Information Communication Technology & Crime: the Future of Criminology

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Riassunto

Fino ad oggi il XXI secolo può essere considerato come il secolo della rivoluzione tecnologica. L'incremento dei flussi comunicativi ha prodotto un'evoluzione nell'economia globale e nella diffusione globale di Internet e della telefonia mobile in cui le nostre vite sono immerse. Tutto ciò rappresenta il principale fattore di cambiamento sociale.

Nuovi modelli di devianza e di criminalità possono essere reperiti nel cyberspazio così come i gruppi terroristi tradizionali ricorrono ad un uso massivo dei nuovi media. Tuttavia, occorrerà prestare un'attenzione speciale al fenomeno denominato Jihad Digitale.

Quale ruolo giocano i media nel terrorismo contemporaneo? Che cosa sono Infowar, Netwar e Mediawar? Che riflessioni effettuare sulla cultura del crimine e sulle sue relazioni con la tecnologia? Che cos'è l'Open Source INTelligence?

Oggi il criminologo deve conoscere l'importanza della cultura digitale, così come egli necessita di un possedere un bagaglio di conoscenze relativo alle tecnologie dell'informazione e delle comunicazioni al fine di prevenire e reprimere il crimine. Egli utilizza le sue competenze anche nell'oceano dell'*open source* per prevedere i trend del crimine del futuro.

Résumé

Jusqu'à présent, le XXIᵉ siècle peut être considéré comme le siècle de la révolution technologique.

L'augmentation des flux de communication a engendré une évolution de l'économie globale et de la diffusion globale d'Internet et de la téléphonie mobile dans lesquels nos vies sont plongées. Tout cela représente le principal facteur des mutations sociales.

De nouveaux modèles de déviance et de criminalité voient le jour au sein du cyberspace, de même que les groupes terroristes traditionnels emploient de manière intensive les nouveaux médias. Toutefois, il faudra faire tout particulièrement attention au phénomène qualifié de « Jihad Digitale ».

Quel est le rôle des médias dans le terrorisme contemporain ? Que sont l'Infowar, le Netwar et le Mediawar ? Quelles réflexions peut-on faire à propos de la culture du crime et de ses relations avec la technologie ? Qu'est-ce que c'est que l'Open Source INTelligence ?

Aujourd'hui, le criminologue doit connaître l'importance de la culture numérique, de même qu'il a besoin d'un savoir-faire lié aux technologies de l'information et de la communication dans le but de prévenir et de contrôler la criminalité. Il utilise également ses connaissances dans l'océan de 'l'open source' afin de prévoir les tendances de la criminalité.

Abstract

Today the 21st century can be considered the century of the technological revolution.

The increase in communication flows has brought about an evolution in the global economy and the global spread of Internet and mobile communication, all of which affect our lives significantly and are key factors of social change.

New models of deviance and crime can be found in cyberspace as well as in traditional terrorist groups who resort to a massive use of this new media. Therefore special attention should be given to the phenomenon referred to as 'Digital Jihad'. What is the role of media in contemporary terrorism? What about Infowar, Netwar & Mediawar? What can be said about criminology and its relationship to technology? What is the impact of Open Source INTelligence?

Today criminologists have an obligation to understand the importance of digital culture and acquire the skills in Information Communication Technology required to prevent and counteract crime. They must also use their skills in the open-source ocean to envisage future trends in crime.

1. Globalization of fear.

Most frightful fear is the diffused, spread, indistinct, free, unmoored, fluctuating, destitute of an address or of a clear cause fear; the fear that oppress us without a reason, the threat that has to fear and that is glimpsed everywhere, but is not never clearly shows. "Fear" is the name that gives to our uncertainty, to our ignorance of the threat, or of that we have to do.

(Zygmunt Bauman, L*iquid Fear*)

The end of '80s, on a geopolitical level have caused the transition from an hard bipolar to a multicentric and multiactorial scenario. That is

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representative of a very dynamic phenomenon, named Globalization.

In this context the ICT, Information & Communication Technology, becomes *the pivot* of the "world system" characterized by the complexity of human infrastructural and economic flows.

Globalization appears as an not-reversible and bidirectional process: on the one hand we experience the dismantling of the States in favor of transnational economic drift, on the other hand, we look a techno-financial skills leveling upwards, at the expense of the macro-flows polarizations.

All long, the history of societies has highlighted, among the social actors, a never-ending production and exchange of information and symbolic contents. So, we can affirm that in the post-industrial society the relationship between information and communication had become main focus, just like the relationship between capital and work in the industrial society.

21st century has to be considered the century of the digital revolution, in which is possible: real-time mobility, portability and the interexchange mass data.

The technological innovation thanks to new media, has caused a first step of great development, then a second step characterized by the creation of a *flat world[1]* where the resources and the technological skills are not any more exclusive to practiced and privileged few élite, but horizontally spread rapidly.

The crossing recession wave in the contemporary societies, favors the rise of the precariousness,

determining in public opinion an increase uncertainty in the future.

After 9/11, the welfare-state project – also deputy to metabolization fear, socializing it into a kind of *Good Society[2]*- seems to be failed. In fact, today in the attempt of the "deprivatization" of the fear, it was chosen the *society of the control[3]*, based on the concept of *techno-safety*, throwing off balance the relationship between privacy/safety.

From an individual dimension, the fear becomes collective involving strong conditionings for the decision makers.

In this context, The post-industrial city appears to be pervaded by an omnipresent feeling of fear. It can be defined as *liquid fear[4]*, characterized by extreme fluidity and overpower that consents to deeply permeate each ganglion of the social structure.

The *metropolis regionalizes[5]* its borders and it becomes theatre of the " urbanization of terror", as a representative *non-place[6]* of the asymmetrical war causing a concrete threat to the democratic order.

The human behave is characterized on one hand by the loss of the geographical borders together with the rise of virtual hyper-socialization, and on the other hand by an obsessive search of fortification, delimitation, securitization and defence from *the other*. Moreover, we experience a dualistic development and a structural heterogeneity, that represent the scenario where

[1] T. L. Friedman., *Il mondo è piatto*, Mondadori, Milano, 2006.

[2] T. Hobbes, *Leviatano*, Editori Riuniti, Roma, 2005.

[3] G. Deleuze, "La società del controllo", in *DeriveApprodi,* n.9-11, DeriveApprodi, Roma, 1990.

[4] Z. Baumann, *Paura liquida*, Laterza, Bari, 2008.

[5] M. Davis, *Il pianeta degli slums*, Feltrinelli, Milano, 2006.

[6] M. Augé, *Nonluoghi. Introduzione a una antropologia della surmodernità*, Eleuthera, Milano, 2005.

the logic of exclusion and the minorities refusal contribute to endlessly reproduce a status of latent aggressiveness together with a widespread feeling of insecurity.

We have to consider the *collective safety* as *a status of social-structural, political-institutional and emotional balance, that allows man to project in a future devoid of dangers his own true condition of belong to a collectivity.*

The contemporary society is in crisis due to the constant perception of insecurity and precariousness that causes a strong change in social capacity projecting. Then it moves from a *future* as wish to a *threatening-future*[7].

Finally, we assist to the "rebirth" of the concept of border, rather imagined as strengthening and *building of content identity* than representation of the *container* as a restricted area.

2. Q-Generation.

Accomplice an exact technological innovation, a human group
substantially lined up to the cultural imperial model, it
access to a before-banned act, it
instinctively relates it to a more immediate
spectacularity and a modern linguistic universe, so
it gain to add it of a commercial amazing success
(Alessandro Baricco, *The barbarians*)

The atrocity and unexpectedness of crime-news which have upset Public Opinion over the last years, as well as the increasing of deeds of utmost deviance, the bullying and other forms of gratuitous violence, have often been associated with *antisocial disorder of personality*, well known as *sociopathy*.

In accordance with what previously said, the centrality and collective/generational dimension of discomfort stands out and, at the same time, the importance of socialisation, as a balanced construction-process of the Self through the relationship with the Others is emphasized, especially during the evolutional segment of life which goes from childhood to youth.

Today's young generation can be defined Q-Generation[8], whose representative person is *the cosmic, fanciful and self-centred fool, who represents the incarnation of the ideal unscrupulous scoundrel beyond good and evil*.

In the socio-cultural background where these generations are developing, we can see an increasing affirmation of the value of sensationalism encouraged by technological innovation and the marketing of successful and enjoyable mass-products. Today the concept of beauty, connected to the classical concepts of harmony and balance is replaced by the sensationalism one which, on the contrary, implies new models based on disharmony and excess. The shifting towards this new *dis-evaluation* scheme takes to the exaltation of concepts such as superficiality, simplification, speed and mediality which become central to this new order.

Remediation, such as the possibility of unlimited and personalised fruition of media contents, occupies each dimension of human-life transversally and deeply influencing it.

Knowledge can be considered the basis of culture and the bricks of social-identity building. The young man, actor of the 21st century, appears less and less tied to the deep experience, but strongly directed to the sequence of experiences which he can live in a very short time.

We can think about the spread of Internet and the use of Google, where what is distinguishable is

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[7] U. Garimberti, *L'ospite inquietante. Il nichilismo e i giovani*, Feltrinelli, Milano, 2008.

the "number of links", such as the times users have shared the information, so not taking care of its pertinence, exhaustiveness and reliability.

The sharing defines the horizontality of knowledge through the contextual redefinition of the concept of quality, tightly connected to the truth related to the knowledge/experience process and *speed-quality* identity, in which the dimension of reliability disappears.

Therefore, we live in a condition of *temporal asphyxia* encouraged by hyper-information and multitasking, in which time is determined by the rationalization of productivity that generates a further change of the experience through a new form of perception. This emphasises with great starkness today's criticality of the concept of sense.

Technological development necessarily defines a shifting of the limit. We can see a progressive acceleration whose paradox is the fact that our aims are constantly re-projected forward without any possibility to reach them, in a kind of *totalitarian progress*[9].

How do the values affect it, considering that this is an era of great social-change?

Knowledge becomes *surfing*, movement, dynamism. Experience is no longer based on sedimentation, remembrance, memory, but on the swift passage from one experience to another.

Just like the frog in the pool jumps from one nymphaeum to another, the surfer swiftly jumps from one link to another, on the surface without reaching or trying to reach any shores, without

going deeply into knowledge because *stasis is perceived as senseless*.

We can affirm that the concept contained in a webpage is knowledge only because associated with a link as the expression of a *sequence*. History and civilisation, always considered the basis of People, Country and State identity, appear to surfer's eyes as senseless because strictly connected to the concepts of culture, *roots*. Besides, the cartographic revolution based on personalisation which is crossing our days, together with the individualisation and virtual sharing of meta-territories through the geo-web and wiki-mapping, put out the importance of analysing and understanding the dynamics tied to cyberspace.

In such a space a collective culture outlines more and more, its negative effects are represented by negative discomfort. This form of discomfort, therefore, is not referable to an existential dimension and individual suffering but to a real cultural dimension.

Thereof, the centrality of communication appears considerable both as a process of mutual acknowledgment and as a construction of the existent.

Technological rationality[10], which is no longer based on the concept of truth but of functionality, is expressed by the contraction of space and the contextual speed of time.

Platonic universe founded on the "ideas" and "things" incorporated the concepts of truth and justice, *the order of ideas*. On the contrary, *wiki-culture* on one side guarantees a wide

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[8] F. Blask, *Generazione Q*, Marco Tropea Editore, Milano, 1997.
[9] P. Virilio, *L'incidente del futuro*, Raffaello Cortina Editore, Milano, 2002.

[10] R. Queraltò Moreno , *Razionalità tecnica e mondo futuro. Una eredità per il terzo millennio*, FrancoAngeli, Milano, 2002.

participation, but on the other side it is too weak to hold relativistic degenerations.

The coming of the new-media has produced another change: the passage from intimacy, as a defence of freedom and personal identity, to mercerization and public sensationalism of intimacy which undoubtedly changes into pseudo-intimacy.

Media phenomena like *Big Brother*, but even more innovative forms of reality, outline a substantial homologation of the social actor through public sharing of his intimacy which causes the erosion of the identity-border whose aim is to protect the core of a person.

3. De-structuration of Human.

He was not hard to talk to.
Called me Sheriff.
But I didn't know what to say to him.
What do you say to a man that by his own admission has no soul?
Why would you say anything? I've thought about it a good deal.
But he wasn't nothing compared to what was coming down the pike.
(Cormac McCarthy, *no country for old men*)

Today, at the individual-level we observe another worry change.

The computer science and nanotechnologies determine the technological redefinition of man and world, characterized in the present, by a strong opposition between true and virtual contest.

Some scientists affirm that the evolution of the biotechnologies and nanotechnologies, would be briefly able to make a backup-copy of human-brain memory, so it will outlive to body-death.

However, the technological development will improve human-life span & quality, but probably it will cannot remove the endemic aggressiveness, almost cultural, of today & tomorrow society.

We are concretely risking to lose the property of our body, our physically.

In relation to this concept, we observe that today we can't talk about just one body, but physical, electronic, material, virtual, political and finally biological body.

The necessity to insure a biological better future, by techniques of autotransplant using our stored biological samples, causes a new conceptualization of physicalness that is named *parceled-out body[11]*.

So, I would point out, in this sense, the existing analogy with the "world of computers" and the concept of peripheral-component.

Just three years ago in London, the studies about the creation of *bio-jewlery*, started; in the next future, they ensure man can bring with him precious objects containing inside active-cells of his partner.

In the same period, in France, a surgical operation based on the first transplantation of human-face has been done. It's represents a milestone in the history of medicine.

Besides, we experience new body-transformations as the subcutaneous insertion of chip, that makes possible to connect body to sophisticated technologies of remote-identification in the so called *society of control*. Then *networked person* is born and it's an *always interconnected body transmitting real-time data to implement spatial-traceability, but even to monitoring the habits useful to produce mental-maps and behavioral profiles.*

An example of this is given by "Apollo project", based on *ppm-system* which consents real-time

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[11] S. Rodotà, *La vita e le regole. Tra diritto e non diritto*, Feltrinelli, Milano, 2006.

transmission of all data relating to the individual dimension of consumer.

Security has reached the "subcutaneous level" for Mexico's General Attorney and 160 people in his office who have been implanted with microchips that get them access to secure areas of their headquarters and prevent the eventuality of be kidnapped.

But we have to ask ourselves: how much does all of that contrast with fundamental freedoms and the respect & dignity of the human person?

Today, Internet represents the main medium and it can be considered as the greatest *agorà* in the history of humanity. We can, in the same time, experience the anonymity and the identity-multiplication , the new knowledge, the ubiquity and the remote-control. In ICT system, we assist to the built of an *e-body* - an electronic body - that preserves the more intimate characteristics of the subject. In the so called *society of the control*, the body and the mind have reached a new vulnerability thanks to the need of traceability due to the *institutions of control*. In relation to the future in perspective, we can talk of *post-humanity* as never-ending & media-bodily-interconnection with the social structure. This represents for the social actor a guarantee of his autonomous mobility, but as a matter of fact that seems to be far from the true concept of freedom but so closed to kind of *soft-captivity*.

Besides, thinking of the spread of black market organ trafficking, we can affirm that atomized and commercialized body, states, at global level, the economic-social dichotomy between a minority of rich and a crowd of poor people.

Finally, the Microsoft patent, relating to the use of human-body as an apparatus for the transmission of energy and information, has opened the road to the *human-portability* - the straight connection between human-body and the communication & storage portable-devices. Whereupon the *man-information* identity, as the reduction of human-body to simple information without its cultural characteristics, moves from science-fiction to real-world. This *new-medium* is very suitable as complex platform to strategic criminal actions.

Therefore, we have to make a question: can alone technology protect human-identity?

To answer, we have to consider, for example, that since 25th February of 1996, clonation of the sheep named "Dolly", the human-clonation, first physics then virtual, seems to be one of the main themes of the debate about not-only the bioethical but especially illicit effects.

Once again, the alone technology causes the stress of the border between legality & illegality.

4. Digital Jihad and Mediawar.

He who fights with monsters might take care lest he thereby become a monster.
And if you gaze for long into an abyss, the abyss gazes also into you.
(Friedrich Nietzche)

Today the terrorism has a news and incisive *weapon of mass persuasion*, the globalized media, given by its ability to strike the individuals emotional sphere.

The information is at the same time "object of desire" and "offence tool" it's used in a strategic way, to make propaganda, to search consent, to delegitimize the enemy searching for autolegitimization.

In a continuous change scenario, the networks are the lead rule of conflict virtualization and this complexity imposes to criminologist to observe

and interpret such phenomena passing through the sciences of the communication.

Just in this way it is possible to get the symbolic decoding contents of new media, especially looking at the terrorism phenomenon. In fact, in this context, we experience the importance of the symbols that define the affiliation, synthesize the ideology, define an action "legitimacy" and spread an aggregative ritual. We can focus on same specific aspect of the phenomenon definite as Digital Jihad, that is the cyberspace activity of groups belonging to the so called Jihadist Forum of the Islamic terrorism: roles, dynamics, structuring, strategy and Mediawar tactics. Now, we have to make a question especially looking to the future:

We observe a "global" terrorism constituted by a reticular multidimensional system of operational asymmetries. Moreover, the intensity & militarization of conflicts can be possible to consider this kind of terrorism as a *sublimation of war*, a *pseudo-war*?

Today the digitalization through internet has increased the operational capability of the terrorist groups. An interesting trend is related to the coming, in the near feature, of a new criminal actor: the *open-source terrorist*, characterized by an high level of invisibility & relationability, thanks to data-storage, portability and a diffused know-how. He will be favored by the synthesis of net-individualism, through the complexity of me-centric matrixes, the virtual-privatization of the social relationships representing a way to release & share multimedia-products showing the effectiveness of the explicit contents and in particular of the hide ones.

So, the main strategic resource is represented by *open-source*.

The "cultural" product – related to a dis-value set in comparison with our set - of the so-called *digital-jihad* or *dijihad* is given by: cross-media products, free-sharing platforms as YouTube, the expert use of the digital technology, and user-friendly contents. That product finally is characterized by the polysemy – as personal and social identity – that, for example in Al-qaeda, can have reference to a sort of t*error-brand*, to a multiplicity of supporters, to many not-militant sympathizers who are interested in the media contents; this functional-triad determines the strategic positioning of the product in matter that it can be remained on the net for a long-time and on the high sharing.

For all that a useful-tool for the criminologist – related to the deep-knowledge of terrorist phenomenona in evolution - is represented by *Open Source INTelligence* (*OSINT*) *applied to the criminological analysis*, considering the exponential increase of the available *open-sources*. One of the main priorities for 21st Criminology, in future perspective, is given by the managing of *open-source* sea.

5. Safety & Security, Technology and Privacy.

> *The man who trades freedom for security does not deserve nor will he ever receive either.*
> (Benjamin Franklin)

Today's trend is the privatization of the public dimension.

What will be of the constitutional balancing? How to balance the security/privacy relationship?

If we analyze the relationship between technology and sovereignty and in particular between media and *institutions of control*, as a

macrophenomena, and if we are looking, in future outlook, for possible scenario, we have to consider some important things.

Today, in principal, we have two levels of technology, *high* and *low*. The expertise that institutions have to keep under control this technology has an impact, in a determinate social contest, that it may be definite in two ways, *hard* and *soft*.

That's why combining those foretell typologies, we will be able to determine, in future, four different scenario:

| | | INSTITUTIONAL CONTROL | |
		Hard	Soft
TECHNOLOGY LEVEL	High	Hyper-society	Flash-society
	Low	Ctrl-society	Delay-society

A.   Hyper-society - characterized by an high development of *portability*, interconnections, *cross-media*, and above all *social-networking*. In such context it determines a strong deterritorialization of the human relationships, even if there is on the territory, a wide diffusion of virtual aggregation. An high level institutional control involve a remarkable infrastructural complexity that redefine the concept of vulnerability, based on the protection of social structure safety. In this scenario, the criminal would have low efficacy, but on the contrary, would promote criminal synergy that will guarantees an proper technological-criminal *skill.*

B.   Flash-society - characterized by the further loss of power and the ability of technology control by the State. In this field, we watched to a progressive safety privatization managed by great industrial groups with narrow individualization of responsibilities. The criminal *leaderless* structures*,* compared to the ability to commit a criminal act, are stronger than the State that even more looks like a *clay giant*. The collective increase of technological skills and the rapid fruition of media contents lead towards *creative*

destructuration. The *hackerism* and all his ramifications, start to enfranchise from his sub cultural dimension to became *far-wirelest* dominant culture.

C.   Ctrl-society - characterized by strong institutionalization of the control especially in virtual field. There is a dichotomous presence of two entities, the State and the civil society. In this context, it determines, on the one hand, the development of marginality, clandestinity, and from the other the rebirth of the sociability desire and presence on the territory of the individual, as well as collectivist phenomena. We can see a remarkable crime containment, but an increase deviance expression, as reaction to the strong control exerted by the institutions.

D.   Delay-society - characterized by a slow technological progress and a weak institutional control. In this social context there is economic contraction and the public utilities do not satisfy the constant demographic growth population. Such situation show social conflicts and the multiplication/expansion of black markets managed by organize criminal structures highly territorialized, as Mafia.

In the end, we can affirm that imaging the future in the next fifty years is the straight consequence of well-knowing and deeply understanding the complexity of the present.

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