A Sociological Approach of Cyberspace Social Order. Deviance, Social Norms and Social Control of Digital Environment

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Abstract: The invasion of the daily world by the digital has led to the need for scientific understanding of the functioning of this space. In this paper I will analyse from a sociological point of view the social order of digital space, cyber crime and cyber security having as a premise the fact that digital space facilitates the deviance because its intrinsic characteristics but also because it is still an anomic environment. For this purpose, I analysed comparatively a series of pairs: norms and social order - digital social order, social deviance - cybercrime, social control - cybersecurity. From the analysis made it follows that the theories formulated by sociology to explain the classical social reality are also applicable to the understanding of the digital space. The general rules of behavior, the trends and biasis of people can be found in the cybernetic environment.

Keywords: digital social order, cybercrime, cybersecurity

INTRODUCTION

The invasion of the daily world by the digital has led to the need for scientific understanding of the functioning of this space, viewed as a communication and information support and, on the other hand, as a special environment to perform social behavior. Becoming a constant of today, the social component of the Internet is an undeniable reality and can not be reduced to communication processes. Because of its effects, this vast and complex phenomenon involves interdisciplinary approaches: historical, anthropological, technical, economic, sociological, cultural, psychological and political.

Digital connectivity in the developed countries of European Union reached 90% of the households [1] and this hyperconectivity has facilitated unprecedented intensification of digital relationships within social networking, e-commerce, and online media. Moving a significant part of the exchanges between social actors in the online sphere has been doubled by many advantages.

People have very easy access to information, digital space has a special storage capacity, information search times are significantly reduced, and costs are minimal. The new media have given individuals greater power in the sense that they have acquired opportunities for expression, communication and information that are clearly superior to traditional means and thus have become able to significantly influence the course of events in society. But in spite of these opportunities, the danger of online propaganda and misinformation, of generalized fake news, of trolls with fictitious accounts are increasingly

noticed. They have begun to influence public opinion by creating seemingly majority views that have no correspondent in the real world.

Therefore, in the global context of profound technological and societal transformations, it has become essential to analyze the behavior of individuals within the virtual space. The sociological analysis is the main research method for deciphering the way in which society crystallizes and evolves either in physical or digital space. From this perspective, sociology of the Internet studies these transformations and specifities related to virtual social interactions and communications, networks, organizations and institutions.

In this paper I will analyse from a sociological point of view the social order of digital space, cyber crime and cyber security having as a premise the fact that digital space facilitates the deviance because its intrinsic characteristics but also because it is still an anomic environment.

ONLINE SOCIAL NORMS AND DIGITAL SOCIAL ORDER

To understand digital space, I argue for the hypothesis that virtual reality is subjected to the same rules, trends of behavior and errors that are specific for the traditional social reality. Therefore, the ensurance of digital social order is possible through very precise legal and social norms that encompass the specificity of human behaviour.

In social envirnment, norms emerge as a consequence of interaction between group members and once negotiated they can determine a certain uniformity and behavioral convergence [2], regulating the social behavior of people, prescribing common patterns of perception, thinking, feeling, action [3]. Because of social norms, it is possible to predict the evolution of social situations and to avoid confusion. In interpersonal relationships, the person displaying behaviors consistent with group expectations is considered to be adapted to social conditions and rewarded accordingly; otherwise he is labeled as deviant, inadequate

and ineffective. If the group's attempts to integrate the individual fail, then the person is considered deviant and marginalized [4].

The ambiguity of social life is minimized when people behave in accordance with mutually negotiated social norms, and the existence of behavioral standards outlines the stability and the constance of the social world, despite the fact that "evolution did not have time to produce a world conforming to the logical and mathematical order" [5]. At the same time, the social norms represent the standard for labeling behavior as deviant or not.

After years in which people have adapted to the idea of online space and have built new levels of confidence, the next stage has been to negotiate behavioral patterns that are mostly accepted in the digital space. Ever since 1922, american anthropologist William Ogburn theorized the cultural lag theory which underline the fact that technology transformations succeed in overcoming the power of laws to keep up with the pace of innovation [6]. Symbolic culture need time to catch up with the material one and this mismatch may cause social problems.

When known solutions fail to overcome the problems faced by society, an alternative can be the voices of those who propose "something else" and which can lead to a new structure of society. Thus, ideas such as blockchain technology can be implemented in different areas, and supporters of such an innovation may be consulted to adopt the most accurate measures to transform social reality. Currently, the blockchain pioneers represent active minorities, such groups being recognized by social psychology literature to be the most important determinant of the social innovation process [7].

In the classical sense, the sociological theories on the genesis and evolution of social order consider that "any social order is based on a combination of coercion, interest and values" [8], and include two fundamental paradigmatic directions [9] which emphasizes:

1) Coercion as a explanatory key to understanding social order. From this perspective,

authorities of every society impose certain rules and sanctions, and such situations may inevitably appear unacceptable to some individuals and may became source of conflicts;

2) The consensus on a set of values and the observance of a corpus of common norms as factors generating social order.

Therefore, in every society the informal normes and the power rules coexist and work alternately.

While the informal norms are generally accepted in the group and the deviance ratio relative to them is relatively low, the institutional rules can induce reactance among group members [10]. Social norms arise from the negotiation between two classes of competing norms, between what people want and what authorities impose [11].

ONLINE DEVIANCE

Understanding the psychosocial mechanisms of the specifics of social norms in digital space can not be completed without analyzing digital deviance. In fact, the object of cyber security is to ensure cyber order by creating and observing legal and social norms. Analogically, deviant behavior in the online environment is cybercrime, and digitals offenders are ususlly called hackers. Their crimes have many similaritie with what deviant behaviors are outside of the digital world as well.

The birth of the digital world is not the first moment in the social history that required shaping new rules. More or less profound changes occurred whenever people revolutionized social systems, and every time the renegotiation of social norms was an important feature of this process: "Social life is essentially rule-making and innovation" [12].

The internalization of norms is the process by which "an individual acquires a preference for compliance with a behavioral standard and carries a certain psychological cost when failing to comply, whether or not others are aware of his deviation" [13].

When norms manage to influence the intrinsic preferences of the individual, they will be respected in any social context crossed by individuals. Intrinsic predispositions crystallize at the intersection of hereditary, biological and cultural factors, being assimilated to the individual's free will [14] [15]. It is true that the predispositions may change over time with the evolution of social norms but when people consider the rules as costly or constraing they will be tempted to cheat them every time the benefits of respecting them are lower than the gains and the risk of being caught is low. When norms do not influence intrinsec predispositions, individuals will tend to change rules, not to adjust their behaviors to observe the rules.

Having as prerequisites the individual uniqueness and the diversity of human typology, it is easy to assume that a few of the human intrinsic predispositions will be incompatible with the rules agreed by the group members and for this reason the generally accepted standard may be violated. On the other hand, K.E. Weick and D.P. Gilfillan [16] experimentally prouved that even a correct but difficult norm will be rather abandoned. Cognitive psychology explains that people tend to choose the easy way to the detriment of difficult strategies, even if they are more effective: the imposition of complicated rules will lead to their rejection no matter how fair they are.

The import of this axiom into online space leads us to a worrying conclusion: if the average individual will have to enforce complicated security protocols, especially if he / she does not have basic knowledge of cyber security, there is a high probability of dropping them despite the risks to which he / she is subject. Literature [17] [18] [19] shows that the optimism bias makes us believe that bad things will not happen to us. No one imagines that in the near future he/she will have a car accident, will get cancer or become a victim of a cibernetic attack. And yet, such unfortunate events appear with a feared frequency. In the digital environment deviance occurs with an increased frequency compared with phisical world because of facilitating conditions such as the possibility to remain

anonymous, the lack of practicing digital behaviours or the lack of social control of the group.

The traditional understanding of the deviance was facilitated by the analysis of the French sociologist Émile Durkheim [20] who delimited the normal from the pathological. From his point of view, normal social phenomena are those that are caracteristic for a large number of individuals, while exceptional situations are labeled as "morbid". As crimes occur in all communities at all times, the author concludes that deviance is a statistically constant normal phenomenon for a society, which only changes its shape in space and time. Crime is not a symptom of a disfunctional society. On the contrary when the crimanls are punished the society reaffirms its most important values.

Therefore, the idea supported by Durkheim is that crime is socially regulated and it is statistically constant. Still, when a certain behavior is characterized by an abnormal increase or decrease in its average number of occurrences, it is labeled as anomalous. The breaking of social order through the appearance of anomie indicates the potential of a morbid state that threatens society's health.

In virtual reality, the deviance has many forms, most of which representing the translations in online of criminal behaviors specific for social reality. Thus, we can identify diades like gossip - cybebulling, pornography - online pornography, racism - xenophobic discussion forums, robbery - cyber attacks, and propaganda - online influence campaigns through trols. The same with the nuclear bomb connectivity technology may be responsible for a lot of good and bad things. Cybercrime take advantage of people hiperconnectivity. *Moore's law* on the annual doubling of online processing capabilities is doubled by the corollary *Moore's wicked*: the power of thieves and scams also doubles annually, and to them adds the identity theft, spammers, cyberbulling, those who use viruses to obtain redemption of hostage data [21]. Having as prerequisites the durkhemian ideas, we can postulate that today's digital space is characterized by morbidity, and extensive interventions are needed to establish the digital order.

Another important step in understanding the concept of deviance and deviant behavior belongs to Robert K. Merton (1938) who refined the concepts of Durkheim (1895) and defined the anomie as the pressure on the individuals when accepted norms are conflicting those of social reality [22]. In the same way we can define the digital anomie as the pressure on the individuals when his norms are in conflict with the norms of virtual reality. In this point it is important to remember that online society is spaceless while the individual prerequisitions are borned in a very specific environment and this is a single reason why the norms may be different. The offender therefore questions the tradition and forces society to solve the inconsistencies. Referring to online space, the cybernetic offender/hacker notices the lack of continuity between physical and digital space, identifies opportunities to achieve the proposed goals with illegitimate means and, in the absence of properly internalized community values, takes advantage of the opportunities that have arisen.

Robert K. Merton [23] explains how individuals choose between five types of possible reactions of the person confronted with different sets of rules, having as criteria the goals they undertake and the legitimacy/ilegitimacy of the means they choose:

1) *Conformation* is the majority's compliance with the existing norms and consists in choosing a behavior that is suited to legitimate means. The majority of the population belongs to this category no matter if we consider the phisical or virtual reality;

2) *Innovation* occurs when social actors accept the general values of society, but refuses to use institutionalized means to fulfill their goals, so they prefer to propose alternatives that are considered more appropriate. Usually, they are socially disapproved some of them being sanctioned by society, while others are taken over by the majority and are gradually transformed into new social norms. Examples of these are web 2.0 technologies that have made possible social engagement and civic participation unthinkable

previously: collaborative technologies, social networks, citizens' journalism are as many examples of revolutions in digital relationships;

3) *Ritualism* characterizes situations where compliance with the means agreed by the majority becomes the very purpose of action. Compliance with required standards is achieved without paying attention to the values involved in these standards. In the online environment, ritualism occurs in the case of people who know and apply certain standards of cyber security, usually in professional environments, without understanding the logic of the operations performed and without anticipating the expected benefits - they are performing those operations vecause they were told to do so;

4) *Evasion* is adopted by people who both reject the goals and the means available in society to achieve them. These individuals are not interested in competing with others, being self-sufficient. If in the social reality "escapists" are recruited among social marginalized members of society (alcoholics, prostitutes, drug addicts, psychic patients), at this stage of digital crystallizationan extremely high number of people are "escapists" from the point of view of cyber security - they are not interested in ensuring digital order and have no contribution to it because they do not apply any security protocols;

5) *Rebellion* occurs when individuals refuse to achieve the goals of society but they propose a new socio-normative order. Traditionally, it is especially the case of terrorist formations, sects, or groups with new ideologies. In the cyberfield, people like those hiding under the nickname of Satoshi Nakamoto may initiate revolution of the digital environment. For example, blockchain technology which should assure the security of the transactions is a protocol that is building trust as an emerging construct transactions are authentified through a distributed trust network accomplished through mass cooperation. This innovation is so disruptive that governement still hesitate to undertake and the elites of the world is tring to find as many applications as possible [24].

The conflict between normal and pathologic needs regulation, deviance or innovation. If governance is the responsibility of authorities, deviance occurs because the individual is not well socially integrated, loses self-censorship capacities, and motivation to make efforts to integrate and respect social norms weakens [25]. While the immersing of the individual in the community is vital to observe social norms and values, digital interactions largely exclude such a contact with memebrs of the group. Deindividuation, the lack of connections with others, the seemingly anonymity are variables that make people believe they can hide behind a screen that promises unexpected benefits with minimal coercion as the legal and social control seems to be dissolved or distant.

The characteristics of the online space rarely allow the regulatory intervention of the group - only social networks or discussion forums may set up levels of tolerance for acceptable behaviors. Most of the online behaviors are not community-based: online citizen journalism, online petitions, online banking, e-commerce are just a few examples of situations where the individual can not be socially controlled. The behavioral regulation of these interactions can only be achieved through strictly regulated legal control through legal rules. Otherwise, the benefits of hiperconectivity are seriously jeopardized by cybercriminals who find in the digital space a little regulated and controlled territory where they can act without fear.

The progressive increase in cybercrime numbers has made cyber security a priority for every government, the decision-makers trying to adopt policies that allow the continuity of social, economic and political life of communities and individuals in and out of the digital space.

CONCLUSIONS

In this paper I argued in favor of the hypothesis that the digital space, despite the technological advance that it incorporates, is a faithful mirror of society, so that social reality and virtual reality are

very similar. Therefore, I have identified a series of pairs that we have analyzed comparatively: norms and social order - digital social order, social deviance - cybercrime, social control - cybersecurity. From the analysis made it follows that the theories formulated by sociology to explain the classical social reality are also applicable to the understanding of the digital space. The general rules of behavior, the trends and biasis of people can be found in the cybernetic environment. The differences that arise are determined by the particular characteristics of virtual reality, namely anonymity, de-differentiation, diffusion of responsibility, impression management, and the existence of unanswered partners in the prevention of deviance. Therefore, the conclusion is that all these particularities need specific policies that could prevent the individual involvement in deviant activities. The transformation of the presentdays anomic cyberspace in a safe environment is possible through 1. Negotiation of digital norms between the digital communities' members, and 2. The establishment of clear rules and policies by the government together with effective control instances. Only by accomplishing these two conditions, the anomie of digital space may be eliminated, the amount of deviance diminished and the digital space may be transformed into an area where people can enjoy the benefits it offers.

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