The COVID-19 pandemic beyond Health Sciences: reflections on its social determination

Abstract This paper aims to perform a theoretical reflection on the historical-social foundations of the COVID-19 pandemic. The “capital worldization”, “capital-imperialism”, “space-time compression”, and “structural crisis of capital” categories are conjured from the historical materialistic-theoretical matrix, outlining a course that transcends the limits of Health Sciences to understand global health, of which the COVID-19 pandemic is an expression. We then return to the field of health, when the category of “social determination of health” allows elucidating the bases of the pandemic studied. We show that, other elements typical of the current phase of contemporary capitalism have become universal besides the SARS-CoV-2 characteristics or the dynamics of the rapid movement of people and objects around the world, unifying the health social determination process.

Key words Capitalism, Coronavirus, Health-disease process, Global health, Public health
Some introductory issues

Was it the COVID-19 pandemic that caused economic-social mayhem or the social chaos intrinsic to the current economic system that established the social bases for the pandemic? Besides the new coronavirus, what is the causal plot of the pandemic? We present this essay to bring a theoretical-reflective contribution developed from such questions, seeking to transcend the discussion of infectology and epidemiology, although they do not do without them.

COVID-19 has affected the lives of individuals on a global level, drawing attention for its reach and its spreading speed. While still very recent for rigorous analysis, some historical data reveal these space-time dynamics of the disease. On December 31, 2019, the World Health Organization (WHO) was notified of pneumonia cases in the city of Wuhan, China, suspected of being caused by a new coronavirus strain. A week later, Chinese authorities confirmed it was a new virus type and was named SARS-CoV-2. Still, in the same month (January 30), the WHO issued an international public health emergency alert due to the speed with which the virus spread across continents. On March 11, the situation was officially classified as a pandemic, although it was already present in almost all continents in February.

Historically, humanity has experienced other pandemics, some with recurrent cycles for centuries, such as smallpox and measles, or decades, like cholera pandemics. We could also mention influenza pandemics, namely, H1N1 in 1918, H2N2 in 1957-58, H3N3 in 1968-69, and H5N1 in the 2000s, known, respectively, as “Spanish flu”, “Asian flu”, “Hong Kong flu” “Avian flu”, although such denominations carry stigmas that should be avoided.

COVID-19 pandemic figures are increasingly alarming and with global dimensions. As of April 17, 2020, 2,074,529 cases were already reported in the world, 1,050,871 in Europe, 743,607 in the Americas (632,781 in the U.S. alone), 127,595 in the Western Pacific countries, 115,824 in the Eastern Mediterranean region, 23,560 in Southeast Asia and 12,360 in Africa. On the same date, Brazil recorded 28,320 cases, with underreporting, as is the case in the rest of the world, due to the non-testing of all symptomatic patients.

These numbers serve to characterize only one face, albeit important, of the problem in question, now the object of reflection that we developed towards contributing to the understanding of its historical-social foundations. That is, besides numbers, we seek to clarify the nature and dynamics of the health social determination process at a global level, albeit in very general and preliminary terms. The case of the COVID-19 pandemic appears as an expression of a larger movement, from which we apprehend particularities, under the prism of historical materialism, that allow making correlations with social universality.

Three more sections are presented next. In the first, the discussion moves forward, outside the Health Sciences, searching for the foundations of global health, when we dialogue with propositions by Chenais, Fontes, Harvey, and Mészáros. In the second section, the category “social determination of health”, with authors such as Laurell and Breilh, is the nodal point for us to make our way back, bringing the contributions of such a trip in order to analyze the COVID-19 pandemic. In the last section, we make notes to close the reasoning of this essay, with reflections to be thought about now and further explored.

Some fundamental considerations

Contemporary capitalism is marked by the articulation of nations within an “organism” that functions worldwide. It is the (a priori, economic) dynamics of eliminating borders to expand capital, described by Chesnais as a “worldization” event. Fontes argues that Chesnais’ formulation is more elaborate than those that support the analysis of the current moment of capitalism from the idea of neo-liberalization as a phase of rupture before the Welfare State experienced in some nations, which the author classifies as a criticism specific to the phase and not the system. Worldization would also be a more appropriate term than “globalization” and the alleged neutrality that, according to its advertisers, it carries as a process driven by technological and informational integration and a supposedly healthy commercial exchange. Despite this, the author prefers to call this phase “capital-imperialism” instead of “capital worldization”, emphasizing the successive expropriations of dependent nations by the imperialist nations.

Even with some differences, Chesnais and Fontes are pointing to a contemporary space-time conformation that derives from the expansive dynamics of capital in the face of its perpetual struggle against the declining trend of profit
rates, mitigated by the accelerated capital turnover, and the hierarchization among nations in this world system. Consequently, it was necessary to reconfigure geopolitical boundaries, eliminating obstacles to the intense circulation of capital, especially the financial one, given its speculative nature that manages, albeit illusorily, to generate the feeling of administering the inexorable threat of plethora.

These new dynamics are reproduced in (and with) all capital forms. It suffices to observe that, for example, industrial capital is increasingly distributed around the world, given the transnational companies. However, whatever the form of capital, what stands out is, firstly, its swift metamorphosis and, secondly, this breakneck pace occurs in the financial sphere. Regarding this, Chesnais expla ns that “the transnational industrial groups (the FMN) can establish the political and social domination of capitalism for all that belongs to the visible sphere of commodities. However, they do not currently command the movement of total accumulation. At the end of a twenty-year development, the institutions constituting a financial capital with strong, profitable characteristics determine, through operations in the financial markets, both the sharing of revenue and the pace of investment or the level and forms of wage employment”.

These institutions are bulwarks of contemporary dynamics since the ephemeral transactions they cultivate gives rise to the type of relationships required by the reproduction of capital on an international scale. They emphasize the transformation of space and time in the world, creating a network of broad, albeit uneven, interconnections. Harvey was assertive about this debate when he analyzed what he calls “space-time compression”. The author shows how this worldwide articulation demands a rhythm compatible with the new post-obsolescence accumulation pattern of Taylorism/Fordism, now characterized by flexibility. Actually, “the acceleration of the productive spin-up time involves parallel accelerations in exchange and consumption. Improved communication and information flow systems associated with rationalized techniques and distribution (packaging, inventory control, containerization, market return, among others) enabled a speedier circulation of goods in the market. […] Financial services and markets (aided by computerized commerce) were also accelerated, in order to make, as the saying goes, ‘twenty-four hours last a very long time’ in global stock markets”.

Therefore, the dynamics of flexible accumulation establish a new time perspective for capital. Fontes resumes the debate by mentioning the role the 4.0 industry now plays with e-commerce, work uberization, the explosion of start-ups, and the growing trend of instant digital relationships. Harvey affirms this is an overview outlined from the first stages of the implementation of flexible accumulation and its tendency to destroy space by the new perspective of time. Thus, “our sensitivity to what world spaces contain highly expands with reduced spatial barriers. Flexible accumulation typically explores a wide range of seemingly unexpected geographical circumstances, reestablishing them as structured internal elements of its comprehensive rationale.”

This spatial transformation does not eliminate the particularity of what Harvey called “place”, delimited by preserved customs and traditions, albeit refun ctionalized, since the peculiarities assume signs of value in the world market. It is an antithesis between space and place, since the former becomes universal, represented by the fluidity of its economic and social relationships in general, that is, creating a universal system in which preserving places can generate new expropriation forms. This dialectical movement of transforming-preserving is only justified on the surface of the process, because it is subordinated to a generic transformation of the rhythm of life, following the economic dynamics, exercising priority over local particularities. A series of behaviors, patterns of food and fashion, artistic styles, and cultural alternatives appear and disappear all the time, absorbing and fending off traditions, creating or reviving products and services, in a spiral of fugacity feeding consumption needs and, therefore, circulation, distribution, and production.

This desperate expansion expresses the dynamics of a system structurally in crisis, which, reaching its limits, seems to no longer fit on the world borders, except for the fantasy of new boundaries created digitally in the financial dynamics. In our view, Mészáros leaves no doubt about this deep-seated contemporary movement, since it locates the productive reconfiguration, in its flexibility and volatility, amid the responses of capital to its crisis, now with a different character from the previous critical cycles, and is even structural, global and creeping. Only a crisis of this proportion (which has dragged on since the 1970s to this day, albeit with internal movement and concealment cycles) could generate responses of such magnitude, in an attempt by capital to remedy the irremediable.
Mészáros argues that the capital’s contradictions become clearer than ever, especially due to their structural defects. Here, it is worth mentioning the contradiction pointed out by the author concerning the relationship between production and circulation, reverberating in another paradox, established by the conflict between the capital’s universalizing dynamics and the interests of the bourgeoisie within national boundaries. This is because each nation, internally, sees its particular interests threatened by a vital demand on the system as a whole, namely: to eliminate the capital borders, which can lead to drawbacks to the internal market. The author affirms that the solution found within the system is establishing a hierarchization among nations, with economic and political orientations that are different depending on the position of the nation in this hierarchy and, thus, will determine which nations will have their internal interests more or less met. However, the structural character of the crisis lays this system on such a fragile foundation that the slightest shakeout of national economies can reveal the structural, sometimes latent, character of the crisis. Therefore, this movement of (hierarchical) articulation of the world is the response of capital to its structurally more critical period because it is chronic, which generates the consequences already mentioned in time, space, culture, among others. Moreover, let it be noted, such responses are becoming toxic instead of being a remedy.

As we have seen, some authors have already set out to explain these world dynamics beyond their appearance, elucidating a tendency to generalize the way we move, think, act, at what time and with what objectives, which ripples across all social hubs, like the sharp effects currently perceived in health, whose COVID-19 pandemic is the most prominent example.

Some considerations on globalized health

The dynamics we have been describing seem to be linked to the COVID-19 pandemic, as the new space-time dynamics allowed the virus to spread rapidly. No more intricate theoretical reflection is required to reach such a conclusion. However, we want to emphasize here that: 1) these dynamics are not a merely natural, neutral event to unify the world and allow progress; 2) the process of social determination in the world is being unified, apart from the movement of people and objects of broad and rapid outreach.

Concerning the first question, we have already described its economic origin, when in the last third of the twentieth century, it became mature to the point of vesting large companies with the character of global companies. We emphasize that this phase was the convergence of a capital expansion process that had been insinuated since the transition from feudalism to capitalism, especially due to the navigations in the race for colonial conquests from which it was possible to boost the primitive accumulation of capital in classic capitalist nations. The effects on global health have been felt since then. Berlinguer states that “disease globalization, that is, the spread of the same morbid conditions worldwide began in 1492, with the discovery (or conquest) of America, which marked, for peoples and diseases, the transition from separation to communication. Before that, different environmental, nutritional, social, and cultural organization conditions, the presence or absence of agents and biological vectors of communicable diseases had created highly unequal epidemiological conditions, in the old and the new world”.

The reproduction of the universal dynamics of capital is particularized, among other mediations, in (and for) health, revealing its social nature. As Laurell states, this is true both for individual and community health levels, and in the case now analyzed, globally. It should be noted here that recognizing such a character does not mean overriding the biological determinations of health. On the contrary, it means raising it to a new level of existence. Let us remember the Luckacsian reflection on the general character of the social being, by demonstrating that, through the mediation of work, the human being is the author and actor of an ontological leap from the natural (biological) sphere of existence to a new social sphere, constantly moving away from that condition, but without relinquishing it.

The social being’s universality is expressed in all its partial complexes, respecting its particularities. In the case of health, Souza emphasizes that “in the case of health, thinking about the social process in this way also means to envision a dynamic articulation between biological and social, individual and community, which is expressed differently. This is the essence of the health-disease process, which is radically historical, generated from (and in) social relationships, and not as a kind of stable core defined a priori”.

Considering this theoretical principle is relevant in order not to fall into fatalistic analyses, eliminating their situational nature or, what
would be more serious, the issue of health’s causality. Let us reflect on the case of COVID-19. Although the social bases occur with the worldization of capital, specific biological determinations had to be linked to these objective possibilities to result in the pandemic experienced in 2020. It is not any infectious disease that will become pandemic or be transmitted so quickly between individuals. The combination of factors such as the novelty of the etiological agent, its transmissibility potential, the level of immunization of the population, the more or less known prophylactic and treatment measures, among other aspects, underpin this process.

The intense exchange between the biological and the social spheres is an unavoidable foundation of the health-disease process, although it is expressed differently over time and space. Even traditional epidemiology, in its pragmatism, captured such differences, when some of its theorists advocated the idea of epidemiological transition, basically, for the following reasons: (i) there is a long process of change in the patterns of mortality and illness, in which pandemics are gradually replaced by degenerative diseases and man-generated problems due to infectious diseases; (ii) during this transition, the most profound changes in the health-disease patterns occur in children and young women; (iii) the changes that characterize the epidemiological transition are strongly associated with the demographic and socioeconomic transitions that underpin the modernization complex; and (iv) the peculiar variations in the pattern, rhythm, determinants, and consequences of changes in the population differentiate three basic models of epidemiological transition, namely, the classic or western model, the accelerated model and the contemporary or prolonged model14.

To some extent, the idea of epidemiological transition expressed time changes in global health, but it also required attention to regional differences, so much so that, for some time, it was worth asserting that in emerging countries, such as Brazil, this transition was never completed, and was classified as a “prolonged polarized” transition, mainly due to the “overlapping stages – the high and concomitant incidence of diseases of both pre and post-transition stages”14.

In general, the demographic issue was given more importance to explain the transition in classical capitalist countries, and issues such as poverty or fragility of the health system emerged only when looking at the profile of the countries of backward capitalism. However, we agree with Laurell14 when she stresses that social determination is not limited to the demographic issue, and its roots are seated in the structure and dynamics of the production mode. The author’s classic analysis, in the 1980s, comparing Mexico (with dependent capitalism), Cuba (with an attempt at socialism), and the U.S. (with advanced capitalism) reveals how the forms of articulation between the productive forces and social relationships of production generate differences in health profiles.

This analysis shows that, in the case of Mexico, significant rates of infectious diseases prevail where there is backwardness and dependence on relationships of capitalist production, although the ways to avoid them are already known. However, in the American and Cuban cases, in general, pathologies such as malignant neoplasms, cardiovascular and chronic degenerative diseases prevail. However, the American and Cuban cases have different discrepancies. The rates of chronic-degenerative diseases were considerably higher in the U.S. than in Cuba at the time of Laurell’s analysis14. A more rigorous investigation is required in the Cuban case. However, the author believes that we could assume that strategies adopted by the local government were successful in combating infectious diseases, even without having the supposed pattern of capitalist urban development. Thus, the pathological profile of the country followed the global trend of growth of chronic-degenerative diseases, but without so much strength, given the different lifestyles16.

Therefore, despite the temporal mediations to be considered, one can refute the idea that the epidemiological profile change is due, simply, to population aging, relegating an entire pattern of organization of social life corollary to timespace compression and that is hostile to health in different and more aggressive ways. Thus, we come to the second issue mentioned above: social determination of health’s unification process, which cannot be understood as homogenization, given the differences already addressed here in the path of capitalist development in the various nations. Instead, we want to point out the process of universalizing some primary elements of capitalism, which have matured in the face of the event of worldization, and which, in these new dynamics, embody a heterogeneous unity.

Again, part of traditional epidemiology can perceive this transformation at an eventful level but not in its deepest determinations. At least, some authors abandon the idea of a complete or incomplete epidemiological transition, and start
to visualize a globalized health profile: “one of the main characteristics of Global Health, and what differentiates it from traditional forms of international health, is the recognition of regional and local contexts, political, economic, social and cultural differences between countries and domestic ones, in each country, as well as the consequences and different responses to global events”

Although this reasoning serves to explain the most superficial transformations, it does not affect the correlation of the capital expansive process to reverse its declining profit rate trend, with the consequent financialization and globalization. Thus, the material roots of the process that became popular for the sake of globalization are neglected. Breilh9 makes reservations about this form of health assessment by traditional epidemiology, defending another methodological path, which he called epidemiología de la determinación de la salud (epidemiology of health determination). The author argues that “[…] while requiring a methodological revolution, epidemiology had to acquire an identity that could only be legitimate by adhering to the profound vision of a civilizational change in the face of a social system that is unfeasible and incompatible with life and health in order to become emancipatory”

In the wake of the most critical Collective Health theories, it is, therefore, clear that globalized health is the result of also globalized capitalist dynamics. Depending on traditional epidemiology, it is customary to warn of the importance of the variables space, time and person; under a critical perspective, one cannot ignore them either but must move towards understanding what underlies them. In the meantime, space-time compression is revealed, along with the formation of a cosmopolitan citizenship5, as mediations that unify the process of the social determination of health in the world.

It is worth reminding here that we use the term “unification” inspired by Berlinguer11, when he argues that the maritime race of capitalism, in its embryonic stage, in the search for wealth in the colonies generated the “microbial unification” of the world. However, we believe that the term “microbial” has become obsolete within Health Sciences, just as it is not sufficient to explain the status of heterogeneous unity of global health, due to referring to communicable diseases.

Currently, some diseases are global, as the WHO26 shows when observing that 54% of deaths worldwide are due to ten causes, and most of them are chronic-degenerative. However, just like the space-place antithesis, some diseases remain typical, whether as endemics or with epidemic cycles, in some world regions. It suffices to say that the Ebola virus has irrelevant circulation outside the African continent, or that malaria is still typical in tropical countries.

Furthermore, let us remember that the unifying mediations we have cited are not limited to the movement of people and objects, but refer to a whole lifestyle, culture, philosophy and art, political organization, among others, which mirrors the economic dynamics. It is evident, for example, as we have already mentioned, that the proper causality of the new coronavirus and the referred movement were undoubtedly relevant aspects for the realization of the pandemic nature of COVID-19. However, other elements that are universal in space and in contemporary time contributed decisively to this event, without any travel, since they are already universal. Some of these elements will emerge with the typically capitalist contradictory features, as pointed out in the final thoughts.

Some final thoughts (for now)

Here, we present some elements (but there are others) that are present in the process of unification of the social determination of health in order to end our concatenation, from which the pandemic of COVID-19 emerges:

1) the priority given to the economic sphere, when, above all, obstacles to free trade, both nationally and internationally, are avoided. This condition had a strong influence on the late decisions of national governments to close the borders and adopt more stringent social distancing measures. Although they still need to be confirmed, some indications evidence that the delay of some European countries in adopting such measures contributed to the explosion of the cases in the continent. This is the case of Spain, Italy, France, the United Kingdom, and Germany. For example, in Italy, after the first deaths were recorded in February, some mayors and regional governments decreed quarantine, but Prime Minister Giuseppe Conte managed to overturn such measures because they only preached chaos17. Shortly after that, Italy became, for a few weeks, the epicenter of the pandemic, and the other countries mentioned here were already among the eight most affected.

All these nations were constrained by the contradictions of the system they defend, taking
a step back and adopting, sooner or later, the distancing measures, albeit under continuous tension by sectors of the national and international bourgeoisie in order to advance the return to normality.

2) The weakening public health systems, to no small extent due to the financial dynamics particularized in the mechanisms of public debts that imply underfunded health systems, especially with policies guided by the World Bank\textsuperscript{18}. More robust health systems have been successful either in surveillance, as in some Asian countries such as China and South Korea, or in reducing mortality due to the large offer of hospital beds, especially intensive care, as in Germany.

The neoliberal facet of worldization is faced with the contradictions of the system that sustains when we started to observe, even discourses of suspension of public debts and advocates for the release of an emergency budget for health. However, we must note that a history of weakening public health systems, certainly implies less efficiency in coping with the pandemic in time, and greater exposure of its health professionals to illness and death.

3) The contradiction established at the heart of neoliberalism is also reproduced within social assistance and social security. Bulwark countries of this political perspective (which are at the top of the hierarchy of the global articulation of capitalism) needed to inject a good part of public funds into aid emergency measures to keep the subsistence income of population segments and fight unemployment. For example, the group of the 20 wealthiest countries (G20) intends to inject almost 5 trillion dollars to face the social effects of the coronavirus\textsuperscript{19}. Of course, the “helping hand of the State” did not let go of the “invisible hand of the market”, as there was no hesitation in implementing large capital-oriented measures, revealing what the real “friendship” is, like the U.S., where Congress approved US$ 2.2 trillion for economic and social actions, of which US$ 50 billion were directly for large entrepreneurs, and the remainder indirectly benefiting them\textsuperscript{20}.

4) Bourgeois individualism is the most concrete result of the individuation process in the face of class antagonism. Despite junsnaturalist currents advocating for the existence of a selfish human essence, the Marxian perspective shows how the social being has a radically historical dynamic, and the individualistic form of the subject is a constructed historical product and, therefore, liable to destruction\textsuperscript{21}. With the worldization of capital, the individualist ethos assumes its heyday, expressing itself in competitiveness beyond (but always functional to) the market, as in education and culture, or the various narratives surrounding meritocracy.

This way of “being” has profound relationships with the relativized severity of the pandemic and, consequently, with the non-adherence to preventive measures, which does not mean that there is no interaction with solidarity actions in defense of measures. This individualistic ethos converges to dissatisfaction with the change in the bourgeois daily routine. It strengthens the argument that the economy cannot stop because it is paramount, which consists of a reflexive determination with the universal dynamics of the system.

5) The intense dissemination of false information in the media, primarily via the internet, which is usually called fake news. In our view, postmodernity is a fertile ground for the narrative to prevail over the fact itself, changing its context. Harvey\textsuperscript{6} believes that the postmodern condition expresses the space-time compression peculiar to contemporary capitalism when the ephemeral nature of communication forms and content is a marked presence.

Such a condition is inflated when the sale of information serves economic-political interests, as signs that contribute to some favoring in the capitalist dynamics, from production to consumption. This character of communications today contributes to the instantaneous reproduction of misleading information about the pandemic, generating uncertainty and confusion.

6) The different impacts of diseases on social classes, especially in the most impoverished groups. Capital worldization generates even more poverty, and the authors recognize this from different theoretical perspectives. The differences in wealth between classes or individuals are reflected in health indicators, revealing greater severity, above all, of certain infectious diseases\textsuperscript{22}. This overview allows us to reflect on the seriousness with which the pandemic can impact the most impoverished communities, especially in countries with dependent capitalism, due to the low access to treated water, sanitation, and the structure and income that allows the adoption of preventive measures.

In this regard, of course, we cannot fail to recognize that the pandemic will aggravate some expressions of the social issue, especially unemployment. The neoliberal narrative oscillates between discourse in favor of preventive measures (such as social distancing) and the notorious defense of the economy, under the subterfuge
that bankruptcy (and the misery that supposedly arises from there) will kill more than COVID-19. It is necessary to analyze this issue given its historical-social dimension, as well as weigh this discourse since a good part of its spokespersons are great entrepreneurs, personifications of large capital, or even their allies in the political and media sphere. It is a quibble that ignores or falsifies the fact that capitalism historically generates social inequality and unemployment, which are its structuring elements.

In 2018, there were 42 million millionaires, which corresponds to 0.8% of the world population, but which accumulated about 142 trillion dollars (44.8% of global wealth). At the same time, 3.211 billion adults were in the lowest income bracket, or 70.1% of the population, who had 6.2 trillion dollars, just 1.9% of the total wealth. Unemployment is one of the drivers of this inequality, with the International Labor Organization (ILO) reporting that the global unemployment rate was 5.4% in 2019, which is expected to increase in 2020. The ILO argues that this represents a change in the declining trend observed between 2009 and 2018. However, the same institution evidences data that allows us to refute this trend, showing that there is a shift of the unemployed to the group of underemployed or discouraged (470 million people in 2019). The economic and political measures required to tackle the structural crisis have increased inequality and unemployment to alarming levels. Therefore, the COVID-19 pandemic is not responsible for hunger and misery for leading the impoverished individuals of the working class to death, but the modus operandi of capitalism, in the daily realization of its destructive character, above all because it allows the accumulation of wealth in the hands of the few and the impoverishment of those who produce such wealth. The pandemic, then, establishes itself as yet another element raised from the objective bases of worldized capital, entering this contradictory spiral, establishing a relationship of mutual determination with them, but far from being the root of social problems.

With these thoughts, we end the essay, but the debate has only just begun. In our view, they are essential points to understand what is happening, at least for now, when we are immersed in the historical fact. Post factum, we would and should revive these and other issues, in order to strengthen a scientific and philosophical path that breaks with the ephemeral contemporary reason.
References


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