing social system is a failure, partly or completely, is a sociological error that however can be corrected. One of the main advantages of the cognitive approach is an opportunity to study the activities of

social movements at the level of individual consciousness. This approach offers to resolve some of the problems that were defined earlier in this paper as particularly challenging for theories oriented to the traditional definition of social movements. First of all, it refers to the Lofland 's concept of mass behavior: from the perspective of cognitive approach, collective behavior and spontaneous individual behavior complement each other, and we can only say that some social movements are focused on the first behavior type, while others — on the second. The studies of the way of individual participants' thinking allows to estimate the potential of the social movement on the level of uncoordinated actions of its activists and also the ways how this potential can be realized.

Further, questions about the origins of movements and their uncanny ability to use a variety of non-political means for political purposes create new scientific approaches and methods in order to find the answers.

The main advantage that enables the study of processes initiated by social movements at the level of individual consciousness becomes evident when we turn to the study of its "latent dimension". Using the term "latent dimension" I mean here the cultural shifts that have no direct expression in political action, but change the life of those who have been exposed to them.

Actually, only exploring the social thinking and lifestyles of members of a society, we can surmise about the latent movements that resting in the peace today to break out tomorrow. Finally, the cognitive approach can lead us to the new level in the studies of the effects that alternative theories of society have on the development of the culture of this society and on the consciousness of its members. Indeed, the social movements, offering new theories to replace the old social order, thereby cause changes in the processes of the construction of social reality. But neither the life-world of the individual, nor the culture in general, is not a set of unrelated elements. Replacing one of those elements by another one can lead to the transformation of many others.

In the next section of this chapter I will focus mainly on the cultural consequences of cognitive changes provided by social movements - I'll try to defend the idea that the cultural consequences of cognitive changes lead to the creation of the range of new subcultures.

# 1.5.3 Cognitivist interpretation of subcultures

The concept of subculture suffered the fate of the others most used concepts of social sciences - it got a lot of not very clear definitions, which made this concept highly controversial. The cognitivist definition of subcultures is offered in this paper due to the author's desire to consider the correlation between subcultures and social movements, as they were understood in the previous section.

All definitions of culture can be quite roughly divided into two groups (Keesing & Keesing, 1971). The first one describes culture as "an abstraction of behavior", the set of reproducible samples underlined by researcher from the observed infinite variety (Kroeber & Kluckhohn, 1952: 223). The second group involves such definitions of culture as "abstraction for behavior" - representations targeted by members of society themselves, when they plan their actions (Goodenough, 1961: 521-528).

Cognitive anthropology, based on the definitions of the second type, aims to study the cultural competence - the abstract theory of culture that is stored in the minds of its members, rather than to study the specific "performances" that embodies this theory (Frake, 1962). From this point of view, to answer the question what he culture of a given society represents we need to list all that we have to know to live in this society.

Based on the conceptual framework outlined above, we can propose several ways of determining the relationships between culture and subcultures of a certain society. These ways of determining cab be grouped into two broad classes. The first class contains the definitions that define culture as a totality of the mental structures acquired, at least, by part of its representatives. Subcultures, on this basis, are possible cultural choices that make individuals or groups of individuals. Indeed, nobody in the modern western societies can say that he/she knows his culture at all its diversity. We need to assume that some groups identificate their "culture variation" with the whole culture in general. In this case we can say that this identification is ideological.

The second class of definitions of culture describes this concept as the set of characteristics that are shared by all members of society and that represent a platform for understanding between its members. Culture in this case is a symbolic core manifested through many subcultural implementations. The prefix "sub" here refers to a secondary position of variations (subcultures) in relation to the basic unity (culture) (Hockett, 1958).

So, in this paper the term "culture" is used as a synonym for the set of all existing subcultures and the term "subculture" - as a synonym for "one of the possible cultural choices".

The existence of subcultures is an inevitable consequence of cultural disintegration, when everyone can - and forced - relatively freely choose from many options of thinking rules and rules of behavior.

One of the central issues for anthropologists of the twentieth century is a question if the culture in general and the cultures of the modern societies really represents an organic whole or not. Eventually, a compromise point of view prevailed. This compromise point of view is far from define the culture as a set of unrelated disparate elements, and also far from the other extreme that define it as a perfectly coordinated system where each element is completely determined by other elements (Geertz, 1966). Cognitive sciences added a new aspect to our understanding of the human. This new aspect contains a continuous struggle for clarity and certainty (Kelly, 1955; Cicourel, 1974; Neisser, 1976).

Undoubtedly, the culture of any modern society, at least partly, is in a state of confusion and any its member has to make a choice which norms of thinking or behavior he/she would like to follow. Sometimes the members of society are faced with the fact that there are several "theories" and, accordingly, there are several ways to navigate in the same situation. But only one way can be chosen. Moreover, sometimes there is no indication how to behave in a particular situation and an individual has to fill in the blanks on his own.

Subcultures arise in the majority of cases as a result of contradictions in the "big" culture. Indeed, the requirement of consistency implies that each subculture includes a set of rules that allows make decisions regarding everything that can happen. And if there is no satisfactory option, the new rules should be invented to make a choice. But nevertheless the members of subculture creating a new rule base themselves on the existing system of principles validated in their environment. Perhaps this system of principles is the most important characteristic of the subculture.

Abelson and Schank made an assumption that the principles of development of subculture can be seen as a "script", a cognitive structure that organizes behavior in

certain types of situations. A typical script can be described as a program of steps, including the mental actions, performed automatically as something self-evident. So, the subcultures evolution can be described with this kind of program that regulates its relation with the norms of culture. Some of those norms can be internalized, and the rest – rejected (Abelson & Schank, 1977).

The principal difference between subculture and culture refers to the degree of arbitrariness in the process of making a choice. Actually, we can't talk about the choice of the culture: it happens without the consent of the child. But the introduction to one of the subcultures in all cases involves a decision making that being carried out deliberately. It is one of the rare moments when a person is free to decide through what kind of glasses he'd like to see the world.

Everyone belongs to a certain subculture, although the subcultures of the most of the people have no self-designation, nor the system of symbols to designate their boundaries. Fisher has a plausible assumption that the identity and symbols appear only when there is a need to quickly and effectively distinguish "friend from foe" (Fisher, 1976).

This point of view gave a birth to the new methodological approach for investigation of subcultures. It requires to characterize the subculture through its principles of choice – why they do that – and not what and why they reject. As it was suggested above, some cultural norms are rejected to follow the other ones. So, Parsons (1965) explaining the youth revolution of 60s, argued that the manifestations of students were not the result of failure of socialization. The manifestations were the result of success of socialization. The baby boomers could not admit the fact that they should leave the childhood's ideals in the nursery and start to live in the adults' world.

In out youth we suffer a lot of cultural conflicts. And in this period we need to choose the way to resolve them at this moment and in the future. That's why the young people have a special place in the formation of subcultures. However, later in life, when we have already opted for one of the subcultures, we equally find ourselves in the ambiguous situations. Continuously we need to choose one from many requirements and perspectives. And the constant source of this ambiguity is the social movements.

#### 1.5.4 Subcultures as a new direction in the social movements studies

The interest in subcultures emerged among sociologists of social movements mainly in relation to the role that they play in the recruitment of new members: social networks of subcultures were the main source for recruiting new activists (Diani, 1990; Klandermans, 1988). After that, the communicative processes and the definition of the political situation in small groups, mainly representative of one subculture, became the main subject of study for researchers of this field. Subcultural social networks played a major role in the several recent attempts to combine micro and macro approaches in the studies of social movements (Klandermans & Tarrow, 1988; McAdam, McCarthy & Zald, 1988). It was recognized that the survival of the recently emerged social movement depends on whether this movement is abled to correlate its new schemes with the script of at least one of the previously encountered subcultures. Melucci (1989), for example, noted that the social movements that emerged in the 60s, in fact, were based on the same subculture. Some of the lifestyle schemes that were typical for that subculture are democracy, anti-technocracy, the desire for autonomy and the dominance of postmaterial values over material. The last one Inglehart (1977) defined as a distinguishing feature.

The researchers were mainly attracted by the idea of the study of the psychological traits of activists and of the subculture features that allow to them explain the success or the failure of movement in the mobilizing and constructing the massive support. In their summarizing article McAdam, McCarthy and Zald (1988) pointed out that until recently the attention of sociologists was focused on the early stages of development of the social movements, and their performance aroused surprisingly little interest.

Indeed, we can assume that the social movements lead to the transformation of the social consciousness and it directly affects the existing subcultures. But also we can say that the social movements can be affected by the existing subcultures.

Subcultures offer the new schemes of social thinking as an alternative to the old one. And it makes dissonance in the barely constructed consistent private universes. The social movements generate subcultures creating situations that require to make a choice especially between different social theories. Those who take the new perspective are forced to reject the old concepts and the associated old norms of thinking and behavior.

From all the above it follows that the cognitive practice of social movements can generate the series of subcultures - as did the youth movements of the 60s. New subcultures can accept or reject the innovations and the theories of new social order proposed by the social movement. Subcultures that decided to assimilate the proposed new ideology have to recreate their universe due to refusal of norms associated with discarded theories. The requirement of consistency is embodied in an attempt to create a lifestyle that is tied to provisions of the new theory of society with all other aspects of the practice of activists. The "script" of subculture guarantees the transferability of its theory of social order in the language of arts, science, politics, family life etc.

At this point I need to return to the problem that I've marked in the beginning of this paper as a main conceptual problem of sociology of social movements. This problem consists in the definition of social movement as a form of collective action. Using a cognitive approach and introducing the subculture concept in our framework we defined social movement as a process of functioning of the alternative social theories. Subcultures convert the alternative social theories in the holistic lifestyles. Thanks to the subcultures the struggle between the social movements and the order that they try to depose can perform not only in the political space, but also in the whole cultural space.

# 1.5.5 Role of digital networks on new digitally inspired social movements

As we can conclude form the above, in recent years, the focus of the theoretical interest of the mentioned scholars and their methodology shifts simultaneously in two directions:

- comparative analysis of the social movements (McCarthy & Zald, 1977; Kriesi, 1995);
- network analysis of the social movements that has a special value regarding the current development of the new information technologies (Snow, Zurcher, & Ekland-Olson, 1980; Passy, 2003; Diani, 2000; McAdam, 1996).

There is a raging debate in the media and in academia about the precise role of digital networks on these new digitally inspired social movements. Castells (2013) studing the social movements in the Internet age concludes that Internet networks provided a space of autonomy from where the movements emerged under different forms and with different results depending on their social context. He is convinced that

technology does not determine social movements or for that matter any social behavior. But Internet and mobile phone networks are not simply tools, but also organizational forms, cultural expressions and specific platforms for political autonomy.

Howard and Hussain (2013) in their social science research dedicated to the Arab Uprisings and to the role of the digital channels in this process collected and theorized the digital experience during the Arab Spring.

I'd like to summarize here their main findings. On the basis of comparative analysis of 75 countries, either Muslim or with significant Muslim populations, Howard and Hussain (2013) finded that, while framed by a number of contextual factors, the diffusion and use of the Internet Communications Technologies strengthen democracy and increase civic involvement and autonomy of the civil society, paving the way for the democratization of state and also for challenges to dictatorships. Furthermore, involvement of civic young Muslims was favored by Internet use. So, Howard (2010) say that the Internet technologies made possible the transformation of social involvement in many countries.

In a stream of research conducted in 2011 and 2012 after the Arab uprisings, Howard and Hussain (2013), using a series of quantitative and qualitative indicators, probed a multi-causal, statistical model of the processes and outcomes of the Arab uprisings by using fuzzy logic. They found that the extensive use of digital networks by a predominantly young population of demonstrators had a significant effect on the intensity and power of these movements, starting with a very active debate on social and political demands in the social media before the demonstrations onset. The authors say the Arab Spring is historically unique because it is the first set of political upheavals in which all the processes were digitally mediated; alienation from the state, consensus among the population in the protest, defense of the movement by the international public opinion. They also underline that digital media provided the very infrastructure that created deep communication ties and organizational capacity in groups of activists. Another conclusion that the authors made is that countries that don't have a civil society equipped with digital scaffolding are much less likely to experience popular movements for democracy (Howard & Hussain, 2013).

Alhassen (2012) in her research dedicated to the effects of the movements presence on the Internet pointed out the artistic political creativity effect. The movements were supported by the innovative graphic design of avatar images, mini-documentaries, YouTube web series (such as Beeshu), vlogs, photographic montages etc. The power of images, and creative narrative-activated emotions, both mobilizing and soothing, created a virtual environment of art and meaning on which the activists of the movement could rely to connect with the young population at large, thus changing culture as a tool of changing politics.

The fact that the major role of the new technologies in the mobilization of social movements consists mostly in the provision of a convenient channel of communication and information transmission does not seem to require any additional proof. However, is the Internet also a space that generates the framework of perception common for the members of the community and the environment in which the discourse of new solidarities is formed?

In his book "The Virtual Community" Howard Rheingold talks about a new form of the society being born in the Internet, which is united around common aims and interests, projected online (Rheingold, 1993).

Manuel Castells evaluates the influence of the Internet over sociality as moderate, meaning that the Internet does not influence the way of life directly, but is able to bring new possibilities into the existing social interactions. Castells quotes the results of the analysis, according to which the extent of the Internet users' involvement in the social and political activities is higher than or equal to that of non-users. As for the purely social movements, Castells characterizes them as a new type, which has emerged in the information age and uses Internet as the most preferable means of organization (Castells, 2004).

Castells names three factors being reasons for this choice:

- First of all, the necessity to be mobilized around the cultural values requires
  mastering the new communication systems to keep in contact with those
  sharing the same values.
- Secondly, Internet gives a possibility to unite the most different participants
  of the movement, which, being both spontaneous and coordinated (thanks to

- the constant online exchange of information), is capable of filling in the gap, left by the crisis of the previous forms of organization.
- Thirdly, the usage of the Internet meets the tasks of the social movements globalization (Castells, 2007).

The Western research on the influence of the computer-mediated communication on the social movements started back in the end of 1990-s: this influence was mostly evaluated as positive, strengthening the existing social connections and solidarities, as well as (even though to a lesser extent) creating the basics for appearance of the new ones (Diani, 2000).

The potential of the Internet in uniting politically indifferent and marginal individuals was analyzed (Kavada, 2005). According to the opinion of the researchers, the Internet strengthens social movements (a) instrumentally, (b) from the point of view of the protest expression, (c) symbolically as an identification processes medium, (d) cognitively (the distribution of the information and the activation of the public opinion) (Della Porta & Mosca, 2005).

The recent studies are dedicated to the role of the social networks in political activism. For instance, one of the articles of 2011 was devoted to the influence of the online media-practices on the degree of the political participation. Analyzing the behavior of Facebook users during the elections (the participants of the research were the students of one of the universities), the authors have come to a conclusion that the users tend to the "light" political participation, realized in the online environments (for instance, publishing the images for political subjects or manifesting "fanatism" for the candidates participating in the elections), but the process of "deepening" towards other forms of political participation takes place, for instance, towards volunteering or signing the online petitions (Vitak and al., 2011).

The mechanism of recruiting Internet users via online social networks for participation in protests was studied in detail in *The dynamics of protest recruitment through an online network* (González-Bailón et al, 2011). The authors traced the propagation of messages on protests in Spain (May 2011) in Twitter. Spanish citizens got mobilized in response to the measures their government was applying in the times of economic crisis. Protest manifestations were held on May 15, afterwards the interest in

the actions started ebbing away slowly. The authors collected more than half a million twits by up to 100,000 users posted between April 25 and May 25. It is noteworthy that the study was not limited to the meaningful interactions only, but also included a network generated on the basis of formal interactions between the users ("add as a friend / follow" criteria in social networks). The authors constructed the logic of their study on the basis of the following tenet: a user is recruited as soon as he posts a twit on the subject of protests and remains recruited up to the end.

Figure 5 shows how the users were recruited over time. The chart suggests that before the protest day - 15-M, May 15 - only 10% of the participants had posted at least one twit on the subject, while after the manifestation a number of people posting in Twitter about it was rapidly increasing.

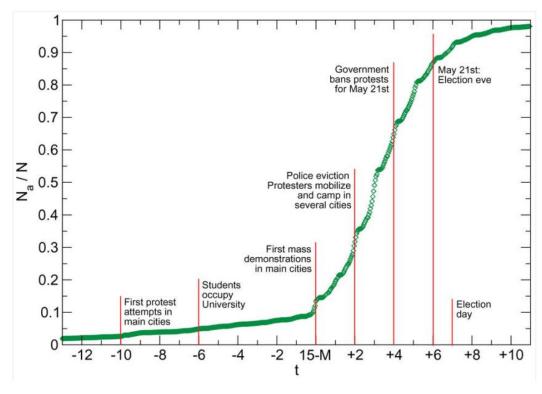


Figure 5. Dynamics of users' recruitment in Twitter. The abscissa indicates the time (in days), the ordinate axis – the proportion of the recruited user at a particular moment of time to the total number of users recruited.

Source: González-Bailón et al, 2011.

The authors also considered the way the information was spreading within the social network, and found out that there was no correlation whatsoever between the topology of the network and the location of an actor inside it. It should be noted that this conclusion has been repeatedly posited by a number of scholars, and many times refuted thereafter, so that the importance of the network structure for spreading the information remains debatable.

# 2. METHODOLOGY

# 2.1 Memetics as a main conceptual framework of the study

As it was shown in the previous chapter of this research paper, to study the laws of effective mobilization of people and effective spread of new protests' ideas in modern social movements organized via new digital channels we need to be focused on two basic variables:

- Capacity of the digital social network for mobilizing the new members for social movement and for spreading the new ideas;
- Capacity of the idea to be spread.

The detection of these two variables came from summarizing all the theoretical issues presented in the first chapter.

As we noted earlier in this paper, the social networks of subcultures were the main source for recruiting new activists (Diani, 1990; Klandermans, 1988). Subcultural social networks played a major role in the several recent attempts to combine micro and macro approaches in the studies of social movements (Klandermans & Tarrow, 1988; McAdam, McCarthy & Zald, 1988). It was recognized that the survival of the recently emerged social movement depends on whether this movement is abled to correlate its new schemes with the script of at least one of the previously encountered subcultures. So, to describe the capacity of the digital social network for mobilizing the new members for social movement and for spreading the new ideas we need to detect if the digital social network that participates in the social movement is based on a subculture or a specific cluster of people united by some traits. So, in this case we need to use a Social Network Analysis as a method of detecting and analyzing the clusters of members of the social movement.

Also in the previous chapter we indicated that the modern researchers of social movements are also attracted by the idea of the study of the psychological traits of activists and of the subculture features that allow to them explain the success or the

failure of movement in the mobilizing and constructing the massive support. So, we don't only need to detect some clusters/subcultures organized through a digital channel, but also we should to describe its members and the models of communication among them. In order to form a primary understanding of the Russian protesters' subculture, which is formed during the computer mediated communication, I have used the netnography method (Kozinets, 2010) in order to provide the analytical description of one of the communities, in which there exists an active exchange of information and the discussion of the protest activity. Also the method of content analysis will be applied.

Using these two methods I plan to describe at some level the capacity of the digital social network for mobilizing the new members for social movement and for spreading the new ideas.

Using a cognitive approach and introducing the subculture concept in our framework we defined social movement as a process of functioning of the alternative social theories. Subcultures offer the new schemes of social thinking as an alternative to the old one. The social movements generate subcultures creating situations that require making a choice - especially between different social theories. Those who take the new perspective are forced to reject the old concepts and the associated old norms of thinking and behavior. So, the ideas that are being diffused should to be very "sticky", alluring and attractive to be accepted by the community and to sacrifice the old patterns. So, in this research we can avoid the "message" variable to evaluate the effectiveness of information diffusion in the digital community and to analyze the capacity of the protests' ideas to be spread. We need to have a conceptual framework that will unite all these variables and different methods to perform a harmonious and logical study and to get finally the interesting and consistent conclusions. In this research I will test a memetics theory as the main concept of methodological design and strategy.

#### 2.1.1 Memetics theory

In the past years, significant bodies of work have emerged on the subject that ideas are like living things. The surge in this thinking came after British scientist Richard Dawkins published The Selfish Gene (1976). Dawkins elaborates it as the follows: "... a name for the new replicator, a noun that coveys the idea of a unit of cultural transmission, or a unit of imitation <...> Examples of memes are tunes, ideas, catchphrases, clothes

fashions, ways of making pots or of building arches. Just as genes propagate themselves in the gene pool by leading from body to body via sperm or eggs, so memes propagate themselves in the meme pool by leaping from brain to brain via a process which, in the broad sense, can be called "imitation". If a scientist hears, or reads about, a good idea, he passes it on to his colleagues and students. He mentions it in his articles and his lectures. If the idea catches on, it can be said to propagate itself, spreading from brain to brain" (Dawkins, 2006).

Dawkins' theory was developed in the works of D. Hofstadter, published in 1985 in the book "Metamagic Themas" (an anagram of the words "Mathematical Games"). In this book, Hofstadter associates the term "meme" with the concepts of "theme" and "scheme", and claims that his film memes aroused a great interest among other researchers, and that one of them, E. Lucas, offered to call the science that studies this phenomenon, as "memetics" (Hofstadter, 1996).

The period of mid-1990s - early 2000s has become the peak of the interest of the Western scientific community to the phenomenon of memes. In this period were published the best-known works on various aspects of memetics, like *Virus of the Mind: The New Science of the Meme* by R. Brody (1996), *Thought Contagion: How Belief Spreads Through Society* by A. Lynch (1996), *The Meme Machine* by S. Blackmore (1999).

In the wake of the overall passion for the new science were made numerous attempts to use the memetics approach in the study of various areas of the scientific interest - from mathematical modeling to religion studies. The main attention of researchers has been focused on the problem of determining the meme that has not yet received a clear and widely accepted interpretation. Moreover, even the term "meme" itself does not arrange all the memetics evangelists. At the different stages of the evolution of memetics theory the different options were proposed to replace the "meme" term: "culture-gene" by C. J. Lumsden & E. O. Wilson (1981), "psychogenic" by J. Giovagnoli, "ideavirus" by S. Godin (2001), "mnemon" by D. Campbell, "sema" by B. Hewlett, "mental virus" by R. Brody, "supergene" by K. McKay, "mentema" by M. Stewart - Fox, "mnemonic" by R. Zemon, "social gene" by Karl Swenson, "lingvema" or

"linguistic replicator" by W. Croft (2000), "symbol" by L. White (1940), "mnemotype" by H. Blum (1967), "cultural representation" by R. Boyd & P.J. Richerson (2008) etc.

So, meme has got a widely attention and scholars have their own ideas about this term since its first proposition. Dennett (1991, 1995) takes memes as information undergoing the evolutionary algorithm, whether they are in a brain, in a book or in some other physical objects. Durham (1991) also treats memes as information, regardless of how they are stored.

Apparently, the uncertainty of the research program of memetics has caused the severe criticism of this scientific discipline and the gradual decline of its popularity. The most frequent claim of the memetic approach is a lack of a clear definition of the meme, the excessive universalism and the literal analogy genetics.

Some other arguments of the opponents of this concept are given in the book of T. Tyler *Memetics: Memes and the Science of Cultural Evolution* (Tyler, 2011):

- 1) Unlike genes, memes do not exist in the reality; it is only a scientific abstraction;
  - 2) Memetics is a pseudo-science, stalled in the mid 2000s;
  - 3) Culture can't be clearly divided into separate independent units;
- 4) Memetics ignores the achievements of other sciences (it repeats the theory of evolutionary epistemology of Karl Popper and also some other scientific concepts without actually adding to them nothing new).

Nevertheless the close analogy to the theory of natural selection makes the meme concept so powerful. Natural selection occurs whenever the following conditions exist:

- 1. Variation: a continuing abundance of different elements.
- 2. Heredity or replication: the elements have the capacity of creating copies or replicas of themselves.
- 3. Differential "fitness": the number of copies of an element that are created in a given time varies, depending on the interaction between the features of that element (whatever it is that makes it different from other elements) and features of the environment in which it persists (Dennett, 1995).

This is a general definition that is not confined to biology, and suggests that memes are subject to natural selection: they vary (out to mutations in transmission or mental storage, plus deliberate changes); they replicate (by definition) and have differing fitness. This leads to phenomena of competition, co-evolution, population dynamics and adaptation surprisingly similar to their biological counterparts.

2.1.2 Basic variables of the natural selection of the information unit: meme, host and vector.

In the field of memetics, there are three main variables that are responsible for the further diffusion of the information unit: meme, host and vector.

#### Meme

As in this research the basic goal is to save a cognitive approach in investigation, we will try to define the meme through this point of view. Methodology of memetics still was not correlated with the research methods of modern cognitive linguistics, while its basic concept - the concept - in most interpretations is practically synonymous with the term "meme" (see Table 1). Comparative analysis of these definitions gives a reason to believe that in terms of the cognitive approach meme can be defined as a replicable concept.

Definition of the term "meme"	Definition of the term "concept"	
	Specific cultural gene that belongs to the	
Cultural gene, transmission unit of the	culture genotype;	
cultural heritage, capable for replication;	Operational unit of the memory, of the	
Internal representation of the knowledge;	mental lexicon, of the conceptual	
Complex idea that forms itself as framework and the brain language; this is a		
something specific and memorable;	quantum of knowledge;	
Unit of information contained in the mind	d Significant, consciously perceived, typical	
that being spread through the process of	of fragments of the human experience, stored	
self-replication (Brodie, 1996).	in the human memory and represents a	
	mental education.	

Table 1. The similarity of the terms "meme" and "concept".

Source: Prepared by author.

So, in this research the actual concept of "meme" is considered in line with the theory and practice of organizing the Social Movements through the Internet, using the methodology of cognitive linguistics. The term "meme" is correlated with the constructs of "concept", "frame" and "script".

The question of classification of memes and of description of their structure can also be considered within the framework of cognitive linguistics. Cognitive linguistics permits develop the more ordered typology of mental units. Nowadays in cognitive linguistics the term "concept" is being perceived as an umbrella term that brings together the different types of mental phenomena. The main function of all these types of mental phenomena is to structure the knowledge in the human mind. "Concept" in cognitive science is a basic axiomatic category undefined and intuitive. It's a hyperon of definition, of idea, of scheme, of frame or of script (Talmy, 2000).

Also in relation to memes such terms like "frame" and "script" can be used. These terms were proposed in 1974 by Marvin Minsky, a specialist in the field of artificial intelligence. These terms along with the concept occupy a central place in the conceptual

apparatus of modern cognitive linguistics. Minsky defined "frames" as "data structures that intend to represent the situation. The frames contains cells filled with information units, Minsky define those cells as slots or terminals (Minsky, 1995).

Besides the slots a frame also consists of units that Van Dijk called themes or topics: "The frame consists of vertex (topic), that is its macro-position and of slots or terminals that are being filled with propositions" (Van Dijk, 1983). The slots within one frame are interconnected by certain semantic relationships, wherein a single slot may be a frame itself (that also consist of slots), or can simultaneously be a member of multiple frames.

Cecil H. Brown defines frame like a type and concept – like a genus. He says that the term "concept" can express any unit of knowledge, including unstructured information unit as image, for example. In difference the term "frame" is used only to refer to structured concepts: the actual frames, schemas, scripts, cognitive models. In other words, the frame is always a structured unit of knowledge where we can distinguish the certain components and the relationships between them. It is a cognitive model of transmitting knowledge and opinions about a certain recurring situation (Brown, 1990).

Script according to the theory of Minsky differs from frame because represents not a static but procedural knowledge. For example, restaurant is a frame, but the process of visiting a restaurant is a script. Talking about the topic of my investigation, the social movement or protest is a frame itself, but the process of organizing it through social media is a script. So, in this paper, the terms "frame" and "script" will be understood as a kind of concept.

Thus, memes, if they are considered as replicated concepts, may represent the indivisible quanta of knowledge as well as the structured frames and scripts, including the whole set of mental units.

It is noteworthy that the idea of splittability of meme into separate elements has been raised in the framework of memetics, but did not receive a wide diffusion. In the article published in 1999 in the Journal of Memetics John Langrish says that "Memes are not units; they are patterns consisting of fragments of memory assembled around a label, like Russian dolls" (Langrish, 1999). This quote illustrates how Langrish without using the cognitive terminology nevertheless intuitively chooses to describe memes chooses the

metaphors that are very widespread in the cognitive environment (like railway, Russian dolls etc.). Unfortunately, this original hypothesis was not included in the set of basic provisions of memetics.

#### Host

According to Bjarneskans and Sandberg, a host must be able to have at least the potential capacity to elaborate on the meme and to perform those cognitive tasks connected to the meme - as "understanding" for example. This means that only humans can be the hosts at least until the development of artificial intelligence reaches further. Although animals can perhaps become hosts for some very simple memes, this phenomenon is not our focus and will not be discussed here.

#### Vector

A vector is anything that transports memes between hosts without the ability to reflect on the meme. For instance, a wall, a voice, an email-program or a picture is a vector. Then how about a human? If a person lacks the cognitive capacity or interest to elaborate on a specific meme, he is just a non-reflective carrier of the meme, much the same as a book (Bjarneskans & Sandberg, 2005).

# 2.1.3 Life cycle of memes

Memes have a life cycle similar to parasites. Memes get through different stages when they are selected by a host and spread to others. According to Heylighen (1998), a strong meme passes a life circle consisting of four stages.

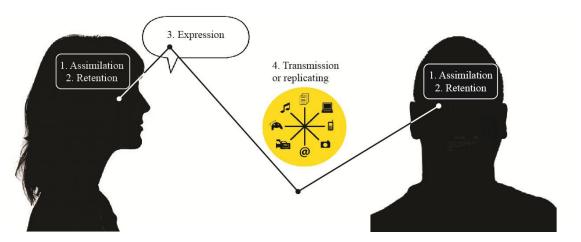


Figure 1. Life cycle of memes visualization. Source: Prepared by author.

- 1. The stage of assimilation comes first. A meme must enter into a host's memory. To be assimilated, the presented meme must be noticed, understood and accepted by the host. In other words, the meme must attract a host's attention and adopted in his or her cognition system. The host will unconsciously refuse those memes that differ from or contrast with existed cultures and accept those memes in accordance with cultures. In that case, assimilation occurs.
- 2. The next stage is retention. A meme must be kept in the host's memory for some time; otherwise it is not a meme. The longer the meme kept in a host's memory, the better. For the longer the meme stays, the more opportunities it will have to spread further by infecting other hosts.
- 3. The third stage is expression. In order to widely spread and infect more people, a meme must urge its host to express or communicate as often as possible.
- 4. The last stage but not least is transmission. To reach other individuals, expressing memes needs vectors, such as books, photographs, man-made articles, CD-ROMs, etc. A meme should encourage its hosts to put as much effort as possible towards publicizing and transmitting it. The process in which a meme is transmitted from one host to another or more potential hosts is also called replicating (Bjarneskans & Sandberg, 2005).

As was noted by Bjarneskans, Bjarne and Sandberg during the different stages of their life circle, memes are subjected to selection criteria (how meme survives).

# 2.1.4 Heylighen's selection criteria

Heylighen (1994) proposed the criteria that determine the overall fitness of a meme, whether it will be maintained in an individual's memory and spread to other individuals, or will be eliminated:

1. Intersubjective criteria refer to selection through the interactions between different subjects. This criteria refers to the group utility is an emergent criterion that is implicit in all four stages of the meme life circle. It suggests that a meme which is useful to the group of all its hosts is more likely to survive because it helps the group itself to survive and grow, and thus to absorb other individuals.

This criteria can be explicated by the conformism feature of the groups. Conformity denoting the reinforcement of a same meme by different hosts belonging to a same group will boost acceptance and retention. Expressivity obviously contributes to the expression stage meaning the ease with which a meme can be expressed in an intersubjective medium. As for publicity criterion, it refers to the effort put by the host(s) into the broad distribution of the message and it maximizes transmission of the meme. It contributes basically to what Dawkins (1976) calls copying-fidelity

2. As Heylighen (1994) proposes, subjective criteria represent selection by the subject who assimilates the meme. Novelty (facilitates assimilation by attracting the subject's attention) and simplicity (requires less effort for the meme to be understood and accepted) are the main criteria in assimilation stage.

In its game-version the meme was modified (or evolved) to meet the needs of a mass audience. It has incorporated other memes of the modern culture: in the game we can meet mutants, zombies and other elements of the modern entertainment horror industry that didn't exist in the first meme version.

- 3. Utility criterion functions mainly at the retention stage, since useful memes have more potential to be effectively used and reinforced.
- 4. Meme-centered criteria focus on the selection at the level of the meme itself. They depend only on the internal structure of the meme. These criteria typically select for "selfish" (Heylighen, 1992) or "parasitic" (Cullen, 1998) memes, whose only goal is to

spread themselves, infecting hosts to the maximum extent without regard for their hosts' well-being. This does not imply that the same meme cannot satisfy both selfish and non-selfish criteria.

Selfish-justification, the degree to which the components of a meme mutually support each other, will facilitate understanding and acceptance. Self-reinforcement, the degree to which a meme stimulates its host to rehearse itself, e.g. by repetition, replication, etc., and strengthens retention. As for intolerance, it refers to the degree to which a meme excludes rival memes from being assimilated or retained, and also helps the meme to retain a stable position in memory (Heylighen, 1995).

# 2.2 Media meme is a unit of the media space

Despite the justified criticism of memetics, it is impossible not to recognize the positive contribution of this science to the development of the theory of mass communication. Under the influence of the memetics paradigm in 1994 an American researcher D. Rushkoff developed the concept of "media virus" that permits correlate the memetics concepts with aspects of mass communication and with issues of social communication science.

If we are to understand the datasphere as an extension of a planetary ecosystem or even just the breeding ground for new ideas in our culture, then we must come to terms with the fact that the media events provoking real social change are more than simple Trojan horses. They are media viruses.

This term is not being used as a metaphor. These media events are not like viruses. They are viruses. Most of us are familiar with biological viruses like the ones that cause the flu. As they are currently understood by the medical community, viruses are unlike bacteria or germs because they are not living things; they are simply protein shells containing genetic material. The attacking virus uses its protective and sticky protein casing to latch onto a healthy cell and then inject its own genetic code, essentially genes, inside, The virus code mixes and competes for control with the cell's own genes, and, if victorious, it permanently alters the way the cell functions and reproduces. A

particularly virulent strain will transform the host cell into a factory that replicates the virus.

Media viruses spread through the datasphere the same way biological ones spread through the body or a community. But instead of traveling along an organic circulatory system, a media virus travels through the networks of the media space. The "protein shell" of media virus might be an event, invention, technology, system of thought, musical riff, visual image, scientific theory, sex scandal, clothing style or even a pop hero – as long s it can catch our attention. Any one of these media virus shells will search out the receptive nooks and crannies in popular culture and stick on anywhere it is notices. Once attached, the virus injects its more hidden agendas into the data stream in the form of ideological code – not genes, but a conceptual equivalent we now call "memes" (Dawkins, 1989). Like real genetic material, these memes infiltrate the way we do business, educate ourselves, and interact with one another – event the way we perceive reality (Rushkoff, 2010).

Classifying the media viruses, D. Rushkoff identifies three main kinds of media viruses:

- 1) Intentionally created viruses, like publicity stunts or activist pranks, that are constructed and launched intentionally, as a way of spreading a product or ideology;
- 2) Co-opted or "bandwagon" viruses that are not necessarily being created and launched intentionally, but which are quickly seized upon and spread by groups who hope to promote their own agendas;
- 3) Self-generated viruses like virtual reality and scientific discoveries that catch up the public attention and interest and spread of their own accord because they hit upon a social weakness or ideological vacuum (Rushkoff, 2010).

The metaphor of infection in Rushkoff's "Media virus!" was probably borrowed from the famous book of Richard Dawkins "The Selfish Gene" where memes are repeatedly compared to viruses and parasites. The Dawkins metaphor was also used in the concepts of "mental virus" of Richard Brodie (1996) and in the concept of "idea virus" of Seth Godin (2001). Another terminological option for meme definition for the communication sphere was proposed in 2008 by Susan Blackmore, the author of the theory of the "third replicator". According to her hypothesis, to replace the "first" and

the "second "evolution replicators, to replace gene and meme, comes the "third" replicator, so-called "teme", or techno meme, or T-meme (technological meme) that contains the information that was stored, copied, modified, and selected through the digital tools (Balckmore, 2009).

But in this research the term "media meme" is more preferable because the options like "media virus", "virus of the mind", "idea virus" etc. nominally do not contain any references to the memetics terminology, make more difficult the disciplinary and methodological identification of the object of a research.

Modern culture and state of modern media environment define the relevancy of usage of memetics cognitive approach for social science researchers. The ideas of linearity, mosaic, randomness, disorder, rizomatization, centerless were proclaimed, depending on the research focus, as basic principles of modern culture (A. Moles, D. Fokkema, J. Baudrillard), or even more - they were considered as modern type of rationality (G. Deleuze, F. Guattari, J.F. Lyotard). These ideas are very popular in social sciences and humanities and are also well reflected in the theory of mass communication.

I'd like to mention here as an example the famous philosophical concept of rhizome of G. Deleuze and F. Guattari. The rhizome is an a-centered network, non hierarchical without a General, without an organizing memory or central autonomy, uniquely defined by a circulation of states, by lines of flight. The rhizome is an arborification of multiplicities. Whereas the root-tree which plots a point and fixes an order, spreading outwards predictably according to a binary logic, the rhizome connects any points to the other in an heterogeneous assemblage of occurrences called bulbs and tubers. In a rhizome, there are only lines of development, which are no pre-determined in casual sense. They merely express the fields of possibilities for becoming to take place. We can summarize the characteristics of the rhizome as based on connections which bring together diverse fragments; hetergenety – multiple connections which are not only massified linkages but also microlinkages which bring together diverse domains, levels, dimensions, functions, effects and aims; multiplicity - which mean a genuine proliferation of processes that are either ones not twos; ruptures, breaks and discontinuities – any one of the rhizome's connections is capable of being severed or disconnected, creating the possibility of the other and different connections; and cartography – not a reproduction or tracing, model-making or paradigm-construction, but map-making or experimentation (Deleuze & Guattari, 1987).

We can see how the ideas of memetics are correlated to this philosophical theory also devoted to describe the culture and the logic of new era. It's also highly correlated with the state of the modern media environment, reflected in its convergence, decentralization, interactivity, information and communication redundancy. It makes it evident that it's needed to consider the new basic structural element of the communication process. Memetics proposes to change the news as a basic structural unit to the more little and mobile unit - media meme. Compared to the news, media meme is more abstract, mobile and playable category: it's easier to remember, faster to be spread, easier to be embedded in a variety of contexts, and it interacts with other memes, forming a semantic network.

# 2.3 Functions of media memes in political communications and methods of using them

We can define three basic functions of memes in the political communications:

1. Positioning of an object – of an idea, organization or person.

I'd like to note here briefly that the concept of brand positioning introduced by Jack Trout and being a crystal marketing strategy, nevertheless corresponds in its main idea to the meme concept. Positioning was defined by its creator as "an organized system for finding a window in the mind. It is based on the concept that communication can only take place at the right time and under the right circumstances" (Ries & Trout, 1986).

Positioning is a media strategy that can be negative or positive. Negative positioning is being used when it comes to discredit a competitor, for example.

Media strategy of positioning of the institute of civil observers in Russia during the elections 2011-2012 can be a good example of the positive strategy. This example seems to be a very good feet for this paper as it's in the line with the main research theme.

Legal observers are individuals, usually representatives of civilian human rights agencies, who attend public demonstrations, protests and other activities where

there is a potential for conflict between the public or activists and the police, security guards or other law enforcement personnel. The purpose of legal observers is to monitor, record and report on any unlawful or improper behavior. Legal or human rights observers act as an independent third party within a conflictual civil protest context, observing police behavior in order to keep police accountable for their actions. Legal observers can write incident reports describing police violence and misbehavior and compile reports after the event. The use of video and still cameras, incident reports and audio recorders is common<sup>1</sup>.

It was a very new phenomenon for the Russian electorate in 2011-2012. In order to combat electoral fraud the broad media campaign was organized to clarify the essence of the work of the civil observer, its functions and one can convert himself in the civil observer. Civil observer positioning was produced through the use of media campaigns, with help of leaders of public opinion and with the spread of information via social media. The image of observer aimed to convince the people that it's the only one true, peaceful, constructive form of struggle against falsification of voting results.

So, Civil Observer and Work of Civil Observer are both media memes that played an important role in the positioning of the idea. Civil observer is a media meme constructed as a frame and Work of Civil Observer is a meme constructed in the script.

Information-rich cognitive structures "Civil Observer" and "Work of Civil Observer" were explicated in the media in a sufficiently expanded and structured way (personal stories, instructions, tips, checklists, video tutorials). So, this new phenomenon for Russian electorate was, firstly, intensively replicated in the media, and secondly, it was correctly positioned in terms of knowledge transmission.

#### 2. Spin doctoring.

Spin doctoring is a method of influencing public opinion by attraction / distraction of public attention, distortion of the meaning of events, changing its scale, putting favorable bias on information presented to the public etc.).

The term 'spin doctor' was born, along with many techniques of PR and the business of political consulting, in the USA. 'Spin doctor' is an amalgam of 'spin' — the interpretation or slant placed on events (which is a sporting metaphor, taken from the spin

<sup>1</sup> http://www.activistrights.org.au/handbook/ch03s02s07.php

put on a baseball by the pitcher, or the spin put on a cue ball in pool), and 'doctor' deriving from the figurative uses of the word to mean 'patch up', 'piece together' and 'falsify' (Esser, Reinemann, & Fan, 2000).

Spin doctors mainly exist because there is no such thing as objective truth. Facts, figures, events and words all have different meanings to different people. So their interpretation is the key issue. The rationale behind spin doctors' activities is the realization that those who can use the media to their advantage can shape reality (Richards, 1998; Sitrick, 1998).

Regarding the case of Russian elections 2011-2012 I'd like to put here an example of media meme that is very popular in Russian under the name of "Fire bell".

In the summer of 2010, just five months before the elections, the blogger top\_lap published in his Live Journal a very emotional post criticizing the state government for inaction, indifference and lack of organization regarding inflammable situation in the village. His statement was motivated by the fact that in a very small village where he is living three lakes - firefighters were drained to expand the territory for construction, the unique fire truck has disappeared, and the fire bell, which had beaten if a fire starts, was replaced with an inoperative telephone. He noted that in old times with fire bell the village was not suffering so much from the fires and wasn't so dependent form the province administration and could manage the fire issues without any administrative help. The message was addressed to prime-minister (at that time) Vladimir Putin.

Prime Minister Vladimir Putin firstly answered to the unofficial request of the representative of the online community. Essentially, Putin commented that he will personally control that all the necessary funds and help will be provided to that village. So, the village received its Fire Bell as a symbol of the case and all needed resources.

Until this case, the Internet was considered a playground of President Dmitry Medvedev. So, experts believe that Putin was trying to be rehabilitated through these methods in the context of fire problems after the unsuccessful trip to Nizhny Novgorod city, where he met the aggressive victims of summer fires and was widely criticized by media after that.

For weeks, this short correspondence has being very actively discussed in the mass media. In fact with Fire Bell case the public attention was diverted from the fire

problems of that summer and the criticism of the authorities was notably reduced. At the cognitive level, this operation is as follows: in the media meme "Fires" was inserted the slot-attraction "Fire Bell" outshines all the rest of the contents of the frame. Attractiveness of this slot can be explained by the funny and well-writing blog post.

#### 3. Consolidation of object supporters.

On the one hand, the effect of consolidation always accompanies the use of any media memes as the general background knowledge of all communicators is a prerequisite for memes' propagation and perception. The very fact of correct decoding of the meaning of a meme is a method of identification of the community members. In addition, I can suppose that the consolidation effect happens due to the polarization of their world model that exists in the mind of supporters. "Black and white" world model is built by using the power of media memes that represent the oldest cognitive categories "Friend or Foe".

A striking example of this technology is active replication of a pair of media memes Bolotnaya and Poklonnaya during the manifestations 2011-2012. Bolotnaya Square sheltered the government opposition during the protest 2011-2012 and became a symbol of struggle against the election fraud. Poklonnaya Gora (which in Russian means "Worshipful Submission Hill" or "Bowing Hill") gathered the opposed to the opposition – the pro-Putin citizens, who came to support his candidacy and policies. So, talking about the protests of that period mass media always use these two names of city insights as opposite terms, in form of opposition to simplify and sharp the complex spectrum of moods of Russian citizens in 2011-2012.

So, in this research a cognitive approach to memes study was used as a main methodological concept of investigation. Some specific techniques were applied:

- Retrospective content analysis of new media space;
- Association experiment, traditionally used in cognitive linguistics.

This research aims to apply the memetics concept to investigate the process of consolidation during the civil protests via new digital media. This process can be analyzed using the indicators of efficiency of meme replication:

- Qualitative techniques (number of mentions of meme in the social media, duration of viral replication in the media, the percentage of respondents who were carriers of the meme);
- Quantitative techniques (the actual changes that have occurred due to meme replication).

In this research project I aim to use the qualitative techniques to analyze the meme replication and efficiency. Quantitative techniques can be used for the boarder investigation. Quantitative techniques require inclusion of the additional methods that makes the research more complex and can be used in the further studies during the PhD program.

#### 3.1 RESEARCH DESIGN

### 3.1 Overview of the methodological techniques of the research

This chapter is devoted to the methodological techniques of the research. To study the laws of effective mobilization of people and effective spread of new protests' ideas in modern social movements organized via new digital channels we need to be focused on two basic variables:

- 1. Capacity of the idea to be spread.
- 2. Capacity of the digital social network for mobilizing the new members for social movement and for spreading the new ideas.

Network analysis is proved to be the most popular technique in studying Internet influence on political processes. This might be related both to a special interest taken in this technique on behalf of the scholars who study Internet, and to the specificity of goals set up for the study. Meanwhile, ethnographic analysis (nethnographic analysis in case of online communities), content analysis, in-depth interviews and all kinds of questionnaires (including online ones) are being actively implemented.

Nevertheless there is a lack of an in-depth content interpretation. It is evident, for instance, that these patterns are not characteristic for any political discussion whatsoever; perhaps a deeper analysis, including content analysis and discourse analysis, would allow to reveal a reason for this phenomenon.

So, in order to form a primary understanding of the Russian protesters' solidarity, which is formed during the computer mediated communication. The first paragraph of this chapter is devoted to the nethnographical analysis of the community of Russian protesters in Facebook in order to provide the analytical description of one of the communities, where an active exchange of information exists. Due to this task also in the second paragraph I'll use the method of content analysis to analyze the topics of discussions in the community. And finally the third paragraph of this chapter is devoted to the social network analysis as a method of detecting and analyzing the

clusters of members of the social movement.

Using these three methods I plan to describe at some level the capacity of the digital social network for mobilizing the new members for social movement and for spreading the new ideas.

#### 3.2 Choosing the object of research

As we have previously explained in the introduction, we have chosen the protests in Russia during the winter of 2012 and spring 2013 as the object of our further research. The fact that there is a lot of protesters mobilized via the Internet can be proven by the research of Levada-center conducted during the action on December 24<sup>th</sup>, 2011. According to it, 56 % of the participants found out about the meeting being organized from the on-line media, while 33% claimed to find it out from other Internet-sources and social networks<sup>2</sup>; for the meeting and the demonstration of the 4<sup>th</sup> of February it was 61% and 34% of the respondents accordingly<sup>3</sup>. The poll of the All-Russian Public Opinion Research Center conducted during the demonstration and the meeting of the 4<sup>th</sup> of February 2012 showed that the participants of the action found out the information about it from the Internet news resources - 70%, social networks – 22% and blogs – 8%<sup>4</sup>.

This data alone is sufficient to prove an evident conclusion that the major function of Internet in the framework of the protest activity is the distribution of the information and the following mobilization.

Virtual communities of the protesters (even more extensive) are found in various social networks. For instance Russian social network "Vkontakte" (vkontakte.ru): "People against the cheats and thieves") obtains more than 16,500 followers as of March 2013). This network features the distribution of the protests' communities according to the topic: for example, "Coordination of protect activities", "Information collector" etc. Microblogging platform Twitter witnessed more than 100,000 twits with #ОккупайАбай ("Occupy Abai")

<sup>&</sup>lt;sup>2</sup> Poll on the Sakharov Avenue on December 24. 26.12.2011 / Website Levada Center <a href="http://www.levada.ru/26-12-2011/opros-na-prospekte-sakharova-24-dekabrya">http://www.levada.ru/26-12-2011/opros-na-prospekte-sakharova-24-dekabrya</a>. Table. 9.

<sup>&</sup>lt;sup>3</sup> Poll at the meeting on February 4 13.02.2012 / / Website Levada Center: http://www.levada.ru/13-02-2012/opros-na-mitinge-4-fevralya. Table. 9.

<sup>&</sup>lt;sup>4</sup> Poll at the meeting on February 4 13.02.2012 // Website WCIOM: http://wciom.ru/index.php?id=268&uid=112492. Table. 2.

hashtag<sup>5</sup>, and this topic was the trendiest one in the Russian segment of Twitter. Many of them referred directly to the encampment life, but the majority expressed their support for the opposition. But this study was performed on a group in social network Facebook. This choice is conditioned by a number of factors.

First, as Reuter & Szakonyi point out, Western social media Facebook and Twitter and Russian ones, Vkontakte and Odnoklassniki, presented crucially different coverage of the protests. The authors state that national social media are actively examined by the authorities and opposition content is being timely removed, whereas on the Western platforms this does not happen. Reuter & Szakonyi notice that Vkontakte community on protests was more than three times smaller than a similar group on Facebook (10,000 vs. 30,000 members, respectively), although the number of registered users from Russia is overwhelmingly larger in Vkontakte than in Facebook. Therefore Facebook analysis is particularly interesting in the context of political unrest in Russia. Therefore our research is limited to Facebook or to Twitter (Reuter & Szakonyi, 2012).

Due to a limited number of previous studies on the topic, I have chosen Facebook. Traditionally, studies center on Twitter as the most transparent online social network that opens complete information on structure of interactions and correspondence. Whereas Facebook gives us an opportunity to analyze not just communications, but also social and demographic characteristics of users. This could help us to shed some light on motivation of the protest movement members.

I'd like to mention here some interesting studies dedicated to the role of Facebook platform in political online activities.

Vesnic-Alujevic performed an online study of a group dedicated to European politics on Facebook platform. The study revealed that political information is most actively retrieved from the social networks by people aged 26 - 35 years old, graduates, with everyday Internet access. According to Vesnic-Alujevic, they represent the target group that politicians should address when developing their operation strategies for the social media. The study also revealed a positive correlation between online and offline

<sup>&</sup>lt;sup>5</sup> "Occupy Abai" action was held by Russian non-systemic opposition in the period of May 8 - 16, 2012: it actually started immediately after President Vladimir Putin was inaugurated. The action was so named for the monument to the Kazakh poet Abai Kunanbayev, in Chistye prudy part of Moscow, next to which the protesters set their encampment. The very word #Occupy was borrowed from the US movement "Occupy Wall Street" that declared fighting unemployment and unjust policy of the current financial institutions as their objectives.

political activity. That is, a user who was actively posting news and commenting materials on political subjects via his page in the online social network was accordingly more active in political life (Vesnic-Alujevic, 2012).

Practices of Facebook use were also studied in the framework of the US elections. In their paper "Social networks in political campaigns: Facebook and the congressional elections of 2006 and 2008", Williams et al. analyzed the way Facebook practices used by politicians changed between 2006 and 2008, and the way social networks activity of a candidate influences his utmost success (Williams & Girish, 2013).

It was established that in 2006, only 16% of politicians had active accounts in social networks, while by 2008 the majority of the Democrats and of the Republicans were somehow present in Facebook. Representatives of the Democratic Party turned out to be the most involved in this channel of communication. This might be conditioned both by a crucially different approach to leading an electoral campaign, and by certain specificity of voters on each side. The Democrats are traditionally supported by the young folks prone to use Facebook and in search of an interactive dialogue. The authors emphasize that a politician being active in social media seems more accessible to his voters, which contributes to his positive image. At the same time, the Republicans are mostly supported by elder generation used to other channels of communication and, most importantly, to another type of interaction.

Summing up, the studies by Vesnic-Alujevic and Williams et al. prove that young people (under 35 years old) get information on politics in general and on political campaigns, in particular, through the social media (Facebook). They do not only consume the content passively, but are also ready to communicate on equal grounds with politicians and compatriots, whereas, as Vesnic-Alujevic showed, this interaction should not always remain exclusively in the virtual world. Very often the young people are also ready to perform actively in the real world.

Scholars dealing with political processes in Internet have recently focused their attention on a social network Twitter. This platform appeared in 2006, and by 2009 it has become the fastest growing website in the whole world. In contrast to such networks as Facebook, VKontakte, MySpace, LinkedIn and others, Twitter does not require your biographical data, you can create an account under any fictitious name you fancy.

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Nevertheless, many people - and rather famous individuals as well - indicate their real names. In contrast to other social networks, Twitter looks rather minimalistic: a user page represents a feed of messages in reverse chronological order. It is explained through the very idea of a microblog: being related through a mobile phone to numerous people at the same time. That's also the reason why the maximum length of a Twitter message is of 140 characters.

The study by Kavanaugh et al also conclude that Twitter was critically important and allowed the protesters to get organized and take to the streets in Iran (2009), Tunisia (2010) and Egypt (2011). The authors stress the possibility of using Twitter via mobile devices, therefore the participants can change their strategy and tactics at any time. Meanwhile, practices of use for this social network are not always aimed at social interaction. Content analysis of twits posted during the Tunisian manifestations revealed that almost two thirds were quotations - retwits – that is, the protesters used the service to distribute information rather than to interact and to discuss what comes next in their action. Besides, twits posted by the protesters were widely replicated in mass media abroad (Kavanaugh et al, 2011).

Of course the studies where Twitter is involved are to certain extent representative for EU countries and for Northern America countries. Its people extensively use Twitter for communication. As for Russia, studying this microblogging platform provides not those valid findings, which is, for instance, demonstrated by the study of Kelly et al on the structure of Russian Twitter: it suggests that a substantial part of this network is represented by advertisements and instrumental discussions (Kelly et al, 2012).

So, because of the factors presented above, this study was performed on a group in social network Facebook. As an object of research I have picked a Facebook community "We've been in Bolotnaya square and we'll come again" (as a most "compact", having the established borders), which may be called a sort of information center for the Facebook users (this community is mostly oriented at the discussion of Moscow protest actions). This community has 27 237 followers as of March 2013<sup>7</sup>.

Let's review the content aspect of the process based on the example of the chosen

<sup>&</sup>lt;sup>6</sup> http://www.facebook.com/moscow.comes.back.

<sup>&</sup>lt;sup>7</sup> According to the statistics of the page, the average age of readers is ranging from 25 to 34 years; main city of residence of participants - Moscow. Source: http://www.facebook.com/moscow.comes.back / likes.

community.

# 3.3 Studying hosts: nethnographical research of the community members in the concept of solidarity

The Facebook group "We've been in Bolotnaya square and we'll come again" in its form and technically speaking is more of a blog, meaning a space where the notes and the commentaries on them are published. This blog is filled with the information by both group of moderators at the main page of the community, as well as by its readers in the part called "Recent posts from the others". The constant activity, the continuing appearance of new posts in this part (for instance, in strictly one day, January, 31st, 136 posts were published; on February, 29th – about 90 posts, on March, 31st – about 30 posts)<sup>8</sup> indicates the wish to share the information with the others which is also an indicator of the transition from the individual virtual protest strategy to the joint activities.

The content of the main page based on the posts "from the others" was stopped in order to fight the provocative acts. One might assume that the most visited and the most read page is still the main page, so the role of the moderators and the information filters they have created is a major communication component of the community.

A characteristic feature of the participation in the community is a high rate of users who may be called "observers" (meaning, the readers, who does not leave commentaries or make posts, etc.). Thus the analytic description is mostly based only on the "actively" voiced positions.

Unfortunately, it is impossible to find the author of each post or comment without the usage of special software, so the foregoing conclusions are limited to a supposition (at least, in the framework of the present research). However, the ratio of an average number of comments to a post (Dec -41; Jan -24; Feb -34; Mar -38; Apr -28; n = 150 posts) and the total number of followers (27 237 users) is still incomparable.

<sup>&</sup>lt;sup>8</sup> To completely and accurately trace the activity in this section, we need to use special software. For technical reasons, in the case of the wall features of the Facebook) it's often very difficult accurately calculate and collect such parameters as the numerical ratios of posts and comments, and other units.

It is also important to mention a big role played in the life of the community and the virtual activity by the "silent", passive forms of participation, like polls, likes and the distribution of information (reposts). For instance, for about 200 comments to a post there might be up to 1000 approvals.

The information published in the community forms some certain structure of the life of the community and becomes the stimulus for further communication. It is possible to provide a crude classification of this information, in order to understand what the basis of communication between the members. In continuing the community content types will be listed.

#### 1. General information about the social movement.

The main aim of the community existence is informing about the meetings, demonstrations and other protest actions. While in the first month of the community existence this informative action was closer to an announcement coming from the organizers, in the later months the main page started publishing mobilization texts from other users (considered by the organizers to be the best): "Please, write why it is necessary to go to (event, day)", "Please, tell your friends about the event", "Give as many likes as possible". Thus, the posts serve to distribute the information about the event being prepared in a free form, while using the social network resource: the invitation comes not from a third party, but from an acquaintance, which, in turn, plays for the mobilization. For the author of the message, its posting on the main page of the blog is a symbolic form of social recognition, an expression of respect from the organizers and the members of the community. Finally, such form of mobilization highlights some symbolic equality of the protesters, due to the "grassroots" initiatives.

#### 2. Information about protesters' actions lawfuly approved.

The news about the approval also belongs to the mobilizing posts, as according to the comments to the posts, the people tend to come (and announce their participation) only to the approved events, thus reducing the risks. The actions, which fall out of the lawful category, are perceived critically (or the intention to come to these actions is kept silent intentionally). For the most part, during the analyzed period the calls for actions which crossed the borders of the peaceful category, as viewed by the members of the community, were disapproved in the comments: thus for quite a long period the low

level of radical actions (but not the claims) was maintained. It is interesting that the word "revolution" was quite rarely mentioned; the community almost never compared the protest movement with the revolutionary actions in Russian of 1905 and 1917, while historically a user with radical views mostly constructs his identity in connection with the events of the beginning of 1990-s in Russia.

3. Calls to the collection of money for various social purposes.

As an information space, the community is used not only to provide for the participation in the protest action, but also as a channel for the other kind of mobilization, for instance, the collection of money for various purposes: the organization and holding the meeting, helping the apprehended etc. Other posts on the organization of an action cover the recommendations to the protesters, including the lawyer advice ("what you should do, if apprehended").

4. Links to the news resources, mass media publications and blog posts – constructing a "trust" framework.

A certain information "trust" framework is formed in the community by means of publishing the links to the news resources, mass media publications and blog posts. One may compile a list of the "friendly" media, with the most frequent links posted: "Ridus" (news internet resource), "Dozhd" TV channel, radio "Ekho Moskvy", "Grany" (Internet news resource), etc. As a rule, if the majority agrees with the content of the link published, a discussion is rare to emerge; the link is just distributed by means of virtual approval or is re-posted.

The posts also quote the links to the resources that represent the information channels of the existing government (or just acknowledged to be so, because the position expressed in them is different from the one of a protester). In this case the commentaries may feature a discussion addressed either to the authors of the source material or to the government directly. The news videos by the central TV channels, showing the protest movement from the negative angle, and often based on the framed-up facts, put-ups and set-ups provoke at least indignation and, at most, become the reason for separate action aimed at the protection of the image of the movement.

5. Results of sociological polls.

The publication of the sociological polls may also be classified separately,

especially the electronic rankings. The "official" results, which show too high support rate for the governmental candidate for presidency, are not trusted by the community.

The organizations and companies holding the polls are called "bribed", "progovernmental", etc. However, the comments quote the direct quotes about the people voting for "Father Tsar", as they do not know anything different, which is a sort of justification for the results of the polls. A so-called "folk sociology" is becoming very popular: the polls held "on one's own accord" (at the meetings or in the internet communities) without the strict obedience to the procedure, but often covering a large number of respondents. Oftentimes the trustworthy sources of information about the studies of the public opinion are considered to be the results of the Internet-polls in the social networks or at the news-portals sites.

#### 6. Gossip

One of the types of information published in the community is gossip. Some of this gossip posts start from the introductory formula "One acquaintance of mine told". Many such posts appeared in January, 2012, and they are connected with the mobilization for the participation in the pro-governmental meetings. This is how the stories about the forcible mobilization mechanisms at the state enterprises appear ("You will go to the pro-gouverment meeting at Poklonnaya Gora or you will get fired"), along with the stories of more moderate methods ("they hinted that it's better to go").

Other gossip posts describe indefinite threats and plots: "May be, the things they (the representatives of the government – Athor's note) do and shape is just according to a script?" (January, 9th, 2012). Before the elections of the 4th of March, 2012, there were publications of the images of the information letters from the universities, in which the employees are strongly urged to get registered after "the elections of the President of the Russian Federation V.V. Putin" (February, 29th, 2012). There has been a story about "the hospitals refusing to provide care if the people do not take absentee ballots" (February, 29th, 2012), "the people state that when they took the absentee ballots they were forbidden to put their signatures in the register with THEIR own pens!!!" (February, 29th, 2012). Sometimes before the actions there appears the information about the possible provocative acts: "During the days of Putin inauguration the subway might not function due to a false emergency, fumigation, etc., so that the

people were not able to get to the place of the meeting" (March, 26th, 2012). One more topic for gossip is constituted by various repressive measures (sacking, expulsion from the university, etc.) for the participants of the online-mobilizations (the distribution of the information from the "oppositional" blogs, commenting political topics, etc.) It is worth mentioning, that the community doesn't really fall under the influence of these types of gossips; only the checked, true information is valued. Any gossip going over the border of reasonable anxiety or having no grounds are usually ignored.

#### 7. Visual materials.

A major part of the community posts is constituted by the visual materials: photographs, images, videos, etc. Of course the photos, connected with the topic of the community are the most widespread: photo materials from the actions held, including those published in the real-time mode. The role of the photographs is to prove the authenticity of the testimonials, create a possibility to see the protests with your own eyes. The photographs also allow highlighting the mass character of the protests. For instance, in the header of the community main page the photos from the meeting taken from a high spot are used. The selection procedure for the photographs for publication is also interesting: it is evident that this choice forms the image of the protest movement as a union of "respected, intelligent and agreeable" people. Sometimes the photos are published with a commentary about the participants of the protests: "nice people", "beautiful faces" and other positive evaluations. While the photographs from the pro-governmental events, as well as the images of policemen, SWAT staff, etc. are evaluated in the opposite way.

The other type of photos is constituted by the images bearing a certain symbolic sense (for instance the monuments with white ribbons, huge police crowds against the every-day life of the city, etc.). The authors of such photographs provide no commentaries about their sense thus leaving certain freedom for interpretation.

At a certain stage of the movement development the "playful", non-political form of the protests start prevailing. The performance character of the protests actions is largely reflected in the provided photo materials. There were multiple mentionings that the creativity and independence, for instance, in the creation of banners is the peculiarity of the protest movement "Za chestnye vibory" ("For fair elections"), while

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according to multiple reports the banners for the pro-governmental meetings were printed in the publishing houses and later destroyed due to their uselessness. The banners from the meetings "Za chestnye vybory" ("For fair elections") are stored by their participants and then used again at the following events.

Other popular images for the published photos are the apprehension of the protesters, the actions of SWATs, the activities of the pro-Kremlin youth movements, famous politicians and officials. During the corresponding period (before the presidential elections) dwell in the topic of elections and falsifications, the humorous images, connected with the central TV channels, etc. were published. After the "Pussy Riot" scandal the images started reflecting the negative attitude to the Orthodox Church servitors. Thus, the circle of the problems somehow connected with the community, is visualized and presented in a concise, bright and understandable for internet-community form. The category of the visually reflected, visible becomes more and more meaningful in the virtual environment during the distribution and consuming of information. For instance, at the first stages of forming the protest movement in the Internet the major "proof" of falsification during the elections was the photo reports from the voting stations.

#### 8. Humorous materials.

A peculiarity of the self-presentation of the protest movement over the Internet is the publications by its participants of a large number of humorous materials with political topics. They are, in particular, the demotivators (the images in a black frame and a meaningful comment to the image, one of the wide-spread forms of virtual folklore) and photocollages. The emotional spectrum of such images is quite wide: from jokes made up in a visual form to sad irony and a philosophical understanding of the political events. Another popular genre is a political cartoon. A huge part of the images published in the community throughout the analyzed period is dedicated to Vladimir Putin and the critical evaluation of his political activity, Sometimes Putin is depicted not only as a Politian but also as a symbol of excessive authoritativeness, not-

<sup>&</sup>lt;sup>9</sup> Pussy Riot is a Russian feminist punk rock protest group founded in August 2011. They stage unauthorized provocative guerilla performances in unsusal public locations, which are edited into music videos and posted on the Internet. After the performance staged in Moscow's Cathedral of Christ the Savior 3 members of the group were arrested and charged with hooliganism. The trial and sentence attracted considerable criticism, particularly in the West.

so-wise government, a general image of the antagonist of the protests movement. These objects may be compared with the plots of the leaflets of the beginning of the  $20^{th}$  century, where the image of the tzar Nicolas II got monstrous, demonic features and symbolized the whole monarchy.

It is worth mentioning that irony is also characteristic of many text messages (for instance the call to throw potatoes at the agent provocateurs during the meeting of February, 4<sup>th</sup>), the humorous folklore is published and distributed in the community, which also facilitates the support of solidarity. In general, just like in the cases with the visual objects, this folklore is dedicated to the government of the country and the presidential elections of the 4<sup>th</sup> of March 2012. For instance, "Gentlemen, you don't know what to give your women as a present for the 8<sup>th</sup> of March? Give them a new president" (February, 11<sup>th</sup>, 2012). The joke about the falsification during the elections which is evident is also an example:

After the presidential elections Churov<sup>10</sup> comes to Putin:

"Vladimir Vladimirovich, I have two bits of news for you: a good one and a bad one. Which one should I start with?"

"Go with a good one, of course!"

"You are the new president of the Russian Federation!"

"And which one is the bad one?"

"No one voted for you" (April 28<sup>th</sup>, 2012)

There is also a joke, describing the stand of a protester:

A guy and a girl:

"I want to hear the three most important words..."

"Russia without Putin!" (April 28<sup>th</sup>, 2012).

As for the self-irony of the community, it is often manifested in the comical phrases about the "American influence", "bloody money of the State Department", "orange menace", etc. Thus, the community ridicules the position of the antagonists, who state that the protest movement is financed by the West and support various conspiracy theories.

<sup>&</sup>lt;sup>10</sup> Churov, Vladimir is a Russian official and politician. Since March 26, 2007, he has been a member and the Chairman of the Central Election Commission of Russia, the superior power body responsible for conductiong federal elections and overseeing local elections in the Russian Federation.

#### 9. Friends and foes

During the period before the presidential elections of March, 4<sup>th</sup>, 2012, the coverage of the pro-governmental structures' activity on the organization of actions supporting the candidate for presidency proposed by the government has become particularly important. In their comments the members of the community discuss the mechanisms of the "antagonists" mobilizations. Multiple messages about the facts that the presence of people at the pro-Putting meetings is secured by the governmental bodies, where the employees are continuously offered to come to are posted.

The other motive to take part in so-called "putings", according to the members of the community, is a small payment. The users post the pictures of the buses, in which the participants of the meetings for Putin are brought to the site, the photos of the banners (with the indication that they are published in a publishing house, meant especially for the action). The offers to come to the meetings to change the mind of the people, shout the slogans against Putin, witness the "dishonest" mobilizations, etc. are voiced. However, such initiatives are not widely supported. It is worth mentioning that the discussion of the antagonists of the movement is very important to establish the border of the community, to choose "friends" and "foes", to understand the image of self "against" the others. Thus, the "honest" oppositions are set against the "dishonest", a voluntary "volunteering" participation in the movement is set against the "bought", "paid". A participant of an "opposing" meeting is depicted as a non-foresighted person or a dependent person, who was "ordered" by an employer to fulfill certain actions. In these cases the advice for those "forced" to go to the meetings on how not to do that is published.

The ideological "struggle" also unfolds directly in the virtual space. The community is "protecting" its borders from the external interferences: the "conquerors", "foes" are considered to be those "paid" for the comments, campaigning for Putings, posting provocative messages in the communications and spamming attacks (filling the community with meaningless messages). The members of the community either use the technical means to delete the "unwanted" guests of the community or ask the moderators to delete them or just mention that there is a "troll" (agent provocateur) in the comments. Apart from that, in the comments there are regular calls "not to fall for" the quarrels, not

to spend time on communication with the provocateurs, because it "distracts", "disunites" and creates a certain risk of "splitting of the protest movement. The community is quite quick in reacting to spamming attacks (the multiple publication of one and the same message aimed at breaking the communication and "spamming" the community), by analyzing the source of spamming. The conversations between the authors of spam messages and the members of the community are quite rare. If this unilateral communication takes place, the members of the community give the provocateur an emotional notification that they are "in the wrong place", accusing them in excessive subservience to the government.

#### 10. Claims.

The mechanism of the protesters' claims formation by means of collective decisions is very interesting.

At the same time there are claims of various degree of radicalism expressed: resignation of the president, mayor, re-elections of the Duma, the direct elections of the governor, mayor etc.

All of the claims may be divided into two categories (based on the community itself) – the internal and external.

The external claims are aimed at the collective actions, which presuppose political changes. For instance, in the middle of March, 2012, as the followers' opinions about the possible crisis of the protest movement started appearing in the comments, the organizers initiated first the discussions and then, based on the results, a voting on the further activity profiles was held. For instance on March, 15<sup>th</sup>, 2012, there were 258 propositions expressed, among which one might figure out a major group of moderate opinions: the struggle against censorship in the Mass media, holding referendums, spreading the information about the "correct" political position among the public, the creation of own information space, the creation of a new party, oppositional primaries, the support of civil initiative, local self-organization, monitoring the elections, etc.

The internal claims (offers) are the "self-description" of the community. This part, in a certain sense, satisfies the community's demand for the establishment of its own goals, position and leader (leaders). In the poll of March 19th, 2012 (11,368 participants) more than a thousand people voted for "conducting the informational work with the

citizens", "creating own information portal", meaning the actions, which, on the one hand solve the problem of widening the borders of the new solidarity, but on the other hand do not require constant expenditure to be performed. The third most popular option was "conducting super-meeting on the day of inauguration".

#### 11. Polls.

Generally speaking the culture of making decisions, the public opinion surveys in the form of Internet polls are widely used in the described community. In particular, at various stages of the protest movement development these polls allowed finding the information about the average number of people attending this or that event (Internet users) or checking the level of radicalism: for instance, finding out whether people are going to go to the unapproved meeting, will they stay in the square after the end of the meeting, etc. The polls were also used to compile the "people's" list of those who the participants would like to see making the addresses at the meeting. Thanks to the technical peculiarities this form secured quite a huge poll base (up to 11,000 respondents) as well as left the possibility to add their own options (so-called open questions). However, there existed a risk of cheating and boosting the number of votes. However, the polls play an important role in forming the solidarity and mobilizing people: first of all, the answer, leading by a vast majority facilitates the mobilization (and here the forenamed social network factor when the results of the voting are automatically demonstrated to all of the readers is meaningful); secondly, this serves to establish the community framework, the image of the collective action, the political position shared by the majority and, finally, the basis for solidity: "We have a common understanding of the situation, that is why we are together." However, the users posting in the "Posts of the others" acknowledge that the importance of the votes is constantly decreasing and that the results of such polls are not taken into consideration by the organizers of the event who "do whatever they want".

# 3.4 Studying memes: Content analysis of the community conversations through the concept of meme and Heylighen's selection criteria

In this research I'll be using the fundamentally different approach to define the meme and to present the meme structure. For example, in the study of mechanisms of self-organizing networks of Russian users in Twitter the term "meme" was used as an auxiliary category. Data collection began with the identification of popular "memes" - either by keyword and by the hashtag in Twitter. This concept, which is close to the concept of thematic dominant, is fully consistent with the cognitive definition of "meme" proposed in this study. Accordingly, the typical structure of media meme can be represented as a concept (frame, script), consisting of topic and slots.

In the Figure 19 this model is demonstrated with the example of media memes Митинги (from Russian – "Protests") and Навальный (Navalny) 11 that were very relevant to the Russian media space for the period of 2011-2012.

Topic	Митинги (Protests)	Навальный (Navalny)
Slots	Болотная (Bolotnaya Square)	Блогер (blogger)
	Сахарова (Saharova Avenue)	Адвокат (lawyer)
	Поклонная (Poklonnaya mountain)	Коррупция (corruption)
	Чистые пруды (Chistue ponds)	РосПил (RosPil) <sup>12</sup>

<sup>&</sup>lt;sup>11</sup> Alexei Navalny is a Russian lawyer, political and financial activist, and politician. Since 2009, he has gained prominence in Russia, and in the Russian and international media, as a critic of corruptionand of Russian President Vladimir Putin. He has organized large-scale demonstrations promoting democracy and attacking political corruption, Putin, and Putin's political allies; and has run for political office on the same platform. In 2012, The Wall Street Journal described him as "the man Vladimir Putin fears most. Navalny was jailed for five years, for embezzlement from a timber firm, but one day after was freed from jail pending an appeal.

<sup>&</sup>lt;sup>12</sup> RosPil is a non-profit social project dedicated to combating the abuse in public procurement. Organized in December 2010 by Alexei Navalny. Funded by donations.

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белая лента (white ribbon)	Транснефть (Transneft) <sup>13</sup>
честные выборы (fair elections)	русский Ассанж (Russian Assaunge)
Провокаторы (provocateurs)	Xомячки Навального (humsters of Navalny) <sup>14</sup>
Омон (riot police)	Протест (protest)
Автозак (paddy)	Митинги (meetings)
Революция (revolution)	да или нет (yes or no)
креативный класс (creative class)	Госдеп (GosDep) <sup>15</sup>
Протест (protest)	Apect (arrest)
146%	Обыск (rummage)
Нарушения (violations)	

Figure 19. Typical structure of media meme with examples of frames Митинги and Навальный <sup>16</sup>. Source: Prepared by author.

As is shown in the table, the frame "Protests" is made of the topic with the same name and of a set of slots. Some of the elements that fill this media meme are capable for the further articulation. For example, the slot "provocateurs" that composes the frame

<sup>&</sup>lt;sup>13</sup> Oil Transporting Joint Stock Company Transneft is a Russian state-controlled the world's largest pipeline company carrying out oil and petroleum product transportation in Russia and abroad.

<sup>&</sup>lt;sup>14</sup> Hamsters of Navalny is a common expression for the pro-government Internet users in Russia to describe the Internet users who unconditionally support Navalny and adequately respond to any criticism of their idol. Noramlly the noun "hamsters" also is being used to describe the gullible and easily manipulated part of the Russian population that don't filter the information on the Internet.

<sup>&</sup>lt;sup>15</sup> United States Department of State is an organization that performs the functions of Ministry of Foreign Affairs in U.S. Used in Rissia as a common noun in the speech personification of evil - of U.S. foreign policy.

policy.  $^{16}$  In the table is presented only the partial content of media memes "Митинги" and "Навальный" just to make an example of methodological approach.

"Protests" can also be interpreted as a frame that contains the knowledge about how provocateurs can look like during the manifestations, for whom they work for, what kind of behavior we can expect from them and how to react to them. The slots can be grouped to structure the frame content.

In addition, we can see that in the frame "Protests" we can highlight a number of scripts that describe the relevant behavioral model (where to find an information about the meeting, how to dress up, what to bring, how to behave, what to do in case of an arrest). Also it is important to note that the frame "Protests" includes some slots that can function as independent media memes (white ribbon, creative class, etc.).

The image of the media person communicated through social media also can be interpreted as a concept or frame and fits the cognitive approach to the media meme definition, as we can see with an example of "Navalny" meme in the Table. For instance, quotes and proverbs, images and videos can not be interpreted as frames. By themselves, these objects can not be the concepts – they represent only the reflections in the human cognitive system about some situations or phenomena to which they refer (case of quotes) or what they show (case of images or videos).

Regarding the images and videos - being, in fact, the separate coherent texts, they express the sense uneconomically that reduces their mobility and valence, and in the end reduces their life in media space. Wording is capable to trigger the same frame but normally it's expressed more efficiently.

Thus, the wording clichés as well as visual and audio-visual objects, without being concepts, obtain only one of the two basic properties of memes - replicability. Probably, this feature, being the most notable during the superficial analysis of such phenomena as the meme, misleads the researchers that try to apply memetics approach to their studies. The spread of a particular phrase, picture or video is much easier to capturing and tracking compared to the capturing and tracking of the b unobvious cognitive operations.

# 3.5 Studying vector – social network analysis of community members.

#### 3.5.1 Network analysis as a technique for political processes research.

In this paragraph I dwell upon social networks analysis in studying the way Internet impacts political processes. In this case, there is a number of directions the study might take. One should single out such directions as computer mathematical, physic-mathematical and socio-mathematical ones. Network techniques are often accompanied by content analysis that adds up considerably to the content component of the study; that was presented in the previous paragraphs.

The Berkman Center at Harvard University issued a series of publications on structural properties of Russian (Etling et al, 2010) and Iranian blogosphere (Kelly, Faris & Palfrey, 2009), as well as of Russian Twitter (Kelly et al, 2012). Special encoding enabled mappings of the respective social networks, nodes thereof being blogs (or Twitter accounts) granted with the respective attributes. The attributes were assigned manually by the experts on the basis of content analysis. Thus, blogs were singled out related to the following "areas": "social discourse" area (social discourse referring to international sources, social discourse referring to Russian media, nationalists, business, social and environmental activism, democratic opposition), "cultural areas" (cinema, female content, Russian literature, etc.), "local area" (Russia, Ukraine, Belorussia), "instrumental area" (search optimization, spam etc.). Relations were then established on the basis of the links posted in blogs. That is, an edge between two nodes of a graph was established if one author referred to another one. Thus, a map of Russian blogosphere was generated (Figure 2).

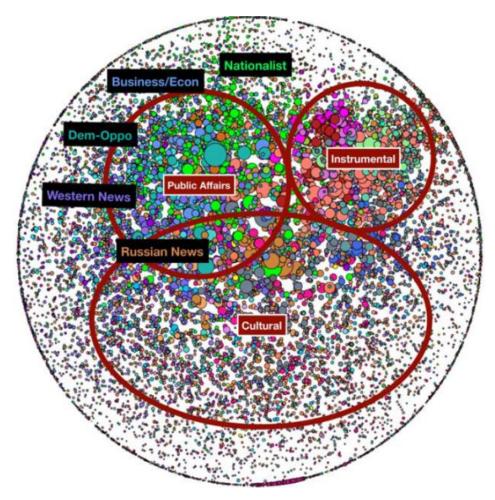


Figure 2. Map of Russian blogosphere. Source: Etling et al, 2010.

As Figure 2 suggests, the blogosphere has clusters, albeit poorly delineated ones.

One of the most famous works making use of social network analysis in studying political blogosphere was that of Adamic & Glance, "The political blogosphere and the 2004 US election: divided they blog" (Adamic & Glance, 2004). The study revealed data on 1500 blogs (more or less evenly distributed between liberal blogs and conservative blogs) and cross-links between them. The authors found that although the Conservatives had less posts that the Liberals, the Conservatives were 40% more active in referring to each other via cross links (Figure 3).

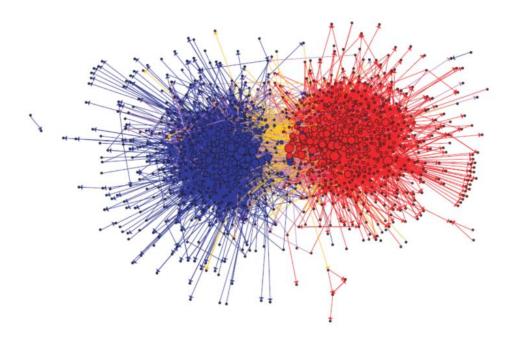


Figure 3. Map of american blogosphere. Democrat's 'blogs are marked with blue color, Republicans' blogs – with red color. Yellow edges represent the cross-references between blogs. Source: Adamic & Glance, 2005.

The Liberals were also proved to be more active in referring to most prominent and popular blogs, while the Conservatives do not seem so concerned with the blogger's popularity. On content level, it might be interpreted in the following way: higher coherence of the conservative bloggers' community implies more pronounced solidarity within the specific virtual group. Yet another detail seemed emblematic: mutual references between the Liberals and the Conservatives were extremely rare.

Such clusterization does not result from any random process whatsoever, but it turns out to be implicitly present in on-line discussions for many years. It might be confirmed by a later study on the structure of political discussions between the Republicans (yet a separate structure of extremely conservative Republicans was set apart, the so-called Tea Party movement) and the Democrats in Twitter on the eve of 2010 elections (Livne et al, 2011). Again, as in the study of US blogosphere in 2004, Twitter discussions revealed two clearly defined clusters, the Republicans and the Democrats. At the same time, Tea Party was integrated in the republican cluster. The authors have additionally labored the point of whether there is a connection between the

structural location of an actor in the social network and his success in the elections. It was noted that wining the election race was highly more probable for the politicians who hold central positions within the social network than for those who linger on the periphery.

Comparing the findings obtained by Berkman Center and by Adamic allows to conclude that Russian and American structures of blogosphere and Twitter are substantially different. In general, such studies allow understand the structure of the landscape of blogging. At the same time, longitudinal sections are also very interesting, as they highlight the evolution of discussions in blogs and the external factors influence on the structure of such a social network.

Although the studies are mostly focused on social networks and blogs, there are quite a few interesting papers on online forums. As such, González-Bailón et al (2010) studied the network structure of meaningful interactions between users of Sladshot forum. It turned out that the "widest" (with the highest number of participants) and the "deepest" (with the highest number of interactions) discussions arise around political issues. These conclusions were drawn from the interactions network analysis (Figure 4).

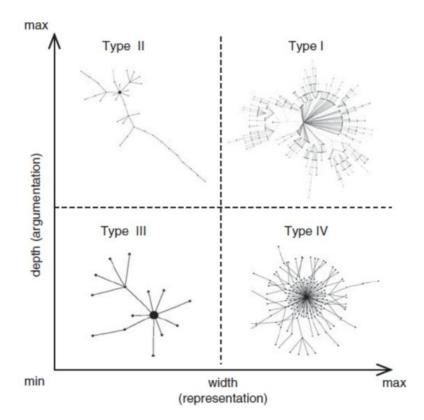


Figure 4. Types of discussions, depending on the "width" (number of participants) and "depth" (interactions). Source: Etling et al, 2010.

The nodes represent the users, whereas the edges mean communication between the forum users. One can easily see that Type IV (political discussions) involves much more users than the other Types.

It should be emphasized that in this respect political discussions resembled scientific ones: they have a vast number of active participants. In general, this study demonstrated what network analysis is capable of in studying the structure of communicative interactions.

#### 3.5.2 Social network studies on the Russian social movement 2011-2012.

Russian protest movement that arose after 2011 parliamentary elections and interactions of its participants in online social networks are extensively studied by Russian scholars. For example, Suvorov analyzed protest groups in the social network VKontakte and summarized data on social and demographic characteristics of those who took part in anti-government manifestations. He found out that 80% of protesters are males aged between 17 and 29 years old. It is noteworthy that in general male / female ratio in this social network is rather equal. Moscow was indicated as current city for 77% of opposition groups' members, whereas Saint Petersburg was mentioned only by 3%. Around 13% said they graduated from Moscow State University MGU, a bit more than 4%, from Higher School of Economics NIU VSHE, approximately 2% stated Moscow State Technical University MGTU, Russian State University for Humanities RGGU, Moscow Aviation Institute MAI each, etc. Around 37% of protest groups' members are married, others are single or in a relationship (Suvorov, n.d.).

Apart from social and demographic data, other profile features were analyzed, notably, political and religious views. It turned out that the majority (more than 30%) position themselves as having liberal views, around 15% stick to moderate views or are indifferent, 13% support monarchy, 9% consider themselves socialists. Protest groups' members tend to be Orthodox Christians (19%) or atheists (6%).

The author also calculated structural indices of the network. It turned out that the graph diameter was approximately 5.5, that is, people present in these groups are not

really familiar with each other. The authors point out that the group has no structure nor hierarchy, which suggests certain individualism of its members. And as these members lack more or less stable social connections within the group, the probability of organizing themselves without internet is rather low. In general, in his publication Suvorov highlights social and demographic data of the protest groups' members in social networks, but the issue of meaningful interaction within these groups and, most importantly, of the ways online interaction influences the reality, is yet to be considered.

There is also a highly interesting paper by Green (2013) studying the social structure of Twitter in the times of protest. Green distinguished three segments of the network: opposition, neutral and pro-government one (Figure 6).

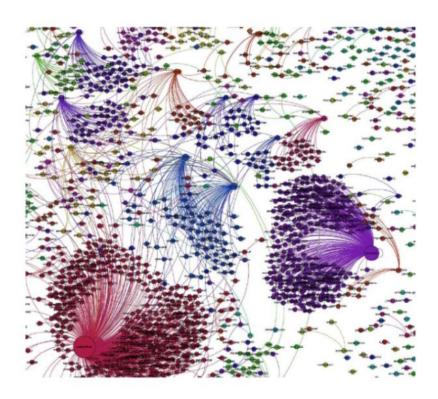


Figure 6. "Opposition" fragments of the network. Source: Green, 2013.

Opposition segment is characterized by a high density of interconnections and, as the author puts it, "complexity", which might imply "variegated sources of information exchange". Central nodes of the network are represented by Twitter-accounts of various mass media (Lenta.ru, The NewTimes and TV Dozhd), although other participants (civil

society representatives and opposition groups) also have high centrality indices. Neutral segment of the network has similar structure. Nevertheless, one should make a reservation and note that despite its neutral positioning, this segment is characterized by prevalence of oppositional members. For instance, a well-known activist Alexey Navalny was also subsumed into the neutral network (Figure 7).

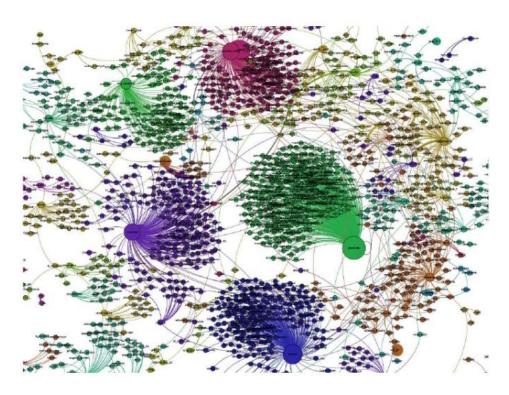


Figure 7. "Neutral" fragment s of the network. Source: Green, 2013.

Pro-government cluster, in its turn, is characteristically less coherent (Figure 8) and there is one dominating account, that of deputy Burmatov. According to Green (2013), such difference is indicative of principally different practices of using this social network, "[high centrality of a single author and low coherence in the network] imply that Twitter is rather used as a mechanism for transmission and coordination, not as a forum with a crucial function of social interaction". Recognizing the importance of the exposed conclusions, one should add that the research would be substantially enriched by including at least some analysis of the meaningful part of interactions (content analysis, sociolinguistic analysis).

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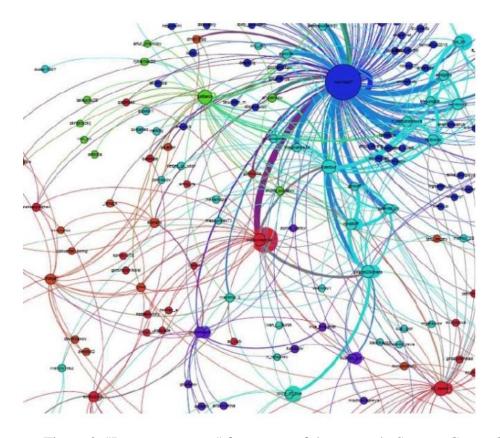


Figure 8. "Pro-government" fragments of the network. Source: Green, 2013.

Summing up, interactions in online social networks and their influence on political processes are being actively studied with the help of different methods. Nevertheless, the necessity of combining both structural and content research is manifest; that would allow to reveal not only social system properties, but to discover the very mechanism underlying the process.

Online social networks, their structure and evolution, as well as their influence on society are studied with the help of most different methods and along most different directions. Meanwhile, social network analysis is the key instrument in examining structure and processes of virtual communities.

Papers that analyze users' interactions in online social networks in correlation with real-life actions mostly emphasize network structure analysis and the way this structure changes depending on external conditions. Thus, a study on student protests in Canadian Quebec revealed significant alterations in the structure of Twitter discussions

after passing a law "Bill 78" that toughened political meetings procedure (Marcoux & Lusseau, 2013).

The present study attempted to evaluate the influence of real-life factors - namely, manifestations - on the virtual structure dynamics.

This part of research comprises 2 blocks. The first one present a dynamic analysis of the interactions structure between friends within a protest group on Facebook. The second is centered on analyzing communications of a protest community "We were on Bolotnaya Square and we will come back".

3.5.3 Dynamic analysis of the interactions structure between friends within a protest group.

Dynamics analysis for social networks is a promising research method that allows to shed some light on the structure of interrelations and their transformation over time in accordance with independent circumstances.

Dynamic analysis of interactions used data on friendship relations between members within a Facebook group dedicated to protest actions discussion and to members' coordination. This protest group is rather famous within online social network Facebook, its members discuss politically related events in the country and negotiate on group actions in organizing manifestations and protest actions. In order to join this group, you have to send a request that may be accepted or declined by the community moderators. If accepted, the member can read posts feed and leave comments within the group.

To study the social structure of the virtual community and communication patterns of interactions was used the method of social network analysis.

Analysis of the social networks dynamics is a promising method that allows us to discover the structure of relationships within the community and to see their transformation over time.

For dynamic analysis of interactions was used the data about social networks among the members Facebook group devoted to protest actions and to coordination of its participants. To trigger the data, firstly, I should to be admitted in the group as a member. Your membership request can be either approved or rejected by the administrators of this

community. If approved, the participant is able to read, write and post comments within the group.

Being a member and with the special Facebook application NetVizz I was able to trigger the community data for the period of December 2012 - March 2014. This data contains the information about social interactions of the members within the community, their geographic location, language, gender, age, as well as the data regarding the content of the group and the members' engagement with this content.

In this study I have constructed a graph of social interactions within this community and have calculated the main network indicators for each of the 18 social systems.

The data was analyzed using the statistical environment SPSS, Gephi and Microsoft Excel were the mains visualization tools during this research.

For learning the meaningful social interactions I've chose the Facebook group "We were on Bolotnaya Square and we will come again". This group is one of the most famous and key social media platforms for participants of the global Russian protest community. Its participants use this group to organize sanctioned and unsanctioned meetings, discuss slogans and demands for government.

Each comment was coded pushed into the database. Also were coded such social network indicators as the number of message comments, the member ID, date and time of writing the message or comment, message destination, topic (up to three choices) and emotive. In addition, the author's recorded comments to the group policy, and the degree of reasoning.

On the basis of instructions about who was the author of the message and the addressee, was created aimed weighted social network, nodes that are parties, and ribs - directed communicative interactions.

Three types of messages were allocated:

- 1. A large percentage of cases it was possible to clearly distinguish the message recipient.
- 2. If commentator expressed his own thoughts and emotions, establish so-called loopand the donor and acceptor connection was the author.

Some of the comments were aimed at a wider audience - to all readers of this
community. In this case, created a directed edge from the author to the top of the
artificial "All".

All calculations were performed in the statistical package R, imaging was performed using a network tool to visualize network data Gephi.

To detect the communities or clusters in the Facebook group I used the Modularity option in Gephi's statistics toolbox. The modularity option of Gephi relies on Louvian method. The algorithms of this method work by, "decomposing the networks into subunits or communities, which are sets of highly inter-connected nodes" (Blondel, Jean-Loup, Lambiotte & Lefebvre, 2008). Modularity can be measured by comparing the density of links within a module to the density of links between modules, and while that measurement indicates the strength of such communities from a network perspective.

In the Facebook group "We were in Bolotnaya Square and we will come again" eight communities were detected. The graph below represents the distribution of number of node in these communities.

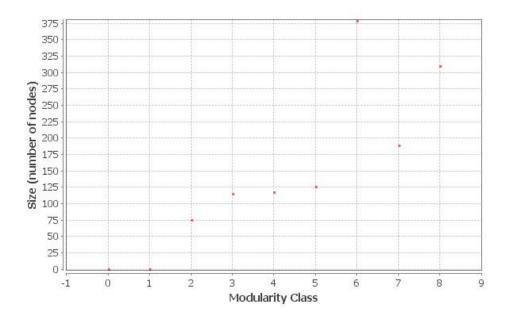


Figure 10. The distribution of number of nodes in 9 communities detected in the Facebook group "We were in Bolotnaya Square and we will come again". Source:

Prepared by author.

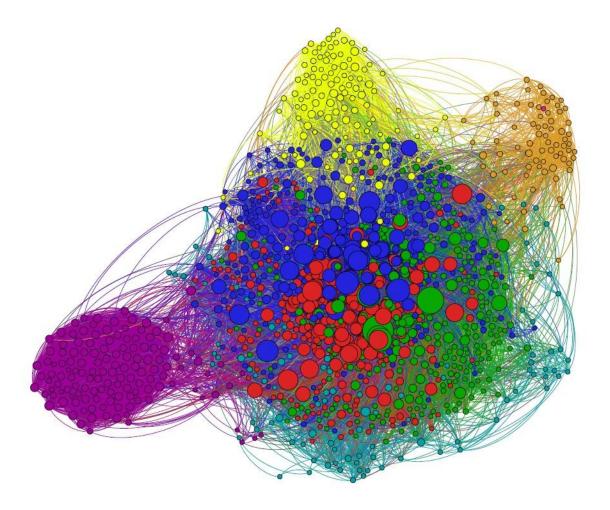


Figure 11. Friendship network of the protest group "We were in Bolotnaya Square and we will come again. Each node corresponds to a member of the group, each edge – to the link between members. Node size reflects the centrality of the node. The nodes belonging to the same cluster are labeled with the same color. Source: Prepared by author.

Figure 12 and 13 show that centralities are distributed in accordance with the exponential law (Newman, 2009; Barabási & Albert, 1999: 509-512; Albert & Barabási, 2002: 47) which possibly implies that the network has few nodes with high centrality indices and many nodes with low centrality indices, respectively. The exponential law is sometimes interpreted in terms of the Pareto principle: the overwhelming part of efficiency is conditioned by a smaller part of elements that assure maximum contribution,

and their impact is disproportionally great (Vanyan & Potashev, 2005: 1986-1995). In this case, we witness a large number of actors with limited number of friends within the community and a small number of actors with a large number of friends.

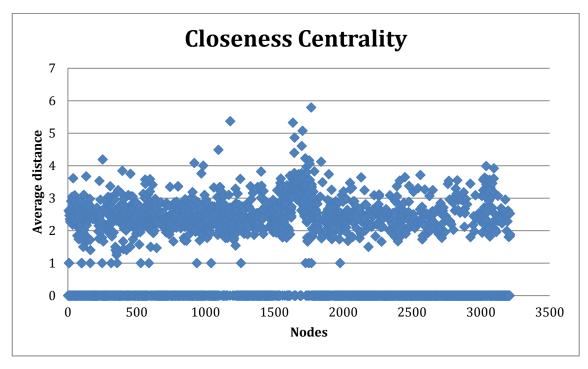


Figure 12. Closeness Centrality is an average distance from a given starting node to all other nodes in the network. Source: Prepared by author.

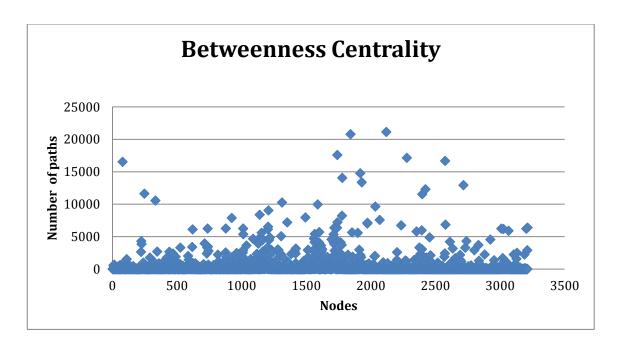


Figure 13. Betweenness Centrality measures how often a node appears on shortest paths between nodes in the network. Source: Prepared by author.

Such distribution is maintained throughout the whole observation period, transformations within the system are insignificant: popular members become somewhat more popular, but those members who have a small number of friends usually do not develop new connections over time.

Findings made by different authors (Adamic et al, 2008: Stadtfeld & Geyer-Schulz, 2011: 258-272) confirm that actors with maximum number of connections turn to be the most active participants in discussions within virtual communities. In order to check this hypothesis in my thesis, I performed content analysis of group posts and determined different types of members in accordance with their activity, so I contrasted this data with the centrality indices of these members within the network. As a result, four types of users were determined:

- Readers 1 users with low centrality (0-10). They virtually never publish their posts in the community.
- Commentators users who post news in the group very rarely (1-2 times per month) and leave comments 1-2 times per week. Their centrality is within the range of 10-80.
- Key actors these are the group members who often post their comments and news in the group and participate in discussions. Their centrality indices are rather high – 80-150. Meanwhile, many internet users belonging to this category prefer to hide their real names and recur to pseudonyms.
- Readers 2 just like as Readers 1, these users actually do not contribute anything to the community, but they have very high centrality indices (150-200). This type includes well-known political and social leaders (Boris Nemtsov, Boris Berezovskiy, Mikhail Kasyanov, Serguey Udaltsov etc.).

It's interesting that the users with high centrality indices - well-known political and social leaders - are not eager to interact with their supporters in the virtual space. Content analysis shows that public persons devote maximum of attention to their profile pages in social media, and are not that eager to communicate with common internet users.

In order to detect implicit communities Lawver clustering algorithm was applied (Blondel et al, 2008). The choice of this method was conditioned by the largeness of the social network: it comprised more than one thousand edges (Newman, 2006). Clusterization results are represented in Fig. 16, each cluster being shown in separate color. Content analysis of the profile pages revealed that this clusterization is also meaningful. For instance, there is a clearly delineated and significantly sized cluster of members who live outside Russian Federation - in the US, in Italy, in Great Britain, Germany, and other countries. The nucleus of the group is also split in two clusters: one consists of left wing opposition members (Serguei Udaltsov, Anastasia Udaltsova), and the other, of right wing members (Boris Nemtsov, Garry Kasparov).

Social structure of the protest group suggests that it contains a rather big cluster of members from abroad who somehow influence the actions of Russian citizens. For instance, the majority of foreign members are actively supporting the protesters in discussions.

The present study analyzed dynamic changes of the key networks indicators: number of nodes and edged. Figure 14 shows that the system had no significant alteration, that might confirm the idea that protest actions and other events actually have no influence on structure and activity of the virtual community.

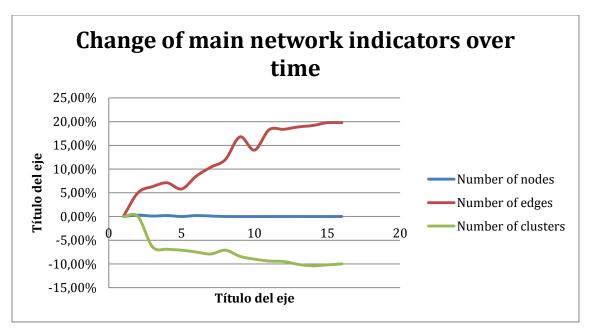


Figure 14. Change of main network indicators over time. Source: Prepared by author.

These findings contradict sociological observations made in different case studies of political mobilizations (González-Bailón et al , 2011) that traced direct correlation between manifestation activity and virtual communities' indicators. But the referred studies considered protests at the earliest stages of their evolution only, meanwhile there was no comparable research conducted for stable organizations. It is evident that the members' activity reaches certain threshold after which the community growth gets suspended. Nevertheless, throughout the whole period of observation the number of friendship connections has been increased, as these appear between members of different ideological stance, which should stand for solidarity increase within the group. Meanwhile, modularity index, which is the value that describes how the network split into separate communities was gradually declining, which is another confirmation of how solidarity grows over time (Newman, 2006).

That said, the community does not grow over time, which suggests limited opportunities for protest mobilization through online social networks. According to a study by VCIOM (Russian Public Opinion Research Center) "Protest meetings: one year

later"<sup>17</sup>, "as for today, opposition meetings are supported by 27% only, while only 10% admit a possibility of taking part in them". Besides, according to the VCIOM study "Opposition and authorities in Russia: yesterday and today"<sup>18</sup>, Russians do not think that the opposition has real chances to come into power, although they are convinced that strong opposition is necessary.

Limited resources for protest mobilization can also be explained through the Granovetter's threshold model. If in the very beginning of the protest movement it was possible to mobilize tens of thousands of people through online social network (while Facebook pages counted hundreds of thousands of subscribers), later on thousands and hundreds took to the streets (with tens of thousands claiming to do so). Participation threshold for many participants of protest movements may vary and is likely to increase over time, therefore if a decision on participation was to be initially taken when the action had 100 000+ undersigned participants, people decided not to participate

3.5.4 Network analysis of communications in the community "We were on Bolotnaya square and we will come back"

Facebook community "We were on Bolotnaya square and we will come back" was chosen for meaningful interactions analysis. This group is one of the best-known key platforms for protest community members; it is normally used for negotiating time and date of organizing political meetings, both authorized and non-authorized ones, to decide on slogans and claims made to the government. Any registered Facebook user may join this group by simply subscribing to its notifications.

In the course of the present study I analyzed all the posts that Facebook users published on the page "We were on Bolotnaya square and we will come back" from August, 15, 2012 to March, 15, 2013; 27 topics directly or indirectly related to political mobilization and self-organization; 797 comments on them. Each comment was registered in the data base and coded. The code included such properties as comment number, author's name, date and time of leaving the comment, message recipient, topic (up to three options) and emotional connotation of the post. Besides, attitude of the author

Press-release of VCIOM No. 2188 «Protest meetings: one year later». URL: <a href="http://wciom.ru/index.php?id=459&uid=113467">http://wciom.ru/index.php?id=459&uid=113467</a> (Accessed on: 2013-04-10)

<sup>&</sup>lt;sup>18</sup> Press-release of VCIOM No.2448 «Opposition and authorities in Russia: yesterday and today». URL: <a href="http://wciom.ru/index.php?id=459&uid=114594">http://wciom.ru/index.php?id=459&uid=114594</a> (Accessed on: 2014-01-18)

to the group policy and his degree of argumentation were registered. Coding was performed by three autonomous experts, and kappa coefficient - indicator for coding discrepancies - had an acceptable value of 0.53. All the calculations were performed in the R stats package.

Based on indications of the author and of the recipient for every message, a weighted social network was generated, with the nodes representing its members, and edges, representing directed communicative interactions. Three types of messages were defined.

- 1. The message recipient could be directly determined in the majority of cases.
- 2. If the commentator expressed his own thoughts and emotions, a so-called loop was established, and the author was considered to be both the donor and the acceptor of the connection.
- 3. Some comments were addressed to a larger audience, i.e. to all the readers of this community. In this case a directed edge was created from the author to an artificial node "All users".

As a result, a social network was generated that is represented on Figure 15.

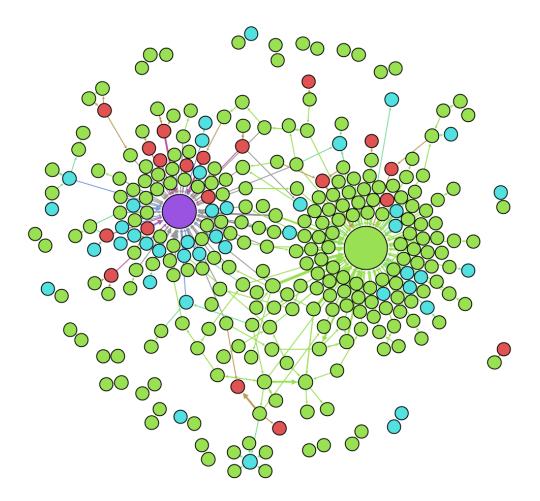


Figure 15. Social network created on the basis of interactions. Size of nodes displays the number of messages received by participants. Node color is an indicator of the relationship to the user group policy of "We were on Bolotnaya Square and come again". Green - consent, blue - neutral, red - disagreement, purple node "All" created artificially. Source: Prepared by author.

Number of unique Facebook users who posted their messages was 540, and number of edges - interactions between them, 797 (that is the number of comments in the data base). Unique edges number equaled 673. Almost half of the connections - 334 - turned out to be loops. Therefore, one might conclude that in the vast majority of cases social media users are not aiming at social interaction or at maintaining a dialogue, but are exclusively describing their own experience and expressing their emotions. Consider

some typical examples of such statements: "The ultimate message for me is Douma was not elected by the people.(end of the line), which means, things they are doing and passing have no meaning whatsoever! For me"; "Avatar shown on the federal tv channel on January, 1, 2013 calls up certain mood"; "I despise this government. Government of scoundrels. They lie. They ruin whatever they touch, destroy whoever comes close to them. They will ruin the country that is so far named Russia".

Two nodes with the highest centrality indices (so-called hubs) stand apart in the communication network: these are the generalized "All users" and the node "We were on Bolotnaya square and we will come back", i.e. the moderator of the page remaining incognito. 79 and 121 comments, respectively, were addressed to these nodes. That said, outgoing centrality indices for these nodes are much more humble: artificially created "All users" get 0 by definition, and "We were on Bolotnaya square and we will come back" gets 12. Meanwhile Figure 7 shows that neutral members or those who disagree with the group policy mostly appeal to "All users", rather than confront "We were on Bolotnaya square and we will come back".

This network structure is an example of "us vs. them" dichotomy (Titov, 2000). Hence, individuals having certain point of view (liberal opposition views in this case) evaluate everybody who disagrees with their stance as external counterparty, regardless of points of view the latter might have. However, the participants do not notice any meaningful differences of opinions, since they are guided mainly by stereotypes.

Once the nodes with high centrality "We were on Bolotnaya square and we will come back" and "All users" are eliminated from the graph, the network falls apart into separate nodes and small simple structures (Figure 16). This observation allows us conclude that social media are not efficient as a tool for maintaining discussions. Participants tend to express their personal opinion, but are not ready to get involved in discussions. It is noteworthy that American authors (Galsgow & Fink, 2013) who studied interactions via Twitter during the London riots came up with a similar conclusion. As is known, this communication platform played an important role in coordinating protest actions and members and in later London recovery. Nevertheless, the authors state that there were actually few direct interactions - active dialogues and discussions; people mostly expressed their opinion and shared information. Besides, after public discussion

some participants might supposedly establish closer contacts and start interacting via private messages or, perhaps, other means of communication.

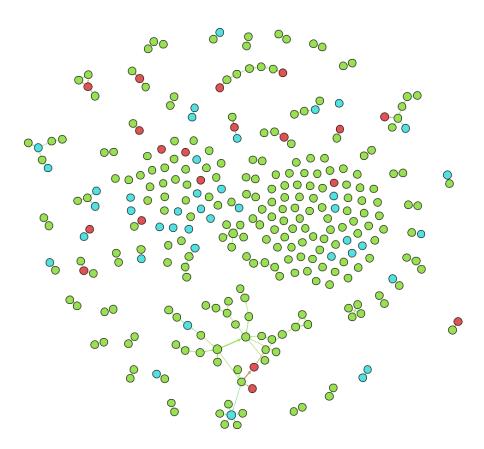


Figure 16. Social network built on the basis of communication interactions after the removing of nodes with high centrality ("All" and "We were on Bolotnaya Square and come again"). Source: Prepared by author.

Network analysis is widely applied not only to determine opinion leaders, as it was performed in reference to "We were on Bolotnaya square and we will come back", but also to detect groups that are formed around these leaders. Loyal members were detected who form a group around the actor "We were on Bolotnaya square and we will come back". In my thesis I define them as potential mobilization members, as these internet users showed their support for protest ideas and claimed their eagerness to participate in active protest manifestations (Figure 17).

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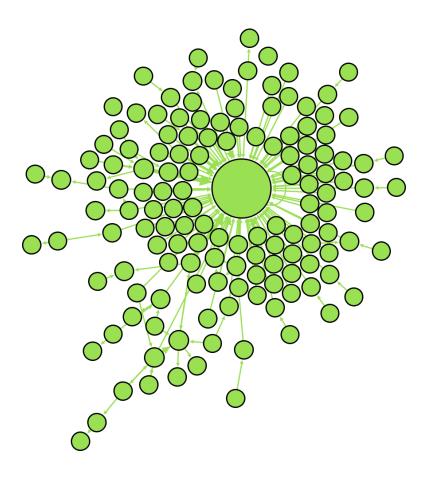


Figure 17. Potential of mobilization. Source: Prepared by author.

Data on time and on the date of posting the comment allowed to construct temporary dynamics of discussing a topic (Figure 18). As the graph shows, a topic is most actively discussed within the first 5-10 hours, afterwards the interest that the members take in the discussion dips down. Lerman states that a number of reactions to posts published in social networks Digg and Twitter reaches its peak in the first 20 hours after the publication, the interest in the topic dropping quickly thereafter (Lerman & Ghosh, 2010).

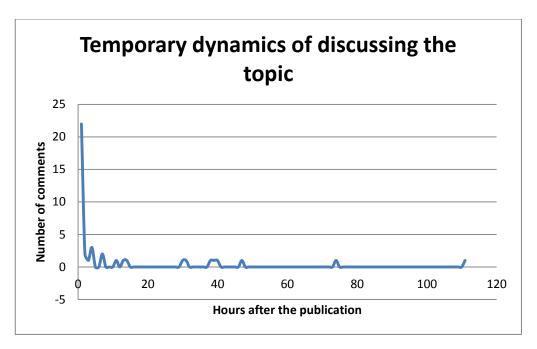


Figure 18. Temporary dynamics of discussing the topic. Source: Prepared by author.

It seems emblematic that similar dynamics is equally characteristic not only of political discussions, but of any other type of discussion: the early stage witness high interest, it drops quickly thereafter and in 100 hours (around 4 days) is completely extinguished.

As mentioned above, topics for comments were also registered in the communications data base. Originally six directions were singled out (Phillips & Jorgensen, 2002): opposition movement policy, domestic policy, image of Russia, personified images, self-identification of members, as well as members' mobilization and coordination. Such classifications as "address with no particular topic» and "references to external resources" were added later on.

In this case one should not be surprised by a large number of comments referring directly to protest actions coordination and mobilization, as these very markers were used in creating a sampling of messages for the data base of communicative acts.

More puzzling, however, is a low interest demonstrated by the members in discussion the opposition movement policy. Despite the fact that "We were on Bolotnaya square and we will come back" community is positioned as one of the key instruments

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for communication and mobilization of protesters, the attention paid to the tasks and objectives of the protest movement is practically nil.

The most popular topics under discussion are the personality of President Vladimir Putin and Prime Minister Dmitry Medvedev, as well as of certain deputies of "United Russia" (Sergey Zheleznyak, Andrey Isaev, etc.). Very often this topic also includes domestic policy and discussing image of Russia. It's worth noting that the discussion very often failed to be constructive and veered away from discussing political proposals of a statesman, and boiled down to his physical appearance, personal traits and private life.

The second most popular topic is discussing members' mobilization and coordination of their activities. As mentioned above, this result seems logical, as the study sampling included posts with at least one comment summoning people to take to the streets. In the comments subsumed into this group the members were mostly negotiating time and place for organizing their actions, as well as content of future placards and symbols to be used. Direct calls for action were rather rare, that might be attributed to relative inertia of the protesters and their low motivation. A great number of calls to join the protest actions were only noticed in comments published before the so-called "March against scoundrels" that took place after passing the law that banned citizens of the United States from adopting children from Russia (the so-called Dima Yakovlev project).

Self-identification of the protest community members also turned out to be a very popular topic. It seems noteworthy that the arising dichotomy "Us" and "Them" is very clearly traced in comments; "Us" refers to the community members associated with the liberal camp, positioning themselves as intelligentsia and the most educated part of middle class. Whereas "Them" comprises all the rest of the Russia's population, conceived as less educated people loyal to the acting government. That dichotomy is not only implicitly revealed through the content analysis of comments, but also according to the very structure of the communicative social network. As mentioned above, the network has two nodes with very high incoming capacity indicators: "All users" and "We were on Bolotnaya square and we will come back", whereas "All users" can be definitely

transformed into politically passive "Them", and "We were on Bolotnaya square and we will come back" into active and liberal "Us".

Yet another recurrent topic of comments might be defined as "Image of Russia" In most cases it implies comparison of Russia with other states, on the basis of such parameters as quality of life, prosperity, respect for human rights, civil freedoms, etc. On the one hand, Russia is compared to liberal Western countries (US, Great Britain, Germany, Scandinavian countries, etc.), on the other hand, with authoritarian regimes (North Korea, Iran, China, Libya). "Somebody should have calculated net costs of housing and public utilities in the US, in Canada, in Finland and in Russia; a slogan might go: American Rates in Russian LIFE"; "You can be "great" just like Iran, DPRK or Venezuela, or like the US, Britain and Germany"; "And I don't want to live in a "great" Russia. I want to live in a country that is normal, calm, with no imperial ambitions whatsoever, that is developed, democratic and socially-oriented country, with a strong rule of law, with correct and efficient police, with minimal bureaucracy, with a government system addressing the people. Like, am I really asking for too much?...". Allusions to Soviet Union and even to the tzarist Russia are also recurrent in this topic. Meanwhile, the overwhelming majority of comments relating to Soviet Union are negatively colored: "Soviet experience came in handy" says one of the community members referring to Russian national security agencies. "In Russia the power was given to the One and forever" - yet another comment alluding to Russian history. In general, the members are very critical in their attitude to the previous regimes in Russia.

Long discussions sticking to the same topic are not typical for the members of this virtual protest community. Internet discussions are characterized by constant jumps of ideas and transitions from one topic to another.

This phenomenon may be explained in terms of clip-thinking (Dokuka, 2013): Internet users are reluctant to perform serious cognitive tasks in order to provide arguments for their statements, do not want to deal with serious resources of information, such as electoral programs proposed by the candidates, and to end their posts with logical conclusions. The discussions tend to be full of emotional statements on a wide range of issues, while no one of these is being considered in detail. It is also worth noting that logical connections between comment posted by different people are absent: this is one of

the findings the content analysis brought about. Hence, the members use their community for self-expression and self-representation, rather than for dialogue and coordination.

The same conclusion can be drawn from studying the degree of argumentation for comments. Degree of argumentation was coded manually for every comment. In case if a member was operating with facts in order to support his stance, "explicit argumentation" was coded (e.g.: "[The regime will get changed] as a result of a joint blow of "non-primary oligarchs" (who are themselves fed up with incompetency, corruption and outrages of "St Petersburg KGB guys"), "sys.libs" (that is, educated managers who are partially concentrated within the government, partially in Moscow city administration, in Kudrin's committee as well, "Prokhorov's party", etc.) and of the "streets" (grossly, "Navalniy's party", including moderate nationalists, but without radical lefties"), in case of partial argumentation, an "attempt on argumentation" was coded (for example: "There's a great country, and then there's a great country. You can be "great" just like Iran, DPRK or Venezuela, or like the US, Britain and Germany"), in case if there were no facts nor arguments in the message, coding "no argumentation" was applied (e.g.: "He's so disgusting on this photo").

As a result, it was determined that more than two thirds of comments are not substantiated, 29% contain attempts at argumentation, and explicit argumentation is seen only in 2% of messages.

Finally, in my master thesis I suggest a model of political mobilization through online social networks based on the findings of my study on online social networks importance and on interaction mechanisms within virtual communities.

- 1. At the early stage members who belong to active or moderately active internet users according to content-based typology make active use of online social networks, and, as they acquire patterns of interaction on these platforms, become carriers of the "clip-thinking".
- 2. In politically active periods internet users sometimes get information from biased sources. Active internet users (content-based typology) and content generators (formal typology) transmit these messages and spread them within the online social networks.

- 3. Then within the social networks groups are formed both on formal and communicative basis; political situation is being discussed in the framework of these groups. Meanwhile a number of friendship interactions within the group keeps growing, which suggests an increase of solidarity among its members, sometimes despite distinct political views.
- 4. In the course of interaction within the protest community a dichotomy "us vs. them" is construed, it motivates the members who consider themselves as "us" to go to the streets.
- 5. Activity in the online social networks is maintained long after the protest manifestations are over.

## CONCLUSIONS AND FURTHER RESEARCH

Modern means of communication allow people exchange information and coordinate collective actions with unbelievable previously speed. The rapid growth of the number of social protests proves this fact. In recent years social networks in the Internet are considered as one of the most effective media for the coordination of protest actions, self-organization and mobilization of social movements' participants.

In this project research, in order to develop an investigation design for the PhD dissertation in the nearly future, was conducted a serie of studies on the role of social networks on the Internet using methods of analysis of the dynamic friendly interactions within the protest group on the social network Facebook, as well as using the method of content analysis and the method of network analysis of communication interactions of participants of the protest community. Thus, using a variety of approaches has allowed conduct the detailed and multifaceted study of the role of social networks in the process of political mobilization.

The analysis of the community discussion content showed that so-called "beginner" of the political communication position is quite widespread. It is characteristic of a person who has committed or is going to commit a political action for the first time (the collective political action here is understood as the participation in an action). The participants of the community are mostly interested in the up-to-date political news, which are directly connected to the fate of the "To fair elections" ("Za chestnye vyboru") Russian movement 2011-2012.

The "professional" politicians and the oppositional leaders function outside the movement. The conditional "friends" are the media personalities of A. Navalny and S. Udaltsov, while the solidarity movement and, particularly, B. Nemtsov are perceived as an element external or even alien to the movement. The representatives of the ultraliberal movements are also outside the group image (even though the latter also participate in the protest actions). It is interesting that the comments feature the critical attitude to the organizers of the meetings and the moderators of the community, who are also addressed as a sort of external structure. For instance, some users express their discontent with "excessively soft", "playful" methods of protest activity, the place of another meeting, the list of speakers, the claims (lack of claims). However, along with the

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critics the organizers, moderators and the leaders of opposition are addressed with solidarity comments, the users prove their readiness to come to the meetings, distribute the information, thus providing additional mobilization, etc.

The image of the symbolic solidarity, represented in the online space is quite blurred and may be brought down to the unity of those who wear the "white ribbon" (the symbol of protest). As the group is quite extensive (for an Internet community) and, apparently, is not homogeneous in terms of social and demographic characteristic, it is quite difficult to elicit the evident basics for solidarity. According to one of the community members, the movement is united only by the agreement with the slogan "against Putin" (even though, this opinion is quite debatable).

So, without applying additional methods (for instance, the network analysis of relations inside the group) we are not able to make a final conclusion whether the members used to know each other before they entered the groups (was there any primordial solidarity) and how their joint activity has influenced the strengthening of connections between the members of the community.

However, using the indirect indicators we can establish the borders of this conditional "trust", the solidarity circles. Judging by the results of our research, the inclusion in the solidarity (primarily expressed in the very fact of participation in the community) with the others is directly dependent on the volume of the jointly perceived information, meaning the information which gets inside the symbolic circle of trust. In other words, such solidarity becomes a community of likeminded people, who need the constant exchange of information and participation in the computer-mediated communication to maintain this solidarity and coordinate joint actions.

The peculiarities of virtual solidarity consists in, first of all, the community aiming at the support of solidarity by means of symbolic participation and actions, which do not entail any risks or resource expenditure (discussions, votes, distribution of information over the Network, virtual approval, etc.). Secondly, a large number of stimulating visual materials, games indicates that in terms of content it is so-called digital natives' solidarity (Prensky, 2001), meaning the participation in the virtual solidarity presupposes certain cognitive preparation. Thirdly, the virtual solidarity does not have clearly established borders. Fourthly, (even though this partially coincides with

Alexander's definition of solidarity (Alexander, 2004), virtual solidarity exists as a result of discursive processing of reality and is mostly representing itself via the media-text.

The community becomes a space of expertise and in a sense a field of socialization for its participants: here the experiences of political participation and action are shared, the political beliefs are crystallized, and the information is checked for authenticity. Moreover, by coordinating the actions and discussing them the community is preparing itself for the reproduction of the collective action experience. It is important that the affiliation with a huge group of "nice", "decent», "brave" and "honest" people gives the user a possibility to "feel" that he is not alone, that "there are a lot of people together with us", and this strengthens his individual eagerness for action. However, sometimes the extent of saturation with the political information of the community environment and excessive affiliation create a certain illusion that it is here where "history is made" and the group of the protest movement represents "everyone" online.

Also during the research it was found that online social networks significantly transforme the communication practices. The communication format of short messages in online social services reduces the level of argumentation of the users' statements and points of view. But this format motivates users to exchange short phrases, to maintaining the discussion and to transmission of the emotional, often extremely emotional, content. At the same time such an interaction in the long term leads to the transformation of thinking patterns, to the predominance of non-reflective consumption of information and, ultimately, to the "clipping" thinking – to the consumption of images and of stereotypes embedded in them, without any systematization and analysis of the real facts.

Using a network approach during the research was presented the structure of social networks that shows the dynamic change of friendly interactions within the protest group on the online social network Facebook. It was found that during the observation period (December 2012 - May 2013) the number of members of the group increased slightly, and the structure of the group didn't change significally. It may indicate that the relatively stable and solid protest virtual community can't be characterized by the continuous and significant increase of the number of participants. At the same time, the growth of the number of friendship ties among participants in the group clearly testifies the growth of solidarity among its participants.

According to the results of the network analysis and the content analysis that were conducted during this research, a typology of the protest groups' participants of online social networks is proposed. This typology was elaborated according to the number of friendship ties among the participants inside the group and also according to the activity level of participants within the community.

So, were proposed the following types of participants:

- Readers of first type;
- Readers of second type;
- Participants of discussions;
- Key actors.

For all types of participants, excluding the "Reader of second type", was detected the direct dependence between the number of friends of a participant within the community and his/her activity in the group. However, "Readers of the second type" - usually very known civil and political activists who have a large number of friendship ties within the community – normally don't contribute to the development of the community, preferring to post content on their personal pages in online social networks and personal sites.

Withing this research the communication social network was built on the basis of communication interactions within the community "We were on Bolotnaya Square and we will come again" in the social network Facebook. Almost the half of the links within this online network were defined as so-called "loops" that indicates that the participants of the group don't always use a virtual platform for mutual communication, and consider the social online networks as a tool for the self-representation and self-expression. This conclusion can be confirmed by the fact that after the elimination of the two peaks with the highest values of Centrality Betwenness the communication network splits into the separated peaks and into small and simple structures. From this we can conclude that social media is not an effective tool for constructive debates.

In addition, the structure of the group illustrates the dichotomy of "friens - foes" clearly traceable within the protest community. Inside the opposition groups the stereotypical notions are being cultivated. According to these stereotypical notions people who do not share the views and values of the opposition, are associated with abstract

"foes", that is characterized by the following social characteristics: low level of education, low wages, lack of broad outlook, old mentality etc.

Using the content analysis and discourse analysis the key issues of discussions were identified and the trajectories of debates were analyzed. It was found out that the vast majority of discussions were not focused on a certain issue. The discussions were constantly moving from one topic to another. Thus, as a rule, in the online discussions there are no clear argumentations and supporting facts that can confirm the author's point of view. The prevalent message format is the emotional consideration. This further testifies the presence of clipping thinking and the lack of reflexive perception that often characteristic the active users of online social networks.

Based on a comprehensive study of political mobilization and evaluation of the role of social media in the process, the author proposed five main findings that can help in elaborating the strategy of political mobilization via Internet social networks.

- 1. At the early stage members who belong to active or moderately active internet users according to content-based typology make active use of online social networks, and, as they acquire patterns of interaction on these platforms, become carriers of the "clip-thinking".
- 2. In politically active periods internet users sometimes get information from biased sources. Active internet users (content-based typology) and content generators (formal typology) transmit these messages and spread them within the online social networks.
- 3. Then within the social networks groups are formed both on formal and communicative basis; political situation is being discussed in the framework of these groups. Meanwhile a number of friendship interactions within the group keeps growing, which suggests an increase of solidarity among its members, sometimes despite distinct political views.
- 4. In the course of interaction within the protest community a dichotomy "us vs. them" is construed, it motivates the members who consider themselves as "us" to go to the streets.5. Activity in the online social networks is maintained long after the protest manifestations are over.

We need to underline that this research is based on a sampling of the data collected for the concrete period of time and from one particular platform (Facebbok) and one particular object (Facebook group "We've been in Bolotnaya Square and we will come again"). So, it seems to be very interesting to expand the object of the research including more Facebook communities dedicated to the protest movement or may be even more social media platforms to make a comparative analysis. It will expand the sampling of data for research and will increase the probability of the relevance of the study's results. I'd like to continue working on this problem and to embody more large and significant investigation in my PhD dissertation. In the Annex 1 in format of Gantt Chart I present the preliminary plan of development of my reserach designed in this paper.

## **REFERENCES**

Albersnagel, F.A. (1987). Cognition, emotion and depressive behavior: From learned helplessness theory to accessibility of cognition theory. Groningen: University Press.

Alexander, J. (2004). The Civil Sphere. Oxford: Oxford University Press.

Alhassen, M., Ahmed, S.E. (2012). *Demanding Dignity: Young Voices from the Arab Revolutions*. Ashland, Oregon: White Cloud Press.

Beck, U., Giddens, A., Lash, S. (1994). *Reflexive Modernization. Politics, Tradition and Aesthetics in the Modern Social Order*. Stanford, CA: Stanford University Press.

Benford, R. D. (1997). An Insider's Critique of the Social Movement Framing Perspective. *Sociological Inquiry*, 67(4), 409-430.

Bjarneskans, H., Gronnevik, B., & Sandberg, A. (2005). The lifecycle of memes.

Blackmore, S. (1998). Imitation and the definition of a meme. *Journal of Memetics-Evolutionary Models of Information Transmission*, 2(11), 159-170.

Blackmore, S. (2000). The meme machine (Vol. 25). Oxford: Oxford University Press.

Blackmore, S. (2009). The third replicator is among us. New Scientist, 203(2719), 36-39.

Blum, H. F. (1967). *Humanity in the perspective of Time*. Annals of the New York Academy of Sciences, 138(2), 489-503.

Brodie, R. (1996). Virus of the mind: The new science of the meme. Seattle, Wash: Integral Press.

Brown, C. H. (1990). A survey of category types in natural language. *Meanings and prototypes. Studies in linguistic categorization*, 17-47.

Brunkhorst, H. (2005). *Solidarity: from civic friendship to a global legal community*. Cambridge: MIT Press.

Castells, M. (2000). Materials for an exploratory theory of the network society. *The British journal of sociology*, 51(1), 5-24.

Castells, M. (2007). Communication, power and counter-power in the network society. *International journal of communication*, 1(1), 29.

Castells, M. (2013). *Networks of outrage and hope: Social movements in the internet age.* Cambridge: John Wiley & Sons.

Cicourel, A. V. (1974). Cognitive sociology: Language and meaning in social interaction. New York: Free Press

Croft, W. (2000). *Explaining language change: An evolutionary approach*. Edinburgh, Harlow: Pearson Education.

Dawkins, R. (1989). Universal Parasitism and the CoEvolution of Extended Phenotypes, reproduced from. *Whole Earth Review*, 90.

Dawkins, R. (2006). The selfish gene. Oxford: Oxford university press.

Deluze, G., & Guattari, F. (1987). A thousand plateaus: Capitalism and Schizophrenia. Trans. Brian Massumi. Minnesota: University of Minnesota Press.

Della Porta, D., & Diani, M. (2009). *Social movements: An introduction*. Cambridge: John Wiley & Sons.

Della Porta, D., & Mosca, L. (2005). Global-net for global movements? A network of networks for a movement of movements. *Journal of Public Policy*, 25(1), 165-190.

Dennett, D. C. (1990). Memes and the exploitation of imagination. *Journal of Aesthetics* and Art Criticism, 127-135.

Dennett, D. C. (1995). Darwin's dangerous idea. The Sciences, 35(3), 34-40.

Diani, M. (1990). The Network Structure of the Italian Ecology Movement. *Social Science Information*, 29:5-31.

Diani, M. (1992). The concept of social movement. The Sociological Review, 40(1), 1-25.

Diani, M. (2000). Social movement networks virtual and real. *Information*, *Communication & Society*, 3(3), 386-401.

Diani, M., & McAdam, D. (Eds.). (2003). Social movements and networks: Relational approaches to collective action. Oxford: Oxford University Press.

Durham, W. H. (1991). *Coevolution: Genes, culture, and human diversity*. Stanford: Stanford University Press.

Durkheim, E. (1997). *The division of labor in society*. New York, NY: The free press. Simon and Schuster.

Esser, F., Reinemann, C., & Fan, D. (2000). Spin Doctoring in British and German Election Campaigns How the Press is Being Confronted with a New Quality of Political PR. *European Journal of Communication*, 15(2), 209-239.

Eyerman, R. (1991). *Social movements: A cognitive approach*. University Park, PA: The Pennsylvania State University Press

Fischer, C. S., & Merton, R. K. (1976). *The urban experience*. New York: Harcourt Brace Jovanovich.

Eyerman, R., & Jamison, A. (1989). Environmental knowledge as an organizational weapon: The case of Greenpeace. *Social Science Information/sur les sciences sociales*.

Frake, C. O. (1962). The ethnographic study of cognitive systems. *Anthropology and human behavior*, 74.

Gamson, W. A. (1975). *The strategy of social protest* (pp. 89-109). Homewood, IL: Dorsey Press.

Geertz, C., & Banton, M. (1966). Religion as a cultural system. Routledge: London.

Godin, S. (2001). Unleashing the Ideavirus: Stop Marketing AT People! Turn Your Ideas Into Epidemics by Helping Your Customers Do the Marketing Thing for You. New York: Hyperion.

González-Bailón S., Kaltenbrunner A. & Banchs R. E. (2010). The structure of political discussion networks: a model for the analysis of online deliberation. *Journal of Information Technology*. 25(2), 230-243.

Goodenough, W. H. (1961). Comment on cultural evolution. *Daedalus*, 90, 521-528.

Groves, J. M. (1995). Learning to feel: The neglected sociology of social movements. *The Sociological Review*, 43(3), 435-461.

Greene, S. (2013). Twitter and the russian Street: memes, networks, and mobilization. CnmS Working Paper 2012/1. *Center for the Study of new media and Society, new economic School*.

Gurr, T. R. (1970). Why men rebel. Princeton: Princeton University Press.

Gurr, T.R. (1972). Relative Deprivational Correlates of Protest Behaviour. *American Journal of Sociology*, 49, 274.

Habermas, J. (1998). *The inclusion of the other: Studies in political theory*. C. Cronin, & P. De Greiff (Eds.). Cambridge, MA: Mit Press, 140-142

Heylighen, F. (1995). Memetic selection criteria. Principia Cybernetica.

Miller, G. A. (1988). *The Making of Cognitive Science: Essays in Honor of George Armitage Miller*. W. Hirst (Ed.). Cambridge: Cambridge University Press.

Hockett, C. F. (1958). A Course in Modem Linguistics, New York: McMillan.

Hofstadter, D.R. (1996). Metamagical Themas: Questing for the Essence of Mind and Pattern. New York, 51–65.

Howard, P. N. (2010). The digital origins of dictatorship and democracy: Information technology and political Islam. Oxford: Oxford University Press.

Howard, P. N., & Hussain, M. M. (2013). *Democracy's Fourth Wave?: Digital Media and the Arab Spring*. Oxford: Oxford University Press.

Inglehart R. (1977). *The Silent Revolution: Changing Values and Political Styles Among Western Public*. Princeton, NJ: Princeton University Press.

Inglehart, R. (1971). The silent revolution in Europe: Intergenerational change in post-industrial societies. *American political science review*, 65(4), 991-1017.

Jenkins, J. C. (1983). Resource mobilization theory and the study of social movements. *Annual review of sociology*, 527-553.

Kavada, A. (2005). Exploring the role of the internet in the 'movement for alternative globalization': The case of the Paris 2003 European Social Forum. *Westminster Papers in Communication and Culture*, 2(1), 72-95.

Keesing, R. M., & Keesing, F. M. (1971). *New perspectives in cultural anthropology*. New York: Holt, Rinehart and Winston.

Kelly, G. A. (1955). *A Theory of Personality: The psychology of personal constructs*. Volume 1: A theory of personality. New York: WW Norton and Company.

Kendrick Jr, J. R. (1991). Meaning and participation: Perspectives of peace movement participants. *Research in Social Movements, Conflicts and Change*, 13, 91-111.

Klandermans, B. (1984). Mobilization and participation: Social-psychological expansisons of resource mobilization theory. *American sociological review*, 583-600.

Klandermans, B. (1988). The formation and mobilization of consensus. *International* social movement research, 1, 173-196.

Klandermans, B. (1996). The social psychology of protest. New York: Wiley.

Klandermans, B., & Tarrow, S. (1988). Mobilization into social movements: Synthesizing European and American approaches. *International Social Movement Research*, 1(1988), 1-38.

Kozinets, R. V. (2010). *Netnography: Doing ethnographic research online*. London: Sage Publications.

Kriesi, H. (Ed.). (1995). New social movements in Western Europe: A comparative analysis (Vol. 5). Minnesota: U of Minnesota Press.

Kroeber, A. L., & Kluckhohn, C. (1952). Culture: A critical review of concepts and definitions. *Papers. Peabody Museum of Archaeology & Ethnology*, Harvard University.

Langrish, J. Z. (1999). Different types of memes: recipemes, selectemes and explanemes. *Journal of Memetics. Evolutionary Models of Information Transmission*, 3(2), 24-38.

Lee, P. B. (2007). Habermas, from Society to Family: Communicative Sociation, Solidarity and Emancipation. *ProQuest*, 113-114.

Lofland, J. (1981). Collective behavior: The elementary forms. Social psychology: Sociological perspectives, New York: Basic Books, 411-46.

Lumsden, C. J., Wilson, E. O., Packing, C., & Rare, W. I. E. S. (1981). *The coevolutionary process*. Cambridge, MA: Harvard University Press.

Lynch, A. (2008). *Thought contagion: How belief spreads through society*. New York: Basic Books.

McAdam, D. (1992). Gender as a mediator of the activist experience: The case of Freedom Summer. *American Journal of Sociology*. 97, 1211-1240.

McAdam, D., McCarthy, J. D., & Zald, M. N. (1988). *Social movements*. Handbook of Sociology. Newbury Park: Sage.

McAdam, D., McCarthy, J. D., & Zald, M. N. (Eds.). (1996). *Comparative perspectives on social movements: Political opportunities, mobilizing structures, and cultural framings*. Cambridge: Cambridge University Press.

McCarthy, J. D., & Zald, M. N. (1977). Resource mobilization and social movements: A partial theory. *American journal of sociology*, 1212-1241.

Melucci, A. (1988). Getting involved: identity and mobilization in social movements. *International social movement research*, 1, 329-348.

Melucci, A. (1989). Nomads of the Present: Social Movements and Individual Needs in Contemporary Society. Philadelphia: Vol. Temple University Press..

Minsky, M. (1995). A framework for representing knowledge. In Computation & intelligence. *American Association for Artificial Intelligence*. 163-189

Morris, A. (2000). Reflections on social movement theory: Criticisms and proposals. *Contemporary Sociology*, 445-454.

Neisser, U. (1976). *Cognition and reality: Principles and implications of cognitive psychology*. New York: WH Freeman/Times Books/Henry Holt & Co.

Parsons T. (1965). Youth in the Context of American Society. New York: Basic Books.

Parsons, T. (1967). Societies and Comparative Evolutionary Perspectives. London: Prentice-Hall.

Passy, F. (2003). Social networks matter. But how?. *Social movements and networks: Relational approaches to collective action*, 21-48.

Popov, V. (2012). The Culture of New Mobility in Russia: Networks and Flows Formation. *Mobilities*, 7(1), 151-169.

Prensky, M. (2001). Digital natives, digital immigrants part 1. On the horizon, 9(5), 1-6.

Rheingold, H. (1993). *The virtual community: Finding commection in a computerized world*. Addison-Wesley: Longman Publishing Co., Inc.

Richards, P. (1998). Be your own spin doctor: a practical guide to using the media. New York: Take That.

Richerson, P. J., & Boyd, R. (2008). *Not by genes alone: How culture transformed human evolution*. Chicago: University of Chicago Press.

Ries, A., & Trout, J. (1986). *Positioning: The battle for your mind* (pp. 34-71). W. Sabin, & M. Hamerling (Eds.). New York: McGraw-Hill.

Rucht, D. (1990). The strategies and action repertoires of new movements. *Challenging the political order: New social and political movements in Western democracies*, 156-175.

Rushkoff, D. (2010). Media virus!. New York: Random House LLC.

Schank, R. C., & Abelson, R. P. (2013). Scripts, plans, goals, and understanding: An inquiry into human *knowledge structures*. *The Artificial Intelligence Series*. *Lawrence Erlbaum Associates* 

Sitrick, M. S., & Mayer, A. (1998). Spin: How to turn the power of the press to your advantage. New York: Regnery Publishing, Incorporated.

Snow, D. A., & Benford, R. D. (1988). Ideology, frame resonance, and participant mobilization. *International social movement research*, 1(1), 197-217.

Snow, D. A., Rochford Jr, E. B., Worden, S. K., & Benford, R. D. (1986). Frame alignment processes, micromobilization, and movement participation. *American sociological review*, 464-481.

Snow, D. A., Zurcher Jr, L. A., & Ekland-Olson, S. (1980). Social networks and social movements: A microstructural approach to differential recruitment. *American sociological review*, 787-801.

Tajfel, H. (Ed.). (2010). *Social identity and intergroup relations* (Vol. 7). Cambridge: Cambridge University Press.

Talmy, L. (2000). Toward a cognitive semantics, Vol. 1: Concept structuring systems. New York: The MIT Press.

Tarrow, S. (1988). *Democracy and Disorder: Society and Politics in Italy, 1965-1975*. Oxford: Oxford University Press.

Tarrow, S., & Tollefson. (1994). *Power in movement: Social movements, collective action and politics* (pp. 3-4). Cambridge: Cambridge University Press.

Tilly, C. (2005). *Social Movements, 1768-2004*. Boulder, Colorado: Paradigm Publishers. Touraine, A. (1981). *The voice and the eye: An analysis of social movements (Vol. 10)*. Cambridge: Cambridge University Press.

Turner, R. H., & Killian, L. M. (1964). *Collective behavior*. London: Prentice-Hall.

Tyler, T. (2011). Memetics: Memes and the Science of Cultural Evolution. Tim Tyler.

Van Dijk, T. A., Kintsch, W., & Van Dijk, T. A. (1983). *Strategies of discourse comprehension*. New York: Academic Press.

Vitak, J., Zube, P., Smock, A., Carr, C. T., Ellison, N., & Lampe, C. (2011). It's complicated: Facebook users' political participation in the 2008 election. *CyberPsychology, behavior, and social networking*, 14(3), 107-114.

Wertsch, J. V. (1991). Voices of the mind. Harvard: Harvard University Press.

White, L. (1965). *The symbol: the origin and basis of human behavior*. Stanford: Ardent Media.

Annex 1
Gantt Chart of the PhD research proposal

