WHAT HAS THE PANDEMIS TAUGHT US ABOUT CAPITALISMS?

Robert Boyer, EHESS & Institut des Amériques, Paris

"Preventing and controlling infectious diseases in the built environment of city regions. France-Singapore cross-views"

Centre Panthéon, Paris, 7 December 2023

INTRODUCTION

1. The Covid-19 has been an analyzer of the contemporary world, a total social fact:

"The facts we have studied are all, if we may use the expression, total social facts or, if you like – but we like the word less – general social facts: in other words, in some cases they set in motion the whole of society and its institutions (potlatch, clans facing each other, tribes visiting each other, etc.) and in other cases only a very large number of institutions, particularly when these exchanges and contracts concern individuals."

Marcel Mauss, Essai sur le don

INTRODUCTION

2. It is an opportunity to mobilize a series of research on health care in historical perspective





C°LECTIVO Éditions de l'IHEAL

La pandémie de Covid-19. Expériences américaines

Ouvrage dirigé par

Capucine BOIDIN-CARAVIAS, Claudia DAMASCENO, Marion MAGNAN, François-Michel LE TOURNEAU & Hervé THÉRY

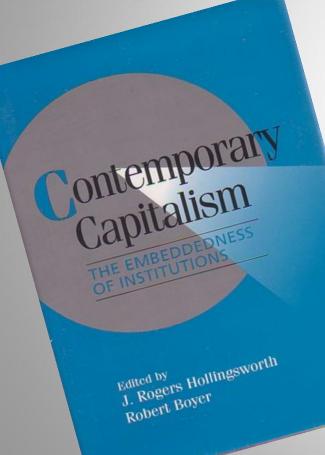
ANCHORDOQUI - ASSAF - BARRAGÁN-OCHOA - BOYER - CAHER - CAZAROTTO - CHIARLIER ZEINEDDINE - DEMELENNE - DETONI - FAVIER - GONZALEZ MALTES - GOUZSET - GRANADA - GRISOTTI - LARRÉ - LUCAS - MANERO - MARCHET - MESCLIER - MORENAS - NOUCHER - DE OLIVEIRA - OLIMEDO - ORÊ - REALI - ROBERTI - ROSTAIN - ROSTAIN - ROSTAIN -



INTRODUCTION

2. Other investigations have stressed the diversity

of capitalismS



Evolutionary Economics and Social Complexity Science 11 Robert Boyer - Hiroyasu Uemura **Evolving** Diversity and Interdependence of Capitalisms Transformations of Regional Integration in EU and Asia Springer



SYNOPSIS

- I. The trans-nationalisation of capitalisms is favoring a resurgence of pandemics
- II. Ignoring history is detrimental to the well being of populations
- III.One pandemic, diverging national patterns
- IV. Two discriminating variables: degree of unpreparedness and political choices
- V. Access to health is another source of inequality
- VI. Development is at risk
- VII.Is the anthropogenetic mode the future or the past?

I. CAPITALISM PROMOTES TRANSNATIONALISATION, URBANISATION, MINING, INDUSTRIALISATION...

An April 2020 study, published in the Proceedings of the Royal Society's Part B journal, found that increased virus spillover events from animals to humans can be linked to biodiversity loss and environmental degradation, as humans further encroach on wildlands to engage in agriculture, hunting and resource extraction they become exposed to pathogens which normally would remain in these areas. Such spillover events have been tripling every decade since 1980. An August 2020 study, published in Nature, concludes that the anthropogenic destruction of ecosystems for the purpose of expanding agriculture and human settlements reduces biodiversity and allows for smaller animals such as bats and rats, who are more adaptable to human pressures and also carry the most zoonotic diseases, to proliferate. This in turn can result in more pandemics

...HENCE ZOONOSIS, INCREASED MORBIDITY AND NEW DISEASES

Annex 1: Health impacts and their causes

Source: World health organization (2023), A framework for the quantification and economic valuation of health outcomes originating from health and non-health climate change mitigation and adaptation action

Causes	Impacts	Reference	
Air pollution	Respiratory diseases, cardiovascular damage, fatigue, headaches and anxiety, irritation of the eyes, nose and throat, damage to reproductive organs, nervous system damage.		
	Cardiovascular diseases in development stages of infants and cancer later in life, as well as impact on cognitive performance.	(29,30)	
Solid waste	High incidence of cancer and lymphoma has been found in populations living near contaminated sites and landfills (e.g. kidney, larynx, pancreas, liver, lung cancer) as well as higher risks for congenital malformations, low birth weight and neural tube defects. Other health problems concern noise, smell and issues due to annoyance, lowering the quality of life of affected residents.	(34)	
Wastewater	Microorganisms in water can cause diarrhoea, skin and tissue infections and dysentery, while other disease-causing bacteria such as <i>E. coll</i> O157:H7, Salmonella, Vibrio and Leptospirosis can be found in untreated wastewaters.		
Heatwaves	Exhaustion, cramps, syncope, strokes, kidney disorders, psychiatric illness, chronic pulmonary illness, diabetes and cerebrovascular accidents.	(5)	
	Lost productivity, which will impact developing countries.	(57)	
Vector-borne diseases	Modification of geographical range of the habitat of animal vectors of diseases such as malaria, dengue fever, chikungunya, yellow fever and the Zika virus.		
Floods	Responsible for the emergence of waterborne diseases, as well as for the destruction of key infrastructure that in vulnerable areas can increase the displacement of refugees and dislocated people.		
	Drowning, injuries and hypothermia, health risks are related to evacuation of patients, loss of health workers of health infrastructure such as essential drugs. Medium-term implications include infected wounds, poisoning, affected mental health, communicable diseases and starvation. In the long term, chronic diseases and poverty-related diseases such as mainutrition can impact severely on the affected population.	(63)	
Droughts	Malnutrition and undernutrition	(68,94)	
Extreme weather events	Deaths, physical injuries, mental health issues, water and food scarcity, water and vector-borne diseases, forced migration, and damage to health facilities.	(71)	
Sea surface temperature	Fish stocks and fisheries production are decreasing, affecting the protein intake of many people. It is also affecting the nutritional values of the available seafood, leading to a reduction of lipids and proteins in some species.	(72,78)	
Ozone depletion	Exposure to ultraviolet (UV) radiation leads to skin cancer, premature ageing of skin, signs of sun damage such as wrinkles, leathery skin and liver spots.	(255,256)	
	Eye problems due to UV rays leading to the cornea becoming inflamed or burned, increased risk of cataracts	(257)	
	Exposure to UV rays can also weaken the immune system, which leads to the body having a harder time fending off infections.	(258)	

.... THE PAINFUL CONSTRUCTION OF HEALTH SECURITY AS A COMMON.

- 1851: The first international health conference takes place in Paris to fight against the plague, yellow fever and cholera.
- 1892: The seventh conference allows the signing of an international health convention on cholera.
- 1907: The International Office of Public Hygiene (OIHP) is created in Rome.
- 1923: The Spanish flu of 1918-1919 pushes the SDN to create in 1923 the "hygiene committee", the ancestor of the WHO.
- 1945: The San Francisco Conference includes health in the areas of competence of the United Nations and in 1946 establishment of the WHO Constitution.
- 1978: WHO develops a new strategy called "Health for All".
- 2001: The Global Outbreak Alert and Response Network is responsible for reporting to Geneva all events likely to give rise to health emergencies of international concern.
- 2009: The appearance of the H1N1 influenza virus prompts the WHO to collaborate in the development of vaccines against influenza.
- 2014: The fight against the outbreak of the Ebola virus under the aegis of the WHO;
- 2020: The WHO declares a "global health emergency" in the face of the Covid-19 epidemic.

II. DO NOT IGNORE THE HISTORY OF PANDEMICS AND ECONOMIES

- 1. Very unequal durations and severities
- 2. Episodes that repeat themselves but whose memory fades

3. Long-term effects on the economy in the past

1. Very unequal durations and severities

Tableau 2.1. : Une chronologie des grandes épidémies

Event	Start	End	Deaths
Black Death	1347	1352	75,000,000
Italian Plague	1623	1632	280,000
Great Plague of Sevilla	1647	1652	2,000,000
Great Plague of London	1665	1666	100,000
Great Plague of Marseille	1720	1722	100,000
First Asia Europe Cholera Pandemic	1816	1826	100,000
Second Asia Europe Cholera Pandemic	1829	1851	100,000
Russia Cholera Pandemic	1852	1860	1,000,000
Global Flu Pandemic	1889	1890	1,000,000
Sixth Cholera Pandemic	1899	1923	800,000
Encephalitis Lethargica Pandemic	1915	1926	1,500,000
Spanish Flu	1918	1920	100,000,000
Asian Flu	1957	1958	2,000,000
Hong Kong Flu	1968	1969	1,000,000
H1N1 Pandemic	2009	2009	203,000

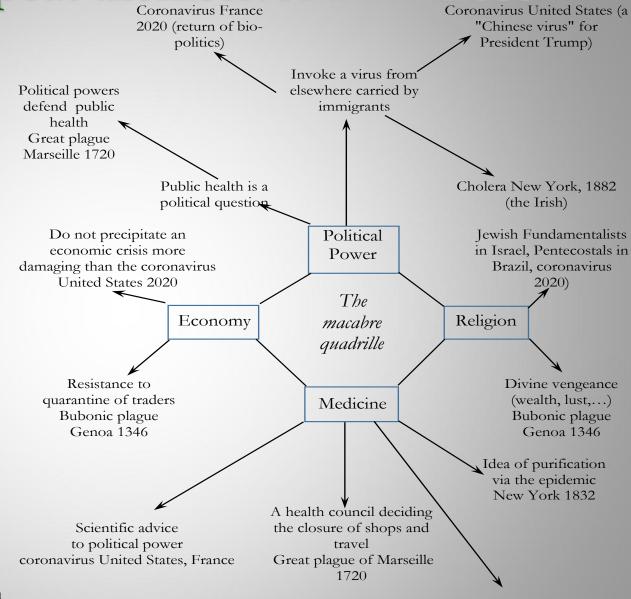
Table 1 Fifteen large pandemic events with at least 100,000 deaths

 $Source: Alfani \ and \ Murphy \ (2017), \ Taleb \ and \ Cirillo \ (2020), \ https://en.wikipedia.org/wiki/List_of_epidemics \ and \ references \ therein.$

Source: Òscar Jordà, Sanjay R. Singh and Alan M. Taylor (2020), Longer-run economic consequences of pandemics, CEPR, page 3.

2. Episodes that repeat themselves but whose Coronavirus France Coronavirus Tence Coronavirus Tence Presiden The politics of the politics of

Figure 2.1 - The coronavirus elicits reactions that are not without precedent



Source: Format of information taken from Simon Schama (2020), "Plague time: what history tells us", Financial Time, April 10.

Rapid immunization strategy to stem the coronavirus (Boris Johnson by March 2020)

3.Long-term effects on the economy in the past

Figure 2.3 - Past pandemics: contrasting economic consequences depending on the country

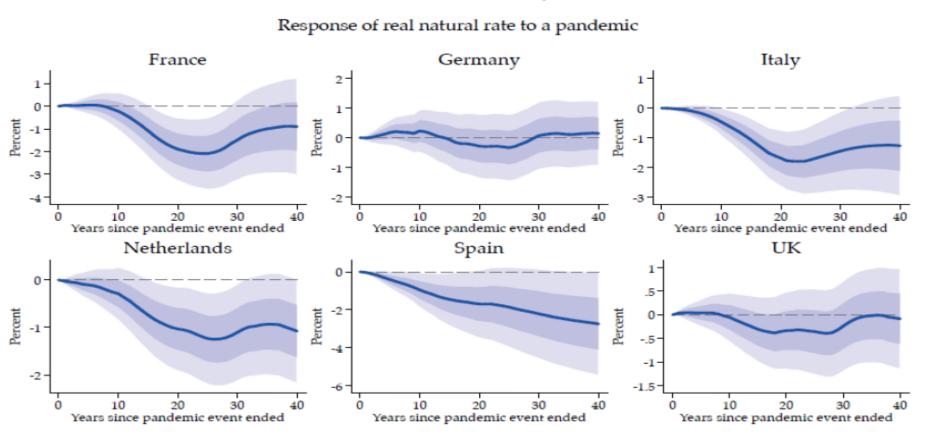


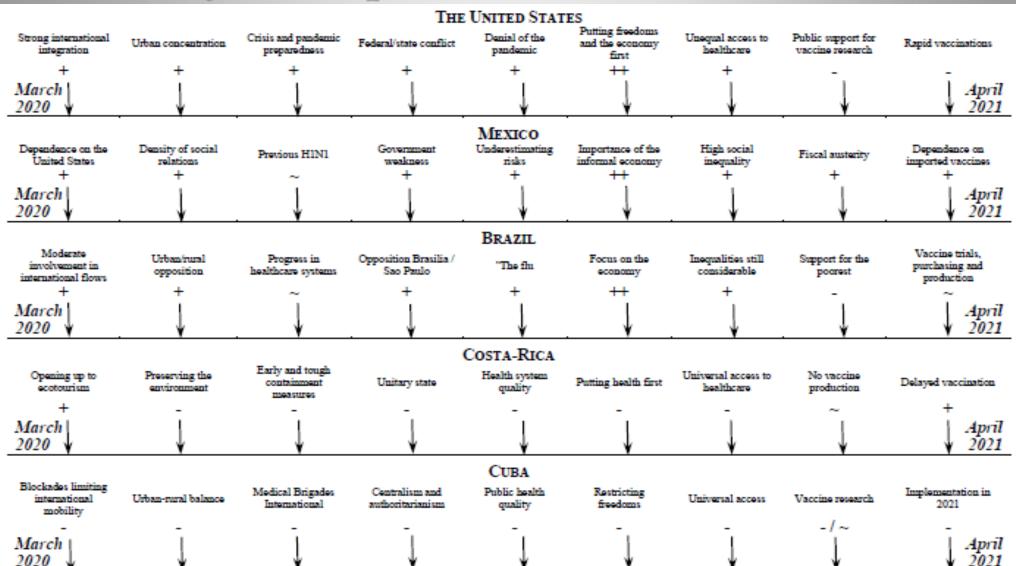
Figure 3 Country-specific response of the real natural rate of interest following pandemics

Source: Oscar Jordà, Sanjay R. Singh et Alan M. Taylor (2020), « Longer-run economic consequences of pandemics », CEPR, p. 9.

III. ONE PANDEMIC, CONTRASTED NATIONAL CONFIGURATIONS

- 1. A complex mix of factors governing the intensity of the pandemic.
- 2. Largely idiosyncratic national configurations

1. A complex mix of factors governing the intensity of the pandemic.



1. Largely idiosyncratic national configurations

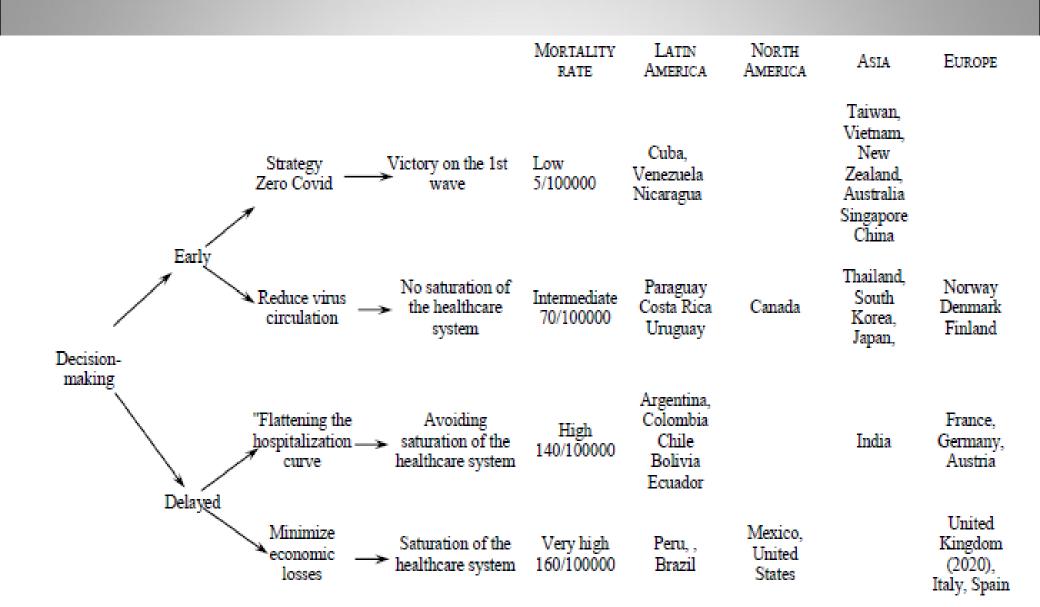
COUNTRY							
FEATURES	UNITED STATES	CANADA	MEXICO	Brazil	PERU	ARGENTINA	COLOMBIA
Integration into international mobility	Fundamental	Strong interdependence with the United States	Raised through migration	Average	Raised through migration	Moderate	Growth through immigration
Intensity of social interaction	Important in the major cities	Urban/rural differentiation	Important via informality	Strong urban presence and informality	Significant informality	Urban/rural contrast	Strong in large cities
No recognition of the pandemic	Persistent until 2021	Consideration	A moralistic view of the virus	Claimed by politicians	Consideration	Quarantine and border closure	Consideration under economic constraints
Delays in public decision-making	Yes, except closure of borders	Modest	Soft mobility restrictions	Refusal of binding measures	Accuracy and hardness of measurements	Early measurement	Relative indecision
Conflicts between national and local	Redoubled by the polarization observed (Republicans/Democrats)	Not fundamental	Little present	Present (Brasilia/Sao Paulo)	No, but a succession of political crises	Not decisive	Tensions between government and municipalities
Primacy of freedoms and the economy	Explicit undermining of public health	Putting health first	Survival in the informal sector	Explicit and assertive	Not explicit	Focus on health but economic crisis	Hesitations between health and economy
Unprepared for pandemics	Considerable	Significant	Considerable	Considerable	Significant	Relative	Relative
Unequal healthcare system	Because excluding part of the population	Universal social coverage	Disparate and incomplete social security coverage	Universal system but lacks resources	Excluding part of the population	Universal but lacking resources	Public service but not enough resources
Public funding for vaccine research	Considerable	Low	Quasi-inexistent	Modest	None	Difficult	None
International dependence on medical goods	Relative	Significant	Considerable	Considerable	Important	Strong	Strong
Progress in vaccination	Fast (35 %)	Good (18 %)	Moderate (8 %)	Moderate (10 %)	Very low (2 %)	Moderate (9,5 %)	Low (4%)
Impact on the succession of epidemic waves	Failure in the face of the first waves, anticipation of a successful vaccination: a contrasting trajectory	Limiting the scale of the pandemic by taking into account the public health imperative	One of the worst ways of managing the pandemic in Latin America	Typically populist management and its failure	Major demographic losses despite pandemic taken into account	Difficulty in curbing the pandemic despite sanitary measures	Revealing the inadequacy of social protection

IV.DIFFERENT STRATEGIES: PREPARENESS AND POLITICAL CHOICE

- 1. Some health care systems had learnt from past pandemics, others not at all
- 2. The impossible trilemma: health, economy and citizen freedom

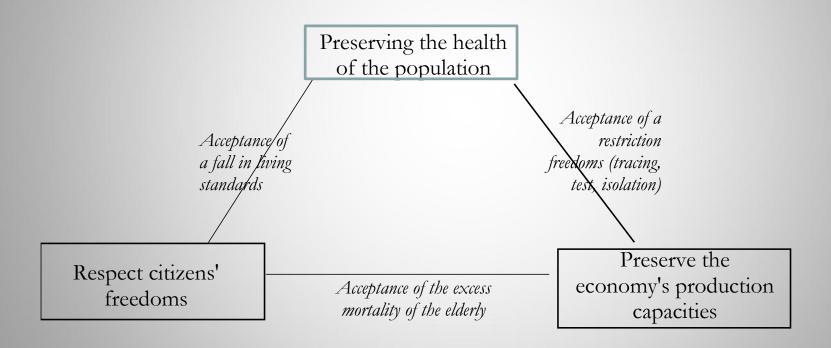
3. A brutal shift in the hierarchy of temporalities

1. Some health care systems had learnt from past pandemics, others not at all

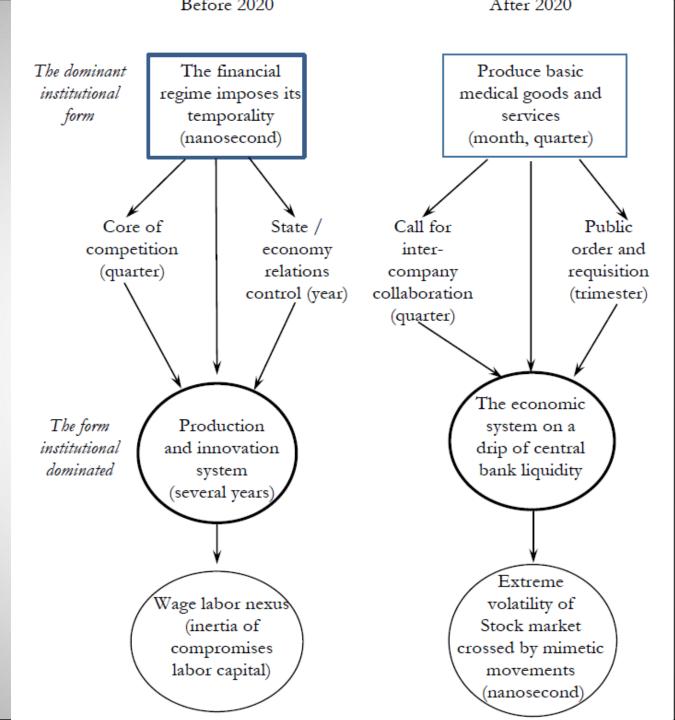


2. The impossible reconciliation between three imperatives: the reason for recurring failures

Figure 4.4 - The coronavirus control trilemma



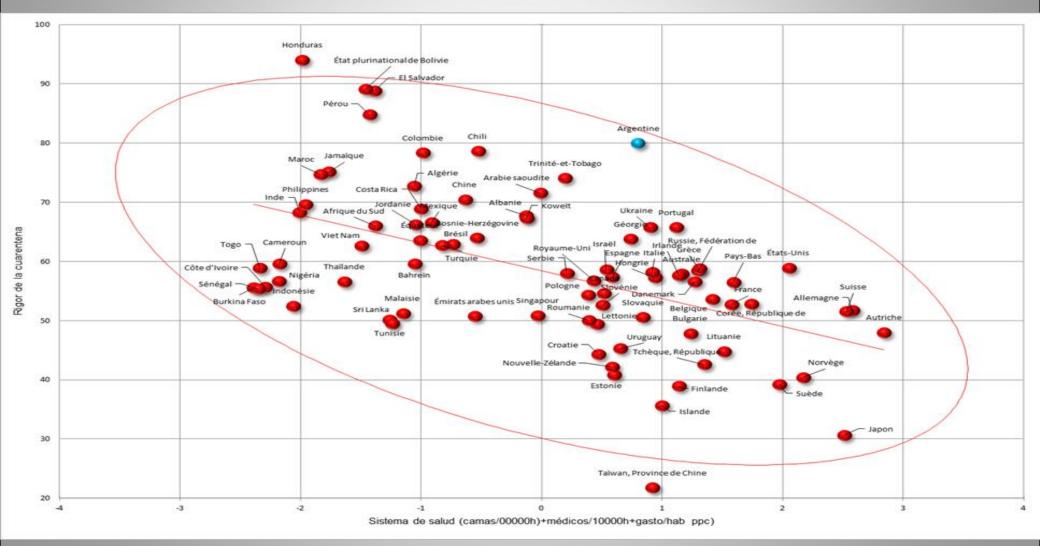
3. A shift in the hierarchy of temporalities



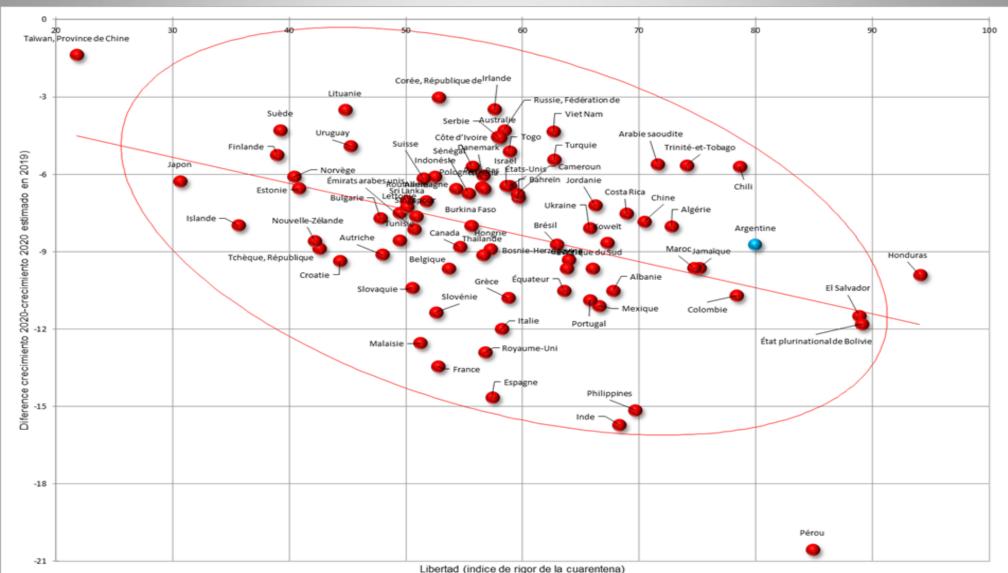
V. DIVERGING OUTCOMES FOR NATIONAL ECONOMIES, POPULATION WELL BEING AND UNEQUALITY

- 1. The severity of quarantine is all the greater where health systems are underdeveloped or deficient
- 2. Economic losses increase with the severity of quarantine
- 3. Access to healthcare is a further source of inequality.

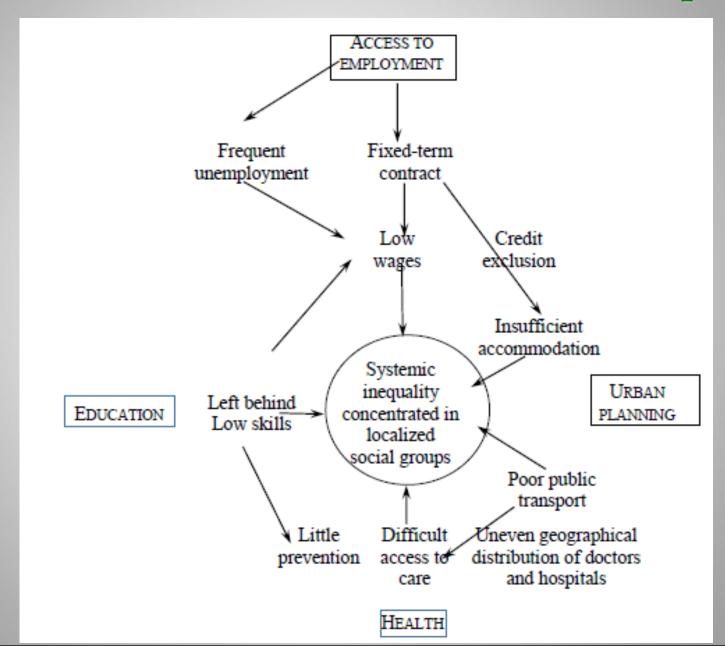
1. The severity of quarantine is all the greater where health systems are underdeveloped or deficient.



2. Economic losses in terms of GDP increase with the severity of quarantine



3. Access to healthcare is a further source of inequality



VI. DEVELOPMENT AT RISK

- 1. The diverging trajectories of mortality across nations.
- 2. Vaccines for rich world, scarcity for others.
- 3. Biomedical research is a quasi monopoly of the rich North.
- 4. The geopolitics of Covid-19 and vaccines.
- 5. Active and generous policies in the rich North, pro-cyclical patterns for ailing poor economies.
- 6. Diverging patterns for GDP and Human development.

1. A pandemics but contrasted mortality rates across countries.

Tracking Covid-19

Vaccines Cases & Deaths Lockdowns

Cumulative deaths attributed to Covid-19 in European Union, US, China, Cuba, Brazil and Taiwan

Cumulative deaths (per 100k)



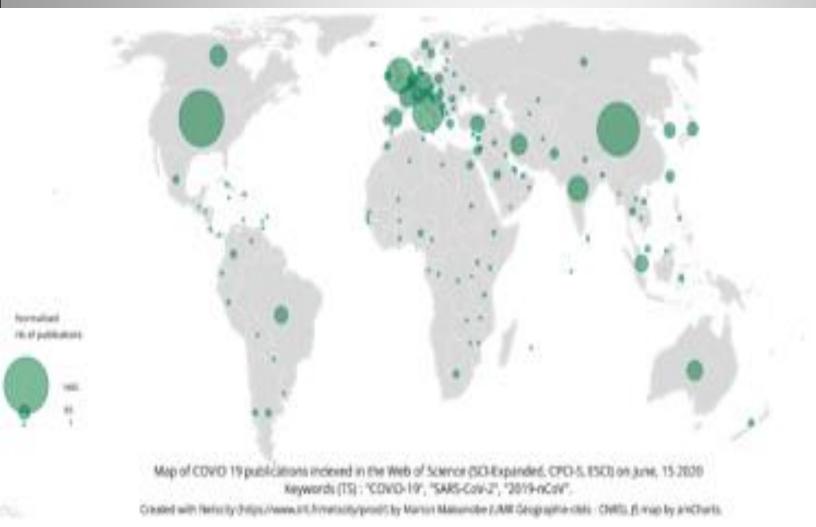
Source: Financial Times analysis of data from Johns Hopkins CSSE, World Health Organization, UK Government coronavirus dashboard, Government of Peru, Public Health France, Israeli Health Ministry, Slovenian Ministry of Health, Finnish Institute for Health and Welfare and the Swedish Public Health Agency. Data updated May 6 2022 11.37am BST. Interactive version: ft.com/covid19



Une capture d'écran a Dropbox.

2. The scientific research on Covid-19 is made by the most advanced countries.

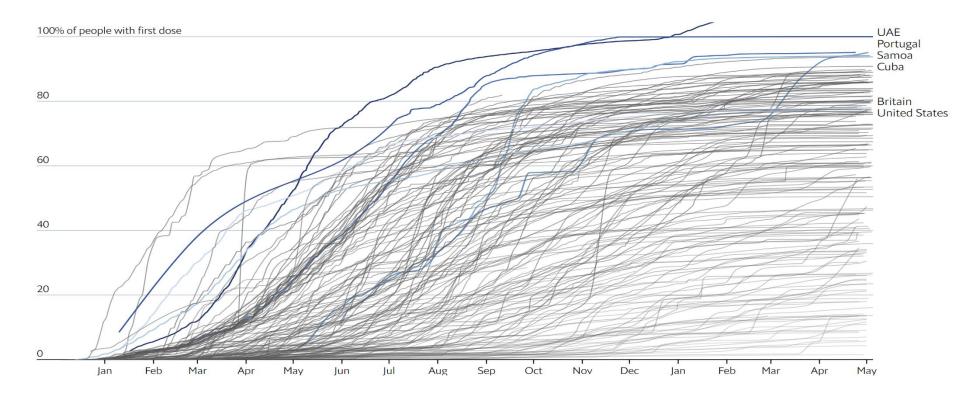
Numero of Publications on covid-19



Fuentes: Marion
Maisonobe/Géogr
aphiecités/IRIT/LISST
/NETSCITY/CN
RS Photothèque
[Maisonobe, 2020]

3. Highly unequal vaccination rates across countries.

currently vaccinating the fastest. In the past week it has given shots to 20.2% of people.



Doses administered by country

Search country

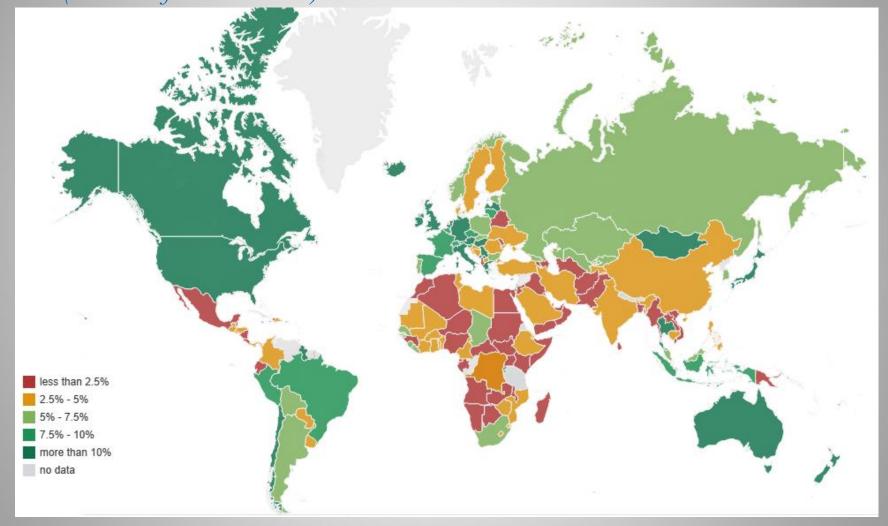
Search country							
Country	Doses administered	▲ People with first dose	People with second dose	Vaccinations per day, per 100,000			
Malta	1.28m	107.7%	106.1%		138		
United Arab Emirates	24.7m	100.0%	97.7%	•	64		

4. The geopolitics of Covid-19

- The controversy about the origin of the virus and Chinese bashing.
- A concentration of masks and health related goods in few countries (China India..)
- Between sanitary protectionism and scientific cooperation among researchers.
- A competition for vaccine creation and distribution: some succeed, others fail.
- The supply of vaccines as a diplomatic tool within the rivalry between western world, China and Russia.
- The COVAX imitative: pooling vaccine supply is lagging and limited.

5. Quite unequal economic outcomes

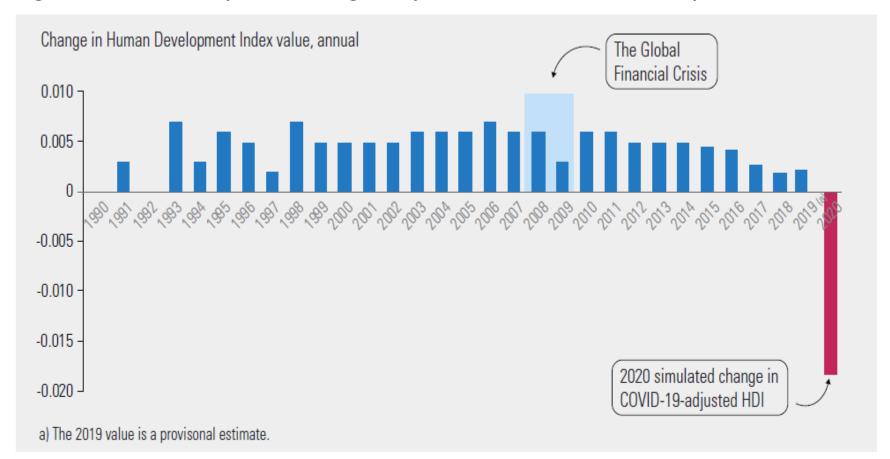
Additional Spending and Forgone Revenue in Response to the COVID-19 Pandemic (Percent of 2020 GDP)



source: IMF https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19.

6. A brutal regression of human development world wide

Figure 3. Human development is facing an unprecedented hit since the concept was introduced in 1990



Source: Human Development Report Office simulations based on data from the International Telecommunications Union, the United Nations Educational, Scientific and Cultural Organization Institute for Statistics, and the World Health Organization.

VII. AN EMERGING MODE OF DEVELOPMENT CENTERED ON HEALTH, EDUCATION AND CULTURE?

- 1. A silent revolution, the blind spot of economic theories.
- 2. The logic of an economy based on education, health and culture.
- 3. What political alliances in favor of this anthropogenetic mode
- 4. Farewell to high speed growth

1. A silent revolution, the blind spot of economic theories

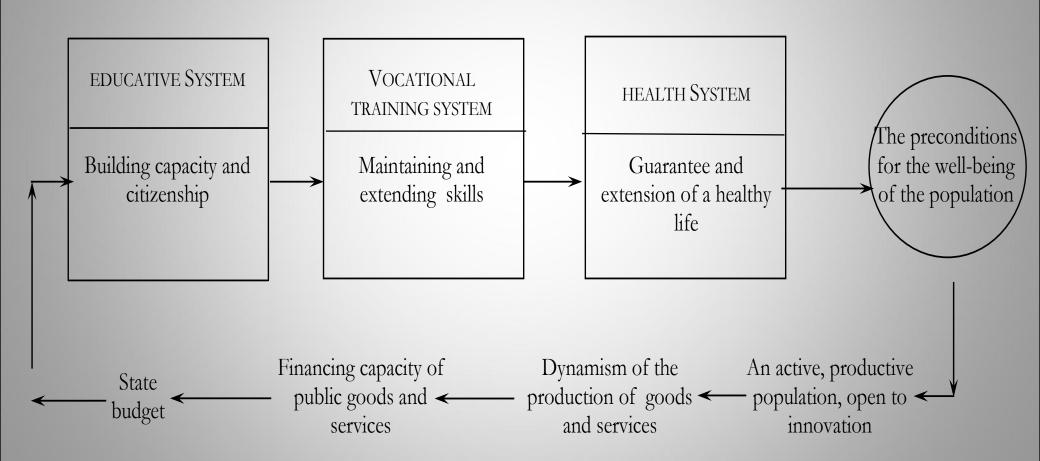
Table 5.2. – From the domination of industry to that of the production of man by man

(Distribution of employment by branch of activity in % in the United States)

		1995	2000	2005	2010	2015	2020
	Agriculture, forestry and	1995	2000	2003	2010	2013	2020
A	fishing	2,8	2,5	2,3	2,5	2,1	2,0
В	Mining and quarrying	0,4	0,4	0,4	0,5	0,5	0,4
A+ B	Relating to nature	3,2	2,8	2,6	3,0	2,6	2,4
С	Manufacturing	13,4	12,1	9,9	8,3	8,2	8,1
	Electricity, gas, steam;						
	water supply, sewerage,						
D-E	waste management	0,7	0,6	0,6	0,6	0,6	0,7
F	C ons truction	5,3	5,9	6,2	5,0	5,2	5,7
C_F	Manufacturing industry	19,5	18,6	16,7	13,9	14,0	14,4
P	Education	1,7	1,8	2,1	2,4	2,4	2,4
	Human health and social	0.5	0.5			43.6	
Q	work activities	9,5	9,5	10,7	12,4	12,6	13,4
P+Q	Education and Healthcare	11,1	11,3	12,8	14,8	15,0	15,8
R	Arts, entertainment and recreation	1,5	1,5	1,6	1,7	1,7	1,4
	Accommodation and food	1,5	1,5	1,0	1,,	-,,	1,4
	service activities	7,1	7,1	7,6	7,9	8,6	7,5
R+ I	Leisure	8,6	8,7	9,2	9,6	10,3	8,9
P+ Q+ R+ I	Anthropogenic sector	19,7	20,0	22,0	24,4	25,4	24,7
	Financial and insurance	-					
K	a ctiv ities	4,1	4,2	4,3	4,2	4,1	4,4
	Professional, scientif c						
	and technical activities;						
M_N	administrative and support service activities	11,2	12,3	12,3	12,2	12,9	13,0
IVI_IV	Financial and business	11,2	12,5	12,3	12,2	12,5	13,0
K+ M+ N	service	15,3	16,5	16,7	16,4	17,0	17,4
	Wholesale and retail						
_	trade; repair of motor	45.0	45.5				
G	vehicles and motorcycles	16,0	15,5	15,2	14,6	14,5	13,8
	Transportation and						
н	s to ra ge	3,2	3,3	3 ,2	3,2	3,4	4,0
	Information and						
J	com m unication	2,9	3,6	3,1	3,1	3,2	3,4
G+ H+ J		22,0	22,4	21,5	20,9	21,1	21,2
L	Real estate activities	1,3	1,2	1,3	1,3	1,3	1,5
S	Other service activities	4,1	4,1	4,2	4,3	4,1	3,9
	Activities of households						
	as employers;						
	undif &rentiated goods-						
	and services-producing activities of households						
Т	for own use	0,2	0,2	0,2	0,2	0,2	0,1
L+ S+ T		5,6	5,5	5 ,7	5,8	5,6	5,5
	Public administration and						
	defence; compulsory						
0	social security	14,7	14,2	14,7	15,7	14,3	14,3
	Public administration and						
0	defence; compulsory social security	14,7	14,2	14,7	15,7	14,3	14,3
	Other services.	,,	17,2	27,7		14,3	24,3
G+ H+ J+ L+	distribution, transports,						
S + T+ O	government	42,4	42,1	42,0	42,3	41,0	41,0
	TOTAL	100	100	100	100	100	100

2. The logic of an economy based on education, health and culture

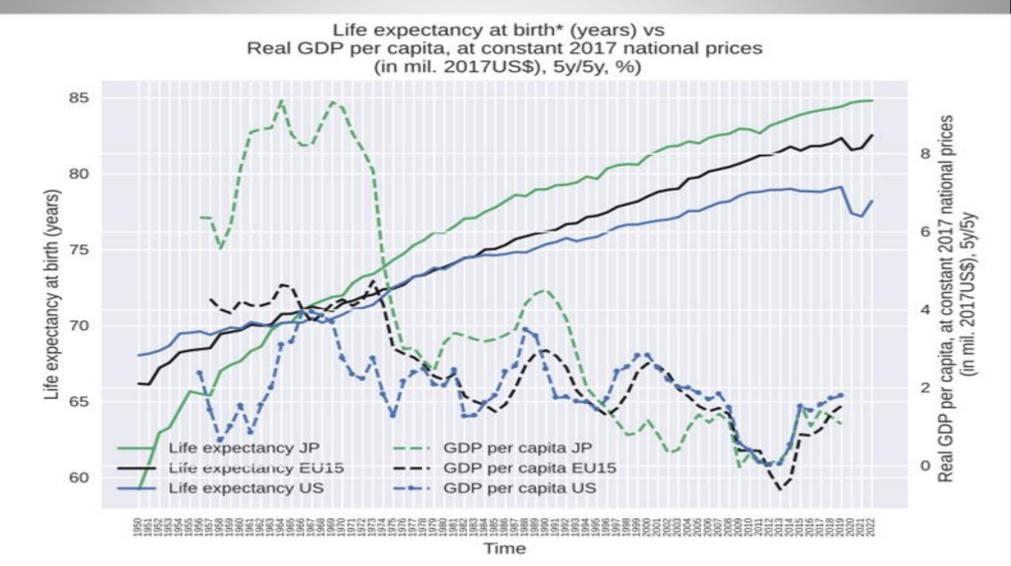
Figure 5.2 - Will the pandemic accelerate the recognition of the anthropogenic mode of development?



3. What political alliances in favor of this mode of development

- An exclusionary and unequal model in the United States
- The extension of the social state in capitalisms of social democratic inspiration
- Stopping unemployment, guaranteeing health and preserving the environment: another trilemma at the heart of contemporary policies

4. High speed growth is over, it is the time for the anthropogenetic mode



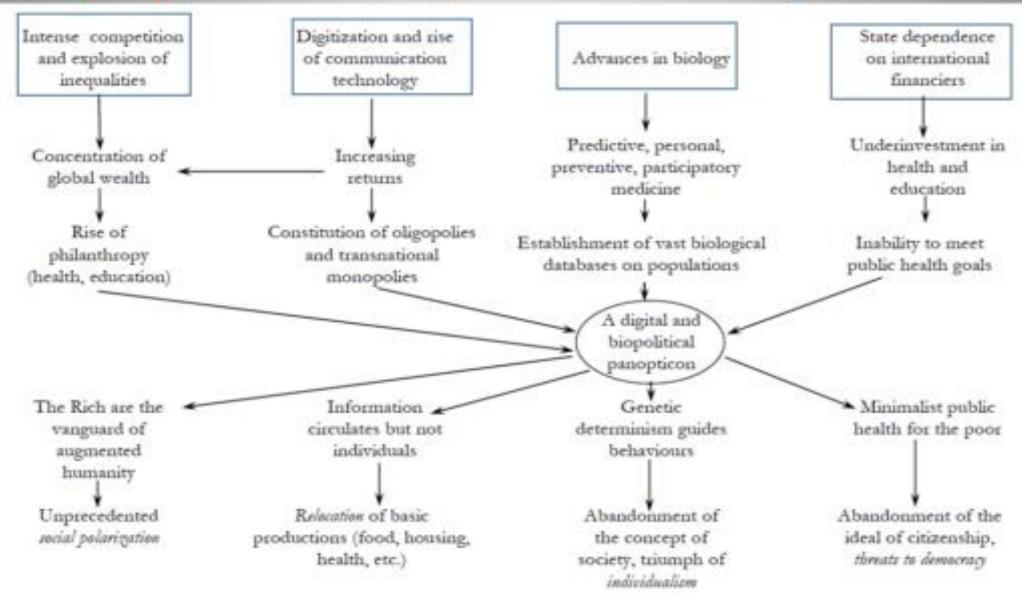
CONCLUSION

- 1. Past pandemics have had society wide impact and long term adverse economic consequences
- 2. Similar outcomes are likely for Covid-19: a reappraisal of the need for efficient, preventive and reactive health systems
- 3. Striking national divergence within developed and emerging economies and across socioeconomic groups

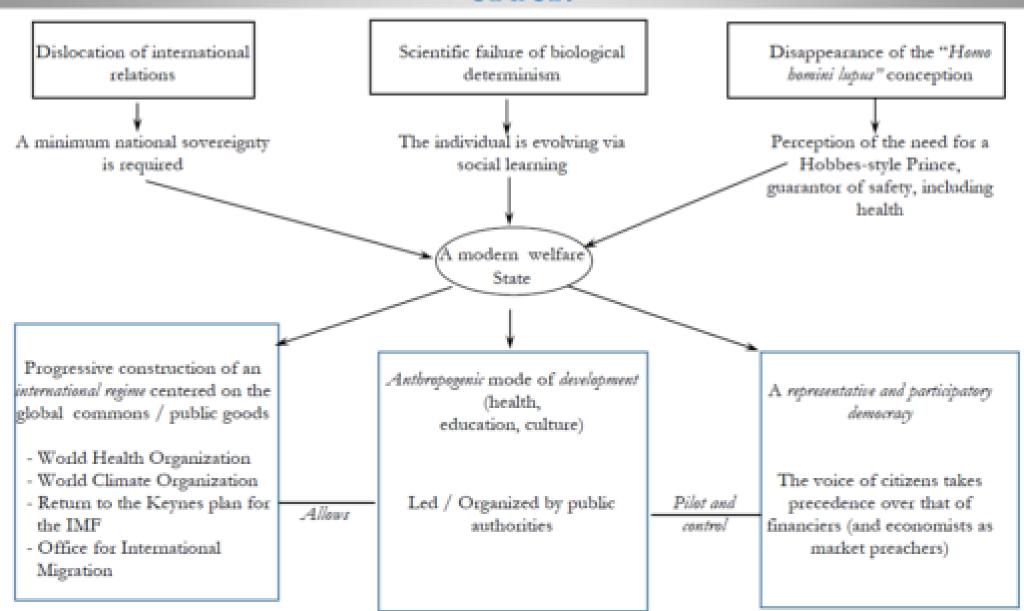
- 4. An emerging anthropogenetic model based upon education, lifelong learning, health but contrasted variants: social democrat, market or state led.
- 5. Climate change and biodiversity erosion make this mode of development more relevant but make its financing more difficult
- 6. The painful path towards the construction of a new global common: health security

TWO SCENARIOS INSPIRED BY THE RETRURN OF PANDEMICS

A dystopia reinforced by the recurrence of pandemics?



A utopia: a democratic leap and a new international order?



Some references

La croissance début de siècle. De l'octet au gène, 2002, Albin Michel, Paris

- « Les crises financières comme conflit de temporalités ». Vingtième Siècle. Revue d'histoire, 2013, 117, 69-88.
- « L'essor du secteur de la santé annonce-t-il un modèle de développement anthropogénétique ? », Revue de la régulation [En ligne], 17 | 1er semestre / Spring 2015
- Les capitalismes à l'épreuve de la pandémie, 2020, La Découverte, Paris.
- « Développement anthropogénétique et reconnaissance de l'utilité sociale du travail », *Sociologie du travail*, Vol. 64 n° 1-2 | Janvier-Juin 2022,

Thank you for your attention and patience

Robert BOYER

INSTITUT DES AMERIQUES

Campus Condorcet

5, cours des Humanités

93322 Aubervilliers cedex(France)

e-mail: r.boyer2@orange.fr

web sites: http://robertboyer.org

http://www.jourdan.ens.fr/~boyer/