

30 years of WWW: challenges, achievements and concerns

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Thirty years ago, on March 12, 1989, Tim Berners-Lee - a British physicist, computer scientist and professor at the Massachusetts Institute of Technology (MIT)- created the World Wide Web from a proposal aimed to convince CERN's (*Conseil Européen pour la Recherche Nucléaire*) managers that the creation of a hypertext global system was in the interest of the world's largest particle physics laboratory, because it would help the management of general information about the accelerators and its experiments.

It was thanks to Berners-Lee's gesture of giving up the copyrights and intellectual property of his creation that the web could become

free, open and public. However, as Berners-Lee points out, "Today, half of the world is online. It is more urgent than ever to ensure the other half are not left behind offline, and that everyone contributes to a web that drives equality, opportunity, and

creativity"; therefore, accessibility will be one of the challenges to be faced in the coming years.

To celebrate 30 years of the WWW, Berners-Lee published an open letter on the Web Foundation website in which he warns of three sources of "dysfunction" that affect the web:

- Malicious activities, such as hacking, criminal behavior and online harassment;
- System design that creates perverse incentives where user value is sacrificed, as the viral dissemination of disinformation;
- Unintended negative consequences, such as aggressive speech and polarization.

In the same letter, the scientist also appeals to the global community for the web to become "recognized as a human right and created for the public good".

Despite the worrying questions raised by Berners-Lee, there are many benefits from the creation of the web that go through education, social life, leisure, culture, financial world, economics,

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and politics. It is possible to know what is happening all over the world in real time with just one click on the computer key.

Research and studies are carried out (individually or collectively), without leaving our homes or workplaces. Everything on the web becomes faster and easier to find and explore. With the web, of living, acting the ways and communicating have changed. Other transformations in society resulting from the advances. uses and humantechnological interactions may also occur on and through the web.

Time and space concepts and perceptions

are re-signified once the barriers attributed to them are diluted or dissipated. Communication and interaction become more fluid and dynamic and take place in a synchronous or asynchronous manner depending on users' wishes and possibilities.

The expansion of the WWW and the possibilities of communication and interaction between people who are geographically distant and in different time roman made possible by the opline

zones made possible by the online connection have transformed the world we live in into an authentic global village.

Personal and social relationships strengthen. Individuals identify with each other. The various tribes or communities built on the web initially as common interests and desires share their behaviors.

The question of belonging to a virtual group is fundamental for the construction of relationships based on trust, empathy and collaborative sociability. At last, online as well as offline relationships are created and maintained through socialaffective bonds that individuals establish among themselves. The relationship with the 'other' impacts emotionally on their affinities or differences.

The man behind the machine

When one thinks about the openings made possible by the web for interaction and communication between individuals from all over the world, a question hangs in the air. Are ethical behaviors and values changed in and by the digital environment?

The answer is probably no. Behaviors and values are inherent to the human being, regardless of the space (whether physical or virtual) in which the person acts or navigates. However, behaviors and values can be reinforced or enlarged when feelings, emotions, and knowledge are shared and associated with common desires and interests and similar identified.

According to Freud, our desires and memories influence our behaviors, and studies of psychology show that various social and individual aspects determine human behavior. The individual's life history socially constructed over time and the social environment in which he is inserted are important and determining factors.

In a presentation at **TED Talks** in 2012 entitled "Connected, but alone?", Sherry Turkle, a renowned psychologist who conducts research on human-technological interaction, draws attention to the fact that individuals are getting used to a new way of being: the illusion of being together when in reality they are alone. For the researcher, we are creating "technologies that make us believe in companionship but without requirements for friendship.

Another important consideration is that of Christian Dunker, a psychoanalyst and full professor at the University of São Paulo who studies behavior on social networks. In an interview granted to Estadão in December 2017, the professor says that "the networks impact the individual in their identification of who I am, who is the other and who we are together." Thus, we comprehend the other as we identify with him.

Turkle's and Dunker's considerations lead us to think about the tribes or communities built on the web, their involvements, actions, and behaviors that can be for good or for evil, depending on the nature of the individual.

On the web, as well as in the real world, there are groups or communities that search for interaction and share useful knowledge for the common good and for society. However, there are also groups or communities from the underworld that spread hatred, anger, prejudice, revenge, and intolerance.

A recent example of mean and violent behavior and perverse use of the web was broadcast in the middle of March this year by the media. Two employees and five students were cruelly killed by two former alumni of a school in Suzano. According to preliminary investigations, the murderers used the Deep Web during a year to plan the crime. But why the Deep Web? Just because on the Deep Web one can hide and navigate without leaving any trace or identification. The murderers used the web because it facilitated the criminal plan. Would they have sought other means that would allow them to hide their plans and cruel acts if they had no possibility of accessing the web to hide their identity? Perhaps, but the answer to the question is left open for reflection.

Another recent incident that shows deviant behavior and narcissism happened in Christchurch, New Zeland when a man entered 2 mosques and shot 50 people. The shooter transmitted the crime through the streaming of Facebook, turning the whole narrative to himself.

In these 30 years of the web, challenges, achievements and concerns about its use have been raised. Its potentiality has been explored. Alerts are required against selfishness, egocentricity and immoral behavior once present in the real world and now also flourishing in the virtual world. Thus, here remains the great challenge: to support Berners-Lee's call to make the web "a force for good," rather than its inappropriate, subversive, threatening and shameful use.



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This article is a result of the author's ascertainment and analysis, without compulsorily reflecting CEST's opinion.