# IMMEDIACY AND ITS HIDDEN INFRASTRUCTURE WHEN AMAZON EXTENDS ITS DELIVERY TIMES DURING THE COVID-19 PANDEMIC

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IMMEDIACY AMAZON INFRASTRUCTURE DELIVERY COVID-19

During the confinement due to the Covid-19 pandemic, Amazon faced crushing demands. The firm chose to extend delivery times for non-essential in-stock goods and to hire more workers. These strategies contrast with Amazon's usual core of business: making delivery always faster and replace as soon as possible most workers by robots.

By describing this transient episode of voluntarily extended delivery times by Amazon and by inscribing it in the history of immediacy as a paradoxical horizon of mediations, as discussed in the field of media theory, the article shows that Amazon's strategies of adaptation during the

Covid-19 pandemic reveal once again what media studies had already emphasized: that many technological, logistic and human mediations are required to fulfill an online order as soon as possible, tangentially immediately.

The article finally highlights an understated aspect of mediations: the importance of economic factors in shaping our societies, where shrinking spatial distances by getting separate things closer ever faster is economically profitable in spite of hidden and disastrous consequences on work conditions, on the global organization of the retailing and circulation of goods, and on the environment.

# INTRODUCTION

"It's simple, I've never seen so much activity in my Amazon warehouse", declared in April 2020, during the Covid-19 pandemic, a trade unionist of the Italian General Confederation of Labor on the site of Castel San Giovanni (Emilia-Romagna, Italy) (Malet, 2020). In the United States, according to an inside source quoted by the *New York Times*, orders for Amazon groceries have been 50 times higher than normal during the confinement (Conger & Weise, 2020). As revealed on April 30, Amazon's Prime subscription revenue climbed 28% in the first quarter from a year ago (Ho, 2020).

Amazon Prime costs \$119 a year in the US and, among other services such as video and music streaming, usually allows delivery in one or two days. But, in order to face the crushing demands, part of the strategy during the confinement was to indicate long delivery times (5 days to a month) for non-essential in-stock goods, in order to discourage some commands and release the pressure (Del Rey, 2020). This strategy strikingly contrasts with Amazon's usual core of business: making delivery always faster. In an article entitled "The Uber-All Economy of the Future", Smith underlines that Amazon "has always focused on speed of delivery, from 1-Click to Prime to PrimeAir to #AmazonCart to PrimeNow. It has relentlessly chipped away at the gap between order and fulfillment. PrimeNow is Amazon's on-demand service, with two-hour delivery for free and one-hour delivery at premium for occasions when immediacy is imperative." (Smith, 2016, p. 386) Amazon is currently working on a delivery system by drones that could shrink the delivery time to 30 minutes for light products in some cities.

My article aims at replacing this transient episode of voluntarily extended delivery times by Amazon in the history of immediacy as a paradoxical horizon of mediations, as discussed in the field of media theory. Don't Amazon's strategies of adaptation during the Covid-19 pandemic reveal once again what media studies had already emphasized: that many techno-

logical, logistic and human mediations are required to fulfill an online order as soon as possible, tangentially immediately?

I will first present materials about the history of Amazon's strategies for speeding up delivery. This desire for immediacy will be explored thanks to the insight given by media theorists on immediacy. It will allow me to better understand Amazon's paradoxical strategy of extended delivery times during the pandemic, relying here mainly on journalistic enquiries and data given by Amazon.

As a result, I will show that inscribing Amazon's episode of extended delivery times in the history of immediacy highlights the usually hidden infrastructure, especially the human workforce, implied by the immediate satisfaction of desires by ever quicker delivery.

I will finally discuss this result, showing that new considerations about immediacy are obtained when paying attention to the economic forces that drive mediations and our perception of time, delay, satisfaction and consumption.

# MATERIALS AND METHODS

A succinct presentation of Amazon will be useful to better situate what happened during the Covid-19 confinement. Founded in 1995 in Seattle, Amazon is the worldwide leader of online retailing sales. It started by selling online books, then CDs and DVDs and finally all sorts of goods worldwide, including food in the US. It developed a selling strategy based on users' reviews of products, a market place with third parties proposing goods on the platform, and warehouses where employees and robots could maneuver easily to pick them up using electronic scanning systems (Galloway, 2017, p. 27). Amazon holds 110 buildings worldwide, specifically order preparation centers, storage centers, specialized centers and shipping platforms. Amazon employs almost 800,000 workers, most of them temporarily employed. In 2019, Amazon increased its workforce by 23%.

Amazon's success largely relies on the enormous catalogue of goods it provides on the same platform, to lower costs of products thanks to centralization and to the marketplace (the sellers don't make customers pay for their own retailing infrastructure), and to faster delivery. Among other activities, Amazon also developed a personal electronic assistant named Alexa, that can search the web and add products to shopping cart. With the big data information collected about the consumers' habits, Amazon plans to develop a retailing service bypassing the purchasing process. Goods will be delivered at home without any purchase. and the unwanted ones could be returned. Galloway (2017) calls this trend "Amazon's unwavering focus on making consumer purchases increasingly frictionless" (p. 33). Erasing the deed of purchase and shrinking the delivery time both tend to erase mediation in the consumers' experience of acquiring goods.

This vein exploited by Amazon can be understood referring to a paradox that media theorists have explored under the name of immediacy. In a first approach, immediacy could be situated at the intersection of time simultaneity and space ubiquity. What goes very quickly between two different places tends to immediacy (in the case of Amazon, from the warehouse to the consumer). Time of delivery decreases, giving an impression of having overwhelmed spatiotemporal constraints (that is, distance), and of having made mediations disappear, as the prefix of "im-mediation" shows.

Some media theorists brought interesting insights to understand immediacy. A powerful principle of media theory would state that immediacy is the paradoxical horizon of all mediation. Mediation should erase itself to be efficient. If we think to the electric wires during a phone call, it is because the transmission is bad, and the mediation too present. It results in a failure of the expected authentic experience of communication (authenticity being a connotation of immediacy). Mersch (2018) calls this principle

the negativity of the medial and situates it in the wake of the dialectics of Hegel (p. 45). The medium should make things appear, make information and goods circulate, but should not be visible itself. Krämer refers to it as the postal approach of media theory: transmission succeeds when the medium erases itself. She uses the metaphor of the messenger that dies when delivering his or her message, abandoning her own agency in order to properly fulfill her mission (Krämer, 2015, pp. 19-26).

The interesting thing about immediacy is that it is a negation of mediation. Immediacy cannot be thought without mediation. Indeed, in order to reach ever more immediate transmission of information and supposedly authentic experience, ever more elaborate technologies and infrastructures are implied. Bolter and Grusin (1999) showed that "immediacy depends on hypermediacy", i.e. on the use and 'remediation' of multiple mediations (p. 6), rather than on the absence of any mediation. Sprenger proved that, if immediacy goes back to the origins of mediations, it received a serious boost with the growing mastery of electricity in the 17<sup>th</sup> and 18<sup>th</sup> centuries and its later use in telegraphy in the 19th century (Sprenger, 2012). These technologies reinforced the fantacy of a peaceful, global, instant and ubiquitous transmission that culminates in Marshall McLuhan's enthusiastic promotion of immediacy in the 1960s.

Nevertheless, the ecologic, sociologic, geostrategic and economic effects of technologies of immediacy tend to be neglected, which blinds users and consumers about the consequences of their use of seemingly ever more immediate mediations. Starosielski (2015) precisely described the undersea fiber-optic cables: with her ethnographic approach, she reveals the "hidden labor, economics, cultures and politics that go into sustaining everyday intercontinental connections" (p. 2). More recently, with the exhibition *The Supermarket of Images*, Szendy et al. (2020) also tried to counter the ideology of immediacy and dematerialization by presenting artworks that unfolded the networks and the

power imbalance implied by technical mediations. The exhibition included *Amazon* (2016), a photograph by Andreas Gursky that, by its large format (4x2m) and its play on the codes of landscapes and marines, presents "an organic and cumbersome set that contradicts the apparent fluidity of the dematerialized commercial exchanges practiced by the online sales platform. Behind a supposedly ethereal digital world lies a saturation of objects, detached from their function and organized according to a single logistic classification" (Voss, in Szendy et al., 2020, p. 58).

Could one say that Amazon's success even relies on this concealment to the eyes of the consumer of the mediations implied by each purchase? That's what the French journalist Jean-Baptiste Malet, who worked from November, 2012 to February, 2013 in an Amazon warehouse in the south of France in order to penetrate the secrets of the firm, thinks: "If Internet users know the homepage of the famous website, most of them do not know what is going on behind their screen, once the order has been validated, when the presumed virtual digital economy becomes real again." (Malet, 2014, p. 9) Faced with the silence imposed on employees, other journalists infiltrated warehouses (Newell & Foggo, 2008; Cahour, 2019) or had to do a huge work of getting closer to employees in order to gather their testimonies (Soper, 2011; Löbl & Onneken, 2013). Thanks to his immersive investigation, Malet describes how Amazon forces employees to remain silent about their hard conditions of work in warehouses, even if it is contrary to the French labor legislation: "They all lived as if they had no right to express themselves." He concludes: "In a world that has been declared open and transparent by virtue of the Internet, where information circulates at the speed of light, supposedly without any limits, high walls rise everywhere and every day that encircle the areas of production and distribution of goods." (p. 11)

Nevertheless, during the confinement due to the Covid-19 pandemic, Amazon could not keep up with the line of frictionless purchases and of delivery time and users' experience verging immediacy. Contrarily to the promise of quick delivery that is part of its success, the firm strategized discouraging commands through extended delivery times. This was set up on March 17, 2020, as announced on Amazon's Covid-19 blog: "To address this need and help ensure the safety of our associates, we've adjusted our logistics, transportation, supply chain, purchasing, and third-party seller processes to prioritize stocking and delivering higherpriority items. This will result in some of our delivery promises being longer than usual." (Day One Staff, 2020) What falls under the category of "higher-priority items" is indeed very large: "Amazon defined several categories as essential products that can continue shipping, including baby products; health and household items; beauty and personal care; grocery; industrial and scientific; and pet supplies. Books are included as well." (Hu & Dastin, 2020)

But another strategy is worth mentioning in regard of that of extended delivery times for non-essential goods. Amazon had to increase its labor force by hiring temporary employees (targeting those who had lost their previous jobs in hospitality and travel), and by keeping its existing employees at work by increasing wages by \$2 per hour. This strategy had been announced on March 16, 2020 by Dave Clark, Amazon's senior vice president of worldwide operations, in a blogpost. In his words, it aimed at "delivering critical supplies directly to the doorsteps of people who need them" (Clark, 2020).

# **RESULTS**

As a result, I argue that Amazon's episode of extended delivery times during the Covid-19 pandemic is yet another breach allowing us to verify and deepen the accuracy of the concept of immediacy as the paradoxical negation of mediations. Including Amazon's episode of extended delivery

times in the history of immediacy highlights the usually hidden infrastructure implied by the immediate satisfaction of desires.

Altogether, both strategies of Amazon (extending delivery times for non-essential goods and expanding the workforce) suggest that it is the human workforce, vulnerable to the virus, that grinded the hidden infrastructure to a halt. These strategies were a way to respond to the difficulty to keep the employees at work whereas their working conditions were not safe. Weise (2020) described in an article for the *New York Times* the discrepancy between Amazon's communication about workers' protection against the propagation of the virus at work and the reality of lately applied and insufficient measures denounced by employees.

In France, this discrepancy led to a legal standoff between the multinational and the French trade unions during the pandemic. On April 24, the judiciary court of Nanterre imposed on Amazon to restrict its activity to orders for food, medical and hygiene products until the company properly assessed the risks to which its employees were exposed due to the Covid-19 pandemic. Amazon France decided to close its logistic sites from April 16 to 20. On April 24, the court of appeal of Versailles confirmed, while softening it, this decision. Trade unionists of the Lauwin-Planque warehouse, in the North of France, had already filed a complaint for endangerment of life on March 31 (Vasseur, 2020).

In the US, on June 3, three workers of the New York warehouse sued Amazon for failing to take the necessary steps to protect its employees from the coronavirus. According to them, Amazon let workers come to work even if they had been in contact with people who tested positive, discouraged resorting to sick leave, and kept asking high work rates that did not allow enough pauses for washing hands and work tools (Statt, 2020).

Amazon's tugging during the pandemic between its employees' health and the growing number of orders thus invites us to reconsider the importance of the human component that is still, as the Covid-19 pandemic has evidenced, at the core of the hidden infrastructures of technological acceleration.

Amazon draws its strength from a powerful logistic infrastructure. In order to receive goods from all over the world in the warehouses, and to send them in many countries, it uses all means of transport: overland roads, sea roads, sky roads. In 2019, Amazon expanded its air cargo fleet with 15 more Boeings, planning to have 70 planes by 2021 (Perez, 2019). In the same year, Amazon obtained from the Federal Aviation Administration, after Google's parent company Alphabet, a one-year authorization for testing delivery by drones in the US, planning to run Amazon Prime Air within a few months (Dunn, 2019). In early 2016, Amazon was given a license by the Federal Maritime Commission to implement ocean freight services so it can ship others' goods, getting a position in oceanic transport business (Galloway, 2017, p. 42). Amazon is thus increasing its positioning in global transport and, because it is very expensive for Amazon to have consumers ordering goods, bringing these goods to them, and eventually having to pick them up if they don't please consumers, the firm developed two strategies: garner membership fees through Amazon Prime, and charge others to use its infrastructure because it's way cheaper for them than building their own infrastructure (Galloway, 2017, p. 48).

Nevertheless, as the extended delivery times and the hiring of temporary workers during the pandemic revealed once again, at the core of this infrastructure lie the humans who plan, activate and maintain it. But it seems clear in Amazon's strategy that humans will be more and more replaced by robots (100,000 are already in use), even if the firm rather emphasizes the collaboration between humans and robots, and its alleviating the hardness of human work thanks to robots (Fulkerson, 2019). As Galloway explains: "The reason [Amazon's founder and CEO] Jeff Bezos is advocating a guaranteed income for Americans is he has seen the future of work and, at least in his vision, it doesn't involve

jobs for human beings. At least not enough of them to sustain the current workforce. Increasingly, robots will perform many of the functions of human employees, almost as well (and sometimes a lot better), without annoying requests to leave early to pick up their kid from karate." (Galloway, 2017, pp. 50-51). In Galloway's eyes, Bezos thinks "there's no way the economy will be able to create, as it has done in the past, enough jobs to replace those being destroyed" (p. 51). In 2012, Amazon bought Kiva Systems, a company that manufactured robotic fulfillment systems, and equipped most of its warehouses with robots, obtaining significant time savings on the preparation of orders. Existing employees are supposed to act like the robots that will almost totally replace them as soon as they will be cheaper than humans, as Malet observed during his immersion in a warehouse. Referring to the employees who go looking for items on the shelves, he writes: "Pickers are cheaper and more efficient than robots. With them, no technical maintenance is required since they are mostly temporary workers. Amazon's management can easily replace them when they are exhausted or no longer do the job by simply drawing on the huge reserve army of the unemployed." (p. 44) His work in the warehouse of Montélimar allows him to compare the repartition of functions into highly specialized and separated tasks (eachers and stowers for the reception part; pickers and packers for the preparation of packages) to working in a factory. Humans become just another tool of the highly computerized industrial process, that will be replaced as soon as possible. Everything is already digitized thanks to scanning systems, whose duplicity he describes: they are supposed to maximize the employees' operations of storing, picking and packaging, but they are also used to watch every movement employees do in the warehouse and to put increased pressure for performance. For Malet, workers are supposed to become machines if they want to keep their jobs: "each human being has to self-discipline in order to mechanize his body and his mind." (p. 36)



**Fig. 1** Bianca Argimón, Melancholia XXI, 2019, oil on linen, 125 x 95 cm. Courtesy MacVal.

# **DISCUSSION**

By applying immediacy as a conceptual tool borrowed to media studies to Amazon's retailing strategies during the Covid-19 pandemics, I confirmed its accuracy for understanding that promises to cancel distances and mediation have concrete consequences. Many levels are implied: the health of workers and their well-being at work; the organization of the circulation of goods worldwide, that relies on private firms having more and more powerful logistic networks and imply long-distance transportations that are not sustainable for the Earth; the relation of societies to time, delay, satisfaction, and possession.

Media theorists and historians of perception showed that media participate in modulating physical distance and time perception. A debate raised among them about what comes first: do media change our perception of time and space, or do societies change, and accordingly create new media to satisfy their need for more and more speed (Koselleck, 1976; Rosa, 2003; Tomlinson, 2007)? My detour by Amazon suggests that this debate could be enriched, that is, displaced, when paying attention to the economic forces at stake. One cannot deny that our perception of time, of waiting, of distance, of presence, is challenged by media, but it is interesting to wonder what role play profit-oriented companies such as Amazon for supporting orientations towards quickness and, tangentially, immediacy. Amazon's huge infrastructure, that still relies on humans for being planned, activated and maintained, has to be voluntarily concealed in order for the customers not to think too much about the consequences of the human, technological, logistical and legislative mediations necessary for receiving the products they purchased. But this hidden infrastructure is clearly revealed in times of crisis, such as the confinement due to the Covid-19 pandemic or the strikes of the employees, be these strikes against their bad work conditions as well as Amazon's devastating impact on the environment (Massiot, 2020).

# CONCLUSION

During the confinement due to the Covid-19 pandemic, those equipped with computers or smartphones largely used the e-commerce worldwide leader Amazon's online interface to overwhelm distance from the goods they more or less needed. As the promise of immediacy of delivery could not be maintained for many non-essential goods, the hidden infrastructure of this promise was once again revealed. The notion of immediacy, developed in the field of media studies, helped us understanding the problematic consequences of such a concealment.

In return, paying attention to the strategies of a firm that promises to reduce delivery time to a minimum and that tries to conceal to the consumer all the human, technological, logistical and legislative mediations it requires to deliver goods, led us to highlight an understated aspect of mediations: the importance of economic factors in shaping our societies, where shrinking spatial distances by getting separate things closer ever faster is economically profitable in spite of disastrous consequences (on work conditions, on the global organization of the retailing and circulation of goods, and on the environment).

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