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Digital Social Work: Challenges, Trends and Best Practices

Digital Intervention, COVID-19, and Critical Realism: Toward a Science of Digital Social Work

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The COVID-19 pandemic has sped up the pace of the digital transition process in which we have been immersed. In a context of generalized lockdown, our organizations have been forced to go digital and many of the activities social workers perform must now be done remotely. As a result, e-social work, or digital social work, has gone from being an emerging specialization to a critical specialty across organizations and activities. In this article, we examine some basic scientific and methodological foundations to develop a science of social work from the perspective of critical realism, with special attention to digitalization. Establishing the scientific foundations of digital social work is a preliminary step for its development as a field of specialization.

Keywords: Digital Social Work, e-Social Work, Critical Realism, Digital Intervention, COVID-19

Introduction

E-social work, or digital social work, is an area of specialization in contemporary digital societies (López Peláez et al., 2018; Eito Mateo et al., 2018). The COVID-19 pandemic, the successive lockdowns imposed in countries around the world, and the need to act remotely has accelerated the process of a digital transformation that was

already underway. The digital skills of both social workers (López Peláez et al., 2020) and social services users of all ages have become critical competencies for the employability of social workers and for the very livelihood of the organizations in which they work. The International Federation of Social Workers (IFSW), the International Association of Schools of Social Work (IASSW), and International Council on Social Welfare (ICSW) have adapted to this new scenario by changing their in-person conferences to virtual conferences. Based on digital social work experiences we have carried out over the years (López Peláez & Marcuello Servós, 2018), during the 2020 COVID-19 lockdown, we organized three free online seminars to disseminate good practices (trabajo social digital seminars, 2020) that have attracted more than 4000 subscribers (López Peláez et al., 2020), created a digital social work channel on YouTube (Trabajo Social Digital±—Digital Social Work, 2020), and organized the 1st International Conference of Digital Social Work with 27 working sessions in English, Portuguese, Italian, and Spanish (1st International Conference of Digital Social Work, 2020).

As it became clear in various presentations at the International Conference of Digital Social Work, a key aspect for the consolidation of digital social work, or e-social work, as a sub-discipline similar to social work with groups or health social work, or as a transversal specialization to any social intervention (since the digital is an inseparable part of personal and collective life), is to analyze its scientificity, both in relation to the object of analysis or intervention and the methodologies used (López Peláez & Marcuello Servós, 2019). In this article, we examine three basic dimensions of science applied to digital social work from the perspective of critical realism (Longhofer & Floersch, 2012): science and language, critical realism in digital social work, and the characteristics of digital-based interventions in social work practice. Finally, we will present a definition of digital social work coherent with the notion of scientificity.

Science, Language, and Social Intervention

In the field of social work intervention and research, recognizing the scientific dimension of our discipline has become essential to establishing our legitimacy. We can only diagnose, intervene,

evaluate, and transfer knowledge to practice—both in face-to-face intervention and through new digital technologies—if our knowledge is rigorous, our contributions are relevant, and our discipline is a science.

From Hellenistic times to the present day, the notions of science, method, and technique have formed a key triad in Western civilization, as well as in many other cultures throughout history. In all times and places, human beings have sought ways to subsist through knowledge of their environment, action strategies, adaptation, and survival mechanisms that are transmitted from generation to generation. This instituted knowledge makes it possible to analyze problems and design efficient solutions, as well as differentiate valid knowledge from invalid knowledge and develop methods to achieve objectives based on this valid knowledge. It is a dynamic where knowledge is established or sedimented (Ricoeur, 1960) and innovations are produced and alternating over time. The great repository of all this knowledge is language, that is, the "social place" where the possibility of knowing the world takes shape. As postulated by Everett (2016), "language is primarily a cultural tool for community building" (p. 4) and hence of the ways of doing and knowing.

Words are the gateway to interpreting the world of life, the reality in which we live. Therefore, the foundation of any knowledge requires mastering a language in its context and unraveling the etymology of the words used to describe the world and the genealogy of the meanings they hold. However, of the thousands of living languages on the planet, only a few have built up a proven scientific corpus. While Latin was the lingua franca of knowledge in European countries and their colonies for centuries, English now boasts this position. Although decolonial proposals have highlighted the process of Eurocentric domination (Quijano, 2000; Mignolo, 2010, 2011) and appeals are made to put an end to this cognitive empire (Sousa Santos, 2018), the logic of this dominant power has allowed the development of a whole edifice of concepts and content together with technologies that have become hegemonic and global.

In order to reflexively analyze language, knowledge, and action, three aspects must be taken into consideration:

- First of all, the world around us is as it is; the difficulties begin when we try to explain and know. From that moment on, differences arise and we find diverse perspectives that have been developed throughout history. We can go back to the point where myth confronts logos or to the moment where Plato distinguished between *doxa* (opinion) and *episteme* (rigorously contrasted knowledge), or until Lakoff and Johnson (1999) argued that the mind is intrinsically "embodied," (p. 3) and from there rework the key questions of philosophy and, by extension, of knowledge. This is not the time or the place for a review of the history of the sciences to situate each step of this great edifice that is inhabited by diverse forms of action. Some will be satisfied with Poincaré's (1946) affirmation that the scientific method consists of observing and experimenting, while others may consider that there is no such thing in singular, but rather there are different models of scientificity (Maass Moreno et al., 2007), because, among other things, neither the observables nor the procedures are the same. In other words, the problem is how this observation and experimentation is put into practice.

- Secondly, our intervention transforms reality, generates a new context, and opens the way to new opportunities and new problems. The mere naming of things that occur in the world of life, in which we are immersed, activates the process of knowing and orients action. For this reason, the concepts of science, technique, and method can also be understood as dynamic activities that mutually nourish each other and are produced in a cultural environment according to certain values. Social work is inherently oriented to intervention with people in a specific place and situation. Therefore, it can be said that there is always a practical problem that motivates a research question. This research question circumscribes and defines a knowledge problem that heuristically aspires to find a research answer; which can—and strictly speaking must—help to solve the initial practical problem (Booth et al., 2001).

- Thirdly, scientific knowledge is transmitted and shapes a corpus that orders the world and its conditions of possibility. For this reason, it is essential to understand paradigmatic structures and to promote critical analysis and second-order reflexivity. Theories are modeled, redefined, and used from different perspectives. In social work, we must also train ourselves to be competent in scientific reasoning that requires language and action. In addition, the application of methods and techniques must also be mastered. All this is part of an educational process that is in itself "performative," since it creates a culture and mode of action. Given this performative character, it is not only a matter of learning how to use methods and techniques, but it is also important to unveil what is taken for granted, what is hidden in the so-called "black box" of theories. It is a question of introducing into the public debate that which is taken for granted, revealing what is operating under the appearance of neutrality, and thus establishing a critical re-appropriation of a fundamental activity—scientific work—in our so-called knowledge society. In the field of digital social work, the non-neutrality of algorithms and the problems related to the digital rights of users further highlight the need to critically address these processes of knowledge and social intervention.

Critical Realism and Digital Social Work

Social work, and hence digital social work, is characterized by being a knowledge urged by action, which seeks to become a transformative practice (López Peláez, 2012). This transformative practice is (a) based on human rights; (b) addresses users' demands and needs; (c) produces knowledge from which specific intervention methodologies are derived through interaction with users; (d) adopts a reflexive position that questions its connections with power in each historical context; and (e) engages in an often conflictive dialectical relationship between the available resources provided by the administration and social policies. As social workers, we are not mere processors, but we process resources; we are not mere instruments of the administration due to our critical commitment,

although we are in many cases part of them. Therefore, social work starts from the external reality of the world, which can be evaluated and known, and in which we can intervene by means of different methodologies. In this sense, critical realism, as described by Brekke and Anastas (2019), allows scientifically grounding knowledge and action in social work.

Social workers have always aimed to explain themselves by taking into consideration: (a) their object of knowledge people in situation, which they share with the other social sciences; (b) the objective of their intervention—the improvement of living conditions and the strengthening of individuals, groups and communities; and (c) their relationship with social policies and the administration, since it is a discipline linked to the welfare state in which users are considered citizens with full rights.

Both explanations and professional intervention in social work must be adapted to the characteristics of its object. We cannot be content with a mere projection of what Norbert Elias (1999) called "naïve" or "egocentric" models of explanation, which are of a mythical-magical nature, or models typical of "natural science," which are developed to analyze interrelations of an inert nature and cannot simply be adjusted to fit the investigation of human social interactions. Moreover, in social work we share a specific feature of modern science: its practical purpose.

Practical Purpose and Social Work

The sciences seek to find explanations that allow us to foresee events and expand our practical capacity to control and transform nature by making new discoveries and developing new technologies in a variety of spheres, from production to health or the use of natural resources, among many others. It was Francis Bacon (1561–1626) who clearly formulated this practical purpose of scientific knowledge: we know in order to foresee and we foresee in order to provide. Thus, the sciences emerge as a fundamental tool for the transformation of the world, as opposed to the old conception of knowledge as a contemplative activity with no practical purpose. Hence, the expansion of the sciences in industrial societies went hand in hand with the development of increasingly advanced technologies in an incessant process of "scientific-technological"

development, in which the "scientific" and the "technological" cannot be neatly separated.

In capitalist and industrial societies, economic and production needs stimulated the development of new inventions and new scientific applications for productive systems, transportation, construction, and health care, among others, in a permanent effort to manufacture new goods and merchandise with more rationalized production systems. Thus, an intense process of mutual influences developed between science, technology, economy, and industrial society that reinforced the role of science and technology as wealth-creating factors (Tezanos & López Peláez, 2000). This process is at the origin of social work as a scientific discipline and as a profession, which precisely addresses the negative effects of industrial society.

Based on this point of view, a fourfold task of social work as a scientific discipline can be distinguished, which could result in an emancipatory process that allows people to develop a greater intellection and control of their own social reality and abandon the inertial behavior that leads human beings to self-destruct on a greater or lesser scale; an inertia that is reinforced to the extent that we lack a scientific understanding of the dynamics of human interactions (Elias, 1999). A proper analysis of the inclusive and exclusionary dynamics generated in human societies must take into account the following four tasks: (a) an analysis of the object of study; (b) liberation from inadequate models of analysis of that object (looking for an emancipation from heteronomous representations that are naively egocentric or linked to natural science but also from representations biased by racism, colonialism, or male chauvinism); (c) the development of new concepts and models through instruments of language and thought that are better suited to the specific nature of the problems posed by human networks (Elias, 1999); and (d) the development of professional interventions that improve the living conditions of citizens at the individual, group, and community levels (López Peláez, 2015).

Philosophy of Science, Critical Realism, and Social Work

There is nothing more human than a machine. Our technologies are our product. They have consistency, they affect our trajectory

sometimes in ways unexpected by their creators, and they highlight our capacity to know and order or re-order the outside world, hence the complementarity between critical realism and social work in a digital society in which problems of inclusion and exclusion are redefined in terms of new technologies and digital social networks. The positivist model of science, key in the 19th century, against which many of the disputes about scientificity and the knowledge generated by social work have been raised, does not hold up critically. Not even in the physical sciences can the positivist epistemological model be maintained as such. The Newtonian model of science, together with Darwin's evolutionary theory, influenced positivism in the 19th century, and underwent a major transformation as a result of the evolution of physical theory and the philosophy of science in the 20th century. The specular conception of language, which defends its neutrality in reflecting reality, has not overcome the critique developed by the second Wittgenstein, nor the notion of theoretical load formulated by Hanson (2010). From the perspective of a science of digital social work, it is important to highlight three fundamental aspects.

First, the difficulties involved in the verification and formulation of necessary causal laws have led to scientific truths being conceived of in terms of probability. This affects both physical theories and social sciences: "every scientific measurement is always given with a probable error" (Russell, 1969, p. 63). But it is not only a matter of achieving probability with respect to an external world that can be "neutrally" observed, as positivist epistemology erroneously presupposes. The evolution of scientific theories must be understood starting from the previous "hermeneutic circle" in which we find ourselves immersed, and which defines the horizon of intelligibility. Every observation is already in a prior theory, although it can, as Giddens points out, evolve beyond the theory that determines the meaning; that is why scientific change and the choice between rival theories is possible (Giddens, 1993).

Secondly, the sciences are a social fact/process; a historical product of scientific communities in a given political context. The impossibility of differentiating between theoretical terms and observational terms highlights a very important similarity between the social sciences and the physical sciences, in that there is no neutral observational language.

Thirdly, science and technology produce a new scientific-technological environment characterized by the accumulation, generation, and distribution of knowledge among the technological systems themselves. This knowledge is distributed among the machines and computer systems on which we perform our activities. In an environment in which artificial intelligence and machines learn to work with each other, researchers, such as Hayles, have delved into the implications of this distributed knowledge upon which we undertake our activity. This bears some relation to the knowledge accumulated and managed in our organisms, on which our consciousness rises (Hayles, 2017). When speaking of "embodiment" and embodied knowledge, we must move beyond the analysis of the mind embodied in a body, and introduce reflection on the body of knowledge that is managed by technological devices and systems, just as the data and information stored in our cells and our perceptual system constitutes the basis on which our conscious activity emerges.

In social work—including digital social work—the methodological criteria must take into account the dual condition of subject and object of the human being and the researcher. In a certain sense, this also occurs in the physical natural sciences since, regardless of the methodology used, observation is mediated by theory. To overcome these classical dualisms (i.e., subjective/objective, action/structure), authors, such as Bhaskar, have proposed a critical realist epistemology based on a transformative model of social action. According to this model, structure and action are always related: structure is an indispensable condition for action, while the reproduction of that same structure depends on the action (Baert, 1998).

In the so-called "realist" position, the recognition of differences between social and natural structures does not imply that the scientific method is different. The central point of "realist" epistemology, as a counterpoint to "positivist" epistemology, is the concept of causality: to explain something is not simply to ascertain regularities, but to establish how they are produced, and this is only achieved by resorting to causal mechanisms or forces that may or may not be directly accessible by observation. In this sense, Bhaskar (1989) coincides with Keat and Urry's approach (1982): it is a matter of explaining the social regularities that we observe by means of underlying causal mechanisms or forces that may or may not be observable.

According to this view, both structuralism and hermeneutics are scientific approaches since they seek to explain regularities by resorting to entities that may or may not be observable. For Bhaskar (1989), the existence of such unobservable entities—and thus avoiding the danger of a language whose terms have no connection with reality—is to be found in what he calls "retroduction," where the phenomena under investigation are explained by analogies and metaphors relating to previously known and familiar phenomena.

Today, the exchange and application of theoretical models, in disciplines other than those that initially developed them, are now common. As such, the boundaries between sciences have become permeable, and concepts that are specific to one discipline are employed more or less effectively in others. This phenomenon of concept broadening has occurred with increasing intensity in the social sciences, thus favoring theoretical innovations, such as analogies between social structuralism and linguistics, functionalism and biology, or rational action theory and economic models (Baert, 1998). In the field of social work and social services, for example, co-design and co-creation theories originally developed in the field of design are now being used in the design of social services (Steen et al., 2011).

In our case, it can be affirmed that the object of social work is the "person-in-situation," with special attention to the helping relationship. For this reason, social work is of an open and integrating nature, and is situated in its own right as one more discipline within the social sciences, while requiring all of them. Rigorous and scientific research in this field cannot be carried out without knowledge and application of the legal and social sciences. It is necessary to incorporate the perspectives and methodologies, techniques and concepts of economics, social psychology, sociology, political science, etc., without forgetting that social work retains its own identity as a science and a specific area of specialization.

Digital Social Work and Social Intervention

Any science, technique, or technology is a product of a human group, but it is not only theirs: they are inserted in a historical tradition and transform reality in ways their designers would never have expected. Sciences and technologies constitute, in Orteguian

terms, a way of being in the world. They are linked to lifestyles and a specific way of relating to nature and to other living beings (including humans). The reflexivity inherent to critical realism, with respect to knowledge, cannot be limited to the debate on the objectivity or subjectivity of knowledge. It must open the way to the consideration of the socio-technological models in which we live and, in an essential sense, to the model of life that they generate and from which they are generated.

In the first half of the twentieth century, philosophers, such as Heidegger, highlighted the link between the essence of modern technology and the reduction of reality to a classifiable and cumulative object or *Bestand* (Heidegger, 1977). In contrast to this position, Ortega and Gasset (1982) elaborated a reflection on contemporary science and technology compatible with the epistemology of critical realism, which highlights the specific orientation of each technology according to the model of life that gives meaning to the activity, and which implies a different recognition of the other—nature, people, and living beings (López Peláez, 1994).

In social work, some basic questions that arise are: (a) How do I define the other, the user? (b) How do I describe and articulate the relationship between user and client? and (c) What are the objectives in terms of lifestyle, opportunities, and environment? To propose a relationship model with the user that allows us to improve their living conditions and access knowledge that takes into consideration all the dimensions at stake and different interpretations of each actor involved, Ortega and Gasset's theory—perspectivism, vital reason, and the theory of technique—may be useful to us. Within the cultural battle in which we are immersed, the social work model of science and technique is linked to social inclusion, with a certain definition of the goods at stake in a specific technological environment. There, the Orteguian perspective contributes to resizing our discipline according to the model of life and values, from which we articulate our science, our technology, and our professional intervention.

In this sense, the digitalization of our lives opens a new field in social work as a scientific discipline and as a profession, what we have called digital social work or "e-social work" (López Peláez & Marcuello-Servós, 2018). Online sociability and digital interactions have opened up a new field of research and intervention (Castillo

de Mesa & López Peláez, 2019). In terms of the methodology, for example, e-social work allows us to investigate the natural environment without the interference of the observer in traditional ethnography, and therefore, overcomes one of the limitations of our usual methods in the pre-internet world. The same is true for longitudinal studies: it is now possible to monitor online interactions and study them over time. With regard to user-professional relationships (Castillo de Mesa et al., 2019), the online environment forces us to rethink these relationships, take into account the digital rights of users, and redefine what we consider privacy. As concerns relations with institutions, which are being transformed into electronic administrations with increasing intensity, interactions with users are also changing.

But, in any case, critical realism, which from our point of view can be enriched with the contribution of Ortega and Gasset, provides a basis for a science that knows and intervenes in the outside world; an external world that is our world, which is prior to us but which is transformed by our actions. This is now a technological world in which we must redefine our relational dynamics, and in which new and old processes of exclusion take place. In this sense, digital-based social work intervention can be guided by the following eight priorities as summarized in Figure 1.

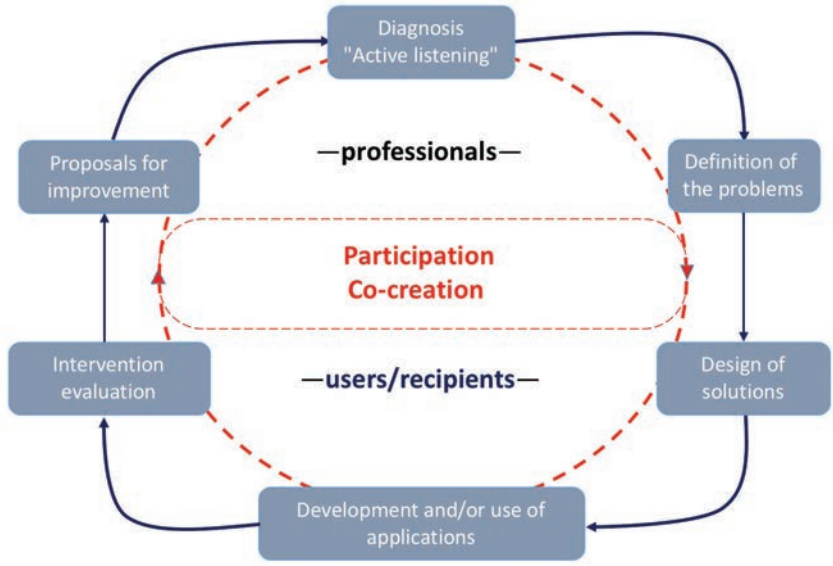
Figure 1. Digital Social Work Priorities

As can be seen, technology itself is not the main priority, but rather resolving the problems faced by users. Firstly, we must define the social problems to be addressed in the physical and digital spheres in order to develop an effective technology to deal with them. We must also make social services visible. To do this, it is necessary to take into consideration specific groups (middle classes, families with children, young people, the elderly, unaccompanied minors) in order to design technological innovations that bring social services closer to them and break the stigma associated in some cases with social services. We must focus on strengthening the prevention of problems, which means approaching citizens proactively, something that new technologies make possible. Prevention is key to redefining our social services and solving problems early on. Another key aspect is to simplify procedures and optimize processes. In addition, help and guidance services must be offered through ICTs and social networks; for example, by geolocating social service centers, offering programs and resources, and guiding users with gamification and artificial intelligence systems. Digital skills must be encouraged and promoted, especially through training programs for social workers, users, and technicians. This involves integrating ICTs in the professional practice of social services, with protocols that respect the digital rights of users and professionals. Finally, it

is necessary to revise and redefine social services to adapt them to digital rights and strengthen citizens in the exercise of these rights.

In any e-social work project, it is possible to differentiate two positions (professionals and users/recipients) and six phases based on the group social work model proposed by López Peláez (2015), as shown in Figure 2.

Figure 2. Model of Intervention Phases in E-Social Work



The first phase involves diagnosis and "active listening." In this phase, it is necessary to describe what resources are available for those who are not connected or suffer from technological limitations and are on social networks by analyzing, monitoring, and investigating their discourse and demands, as well as the characteristics of their interaction patterns. In addition, the online resources available in the different administrative bodies or private companies involved are identified. In the second phase, problems are defined by taking into account the various perspectives to cooperatively set operational objectives and establish the systemic framework of the problem, its environment, its elements, and relationships. To achieve a common diagnosis and solution, it is very important to

involve all actors from the perspective of co-design or creative design. The third phase entails designing solutions adjusted to the previous steps, which are dynamic and not necessarily linear. That is, the elements and positions of the different actors and situations must be reviewed in a recursive way by taking up again from the beginning the diagnosis and formulation of the problem according to the evolution of the whole. The fourth phase is either the development or use of specific applications, from games to WhatsApp groups, in order to carry out the activities planned as mechanisms that respond to the why of the intervention. In the fifth phase, the intervention is evaluated, with special attention to the digital skills of users and professionals, as well as training programs to overcome any problems that are detected. The sixth phase is dedicated to proposals for improvement, the transfer of the results achieved and the methodology used, and the dissemination of good practices, thereby reinforcing the confidence of users and professionals in the approaches used.

Concluding Remarks: Towards a Definition of Digital Social Work as a Science

Within social work as a science, digital social work is emerging as a specific sub-discipline. The basic elements to be taken into consideration in formulating a definition of digital social work as a science are as follows:

> First, the object of our discipline, which involves a complex set of problems and opportunities with the following characteristics: they affect individuals, groups, and communities; they are formalized and expressed through digital social networks and new information and digitalization technologies; they require an approach based on the scientific method and the planning and evaluation of results; and they affect the dynamics of social inclusion and exclusion.
>
> Secondly, it is essential to define the set of values that guide our actions. In this sense, the digital rights of citizens, and more broadly human rights, constitute the foundation of our professional practices as social workers.

> Thirdly, the scientific method, which, from a realist epistemology, is based on the existence of an external reality that can be known, which is not neutral in its configuration, and which has its own characteristics. It is a method that, in order to define problems and opportunities, must be open to involvement, negotiation, and dialogue with all the actors involved, from users to the e-administration.
>
> Fourthly, intervention aimed at strengthening the set of digital skills needed to operate in a digital environment that is transversal to all our activities.

Taking into account these four elements, we can formulate the following definition of digital social work. Digital social work is a discipline of social work that is grounded in the values of democratic citizenship and based on scientific methodology that presupposes an external reality which can be studied, addresses problems and opportunities in digitized societies through new information and communication and digital technologies, and is applied through a process of diagnosis, planning, organization, development, and evaluation in which the digital skills of users and professionals play a key role. It takes the on-line or digital environment as the object of analysis, evaluation, and social intervention. It establishes strategies for user access, user participation, evaluation of user needs, and the design of intervention dynamics and user empowerment. Its objective is to help a population living in a digital environment.

In short, digital social work or e-social work can be defined as the use of new information and communication technologies in the field of social work and social services. It includes online research, patient treatment (individual treatment, group, and community dynamics), the education and training of social workers, and the monitoring of social services programs (López Peláez, 2015, p. 44). Moreover, e-social work is a place of convergence "an adaptation of social work resulting from the use of ICTs and allows the development of the capacities of individuals to meet their needs and demands" (Mateo et al., 2018, p. 934). There is still a long way to go to continue researching, substantiating, and building a science of social work in general, and of digital social work in particular. This is all the more important because exclusionary digitalization can also occur. Only through

our commitment to democratic values can we ensure that the digitalization of our societies strengthens social inclusion and not social exclusion. And in that process, digital social work based on human rights can help us build a better society.

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