

New Communication Tools and the Phenomenon of Privacy Violation in Interactive Societies: A Prospective Vision Towards Interaction Ethics

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Abstract

The interactive world has allowed us to communicate anytime and anywhere in the world, changing the concept of proximity between peoples... "As for privacy, we mean the right of a person to live alone, retreat into themselves, and interact with familiar people, with minimal interference from others... This is reflected in being free from others' spying. If we continue with the violation of privacy, we would be opening an important door for legal crimes related to privacy breaches. We see that such topics and approaches are part of recent research in the field of monitoring the performance of new media tools in terms of the essence of their content, particularly the interference in the privacy of societies interacting with these contents." This is one of the latest media studies.

Therefore, this research paper attempts to explore ways of establishing ethics of interaction to protect the privacy of every individual interacting on new media platforms, primarily represented by social networks.

Keywords: New communication tools, privacy violation, society, interaction, ethics.

Introduction

The information revolution began as a result of the combination of communication technologies on one hand, and information and its advancements on the other. The information revolution is the scientific and technological leap we witness today, and this era is often referred to as the Information Age. Information has always been one of humanity's most valuable possessions. It has been cared for throughout the ages, collected, recorded, and stored on progressively developed media, starting from the walls of temples and tombs, moving to papyrus, and culminating in the invention of paper, which took many forms, eventually leading to the use of magnetized electronic discs.¹

Traditional assets, protected by legal frameworks and systems for a long time, are now facing new forms of violation through modern technologies. Whereas theft and fraud were once committed in traditional ways, and trust in paper documents was violated through forgery, these assets are now being attacked via network intrusions and electronic transactions, allowing funds to be transferred from one end of the earth to the other in moments. Similarly, rights once held in paper forms are now being infringed upon in their electronic formats through hacking into networks and information systems, without the need to tamper with any physical documents.

Furthermore, an individual's private life, which used to be violated through eavesdropping or photographic intrusion, is now being breached through hacking into personal emails, computers, and databases related to health insurance, hospitals, credit institutions, and social security. This is the essence of our discussion, where we highlight the major challenges facing the interactive individual online.

1. The Key Challenges of the Interactive Identity on New Media:

Mahmoud Alameddine defines communication and information technologies in three main dimensions:²

- **Information Revolution:** This refers to the massive knowledge explosion represented by the vast amounts of knowledge across various fields and languages, which is being controlled and utilized through information technology.
- **Communication Revolution:** This involves the technology of wired and wireless communication, starting from television and broadcast programs, eventually advancing to satellites and visual technologies.

- **Electronic Computing Revolution:** This revolution has permeated every aspect of life, blending with all forms of communication. With the rise of the internet, international information activities have expanded, connecting these activities through two main processes:
 - **Transnational Commercialization:** Crossing national borders in business.
 - **Informationalization:** Crossing national borders in terms of information flow.

In a book published in 1995 by Lawrence Gerd Sman, former chairman of the Public Broadcasting Corporation and NBC Television, titled *Electronic Dialogue: Reconstructing Democracy in the Media Age*, he argues that as the world approaches the 21st century, the United States is transforming into an electronic republic. A new political sphere is emerging in the U.S., where the democratic system significantly increases people's influence on governmental decisions.³

Two main factors largely drive this democratic shift:

1. The movement, which began about 200 years ago, that pushes for political equality and efficiency for all citizens.
2. The tremendous growth of long-distance communication technologies, along with the remarkable interconnection between television, telephones, satellites, cable, and personal computers.

Developing countries have become vulnerable to penetration by international communication technologies, and communication channels, especially television networks, are not just sources of news; they are indicators of a shift towards a borderless world. As a result, the concept of national sovereignty has declined, as many matters tied to sovereignty were not solely based on the effectiveness of authority and barbed wire but also relied on the control of information. Due to the current revolution in information technology, international communication, and the development of the news function through satellite-based television broadcasts, many countries have lost the imposed control over information.

As for the public, the negative impact of the "information-communication revolution" is apparent. What matters about the public is not just the group of people, as suggested by the legal definition, but rather the importance lies in the influence of the people on the strength of the state, depending on the cohesion, belief, and loyalty they have towards the state they belong to. Due to the effects of the "information-communication revolution" and "computer networks" on an individual's perception of time, space, control over distances, and crossing geographical boundaries, a sense of loyalty and participation can emerge, which is called "electronic communities." This can weaken the loyalty of the public to their political systems and the state they reside in.

These changes in traditional concepts of "state, authority, security" and the emergence of new concepts like "cultural security" are primarily due to the pressing features of communication and information technology, which we summarize as follows:⁴

1. **Interactivity:** This refers to the degree to which participants in the communication process influence roles and can exchange them. This practice is called "interactive practice."
2. **Non-Massification:** This means that the communication message can be directed to an individual or a specific group, not necessarily to a large audience.
3. **Asynchrony:** This refers to the possibility of sending and receiving messages at a convenient time for the individual user, without requiring all participants to use the system simultaneously.
4. **Mobility:** Many communication tools allow users to benefit from communication while moving, such as mobile phones.
5. **Transformability:** The ability of communication tools to transfer information from one medium to another, such as converting an audio message into a printed message and vice versa.
6. **Connectivity:** The ability to connect communication devices to a wide range of other devices, regardless of the manufacturer or country of origin.
7. **Ubiquity and Spread:** This refers to the widespread dissemination of communication systems across the globe.
8. **Internationalization or Globalization:** The new basic environment for communication technologies transforms into a global international environment, allowing information to follow complex pathways, similar to the flow of capital across international borders back and forth.

Here are the main challenges posed by new media or communication in interaction:

1. **Technical Challenge:** We are still consumers, chasing the latest technological developments, and have not succeeded in utilizing them effectively to achieve the intended goals and message.

2. **Professional Challenge:** We have not focused our efforts on training technicians and programmers who can keep up with advancements and strive to localize culture and knowledge in our countries.
3. **Stylistic Challenge:** We suffer from a lack of unity and coherence in our rhetorical style, and our programs lack appeal in presentation and distinctive form.
4. **Content Challenge:** It is evident that what we have is lacking in many areas (our message is for all people), but we have not properly prioritized our steps. We are either too hasty or too slow, both of which are problematic.
5. **Internal/Personal Challenge:** The success of frustration and control has shaken our convictions and weakened our trust in what we have. We are hesitant in presenting what we have and are uncertain.
6. **Challenge of Accepting the Other:** We often struggle to be patient with others in order to convey our message. How can we ask them to follow what we have when they are often unaware of it? {And if any of the polytheists seeks your protection, then grant him protection so that he may hear the word of Allah, and then deliver him to his place of safety }⁵
7. **Challenge in Approach and Philosophy:** We are either fully open to the outside world {An ant said, 'O ants, enter your homes, lest Solomon and his soldiers crush you while they perceive not.} or completely closed off to ourselves {And indeed, the home of the spider is the weakest of homes—if they only knew.}. Often, we lose the method of the bees {And your Lord inspired the bee, 'Take for yourself among the mountains, houses, and among the trees, and in what they build. Then eat from all the fruits, and follow the ways of your Lord laid down for you.}
8. **Challenge in Specialization and Methodology:** As media work has become a vital industry, as Sayyid Qutb says: "We are in desperate need of specialists in every branch of human knowledge, those who turn their labs and offices into sanctuaries and monasteries, dedicating their lives to their chosen field, not only with a sense of sacrifice but also with a sense of joy, like the worshiper who offers his soul to his deity with happiness."
9. **Challenge in Role Integration:** Media and security are two sides of the same coin and cannot be separated. Coordinating and recognizing the role of the other is crucial to overcoming the challenges of the current stage.
10. **Challenge of Keeping Up:** The rapid developments in science, technology, and their global effects require swift adaptation and immediate implementation. Otherwise, those who fall behind will remain behind, even if they strive in their apparent work.

2. Interactive Media:

Since the mid-20th century, the world has witnessed enormous technological leaps, one of the most important being communication systems. The Information Society emerged as a result of the fusion between satellite communication technology, which has the remarkable ability to transcend time and space, and electronic computing technology, which can store large amounts of data and retrieve it quickly in a matter of seconds. This has led to the emergence of information networks through both terrestrial communication means and space, adding an important dimension to humanity's ability to expand knowledge, store it, organize it, produce it, broadcast it, and deal with it instantly.⁶

1.2 What do we mean by Interactive Communication:

Researchers define interaction as involving a sender and a receiver. One of the key characteristics of interaction is **responsiveness**, meaning that interactive communication goes beyond human-to-human communication to involve communication and interaction with the medium itself, not just between individuals in the communication process.

The term "interactive communication" is used as a replacement for "computer-mediated mass communication."

Interactive communication is one in which the roles of communication are exchanged.

Interactive communication means equality between the participants in communication, with symmetrical communication power, leading to collective communication and agreement through the free exchange of opinions without external interference or influence from other sources or powers.

Interactive communication means open democratic participation, such as live online discussions, live chat rooms, and online email sites.

Dr. Mahmoud Alam Eddine presents his opinion on seven levels of how newspapers can benefit from the internet as follows:

1. **Level One:** The internet as a source of information and a tool to assist in news coverage, breaking events, and discovering new books and publications.
2. **Level Two:** The internet as a means of communication with external sources, correspondents, and reporters, as well as for conducting meetings.
3. **Level Three:** The internet as a tool for interactive communication by expanding communication through email.
4. **Level Four:** The internet as a publishing medium for newspapers, by issuing copies of the newspaper, summaries, databases, or full newspapers and magazines.
5. **Level Five:** The internet as an advertising medium that increases the newspaper's revenue through the ads published.
6. **Level Six:** The internet as a tool for marketing and services provided by the media organization through the creation of one or more websites offering basic information about their development and achievements.
7. **Level Seven:** Providing informational services by transforming the media organization into a provider of services to subscribers, such as issuing newspapers and newsletters for third parties.⁷

3. Security Risks Threatening the Privacy of the Interactive Community:⁸

In the information age, due to the presence of highly advanced technologies, the borders of states are compromised by spy satellites and satellite broadcasting. The Arab and Islamic world has always been, and continues to be, targeted both security-wise, culturally, and ideologically. The methods of espionage have shifted from traditional methods to electronic methods, especially with the use of the internet.

3.1. Interactive Espionage:

The danger does not lie in the use of the internet itself but in the weaknesses of security measures employed to protect the networks of institutions and government bodies. One cannot fully rely on protection measures produced by foreign companies, as they are not entirely secure, and complete trust in them is not guaranteed. The risk is not limited to attempts to breach networks and websites by hackers, whose risks are usually confined to vandalism or content destruction, which can be overcome by restoring a stored backup from a secure location. The real danger, however, lies in the espionage operations conducted by intelligence agencies to obtain state secrets and information, which are then leaked to other nations, often hostile, or exploited to harm the national interests of the state. Some international espionage cases have been uncovered, including the discovery of the National Security Agency's (NSA) key, which was planted in the famous Windows operating system. This may have been one of the main reasons why the German government announced its decision to replace Windows with other operating systems. Furthermore, a large international electronic espionage network was revealed, operating under the supervision of the NSA, in cooperation with intelligence agencies from Canada, the UK, Australia, and New Zealand. One of the modern methods of electronic espionage is "steganography," a technique where sensitive information is hidden inside ordinary information. This method is common, though not easy to execute. It involves the criminal hiding the targeted sensitive information inside regular data on a computer, then finding a way to smuggle out that regular information in such a way that no one suspects that sensitive information is being smuggled, even if the person is caught in the act. Unconventional methods may also be used to obtain secret information.⁹

3.2. Piracy (Website Theft):

Piracy here refers to the unlawful use or copying of various operating systems and computer software. With the advancement of technology, the methods of piracy have evolved and expanded. In the internet era, forms of piracy have become more widespread, and it has become common to find websites dedicated to promoting pirated software, either for free or for a fee. Software piracy has led to significant financial losses. Consequently, companies in the software industry have formed alliances and established an organization dedicated to monitoring and analyzing the software market, such as the Business Software Alliance (BSA). A study conducted by the BSA showed that online piracy will overshadow other types of piracy.

3.3. Crimes Against the Privacy of Individuals

It is initially difficult to define the elements of the right to privacy, as it consists of aspects that are not universally agreed upon by scholars. It can be said that it includes the sanctity of the human body, home, image, conversations, correspondence, and professional life.¹⁰

The relationship between privacy and information technology became important with the rise of data banks in recent times, serving multiple purposes and achieving the goals of users in scientific, cultural, and military fields.¹¹

Thus, information networks have become a dangerous repository of many of an individual's secrets, which can now be accessed easily and quickly, something that was not possible with traditional methods of data storage. As a result, data banks have become one of the most important and dangerous elements of an individual's privacy in the modern age.

Initially, this concerned the information that some individuals willingly provide during their dealings with public and private institutions such as banks, financial institutions, credit institutions, insurance companies, social security, and others. The personal data of users can be accessed by visiting certain websites on the information network, as communication networks operate using standardized protocols that facilitate the transfer of information between devices. These protocols, such as HTTP, can be used to access the user's computer number, location, and email address. Moreover, some websites place a program on the hard drive of a user's personal computer, known as cookies, to collect information about the users. What is even more dangerous about using this network is that everything a person writes in messages is stored in a special archive, allowing it to be accessed even after twenty years. Many people believe that using a pseudonym or a fake email address in chat rooms and discussion groups protects their identity. In reality, the service provider or Internet Service Provider (ISP) can access all of this information, and can also track the websites the user visits.¹²

Conclusion

Both divine legislations and secular systems agree on the necessity of respecting an individual's privacy. The mere intrusion into such information, whether stored on a computer, in an email inbox, or elsewhere, is considered a violation of individual privacy. The widespread use of the internet has led many internet users to experience violations of their privacy, either intentionally or accidentally. Simply put, whenever an internet user visits any website, that site generates two versions of cookies for their devices. Cookies are small text files sent by many websites to be stored on the devices of those who visit them for various reasons, such as recognizing repeat visitors or other purposes. One cookie remains on the server, while the other is stored on the visitor's hard drive in a file that the website has previously saved, without the device owner's awareness or consent. A unique number is immediately issued to distinguish that visitor from others, and the cookie starts its task of collecting information and sending it to its source or one of the data collection and analysis companies, usually advertising firms. Each time the person visits the site, the information is sent and the existing version is updated, and the browser performs the required task unless the device owner alters their settings. Some suspicious websites may exploit these cookies by copying these files and benefiting from them in one way or another. Website owners may also obtain personal information from the device owner voluntarily, as individuals are generally less hesitant to disclose personal information through interactions with their computer, unlike when dealing with another person.

There are ways to protect privacy while browsing the internet, but it is extremely difficult to control what happens to the information once it leaves the computer. Therefore, privacy protection should begin by identifying the types of data that should not become public, followed by restricting access to such information.

Footnotes:

¹Hisham Farid Rustum, *Penal Code and the Risks of Information Technology*, Modern Machines Library, Assiut, 1992, p. 5.

²Bouhenia Qawi, *Media and Communication and the Inevitability of Socio-Cultural Change*, Journal of Human Sciences. University of Batna. Algeria. Issue 14. June 2006. P. 230.

³Mohamed Laqab, *Muslims in the New Media Civilization*, Dar Al-Ummah, Algeria, 1996, p. 20.

⁴Bouhanian Qawi, *Modern Communication Technology and the Reality of Arab Media Discourse*, Third Scientific Conference of the Faculty of Arts, Philadelphia, Jordan. 1997/ 1998.

⁵Badr El-Din Ahmed Ibrahim: *New Media: Its Impact and Role in Security Awareness*, Security Awareness Conference, Knowledge Enlightenment Center and the Higher Military Academy in Cooperation with Naif University for Security Sciences, 2013, p. 15

⁶Abdul Rahman Arabi: *Interactive Communication: A Theoretical Introduction*, Dar Ibn Salem Al-Aghwat, 2013, p. 82

⁷Mahmoud Alam El-Din: The Internet and Social Service, Dar Al-Majidi for Publishing and Distribution?, Cairo, 2014, p. 114

⁸Mustafa Ahmed Mounir: The Communication Risks of the Internet, for more information see: <http://www.startimes.com/?t=30327235.le> 10-15-2016.a 21.30

⁹<http://www.startimes.com/?t=30327235.le> 10-15-2016.a 22.00

¹⁰Mamdouh Khalil Omar: Protection of Private Life and Criminal Law, Dar Al Nahda Al Arabiya, Cairo, 1983, p. 207

¹¹The same reference, p. 207

¹²Abdel Fattah Bayoumi Hijazi: The Conflict between Computers and the Internet - in the Arab Model Law, Dar Al-Kotob Al-Qanuniah - Cairo, 2007, p. 609;