

Slobodan M. Miladinović¹
University of Belgrade,
Faculty of Organizational Science,
Department of Human Resources Management
Belgrade (Serbia)

ON THE CONCEPT OF VIRTUAL AND DIGITAL IDENTITY²

ABSTRACT: This paper starts from the position that identity represents a set of relatively permanent, i.e., long-term determinants that relate to or can be associated with an individual or a social group and are most often recognized as awareness of the long-term continuity of personal or collective experience. Based on that, we can talk about personal and social identities. The contemporary moment is marked by identity pluralism (professional, educational, ethnic, religious, sexual, gender, generational, etc.). One of its new forms, which is associated with the accelerated scientific and technological development and especially the emergence of digital technologies, is virtual and digital identity. These identities also refer to individuals and social groups, but also extend to different organizations and products. They are formed in the online environment and consist of digital records, on the basis of which a special set of characteristics is built – from them, a unique identity is derived, making sense both in personal or collective identification, as well as in legal and business relations. The aim of this paper is to point to the concept of virtual and collective identities and their importance at the contemporary social moment.

KEYWORDS: identity, technology, social development, virtual identity, digital identity.

¹ slobodan.miladinovic@fon.bg.ac.rs

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INTRODUCTION

In the last five decades, scientific and technological development has been determined by the development of information and communication technologies, based on the microprocessor, which can process a large amount of information in a short time. From the beginning of the 1970s, when computers began to enter mass use, until today, several generations of these devices have been developed, and each of them could process a significantly larger amount of data than the previous one. The Third Industrial Revolution or Industry 3.0 begins with them. From that moment, the entire human life begins to speed up and become overwhelmed by a large amount of information (Eriksen, 2001). At the end of the first decade of the 21st century, thanks to these technologies, artificial intelligence began to enter everyday use, and with it, the Fourth Industrial Revolution or Industry 4.0 was launched (Miladinović, 2020).

So, in just a few decades, we have two scientific-technological (industrial) revolutions that have fundamentally changed the entire way of life of people. What is common to all technologies developed in these frameworks is that all information appears in the form of a different arrangement of only two digits 0 (zero) and 1 (one). Hence the name “digital”.

The term “digital” is quickly entering everyday use. Many things, over time, move from real to virtual space and from analogue to digital form. There is almost no area of human life that has not taken on a digital variant. This means that computers from being exclusively personal instruments become parts of larger or smaller networks, which creates cyberspace as a network of connected computers, where virtual data translated into digital form resides. Today, it is almost pointless to list what is in the virtual space. It may be more challenging to look for what is not there. This means that many things can appear in digital form today. Moreover, it is going so far that literacy also acquires the attribute of “digital”, and now we are starting to talk about digital literacy as well (Miladinović, 2019). In that multitude, there are also identities.

The aim of this paper is (1) to point out the existence of virtual and digital identities, which in many respects can be identical to real identities, but also have the peculiarities that make them different, and (2) to recognize their main characteristics and forms.

THE GENERAL CONCEPT OF IDENTITY

The general concept of identity implies a connection - the identity of an object with a certain property. It is about the fact that we can attribute certain properties to a certain object and, based on that, place it in a classification category. The identity defined in this way must be related to a relatively permanent or steady property based on which the identification is made. Although identity is linked to a property, it is not, by itself, a property, an attribute, but it represents a certain relationship, which is subjective and determines the form and not the content of the identity (Radojčić, 2011: 93). In

a sociological context, identity would be a social relationship, a relationship between people regarding things and their specific properties.

In earlier times, when social life was not so differentiated, as it is at today's level of scientific-technological, economic and social development, there was a relatively small number of identification frameworks with which an individual could be identified. Identification was mainly done according to belonging to the family, local community and religious group. To this, eventually, belonging to a profession - trade or social class - could be added. Of the above-mentioned frames, one most often dominated while the others came to the fore in exceptional situations. Today we can talk about identity pluralism. Pluralism follows from the complexity of modern society. Everyone is involved in many different social groups. Some of them are given greater and others smaller importance and, therefore, we can talk about different importance of individual identities respectively.

One can ask why there is a need for identities. The answer lies in, among other things, the fact that people need ways to identify each other, such as names and surnames. To this should be added the individual need for identification with the communities to which they belong (nation, confession, state, local area, profession, workplace, etc.). In small communities, identity can easily be established based on informal grounds such as belonging to a kinship group, physical appearance, or the guarantees of trusted persons. Organized societies, of greater complexity, have more formal requirements such as identification documents that are equipped with relatively reliable indicators based on which it is possible to determine the identity of their owners, such as a personal description, signature, photo, and more recently, biometric data. All this must be verified in central registers kept in official state archives (WB, 2016: 194).

We should not forget that people need to belong somewhere, to know with whom they share certain characteristics that are important to them. People are social beings, and the sense of belonging is a very important element of self-evaluation.

Legally verified identities are the basis for exercising many human and civil rights, such as the right to work, education or health care. Therefore, identity must be a public good. but is that the case in the 21st century? The World Bank estimates that today about 2.4 billion people, mostly in underdeveloped and developing countries, are not registered. Even in Serbia, it is estimated that not a small number of Roma have not been included in the official records. Estimates range up to several hundred thousand. Hence their marginalization and social exclusion (Miladinović, 2008).

From a psychological point of view, identity is the sequence of an individual's mental life from which the basis for development is created. Viewed in this way, identity is not someone's trait but is formed through the socialization process. Based on it, one can feel their uniqueness, but also affiliation to a wider group. Therefore, it is a dynamic structure of self-perception that is formed in individual self-determination in cooperation with external determinants (Pakhtusova, 2019). No matter how identities are socially rooted, they still represent the psychological basis of personality.

In social-psychological terms, identity can be seen as the way in which one tries to present oneself to others. It follows that cyberspace “offers people the ability to be whatever they want to be”. Personal identity becomes one’s creation, and every cybernaut is a free artist” (Golčevski, 2004). Of course, that performance must be related to the social and cultural context. Therefore, identity is not only a matter of personal perception of someone’s characteristics, but it is connected with time and space. Thus, identity becomes a sociological category that connects the individual and all his experiences with the entire structure of society. This means that identity is not only a matter of personal perception and personal choice but also appears externally imposed, regardless of whether someone wants that kind of identification or not.

Here it makes sense to mention Erikson, who claims that the feeling of identity is based on the observation of self-identity and the continuity of one’s existence in time and space and the acceptance that others notice and acknowledge this fact (Erikson, 2008: 11). Hereby, Erikson accepts the interconnectedness of sociological and psychological viewpoints. Time and space form an important setting for the sociological consideration of any phenomenon, including identities. The first impulse, when it comes to them, comes from the awareness of self-perception, which is undoubtedly the psychological plane. Sociability follows from social interactions, i.e., social relations in which perceptions are associated with specific time and space, that is, a given social framework.

The bearer of the identity can be an individual or a group. From this follows the basic division of identity into personal (individual) and group (collective and social). Collective identity is socially based on tradition, culture, religion, values, customs, norms of a society, etc. In the case of personal, or individual identity, this obviousness is absent, but that does not mean there are no connections and influences of the mentioned elements. Individuals are parts of wider wholes and, as such, they belong to certain social groups, and narrower cultures, and adopt dominant norms and values, even when they resist them by denying them or different forms of antisocial behaviour directly negating them. Therefore, individuals belong to society and are subject to all influences that shape collective identity. Of course, there are also individual experiences and interactions with a limited number of individuals that have a certain influence on them. The type and level of education, profession, political, local or similar affiliation are also important here, which makes a specific difference in the relationship between an individual - a wider collective - other individuals.

Social identity refers to an individual’s perception that he belongs to a certain social group. This is complemented by an emotional value related to the given affiliation (Turner, 1975). The mechanism of building social identity includes the processes of categorization, identification and comparison. It starts with categorization, which is carried out by the classification of individuals based on different properties, which places them in different social categories. In the next step, identification with others similar to oneself is performed. In this way, individuals recognize others as members of different groups and adopt the identity of the group they identify with. In the third step, the individual compares himself

with other groups, which are set as a reference framework for his evaluation. This establishes a relationship with other subjects of social life. This means that individuals, when they identify with a group and classify themselves as its members, tend to compare their group with other groups. Of course, this process should produce a feeling of group self-esteem and, therefore, it would not make sense if one's group was not compared to others in a positive light, more precisely as more valuable and useful than others.

We derive all other classifications from the basic division into individual and collective identities and they are made based on different life circumstances. In the case of individual identity, the key benchmarks are the individual's personal characteristics, physical appearance, knowledge, skills and abilities, psychological characteristics, intellect, etc. In the case of collective identity, the individual's belonging to different groups is of crucial importance, with the most significant identification frameworks being ethnic, religious, social class, professional and territorial affiliation. In this context, the division is made of social groups to which individuals belong, into in and out groups. By in groups are meant all those groups to which individuals, in one way or another, belong and identify with them (Çöteli, 2019). On the other hand, outgroups are those with which they do not feel closeness or belonging. The members of these groups are considered in the categories of us and them. From this follows the division into insiders (we) and outsiders (they). The essence of the division into in and out groups is in (1) setting boundaries and (2) symbols. The borders are more or less impermeable and make it difficult for insiders and outsiders to mix. Symbols have the function of strengthening the insider's connection with the group and the boundaries between them. The point of all this is that the individual strongly identifies with his group. Based on this, the social-collective-group identity is formed.

The concepts of in and out groups and we – they relations were introduced at the beginning of the 1970s by Henry Tajfel and his colleagues (Tajfel, 1970: 96-102; Tajfel et al, 1971: 151-152), while developing the theory of social identity. Tajfel and Turner believe that identity is important in social interactions because (1) individuals, striving to maintain or achieve a positive identity, strengthen their self-confidence and self-esteem through it; (2) they value belonging to their own or close groups positively and base it on favourable comparisons between the in-group and relevant out-groups. (3) their group is evaluated by comparison with another, if the evaluations are not favourable, individuals will either leave it and join one that they value more positively, or they will make an effort to improve their group and thereby regain their self-esteem (Tajfel and Turner, 1979: 40).

Otherwise, the theory of social identity has been criticized intensely in the literature (Çöteli, 2019: 4-5) due to the sharp separation of individual and social identities. The main argument is that these two groups of identities cannot be sharply demarcated because individual identities are socially determined. The individual is not isolated from society and, therefore, his identities cannot be distinctly separated from the social ones; they intertwine and combine in most diverse ways and build the unique identity

of each individual. Almost every personal trait of an individual that builds his identity is shaped by the socialization process, and it cannot be solely the product of chance events isolated from society.

VIRTUAL IDENTITY

Within the framework of the Fourth Industrial Revolution, in the context of this topic, the development of new, digital media, primarily social networking sites, is of particular importance. They were primarily adopted by members of younger generations. For them, these sites represented an instrument for establishing mutual connections, whether their goal was to maintain contacts with old acquaintances or to acquire new acquaintances and connections to meet various goals and needs (Banepali et al, 2017: 226). New generations of digital natives (Prensky, 2001; Prensky, 2001a) were formed around them very quickly, i.e., people who grew up with digital technologies and who, through various media, such as text, audio and video recordings, reshaped the social relations into which they entered daily. By building different models of mutual communication (Snijders, Kenny, 1999), they shaped previously unknown forms of personal and collective identities. And all this takes place on different software platforms, most often social networking websites, which are virtual meeting places for different individuals. What distinguishes them from the real space are profiles that, very often, can be designed for different purposes, through which individuals are identified depending on the nature and purpose of the platform itself, but can also be completely imaginary, and even consciously designed as fake, as well as misleading. The complexity of the virtual identity is expressed by the totality of characteristics that someone has online, which should reflect real, or at least desirable, individual characteristics and guarantee the integrity and identity of that person during their stay on the Internet.

Observing things in this context, Pakhtusova believes that the virtual identity usually emerges as an expression of dissatisfaction with the real identity, or because of an identity crisis and that it appears as a function of compensation for one's specific life situation or socialization, which should mean that the virtual identity can be seen as an open path for self-actualization and personal fulfilment (Pakhtusova, 2019). But is that so? A virtual identity may or may not be compensation for one's dissatisfaction with a real identity. There are many reasons why people build virtual identities. Many of them require that the virtual identity should correspond to the real situation and even that it should be filled with verifiable facts – especially when the goal is to establish business contacts. It is a different matter if we speak about sites for establishing personal contacts. Then it is not unusual for profiles to be formed by listing only positive features, mostly of a valuable character, to be full of euphemisms and even to relativize the entered data.

By transferring to the virtual space, the individual often wants to hide the representation of his personality from real life and to present himself as different, better, more valuable, smarter, and more beautiful than he perceives himself to be. In virtual

space, it is easy to hide your tracks in order not to reveal your identity. Of course, trail-blank should be understood conditionally, given that if there is any abuse of online contacts, forensics can relatively easily track down the perpetrator.

One of the first surprising findings of cyberspace researchers is the conclusion that the majority of those who regularly live in it actually value their identity in the digital environment (cyber identity) more than the one representing their personality and everyday identity in the real environment in which they spend their daily lives (Turkle, 1995; cited according to Olivier, 2011: 40). Moreover, instead of one identity, there are identities at work. This identity transformation was made possible by the advent of the Internet, which made it possible to connect a large number of people when visiting multi-user domains, chat rooms, online social networks, and similar virtual spaces, specially created for establishing contacts for various purposes. It is precisely because of these different purposes that the need arose to open multiple profiles, digital doubles, during which each of them constructs a separate identity (avatar). This diversity of identities has contributed to the fact that today we also look at the concept of identity differently.

Of course, when it comes to online social networking platforms such as Facebook and the like, most people are aware that they are then exposed mainly to those who know them and are therefore not inclined to give false information about themselves. Another thing is when they appear on different forums, then their true identity is very often unknown to other users. There, a completely new identity can be built, which is drastically different from the real one. In that case, the possibility of public action opens, without public display. People then become bolder, more daring and ready for different actions, which otherwise, for various reasons, they are not ready for in real life.

In such a situation, it is possible that each actor appears in the virtual space, as a split personality, like Dr Jekyll and Mr Hyde. In one's regular activities, it is possible to be frustrated, anxious, quiet and withdrawn, in a word inferior, while in the virtual space appearing as an arrogant noisemaker with a sharp tongue, who has the ambition to shape public opinion. Or in a similar situation, someone who is functionally, so to speak, illiterate presents himself as a highly educated intellectual who, with full authority, gives lessons to everyone, or a person who has not left some rural hinterland may present himself as someone who has travelled the world and knows very much about how people live in different societies and cultures.

Therefore, in the virtual zone, it is possible to build an ideal self-image and establish an ideal identity based on it. This is difficult to do in real life, given that identities are built in direct physical interaction with others and their formation is influenced by many factors, such as ethnic, confessional, local and wider spatial affiliation, language or dialect, profession, education, class-layer position, a job that someone performs, etc. In the virtual space, the possibility is created for the individual to become what he is not really and, conversely, to be not what he actually is, but what he would like to be. In this way, identity takes the form of a hybrid between desire and reality. This compensates for what is not realized in real life with something that appears as an ideal image from virtual

reality (Đorđević, 2011: 103-104). Of course, it is possible to create plenty of such ideal images that would circulate in the virtual space as different identities, that is, identities for different purposes. In real life, it would not be easy to create so many different identities for the simple reason that each interacts with a relatively limited number of other persons, and it is impossible to hide some of their real identities. Nowadays, this is particularly difficult to achieve, given that thanks to modern technologies, many data are easily verifiable. Attempting to switch identities in this way can easily turn into outright deception.

The virtual space allows greater anonymity, where someone wants to hide their real identity and build an imaginary one according to their own wishes and measure. An imaginary identity in the virtual space does not have to be experienced as an act of fraud and deception in the way it would be understood as such in the real world. This is even more possible if no traces of physical identity are left in the virtual space, e.g., photos, addresses, phone numbers and other identifiable information.

The phenomenon of bots, which is present on many Internet portals, gives such an impression. In this case, bots refer to individuals, usually party henchmen who, as a sign of recognition, leave their nicknames in comments on published news. Their task is to comment on various media publications supporting certain ideas and ideologies. Many of them have already built their image and identity to a large extent and have become recognizable by the narratives they leave about themselves and the topics commented on. Moreover, real bot wars are being waged on some of the portals in which some of them try to unmask others by knocking down their key identity items (e.g., occupation, level of education, political or religious affiliation, place of permanent residence, etc.).

DIGITAL IDENTITY

The concept of digital identity can be understood in a two-fold manner. First, more broadly, it implies that it is a synonym for online or virtual identity. The second, narrower meaning implies an instrument for identification when accessing the network, i.e., special resources located in cyberspace. This is usually about confidential content, which can only be accessed by authorized individuals. Depending on the confidentiality level, different instruments can be developed to determine the personal identity of each actor in the online environment. This section will discuss the narrower meaning of digital identity.

A more serious need for the formation of reliable digital identities arose from the expansion of the use of information and communication technologies in the sphere of financial services. Until then, the issue of digital identity was solved by using a username and password. This method was not reliable enough to protect confidential transactions and there was a need to develop different security mechanisms to prevent identity theft and fraud based on it (Newman & McNally, 2005; Koops & Leenes, 2006).

Digital identity refers to the digital representation of known information about a specific individual, group, organization or product. It provides each actor involved with

the opportunity to know with whom they are interacting, thus encouraging the establishment of mutual trust. This means authentication and authorization processes, i.e., recognition of someone's personal - physical identity and authority in the digital space (WTO, 2022: 41). The concept of digital identity conceived in this way applies both to natural and legal persons, as well as to physical and digital objects. Digital identity can be proven through different identifiers, such as official identification documents that are accessed through appropriate readers, a token that generates a new code with each access, different types of identification cards, confirmation via a link sent to an email address or mobile phone, etc. Where less sensitive information is located, it is possible to use usernames and passwords of different levels of confidence. A key function of digital identity is to prevent unauthorized persons from accessing confidential data.

Digital identity, therefore, can be defined as a set of online data about an individual, group, organization, product, etc. Usually, it can consist of four categories of information: (1) elements for authentication of personal and username, password, alias or IP address; (2) data such as personal, administrative, banking, and professional; (3) identifiers - photo, biometric data, logo, avatar and (4) digital traces, i.e., everything we leave on the Internet as traces of our activity (YEES, 2015: 3).

Thus, digital identity is a part of virtual or online identity that an individual, organization or electronic device adopts as its own in cyberspace. Considering its multiple purposes, of particular importance are security and privacy issues. Although research in these fields has already advanced, we cannot yet be completely satisfied with the results achieved, given that practice shows that these are still vulnerable technical solutions. However, it should be noted that, at least when it comes to strategic security segments such as, for example, banking systems or security-sensitive institutions, we already have developed sophisticated systems that guarantee high security of both existing infrastructure and available data. Things are different when it comes to technologies of wider purpose, such as the so-called social network. Sites like Facebook or Instagram are available to a wide range of users and allow them to create their own identities. This is sometimes done by creating several profiles that align with the different needs or intentions of their owners.

For those who are involved in the social system, digital identity may seem like something completely trivial, but for others, it can be a catalyst for changes towards inclusion in various social activities and the use of services provided by official society. Today, biometric personal documents represent reliable proof of personal identity, which enables numerous social transactions, from using the services of the financial, educational or healthcare system to the exercise of voting rights.

Of course, digital identity can be formed for specific purposes of using various online resources such as video sites, networking platforms or for the offer and demand of work, but also for several other activities in which it is important to enable those who have the right to have safe access to network resources.

Given the level of modern technological development, identity is determined as a series of properties (physical, legal, behavioural) that combine to form a unique representation of an individual (Commonwealth, 2020: 39). Physical characteristics today include not only outward appearance but also one's DNA and biometric characteristics. Legal properties are linked to classic identification documents, which are more or less used worldwide and are now supplemented with biometric data. Electronic properties are associated with the increasing amount of time individuals spend on the Internet, and include email addresses, social media accounts, actions taken online, and IP addresses.

Modern technologies are precisely focused on the study of an individual's online behaviour, thus delving into the details of his behaviour and interests. This collects personal data which are easily commercialized, thereby opening a new research field called behavioural biometrics (Yampolskiy & Govindaraju, 2008). Today, data about individuals is collected by tracking their browsing history on the Internet, or by various organizations, especially commercial ones, having elaborate applications that collect data on the consumer habits of their users, offer them targeted discounts or reward them in certain ways for loyalty. In this way, the specific (digital) identity of each individual who joins the "consumer club" of trade chains is established. Of course, the story does not end here; there are many varieties in which different organizations can collect certain types of data about citizens and thereby construct their virtual and digital identities.

CONCLUSION

Ultimately, virtual identity can be defined as the sum of all traces that an individual leaves in cyberspace. Based on them, it is possible to build an idea about an individual. Participants in online communication may be interested in various types of data and information about other participants, which all depends on their goals and interests for which they connect to the network. Therefore, they may only be interested in certain segments of other users' identities.

On the other hand, digital identity is a set of data that serves to verify the right of access to certain, most often sensitive, data in cyberspace, i.e., authorization and authentication when accessing certain data. The purpose of digital identity is to prevent misuse by third parties.

Basically, online and virtual identity, as well as digital identity in a broader sense, have a sociological meaning that, with the development of new technologies, is gaining more and more importance. The involved individuals interact with each other in the online space, based on which they create their own, desired, identity. On the other hand, digital identity in the narrower sense appears as a legally based concept denoting a set of identifiers that legitimize an individual before accessing the Internet or a specific place in cyberspace.

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