COVID-19 in China. The Great Wall of Technology

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Note of Editor-in-Chief

This is the first Special issue of the journal Culture e Studi del Sociale-CuSSoc. The idea behind the special issue comes from this consideration: around the world, individuals are facing a critical moment, the COVID-19 pandemic and its consequences require some reflections on many topics, often forgotten by scholars. This is the reason why many Italian and foreign scholars have been invited to give their contribution. Furthermore, now more than ever, it is crucial to share knowledge coming from multiple disciplines and that's why it was decided to write an entire issue in English.

For scientific and intellectual correctness, the contents of single articles refer to the situation as in mid-May 2020. It is necessary to clarify that because this Special issue was published when many countries were starting to reduce their emergency measures to cope with the pandemic.

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Abstract
China is the first country to have faced an extensive contagion of Covid-19. The response it has given, in terms of prevention and control measures, has been effective in eradicating the virus, even though not completely. Those measures were based on an extensive and widespread use of technologies. The strategies adopted were not the result of improvisation: the social, cultural and technological structures were already in place well before the epidemic took place. In light of the news and the media theory, the present contribution draws upon the anecdotal experience of one of the two authors, who lives in China and has been there during the epidemic. Though the Chinese approach was, indeed successful, we argue that it is doubtful that such a model can be exported to countries with different history, culture and socio-political background.

Keywords: COVID-19, New media, Space, Time, Chinese media, WeChat.

Introduction

At present, since the pandemic emergency is still going on, it seems impossible to us to propose observations supported by data and methodology. Extensive generalizations, also because of the lack of homogeneity in the way available data have been collected, make comparisons particularly hazardous[2].

The only certain fact, which is the common thread of our contribution, is that China was the first country to act against the spread of COVID-19. Therefore, it was a trailblazer of the problematics that have emerged, the response of which has, obviously, been declined on the basis of the different characteristics of the countries involved.

We are aware of a sociological undecidability risk in the post-modernity (Platt, 1989). Today more than before, catching a phenomenon in its speed of unfolding is one thing; bringing a deeper understanding on it, also through the collection of data, in the direction of the heuristic of an explanatory model is another thing. The research results of the second might come long after the conclusion of the observed phenomenon.

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[1] Although the contribution is the result of reflections shared by the authors, paragraphs: Introduction, 1, 2, and Conclusions are to be attributed to Nicola Strizzolo, parts 2.1, 2.2 and 2.3 to Emanuele Gatti.
[2] Retrieved from https://www.cnbc.com/2020/03/31/china-coronavirus-case-numbers-cant-be-compared-to-elsewhere-economist.html. There are presently numerous calls, from the academic environment, for a statistic sampling of the population through medical buffers (i.e, https://web.uniroma1.it/memotef/sites/default/files/Proposta.pdf?fbclid=IwAR2TBaSIazE7mSmvsj8h AMamBcWVF86_PuI99RjGmiNOFm2aWpzZK_EaXN0, di un utilizzo più radicale delle tecnologie; https://www.repubblica.it/economia/2020/03/19/news/coronavirus_l_appello_dei_docenti_utilizzare_ a_fondo_la_tecnologia_per_sconfiggere_prima_il_male_-251744520/). Unfortunately, as we discussed in the introduction, due to the present lack of data we are compelled to use news reports and grey literature. Unless differently specified, URLs quoted in the text have been visited during the last week of April 2020.

Some recommend an integration between journalistic and scientific methods, even though with all the necessary reservations (Gans, 2018). With this approach, our argument, discursively illustrated by one of the authors, is that China was able to set up particularly effective measures of lockdown and isolation, with excellent results in containing the first wave of the virus, because it already had, culturally and technologically, an adequate background structure.

In this case it is more appropriate than ever the definition of Colombo (2003) and Rehingold (2003) of communication tools as social technology: social technology is not just the instrument per se but the fusion of shared practices and cultures in the use of the medium, such that allows people to form a new way of participating and acting, collectively, in the society.

1. The technological context (compared with the world and with Italy)

In order to better understand the Chinese testimony of the co-author, a description of the technological context is opportune.

In China, the information and communication technologies (ICT) have been a major catalyst for economic development, although their distribution is not yet homogenous. It has been claimed that ICT and economy concurred to the amazingly rapid development of the country (Xu, 2019; Song et al., 2020).

China has the largest number of Internet users in the world, with 772 million people connected to the web. By number of Internet hosts, 53.3 million, it is second only to the USA (Song et al., 2020).

China is also among the top two nations in the world for the number of mobile phone users (CNNIC, 2018).

«According to the International Telecommunication Union (ITU), China is the world's largest telecommunication market in terms of the number of mobile devices, and fixed-telephone and fixed broadband subscriptions, as well as being the leading exporter of ICT products (ITU, 2017)» (Song et al., 2020, 2).

At the prefectures level (excluding Taiwan, Hong Kong and Macao), there is still a certain generational digital divide. The areas with the greatest digital penetration and diffusion are the administrative capitals, coastal areas and central and western regions, major cities and surrounding areas (Song et al., 2020).

«Core regions of ICT development are identified, such as the Pearl River Delta, Yangtze River Delta, and Bohai Rim. In other words, there are strong regional contagion effects, whereby the diffusion of the technology in a prefecture is affected by the diffusion in neighbouring prefectures» (Song et al., 2020, 10). The variables that determine the digital divide are income difference, higher education, providing access and training to digital skills (particularly for the gender gap; Song et al., 2020).

China has an Internet penetration of 59 % (six from last place in the global ranking; Italy, with an 82 % penetrations, is twenty-sixth; Global ranking of We are social, 2020[3]), although it represents the second largest growth in absolute data (+ 25,459,000 corresponding to an increase of 3.1 %), after India.

On average people aged 16 to 64 spent 5 hours and 50 minutes a day on the Internet (the world average is 6 hours and 43 minutes, with the Philippines at the top with 9 hours and 45 minutes and in the queue Japan with 4 hours and 22 minutes), just below Sweden , Canada and Italy (6 hours a day). Of this time, 3 hours

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[3] The data that follows in this paragraph comes from this source.

and 22 minutes are spent on mobile appliances (seven positions above Italy with 2 hours and 42 minutes; data were collected before the Covid-19 pandemics).

A very significant figure is the average of the connection speed, which places China fourth in the world behind South Korea, United Arab Emirates and Canada (Italy is 20th between Romania and Honk Kong).

China is above average, ninth between South Africa and Canada, for content streaming (Italy is below the average, fifteen places behind China).

China ranks first (55 % of 16- to 64-year-old users) in the use of voice commands on technology devices, the world figure being 43 % (Italy is fifteenth with 35 percent of users).

In home automation (use of smart home devices) China ranks third, after the UK and the US, with 15 % of Internet users between the age of 16 and 64, compared to 11 percent worldwide (Italy is at 25 % with a penetration of 8 percent).

If UAE holds the first place of social network usage with 99 % of the population, China is in twelfth position with 75 %. The worldwide spread is 49 %, Italy is at fourteen places from the tail, with 58 %. China, however, is second in the world, behind India, for the absolute increase of people using at least a social media: plus 15 million users compared to 2019, corresponding to a 1.5 % increase).

On average, social networks are used 2 hours and twelve minutes every day (Italy back with 1 hour and 57 minutes).

On average, every Chinese citizen, aged 16 to 64, has 9.1 social accounts, exceeding the average of 8.6 (below Italy with 7.8).

China ranks 14th in using social networks for work, with 43 % of internet users between the age of 16 and 64, the world figure is 43 % (Italy 12 from the queue, thus means 31the from the top, with 31 %).

With a 74 % of network users between the age of 16 and 64 who bought online in the last month, China is at the 11th place (same as Italy). However, for mobile commerce (mobile purchases), it is in fourth place, with 64 % of online users between the age of 14 and 64, above the global value of 52 % (Italy is 20th with 40 percent).

In average terms, per spent money by online shopping in 2019, China is eighth with 1,021 dollars, first South Korea with 1,441 US dollars, with a world average of 499 dollars (Italy is 25th with 401 dollars). Concerning the e-commerce consumption, China ranks first with 10.4 percent of annual per capita income (2019), the global average being 4.4 % (Italy is at the 38th place, seventh from the end, with 1.2 percent).

China ranks third for mobile device payments, with 37 % of 16- to 64-year-old users of mobile payments methods, the global figure is 27 % (Italy is at the 32th, with 16 %).

China is seventh in the world for using ride-hailing apps (apps for using a transport company's vehicle), a third of Internet users in the court 16-64 years, above the world value (24 %; Italy is at 37th place, sixth from the last one, with 5 %).

In addition, China is extremely ahead in the technology and mass application of facial recognition, from payments of subway rides to the approval of loans by banks (Porro, 2019; Cuscito 2019). In addition, the Ministry of Industry and Information Technology has promoted a law in force since 1 December 2019. According to this law, each person, at the time of signing a new contract for internet or mobile phone, must undergo a facial scan (Porro, 2019; Cuscito 2019).

Finally, both in research and implementation, China is at the top of the world for AI, using big data and tracking the population, competing with Russia and the US (Valori, 2019).

2. A first-hand experience in China

The first-hand experience illustrated hereafter has as its theatre the city of Shenzhen, a metropolis geographically located in the continental area facing Honk Kong, and administratively placed in the GuangDong province.

Officially Shenzhen counts 12 million inhabitants[4]. However, this number does not take into account the huge number of migrant workers, which brings the population in the area of 20 million people, similar to the population of the entire North of Italia (Piemonte, Valle d'Aosta, Lombardia, Trentino Alto Adige, Veneto e Friuli Venezia Giulia)[5], and the double of the population of countries such as Portugal or Sweden. This data is even more impressing when considering that Shenzhen used to be a fishing town with a population of just3,000 in 1950[6], and that it has been for years the city with the fastest growing population. The city is now particularly modern, with design skyscrapers, cutting edge face recognition technologies with a widespread road-camera system, and very new and still growing infrastructures and transport networks.

In Shenzhen there are the headquarters of some of the world's largest technology companies, including Huawei, Tencent (which is the owner of WeChat) and Dajiang (which manufactures drones). There is also a big office of Baidu (which is China's equivalent of Google).

Tencent runs WeChat[7], a chat system that many compare to Whatsapp but which in fact offers many more functions, including groups, pages, articles, and a paying system, and which covers a good percentage of the Chinese web. Tencent owns a futuristic skyscraper, but just one of the many that characterize and visually preside over the modernity of this metropolis.

A surprising aspect and an evidence of modernity for a citizen of any European or Mediterranean country is the widespread use of e-payments: while there are still payments in cash, this is useless in Shenzhen if you have a mobile phone. Every economic exchange in every store or service can take place through the smart phone, and the majority of transactions are supported by WeChat. Even the poorest of the street vendors, in Shenzhen (and in many other areas of China), has a QR code so that people can pay with their mobile phones directly to their mobile phone accounts. Obviously, the fact of not having to use cash reduces the possibility of spreading germs through banknotes and coins – what may have been helpful during the pandemic –. Smartphones are used also to enter museums, underground stations and so on, through the QR code scan function. As the smartphone is an instrument of absolute necessity, taxi drivers, shopkeepers, bars reequipped with portable charging devices or mobile phone charging wires.

Another example of modernity is the technology of tracking people through facial recognition. Either one likes it or not, in Shenzhen there are cameras everywhere, and they do work. If you try to enter the subway, for instance, without paying the ticket, you would be immediately identified and tracked by an incoming camera and an outgoing camera, and receive a message on your mobile phone asking to pay the amount corresponding to your route. It is clear that we are in the future with respect to Europe (just think of how primitive our subway systems in Mi-

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[4] Retrieved from https://worldpopulationreview.com/world-cities/shenzhen-population/ (consulted on May 6th, 2020)

[5] Retrieved from http://www.comuni-italiani.it/regionip.html(consulted on May 6th, 2020)

[6] Retrieved from https://worldpopulationreview.com/world-cities/shenzhen-population/ (consulted on May 6th, 2020)

[7] WeChat, with 1,151 millions users, is the 4th social platform in the world. Data report 2020. Retrieved from https://bit.ly/3678jBL.

lan or Rome appear in comparison). Of course, this is not just the result of the use of cutting-edge technology, but of the integration of systems (Marx, 2002; Arthur, 2009).

As WeChat is the most popular chat for interpersonal communication, but also a widespread system for payments and for a whole host of other functions, it is ubiquitous: you cannot imagine a Chinese deprived of his mobile phone, because a Chinese without his mobile phone is deprived of a whole series of working tools, communication tools, and systems that allow to move freely and carry out a range of services. The smartphone, therefore, is a fundamental part of the life of the urban Chinese, possibly one that contributes to define his or her identity.

It is reasonable to think that we will slowly go in this direction also in Western countries, even though we have resistances due to privacy issues. Such resistances to be traced and tracked are evident now, when apps for tracing people in order to contain the spreading of the virus have been received with scepticism and diffidence.

From the technological point of view, at present China is very inhomogeneous; Shenzhen is an almost unique reality, particularly because it is also a so called special economic area, which made of it a place suitable for finance and import-export business, and most of all, a very rich municipality, capable of continuously investing in new services and infrastructures.

Generally speaking, the Chinese government has been promoting the adoption of 4G or 5G, installing masts also in the countryside. While many areas in China are still developing, the costal urban areas may take advantage of an ecosystem of integrated technologies which has few pairs in the world. This has been made possible by the fact that many areas pass from absolute lack of technologies to state of the art technologies once the government invest in such areas. In china, the modernization skips all the intermediate passages it has faced in Europe.

2.1. The advent of the Covid-19

The first public news about a new coronavirus were spread in China at the beginning of January. When the authorities started to take measures to contain the then epidemic, hundreds of millions of people, both Chinese and expatriates, were travelling in China and abroad, taking advantage of the three weeks of holiday for the Chinese New Year. This is a very important holiday, comparable to the Christmas one in Italy, and traditionally is a moment for families to get together. During this period there is a significant shift of the population, with people moving back to their hometown. In such a context, the toughest quarantine in history began: people in Wuhan were placed in lockdown on January 22nd[8], and the following day some kind of lockdown measures were ordered for the entire country, managed at a regional level. Given the population of China (presently around 1,4 billion people), even considering that not all provinces were affected by the pandemic in the same way, it is safe to say that many hundreds of millions of people were in lockdown.

In China cities are divided into levels. At the first level there are the few really huge metropolitan areas, such as Beijing, Shanghai, Shenzhen and few others. These are also the cities where lockdown measures were more stringent, requiring different isolation measures. Commercial and industrial activities, as well as transportations, were initially closed, leaving open only the essential ones: pharmacies,

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[8] Retrieved from https://www.reuters.com/article/us-china-health-who-idUSKBN1ZM1G9 (consulted on May 11th, 2020).

supermarkets outside of shopping malls, post offices, and most importantly delivery services.

2.2. WeChat: three stages, three forms of communication

We can ideally split the quarantine into different stages, according to the kind of dominant messages spreading on WeChat groups.

The initial stage was characterized by people finding themselves either forced or highly recommended to stay at home. In Shenzhen during the first weeks people were allowed to go out for about an hour per day, keeping the safe distance from other people, which in China is 4 and a half meters, and strictly using face masks. However, also due to the memories of the SARS in 2003, many people were afraid and did not go out at all if not necessary. This led, particularly during the first two weeks of quarantine, to the unusual sight of a Shenzhen almost deserted.

WeChat became one of the main communication instruments, to stay in touch with other people and to keep informed. WeChat allows the creation of discussion groups of up to 500 members. In such groups, as well as in personal chats, it is possible to share all kind of contents. Therefore information, both official and unofficial, spread rapidly.

With everyone at home, mainly not working, and a definitely high level of anxiety due to the lack of information, at the time, about the level of danger posit by the new coronavirus, the majority of people tended to use information as a way to sooth their bad feelings. In this scenario, rumours and fake-news easily spread. Parallel, a lot of official information spread in the form of scientific articles or data extrapolated from scientific articles. As such scientific articles were the first ones about the new coronavirus, data were templatise, but many people started to debate on them, in an effort to understand what kind of threat they were facing. So some fake-news took the shape of fake data.

In order to drastically limit the spread of misinformation, a few days later, on January 26th, the Chinese Government issued an ordinance prohibiting the spreading of any kind of fake news. "Severe punishments", including detention, would be committed to those who would create and or spread fake news. The administrators of the WeChat groups were considered liable for the content published on their groups. In China issues related to information must be taken very seriously, so the combined repressive action of the government and self-regulation of WeChat users led to a dramatic decrease of fake news in just few days. People started to be asked to mention the source of the data they were spreading, and if this was not an official source (either a Chinese or an internationally recognized one) the data were not taken seriously by the readers. While it is dubious if some kind of similar action against fake news could ever be adopted in a Western democracy, it doubtless was effective and helpful, as *users and groups' administrators were given responsibility for the contents they were publishing*. Moreover, it helped direct people's attention towards official information resources, particularly the World Health Organization (WHO) and the Chinese Centre for the Prevention and Control of Diseases. While other information sources were not obscured by the government (which has the technical means to do so), these started to be considered less trustworthy – in what can be read as an increase in critical thinking.

A second phase can be identified in the appearance of videos by professionals of all kinds offering services in a volunteering form. It may be argued that such services were initially given by professionals as a form of self-promotion rather

than as providers of a service to the community, or that at least there were mixed intentions behind the profusion of free services that made their appearance: this is another aspect of the pandemic that would benefit from some structured research.

The first tutorials were of coaches encouraging people to do gymnastics at home. The very first one that's been circulating perhaps was that of an Australian coach, whose message in a nutshell was: "People in China, I feel close to you and I want to teach you how to exercise at home". These kinds of contents were spread on WeChat, for this reason they are not available online anymore.

Then the language lessons came, and the cooking ones, and of course the coaching. Few professionals offered free counselling sessions or meditation practices (this is one of the co-author did in Shenzhen, offering free counselling support group and mindfulness practices).

Another service that people took advantage of from home was online purchases, with an increase in sells of different goods, from food to fitness machines.

If in Italy the distribution system in big cities has been overwhelmed (Redazione Food, 2020) and reached the collapse[9], and even worldwide Amazon suffered strong delays and difficulties in complying with all the deliveries[10], in China the system held up well. This success can be explained in two ways. First, the door-delivery system in big cities is extremely widespread and efficient. Food is cheap, so Chinese people routinely eat outside or ask for food delivery at home or at their offices. Given the dimension of the Chinese main cities, shops are compelled to provide home deliveries. This led to the burgeoning of an immense delivery industry. An anecdotal example will illustrate to what extent Chinese people rely on such industry: for the 70th anniversary of the Communist Party, which was held in 2019, a huge military parade was organized, following by a parade of coaches representing the peoples (ethnic groups) of China and the main jobs that make China a great country. The last of such coaches was the one dedicated to the personnel in the delivery industry, and a joke on WeChat rapidly circulated at the time saying that it was "the save-my-life coach". The second reason to explain the capability of the Chinese home delivery services to keep up with the increased demand was a prompt shift of workers from other industries, particularly waiters who were not working due to the closing of all restaurants, to the delivery industry. This was facilitated by an agreement between the government and the behemoth Alibaba. Of course, such an industry is also made possible by the relatively low cost of manpower. In fact, the delivery personnel is among those categories which work frantically, without any career perspective; delivery people are usually male, young, and they often are migrant workers[11].

As mentioned above, it is not just a matter of technology, but of the integrated system between technology, economy, society and culture: in the Chinese case, having a lot of manpower at a sustainable price has facilitated the maintenance of the home delivery system.

The third period was that of the return to work.

The festivities were exceptionally extended due to the coronavirus, and officially ended on February 10th. At this point, in Shenzhen only few companies were actually ready to open, and many were able to comply with the prevention meas-

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[9] Retrieved from https://www.ilfattoquotidiano.it/2020/04/03/sono-le-venti-nove-siti-per-la-spesa-online-in-tilt-in-tutta-italia-ordinare-e-diventata-unimpresa-e-le-consegne-sono-a-15-giorni/5758624/ (consulted on May 11th, 2020).
[10] Retrieved from https://tech.fanpage.it/i-tempi-di-consegna-potrebbero-essere-piu-lunghi-amazon-avvisa-gli-utenti-di-probabili-ritardi/(consulted on May 11th, 2020).
[11] "Visible and vocal", *The Economist* (international edition), 03/04/2020.

ures imposed by the authorities only weeks later. So, even though a common date for all the GuangDong province was set, the return to work was actually gradual. It is worth noticing that in Shenzhen schools only partially opened on April 27th, and a date for the reopening of kindergartens has not been set yet[12].

So at mid-February a phase of teledidactic and smart working begins. Here, too, China has been leading the way for the remote working and studying experience that is now common to so many countries in the world.

One of the coauthor working as a mental health counsellor, he had the opportunity to counsel both international teachers (from English speaking countries) and international university students from almost all the continents[13].

Both teachers and students found particularly difficult to cope with the different time zones. The majority of them had returned to their home countries and were mostly unable to go back to China. Many found themselves having to teach or to follow an online class in the middle of the night – which shows both the rigidity of the teaching system and the limits of the current approach to teaching online, which is basically just a transposition of the usual activities on an online platform, without all the necessary adjustments.

Another problem for both teachers and students was to develop a new routine which did not include going to a work place or to class, but rather doing everything at home. This is challenging not just for the easily understandable issue of having to work and study with potential distractions around (mainly represented by children, younger siblings, or the activities of the other family members), but also because of the function that we attribute to places: our houses are usually places characterized by their main specific functions related to rest and leisure, not work.

Such difficulties are reflected in the Italian experience with study and work from home, about which many are currently discussing (the most authoritative sociologist currently trying to understand if and how the remote working will survive the pandemics is, perhaps, Domenico De Masi[14]).

In China during the quarantine and later on the majority of people were with their family, while in Italy, also due to a different family structure, many people were isolated. This shows another weakness of remote working: offices can be places of truly abhorrent desolation, spaces that are not meant to live in, yet they are the places where we spend most of our day; however, offices also are made of people and in an office one may get to know those who then become partners or lovers, or even the next employer (due to the well-known strength of weak ties, Granovetter (1973). Moreover, in the office we exchange information through informal communications. If we were to move all this into remote working, either it all would get lost, or we would need to find ways to establish informal communication flows in our remote working activities. Of course, remote work allows to save all those inessential business meetings and business trips held somewhere different from our offices, which are so common in multinational corporations and in European funded projects, but also for small businesses. However, very often people want to make the effort to go somewhere, even at great length, to have a meeting, either because certain issues are still better discussed face to face, or because it is a

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[12] At the date of May 8th.

[13] The experience that emerged in the form of life narratives of this experience and its reflections will be the subject of a subsequent publication.

[14] See his interventions, for the time being in the form of articles on Linkedin and Facebook, or of interviews. See for instance: http://www.donnainaffari.it/2020/04/telelavoro-intervista-al-sociologo-de-masi/- (consulted on May 11th, 2020).

way to create a stronger bond with people, or else because it allows to escape the usual routine and make an experience visiting a different place.

In addition, remote work may lead to a lack of motivation: when we go to the office, we are compelled to do things. At home this may turn to be harder, because of the many competing and more pleasant activities that surround us. While remote work as a huge potential, the experience during the pandemic clearly showed that it cannot be used as a way to transfer at home the same activity people do in the office is exceptional, but it will have to be combined according to the needs of different professional realities.

We can make a comparison with experimental situations: remote working appears to be similar to such psychological or social experiments carried out in laboratories, and completely lacking any ecological validity. The entire dimension of non-verbal communication goes lost – and it is missed[15].

2.3. Space and time

We cannot understand the potential of new media if we do not reflect on the concept of space (Colombo, 2003), but we must be careful because this word has different meanings (Martina, 2016). We're going to look at two of them.

The first meaning is that of distance: with telecommunications, distances are cancelled, and its measure, strangely, becomes time – that of time zones. The other meaning of space we refer to herein is that of place.

Thinking about remote working: we move from one space-place, usually our home, to another, the office. The space in between is an irrelevant distance, a crossing space that we are usually not interested in and that it is often plagued by congestions of cars and people. Communication media allow us to skip the process of crossing the distance, but at the same time they keep us in our space-place and only allow people to enter it with their image and voice.

However, space, we argue, is never neutral (and in fact Marc Augé famously called the spaces that he considered to be flat, neutral, anonymous "non-places"; Augé, 2009). The space at home is usually the theatre of our interactions with our dearest ones; the space where we collect the symbolic and material objects which represent our passions and hobbies; the space for intimacy and privacy. Moreover, this space is often shared with other people, possibly with children – what may be extremely taxing for our selective attention and concentration. Not all houses have a space such as a studio, where people usually work.

Indeed, before the pandemic we already knew that it is possible to keep relationship in the distance and through the distance: how many love stories continue to unfold between people living in different countries, people who see themselves physically only once in a while, yet they keep feeling as somehow "being together"?Thanks to smartphones and social media, it is possible to spend an entire day being "together in the distance", seeing what the other does, talking, etc., almost as if the other were there (Athique, 2013).

One of the major problem with this practice comes when the two people are in time zones very far one from the other. Distance becomes determined not by the amount of space between two people, but by the amount of matching between their routines.

This became immediately apparent during the epidemic in China. Although Beijing adopted a single time zone for the whole county, Chinese big cities are very

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[15] See for an example: "Low resolution", *The Economist* (international edition), 30/04/2020.

globalized and host foreign nationals who come from all continents (up to before the coronavirus, Chinese authorities tended to issue work permit more easily to highly rather than poorly educated foreigners, in a policy of attracting talents and know-how). As we explained, the virus hit during a long holiday, when many people take the chance to visit travel abroad or go back to their home country. The same people, when they did not lose their jobs, may have been asked to work during the night. In March, for instance, the Italy-China Chamber of Commerce organized an online conference, where one of the co-author was invited as a speaker. The person who organized the conference, who normally resides in the GuangDong province, had returned to Italy and was therefore compelled to routinely get up at two in the morning to keep up with the Chinese schedule, which was 7 hours ahead. This problem well illustrates one major risk linked to remote working: the blurring of the boundary between private and professional life. When remote working is accompanied by a policy of working by results, that is, being free to manage one's own time as long as results are achieved, people may feel motivated to exchange an increase in freedom with some sleepover. When remote working, on the contrary, becomes an excuse to ask employees to be constantly available, because after all they are at home, people may easily get burnt-out.

There is another aspect of time that deserves some attention: the time dedicated to relationships. From the classic productivity point of view, all the time not directly allocated to production is considered wasted time. This is, of course, a heritage of the early industrial age, when the only time that counted was the time a worker spent at the production chain. It is highly arguable that this is the case also with intellectual professions. The time spent at the infamous coffee machine in every office is important because it often translates in time for human relationships. A person can let go his or her thoughts about a project with a colleague; what sometimes may seem just a release of bad feelings may throw light on existing problems and give birth to creative solutions. Companies are constantly looking for ways to decrease their operating costs, but very few companies, including the ones boosting a most modern internal culture, have shifted to remote work. How is that so? It is reasonable to think that there is a relational dimension of work that somehow has its own function within the organizational system itself, in terms of motivation, knowledge, social capital, all dimensions highlighted by both Mitchell (1969) and Granovetter (1973). It is often said that companies do not want to give up control on their employees; this may well be the case, but the need for the relational dimension of work must also play its role.

Moreover, human beings are intrinsically social beings: we do not bond only on the basis of rational considerations, but rather and mainly on the basis of affective elements – which would get lost with remote work. Are we sure that we are ready to give up the time for the relationship? This is a fundamental question that the adoption of remote work would certainly end up raising. Observing the ways that communication is transformed when it runs on social media (here McLuhan's lesson that the media is the message echoes prophetically), there are reasons to worry that eliminating the interpersonal aspects of work relationships may dramatically change the perception of the work environment and the nature of relationships inside of it. As usual, technologies offer us new possibilities, but we should not make the logical mistake of thinking that new also means desirable. The adoption of new technical solutions should stem form perceived needs rather than from the fact that technologies simply are there. As Richard Sennett convincingly showed (1998), innovation for the sake of innovation may not lead to improvements.

Finally, despite the image of a youth perfectly at ease with carrying on their communications mainly through media, anecdotal experience with young adults in China let us think that young adults are those who actually may be most vulnerable to isolation.

Human beings, compared to other animals, need an apprenticeship in life composed of socialization, formal and informal training. In the psychosocial component, it is very important to learn to manage emotions, and these are based in the body (Izard, 2010). Indeed, we feel emotions because we have a body. When we talk about presence, we talk about body, physicality, even unpleasant smells, people who willingly or unwillingly touch each other, sensations that we feel in our body; interestingly, in Italian we say that we like or not a person on our skin ("a pelle"), while in English we say that "it's just a feeling" or "we follow our guts". Isolating young people has meant interrupting their on-going process of socialization on emotions through their bodies, and emoticons on mobile phones cannot replace the richness of face to face human communication. Ericsson's researchers have highlighted how corporeity should be one of the user's digital experiences (Ericsson, 2018). The same world of virtual games is moving in the same direction[16]. And of course, China, too, had already made research on this[17]. Even though we are making research to replicate all 5 senses in immersive virtual reality, we are still far from succeeding. And even if one day we did, it may resemble a Philip Dick's dystopia.

Conclusion

In this contribution we have set out the contextual premises of the first wave of the Covid-19 pandemic, which then spread to the rest of the world. China appears to have controlled and then defeated the virus, with the death toll zeroing in and Wuhan's isolation ending on April 8[18], even though the issue of the imported cases still worries the authorities and impedes a full return to normality. Other countries are now addressing the spread of the disease and responding on the basis of their health, political and cultural situations, political and economic priorities, and demographic characteristics. In every country, even the ones considered particularly advanced such as, for instance, Sweden, the coronavirus is revealing fragility and contradictions, but also unexpected strengths and resilience capabilities.

Several sources report that China's strengths have been:
- the widespread dissemination of technology for citizen control, the traceability of their movements, the analysis of big data released by citizens' activities;
- machine learning for analysis and decision based on all the information collected;
- the rapid implementation of these technologies in health monitoring and tracking movement systems (Berti, 2020; Biagio, 2020).

It is unthinkable, however, that a country's technological substrate and the use of technology is disconnected from its cultural, political and economic approach to its use and to society as a whole.

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[16] Retrieved from https://www.weforum.org/agenda/2019/11/new-game-takes-virtual-reality-beyond-sight-and-sound/ (consulted on May 11th, 2020).
[17] Retrieved from http://www.xinhuanet.com/english/2019-07/10/c_138215213.htm (consulted on May 11th, 2020).
[18] Retrieved from https://www.ansa.it/sito/notizie/mondo/2020/04/07/coronavirus-in-usa-altri-1.150-morti-in-24-ore-_71bf48bb-7dbf-434a-9b2e-41a7522fe8b8.html (consulted on May 11th, 2020).

Technological advances developments, at least in our perspective, are intersystem (Mattelart, 1998; Brigs, Burke, 2009).

For this very reason, it is controversial to argue that the Chinese monitoring system or any other policy adopted in China to curb the pandemic can be transferred to other countries *tout court*, without considering the necessary changes due to culture, history, politics and economy in those countries. Every innovation (ideas, artefacts or organizational systems) needs to take hold of adequate conditions, otherwise it risks of being immediately rejected (Rogers, 1962).

An illustrative example of what we are affirming is offered by the recent attempts in Western countries to adopt apps for tracing potentially infected people. In Italy, for instance, the government proposal that the public use the app Immuni has come with an impressive debate about its potential risks for the privacy (Lisi, Sarzana, 2020). People are reluctant to provide information about their geographical movements, even though such movements can all the same be followed by tracking individuals' mobile phones, electronic purchases, public cameras, and so on. People are also resistant at the idea of sharing information which can be used to reconstruct their routines and social activities, even though they may then publish detailed pictures of those same activities on social media. At the institutional level, the Ministry of Health committed to deliver to the Guarantor of Privacy ('Garante della Privacy') a report about the app, but then did not do it, possibly waiting for another report from the secret services which apparently hasn't been delivered either (Carli, 2020). Moreover, the same Ministry did not make sufficiently clear the way the app Immuni was chosen among others available, and this caused the same choice to be welcome by polemics and criticism.

China, on the contrary, is among the first countries in the world for what concerns the use of control technology in the private and public spheres. For instance, WeChat has an agreement with the government to make available to government scrutiny all the activities undergoing on the platform, and big cities are crowded with cameras for face recognition. Moreover, the massive use of online purchases and virtual money transactions is another way the authorities may easily track individual activities.

We suggest that the relatively uncontested adoption of technologies for the control of citizens in China may be due to a number of historical and cultural contextual factors. China has a strong Confucian cultural background, which is paternalistic and promotes an undiscussed respect for the authority – be it that of the parents or the government (Bell, 2008; Scarperi, 2015). This cultural background, together with the rapid adoption of technologies and the lack of a public discourse about it has allowed the government to proceed basically undisturbed in the adoption of control technologies, which many Chinese have seen as a sign of progress and received favourably. On the contrary, the Italian sociopolitical system faces the need to discuss publicly the main technological advances adopted. The present resistance to the creation of a 5G network, with attacks to masts and municipalities issuing orders against the construction of the infrastructures in their territory, clearly exemplifies the nature of difficulties of imposing a new technology with a top-down approach, rather than through a deliberative one.

China has also historically enclosed itself inside its own borders, as the construction of the Great Wall testifies. The same Great Wall is now technological: it has the form of the great firewall that divides the Chinese Internet from that of the rest of the world; and it has the invisible shape of the control technology in place everywhere.

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