

# Two theoretical dimensions of the cyber hate crime

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## ABSTRACT

The impact and relationship between technologies and society establish the development of certain adaptive models, based on coexistence (Human-information-Machine), as well as several behavioral and cognitive changes of the human being, and new models of influence and social control through ubiquitous communication, which is the basis of a new social units called "virtual communities". The rupture of social norms that accompanies rapid social change, and subsequently the appearance of sub-cultural values establishes gaining status of participation in criminal activities, the components of social unites in general conform to social norms by social ties. the individuals or groups see themselves unfairly disadvantaged compared to other similar individuals, within physical-cybernetic ecosystem environment, which supports the interconnection and transformation of social phenomenon of digital dimension, with several implications in cyber hate crime. Thereby establishing the theoretical basis for further research looking which social vulnerability, identify the trajectory of the massive vector of impact "Information", which is a component of social cybernetics from the following three dimensions: (P) Propagation - (R) Replica - (C) Control called the "Cyber Hate Crime Pathway" that links hate crimes within the cyber-physical ecosystem, and where different types of social vulnerability are established. This study incorporates an epistemology approach of the relation between social and cybernetic theories, that will allow establishing a scientific base for future research in the field of new phenomena that will continue to appear within the Physical-Cybernetic ecosystem. It will also allow the contributions and implications to science derived from the product of this research establish a global holistic field applied to criminal justice system, academic and the new entities of social cybernetic.

## Keywords

hate crime, virtual communities, social vulnerabilities, netnography, cybernetic.

## 1. INTRODUCTION

Studies on the relationship between technologies and society have increased in the last decade. However, beyond relationships or differences, it is crucial to conceive that this evolutionary process between society and technology has established two routes since there are certain characteristics in society that lead us to observe the same physical-cybernetic system, which establishes the convergence between the human, the information and the machine.

These new social characteristics establish the development of certain adaptive models based on the coexistence of three ontological dimensions: Human (h) - Information (i) - Machine (m). which is impacted by three technological segments, namely devices, applications and social communication infrastructure. These are involved in various physical changes.

Behavioral and cognitive aspects of the human being, as well as new models of influence and social control through ubiquitous communication, which manages social information under This form the basis of a new physical-cybernetic ecosystem where new social units called "virtual communities" coexist and develop.

This new ecosystem of communication, management and social interaction has exposed areas of vulnerability called "Social Perspectives of Risk", impacting all social units by the massive impact vector (i) or information". The virtual environment "H + i + M"; And their entities can be analyzed and interpreted through the trajectory of the vector (i) between two or more human entities and their relationship with other virtual entities that coexist in the ecosystem.

## 2. RESEARCH OBJETIVES

This study aims to identify with the literature review, the epistemology approach of the relation between two theoretical dimensions: social and cybernetic theories, explaining the theoretical bias of hate crimes within Physical-Cybernetic ecosystem that links hate crimes within the PCE, and where different types of social vulnerability are established according to the literature review.

Unlike other areas of research in social cybernetics, the researcher is part of the immediate experience in an intrinsic way. And there the relevance of the academic application in the forensic sciences, the new cyber intelligence approach and the processing of the public unstructured data within the virtual communities require a new netnographic methodology base. In turn, this establishes the processes of collection and analysis of data in the crime scene clearly focused on the trichotomy of the Tecno-Social Convergence: human+information+machine ("h+i+m").

## 3. RESEARCH JUSTIFICATION

The continuous social changes that have emerged since the beginning of the digital period are accompanied by the breaking of norms (Nikbay, 2009), which were traditionally drawn from the typographical period. Nevertheless, the new social units called virtual communities have certain characteristics such as semantics, subjectivity, adaptability and a new social consciousness (Yaich, Boissier, Jaillon, & Picard, 2012).

These new social bonds through human-information-machine coexistence (Salas Guerra, 2016) establish certain changes in individuals and groups. This can be represented in some social phenomena that accumulate persistent hostility within hate crimes in certain virtual social units, identified in practices of certain marginalized and stigmatized social groups (Walters & Brown, 2016).

## 4. THEORETICAL FRAMEWORK

### 4.1 Epistemology

This research methodology seeks to establish the social cybernetic theory/model review, which is aligned with current phenomena and a process that merits moving away from traditional approaches to research to explore and delimit new Biocybernetic phenomena based on hate crimes within virtual communities. Identifying "endogenous" and "exogenous" aspects within hate crimes that influence the problem within the conceptual gap and the treatment of public data within virtual communities, will allow for compliance with scientific rigor. In the social area, the qualitative method remains the only way to obtain data on many areas of social life (Glaser & Strauss, 1967). This has generated an existing gap based on the limitation of the collection of quantitative data, impelling the parsimonious establishment of new initiatives in qualitative scientific research that involve the new phenomena of the physical-cybernetic ecosystem.

The new forensic research technique that will be used is defined by (Poncela, 1990) as a set of operational aspects based on the organization of data, the formation of concepts and hypotheses, collection and analysis of information and production of results (Palomino, Alonso, Morales, & Prieto, 2009). However, this study demands rigorous, definable and transmissible operational procedures to be successively repeated as is established by the research objective.

In contrast to other areas of research, in social cybernetics, the researcher is part of the immediate experience in an intrinsic way. The researcher's permanent relationship in technology-based communication processes is clearly focused on the trichotomy of the CTS "h + I + m". This allows describing and explaining the meanings according to (Ruiz Olabuénaga, 1996).

The scientific research method based on Netnography allows carrying out studies focused on learned behaviors. These behaviors are based on new values and customs, directed and established within a virtual community, according to (Bowler, 2010). This binding interaction (human - information - machine) or (h + i + m) allows for the understanding of ontological factors of society and cyberculture.

Although, the process of globalization through electronic information management has developed two poles: those that still want to maintain cultural identity and the other that seeks homogenization based on multiculturalism as mentioned (Gómez, 2001). This point of controversy has been corrected through the development of virtual communities that establish a multicultural, homogeneous process, based on the same perspective, with vast processes of coexistence and coexistence.

### 4.2 Forensic Academic Implications

The contributions and implications to science derived from the product of research establish a global holistic field that feeds on an epistemological basis that seeks to analyze and apply the findings found within the research. This application aims firstly to design the new educational conceptual base that to contribute to the solution of the phenomenon by studying and the needs of the vulnerable population. In addition, the application program will seek to cover the academic needs of law enforcement, in relation to penetration, analysis and vectorization in investigative processes, both in terms of research and cyber intelligence regarding the physical-cybernetic ecosystem and hate crimes.

### 4.3 Forensic Data Analysis and Collection

The development of a qualitative research in this field seeks to develop a model that nurtures the singularity of each component that exerts value both in the qualitative area and social cybernetics, after having established a theoretical rigor, will establish the operational process based on the following epistemological criteria:

**Table 1 Two theoretical dimensions**

Social Dimension Theories	Social Cybernetic Dimension Theories
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### 4.4 Cyberintelligence Field

The field of action is the Physical-cybernetic environment, with distinctive and unique social characteristics; The risk population is framed within the new social units called virtual communities (Cachia, 2008) (Salas Guerra, 2016) (Undine, 2012) (Kozinets, 2015), which are under the approach of a new worldview of the scientific research area (Thompson, 1997), where the ubiquity of interpersonal communication predominates. Virtual communities are established through multicultural and homogeneous characteristics within a human-machine cybernetic structure, these social units inhabit the existing physical-cybernetic ecosystem (Engen, Walland, Uders, & Bravos, 2017).

### 4.5 Cyberintelligence Analysis Plan

The praxis in the identification of new phenomena of the hate crime establishes the existence of a new social structure, which is already part of the same ecosystem of life, these inferences involve a new conceptualization of the hate crime, thus establishing a new need for Treat and study these criminal phenomena. However, it is necessary to develop new models and methods of scientific research to obtain data in an appropriate way. Since the focus is on crime, not on the phenomenon, secondly, it is important to establish new types of social identities based on anonymity, and the Troll entity, and the third point is to study the vector Massive impact of (i) social cybernetics from the following three dimensions: (P) Propagation - (R) Replica - (C) Control (Salas Guerra, 2016). The spectrum of the physical-cybernetic ecosystem, virtual communities and their respective entities are found cohabiting in different environments. This is the case of the dark side of the Internet or "Dark Internet Site". This is a site of criminal proliferation, a virtual black market, as well as its counterpart with the establishment and permanence of ideological subcultures within contemporary virtual communities. The forensic application of this research will be nourished by data obtained within the physical-cybernetic ecosystem, thus seeking to fulfill the established objectives.

## 5. FRAMEWORK MATRIX

Within the process of cyber intelligence is important the design of an exploratory and experimental qualitative research will allow for the description and explanation of the meanings of the daily experiences immersed in virtual communities (Ruiz Olabuénaga, 1996), the predominance of social opinions based on the "hub" of collaboration and social communication, "social networks" and the frequency of certain behaviors influenced by the massive vector of impact [i] "information" (Salas Guerra, 2016). To these experiences and new social phenomena such as: anonymity, influence of opinion can be added the reputation and imitation of virtual entities or new types of social deviation such as Troll (Halder, 2014) This leads

to show the dimension of this study in two areas called (Social and Cybernetic).

**Table 2 Theoretical Framework Matrix**

<i>Dimensions</i>	<i>Theory</i>	<i>Operability</i>	<i>Reference</i>
<i>Social Theories of Crime</i>	Anomie - Strain Theory	Rupture of social norms that accompanies rapid social change	(Nikbay, 2009) (Merton, 1938)
	The Subcultural Theory	Sub-cultural values establish gaining status and respect for participation in criminal activities	(Nwalozie, 2015) (Bordua, 1961)
	Social Control Theory	People in general conform to social norms by social ties. Rather, they engage in delinquent acts when these links are broken or weak	(Pratt, Franklin, & Gau, 2008)
	Right Realism - Rational Choice Theory	Social changes arise from individual human action	(Scott, 2000)
	Left Realism - Relative Deprivation Theory	Individuals or groups see themselves unfairly disadvantaged compared to other similar individuals	(Schwartz & DeKeseredy, 1991)
<i>Theories of Social Cybernetic</i>	The Convergence Techno-Social Theory	Establish a new form of human coexistence based on coexistence (human - information - machine) (h + i + m), within a new physical - cybernetic ecosystem	(Salas Guerra, 2016)
	The Cyber-Physical Social System Theory	Physical-cybernetic system, which supports the interconnection and transformation of social and digital dimension	(Rajkumar, Lee, Sha, & Stankovic, 2010)
	The Actor-Network Theory	Argues that any social system is an association of heterogeneous elements such as humans, norms, texts, devices, machines, and technology	(Latour, 2006) (Engen, Walland, Uders, & Bravos, 2017)
	The Memetics Theory	Imitation, control, replication involving technology and culture factors	(Rose, 1998) (Blute, 2005).

## 6. CONCLUSIONS

These new social bonds through human-information-machine coexistence (Salas Guerra, 2016) establish certain changes in individuals and groups, which incorporates a symmetrical relationship between the social and cybernetic and social changes arise from individual human action, in our social system this association of heterogeneous elements such as humans, norms, texts, devices, machines, and technology (Latour, 2006) (Engen, Walland, Uders, & Bravos, 2017),

establishing a solid foundation for development of new human behavior model based in imitation, control, replication involving technology and social entities.

The rupture of social norms that accompanies rapid social change, and subsequently the appearance of sub-cultural values establishes gaining status and participation in criminal activities (Nwalozie, 2015) (Bordua, 1961), the components of social unites in general conform to social norms by social ties, and that's where they appear delinquent acts when these links

are broken or weak, the individuals or groups see themselves unfairly disadvantaged compared to other similar individuals, within physical-cybernetic ecosystem environment, which supports the interconnection and transformation of social phenomenon of digital dimension (Rajkumar, Lee, Sha, & Stankovic, 2010), in several implications of cyber hate crime.

Thereby establishing the theoretical basis for further research looking the trajectory of the massive vector of impact (i) "Information", which is a component of social cybernetics from the following three dimensions: (P) Propagation - (R) Replica - (C) Control. This will be called the "Cyber Hate Crime Pathway" that links hate crimes within the cyber-physical ecosystem, and where different types of social vulnerability are established.

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