# INNOVATIVE MARXIST SCHOOL IN CHINA

Comments by International Scholars on Cheng Enfu's Academic Thoughts

John Bellamy Foster (US), Gennady Zyuganov (Russia), Tony Andréani (France), Hiroshi Onishi (Japan), Alan Freeman (Canada), Nguyen Minh Hoan (Vietnam), et al.



CANUT INTERNATIONAL PUBLISHERS Istanbul - Berlin - London - Santiago - Cape Town

## Innovative Marxist School in China: Comments by International Scholars on Cheng Enfu's Academic Thoughts

Authors: John Bellamy Foster (US), Gennady Zyuganov (Russia), Tony Andréani (France), Hiroshi Onishi (Japan), Alan Freeman (Canada), Nguyen Minh Hoan (Vietnam), et al.

Canut International Publishers

Canut Intl. Germany, Kommandantenstr. 25, D-12205, Berlin, Germany

Copyright © Canut International Publishers, 2023

All rights reserved. No part of this book may be used or reproduced in any manner whatsoever without the written permission of the publishers.

### ISBN: 978-605-4923-74-8

Also available as e-book

www.canutbooks.com

# Preface

Professor Cheng Enfu was born in 1950. He currently holds esteemed positions as a member of the Academic Committee and the Standing Committee of the Chinese Academy of Social Sciences (CASS). He serves as the Deputy Director and Chief Professor of the Academic Committee at the CASS University, as well as a doctoral supervisor. He also holds positions as the Director of the China Academy of Social Sciences Political Economy Research Center in Nankai University and the Dean of the Economic Research Institute of Shanghai School in Shanghai University of Finance and Economics. He is a member of the Education, Science, Culture and Health Committee of the 13th National People's Congress. Additionally, he holds various important positions, such as the President of the World Association of Political Economy, President of the Chinese Association of Political Economy, President of the Association for the Study of Chinese Foreign Economic Theories, and Chairman of the World Culture Forum. He is an honorary professor at St. Petersburg University and Moscow University, as well as an international advisor to the Japan Society of Economic Theory. He has published over 800 articles and more than 40 books in China, the United States, Russia, Japan, Italy, Vietnam, and other countries. He is the chief editor of the World Review of Political Economy (WRPE) and International Critical Thought (ICT) published in the United Kingdom, as well as Chinese Journal of Political Economics (CJPE) and Journal of Economics of Shanghai School (JESS). He is an esteemed and widely acclaimed left-wing thinker and political economist, both in China and on the global stage.

This book is published by our company in order to strengthen the intellectual exchange among left-wing scholars worldwide and to better understand the theories and policy proposals of the innovative Marxist school in China. Whether the comments of scholars from various countries are in agreement, deepening, or questioning, they are all necessary for the prosperity of the global left-wing ideological system, and for the promotion of human civilization and progress. Scholars, readers, and media from all countries who are interested to participate in further discussions, criticisms, and corrections regarding the content of this book are welcome!

> Deniz Kizilcec Editor

# Contents

Preface	i
PART ONE: Contemporary Socialist Theory	
Socialist Market Economy: Experiences of Western Scientists from th Economic Thought of Professor Cheng Enfu during the Initial Steps of China within the World System of the Market <i>Alexandros Dagkas &amp; Roula Tsokalidou</i>	e of <i>3</i>
Socialism With Chinese Characteristics and Equitable Development —A Look at the Thought of Cheng Enfu Isaac Christiansen & P. Mike Rattanasengchanh	19
The Real Socialism: A Dialogue Between Domenico Losurdo and Cheng Enfu <i>Diego Pautasso and Tiago Nogara</i>	41
Building a Comprehensive Communist Civilization —The Science of Marxism in the Thought of Cheng Enfu <i>David S. Pena</i>	55
Congratulations and Thanks 100 Years Communist Party of China —100 Years of China's Struggle for Socialism <i>Cornelius Renkl &amp; Ernst Herzog</i>	77
The Transition to Socialism.Yesterday and Today David Lane	89

How to Lead to the Road of Socialism: Comrade Cheng Enfu, A True Marxist Thinker	
V.A. Popovich	101
On the Electronic Revolution and Cheng Enfu's Economic Analysis the Stages of Socialism	of
Bruce E. Parry, Ph.D	105
Sectoral Trends and Economic Development in China Jean-Claude Delaunay	127
PART TWO: Contemporary Capitalist Theory	
An Analysis of Contemporary Imperialism Based on a Marxist-Leninist Perspective and Method <i>Peggy Cantave Fuyet</i>	147
Notes on Contemporary Imperialism and Socialism with Chinese Characteristics —The Contribution of Cheng Enfu	
Marcelo Pereira Fernandes	149
On Cheng Enfu's 'Five Characteristics of Neo-Imperialism' Stavros D. Mavroudeas	199
Imperialism and Marxist Theory David M. Kotz	211
Bending Law – The Global Financial Crisis as the Early Stage of the Beginning of a New Phase of History <i>Peter Herrmann</i>	231
Out of the Ashes and into the Dust: Britain's Developmental State Michael Keaney	249

China's Development Model of Distributive Capitalism —Rethinking Sri Lanka's Growth Path	
W. D. Lakshman & Kenneth De Zilwa	287
The U.SChina Confrontation and the New World Order —The False Technological War	
Miguel Ángel Rivera Ríos, Oscar Daniel Araujo Loredo & José Benjamín Lujano López	307
Cheng Enfu in China, Ricardo in Mexico: Intellectual and Comparat Advantages as State Insertion Outcomes in Knowledge Capitalism —Obtaining Lessons for Developing World in the Face of a Possible Transition to a New Post-Covid-19 Pandemic World Order	tive
Carlos Sanchez	337
PART THREE: Contemporary Marxist Economics	
Cheng Enfu and the Renaissance of Marxian Political Economy in China John Bellamy Foster	355
The Philosophical Economist: The Contribution of Cheng Enfu Roland Boer	367
Cheng Enfu and the Value of Living Labour	
Jeff Noonan	391
Innovative Marxian Economics	
Romar Correa	413
Wage Slavery, Capital and the Law of Value Henry Heller	435
Searching for Ideas to Build a Non-Capitalist Economics:	
Some Learnings from Chinese Scholars	150
irene sotiropoulou	433

Vigilant Leninist Warrior: The Significance of Academician Cheng	
Enfu to China's Line of Political Security Defense	
Y.I. Yakovlev, Li Zhuoru & Wang Jingxuan (trans.)	479

### PART FOUR: Philosophy and History

The Chairman of the Central Committee of the Communist Party of	
Russian Federation and others on the Innovation of Marxist Theory G.F. Zyuganov, D.G. Novikov, M.V. Drobot, D.G. Novikov, Y.V. Afonin	485
Professor Cheng Enfu is a Great Banner of Adherence to	
and Innovation in Marxism in Struggle	
Nguyen Minh Hoan	489
Cheng Enfu and Zhan Zhihua on Historical Figures and	
a Counter-Reading of Antiheroism in Hombre	
Jerry D. Leonard	499
Dialectics in the Marxist Tradition, in Mao Zedong and	
in Current Chinese Innovative Marxism	
Alberto Martínez Delgado	521
Revolution and/or Sovereignty?	
—A Critique of The Uses of "Exception" in Radical Political Discourses	
Dimitar Vatsov	551
New Stage in Industrial Development (Nis.2)	
—Pivotal Step on the Path Towards Noonomy	
Sergey Bodrunov	575
On the Elevation and Problem Consciousness of Economics	
Methodology Compiled and Written by Professor Enfu Cheng	
Hiroshi Onishi	597

Philosophy and Politics: Academician Cheng Enfu's Contribution	to the
Development of Marxist-Leninist Philosophy	
S.E. Anikhovsky	605
Academician Cheng Enfu and Ideological Struggle	
I.I. Nikitchuk	609
Contribution, Role Model and Breakthrough:	
Academician Cheng Enfu and the Innovative Marxist School	
A.B. Rakhmanov	613
A Model for Propagandists and Workers of Marxism-Leninism:	
Academician Cheng Enfu is the Theorist of the Working People Themselves	
L.I. Palfirova	617
Comment on Professor Cheng Enfu's Innovative Marxism in China	
M.A. Lebeski, A.G. Vaitov	621
Does the New Necessarily Negate the Old?	
— On the Philosophical Thoughts of Academician Cheng Enfu	
V. I. Kashin, Li Zhuoru Wang Jingxuan (trans.)	625
PART FIVE: BOOK Reviews of Related Works	
Understanding and Managing Skilled and Creative Labour:	
The Theory Behind China's Economic Miracle	
Alan Freeman	631
Labor Theory of Value, Value and Price: A Historical Meeting Bet	ween
Chinese and Western Marxist Scholars	
—Commentary on Volume 2 of "A Normative and Empirical Study. The Creation of Value by Living Labour" by Cheng Enfu et al.	

Alan Freeman

Thoughts on the Concept of Productive and Non-Productive Labor	
—A Review of the English Monograph the Creation of Value By Livin Labour a Normative and Empirical Study Written by Cheng Enfu, Wa Guijin and Zhu Kui	g ing
Tony Andréani	673
On Productive and Unproductive Labor a Dialogue Around Two	
Volumes of Chinese Political Economic Theory	
Dariush M. Doust	687
A Review of The Creation of Value by Living Labour. A Normative	
and Empirical Study Vol. I co-authored by Cheng Enfu, Wang Guijin, Zhu Kui Alan Freeman Sun Yevia	
Paul Cockshott	707
A Book Review of China's Economic Dialectic, The Original Aspiration of Re	form
Jean-Claude Delaunay	729
An Excerpt from the Discussion of Innovative Marxism in China:	
The Complete Works of Cheng Enfu, Vol. 1	
S.E. Anikhovsky	733
The Foreword to China's Economic Dialectic, The Original Aspiration of Reform	п
John Bellamy Foster	735
China's Route to Advanced Socialism	
Andrew Murray Recommends that Rare Thing	
—A Study of the Country's Economy that Comes from China	
Andrew Murray	743
Dialectics in Cheng Enfu's Economic Thought	
-Review of Innovative Marxism in China: <i>The Complete Works of Cheng Enfu, Vol. 2</i>	
Y.Y. Ermalavicius	747
References	749

# The U.S.-China Confrontation and the New World Order

-The False Technological War

Miguel Ángel Rivera Ríos Oscar Daniel Araujo Loredo José Benjamín Lujano López

Miguel Ángel Rivera Ríos is a professor at Faculty of Economics (FE-UNAM), full time, level C.

E-mail: mriverarios@gmail.com

Oscar Daniel Araujo Loredo is a professor of Economic Development and World Economic Structure.

E-mail: oscararaujoloredo@gmail.com

José Benjamín Lujano López is PhD in Political Economy, UNAM. Iujano.

E-mail: benjamin@gmail.com

#### Introduction

Since 2017, the government of the United States of America (USA) has undertaken a series of actions against the People's Republic of China (PRC) that, together, can enter on the definition of a technological war. They drastically restricted technology transfer, vetoing Chinese companies' operations in the USA, while the government requires USA companies to make commitments aimed to limit their business in the PRC.

Most of the media, as well as many analysts and observers, have proposed various elaborations to "explain" this conflict and the supposed inevitability of the US government's response (Boustany and Friedberg, 2019; Lim, 2019; Kennedy and Lim, 2018). However, it is also recognized that there are several anomalies in this semi-official scenario. On one hand, it is assumed, in accordance with historical experience, that trade and technological wars serve as vehicles to win markets and, therefore, profits for a rival power, but in this case the so-called **Corporate America** has mostly manifested its skepticism and frank disagreement with the actions of its government (see Mitchell, 2020). This suggests that, for USA corporations, especially those more globalized, China is not a rival, but a trading partner, so that, at least from the point of view of their immediate interests, the conflict seems strange to them.

On the other hand, China has not developed its techno-productive capacities in a similar way as Japan did, which translated its advances into technological learning and autonomous innovation as a means of winning markets to the USA, like we will see. Instead of that, the PRC, both out of necessity, but also out of strategy, adopted a model of collaboration and co-dependency. This co-dependency has linked Chinese companies economically with USA corporations and other powers. So that, technological rivalry is not the logical corollary of that relationship.

According to our hypothesis, the USA government has started the confrontation with China because it considers that the growing influence that the Asian country exercises in the world is contrary to its hegemonic interests. Following this strategy, the USA government runs into resistance of its own capitalists and, at the same time, it is capability as global order provider deteriorate. China's influence is not only economic, but also political and cultural, representing an alternative to the neoliberal and individualist doctrine that still prevails in the West. The present global production stagnation, together with the harsh social condition in developed countries, are seen by USA strategists as weaknesses that play in PRC hands; for that reason, they radicalize its action against China.

We should add that this radical turn reflects the recognition that the so-called market discipline was dysfunctional as the axis of the world order advocated by the United States. With the discourse of the **end of history** and the **world without**  **borders** in hand, the strategists in the centers of world power mystified themselves believing China as a country in transition towards the neoliberal regime and, therefore, the opening to transnational capital would be under foreign control (Philippon, 2019). Although this rule was applied to many other countries in the world, it was not the case in China, which became an autonomous industrial, with also its own institutional structure. The rude awakening occurred in the context of global stagnation under the influence of what the historian Niall Ferguson (2012) calls the **great degeneration of Western institutions**.

Once the core of the USA offensive is defined, it is worth to stress the role of the so call technological war as a mean to justified the policy of containing Chinese influence in the world, with the aim to the disarm that is, a globalization without China participation. Modelski (1987), when discussing global power cycles, defines these actions as aimed to form a coalition in response to the emergence of what the leading power qualifies as a systemic threat. The author adds, referring to the background:

It has been the experience of the past five centuries of global warfare that the continental challengers (Spain, France, Germany) invariably succumbed to a general coalition coordinated by the world power and basically oceanic in orientation. The challenger was usually isolated internationally and claimed being isolated and surrounded (Modelski, 1987, p. 33).

According to an influential research center, the McKinsey Global Institute (MGI), an attempt is being made to reverse the co-existence between China and the West, even though the cost of disengagement is exorbitant:

China and the rest of the world appear to be reevaluating their relationship. In the rest of the world, particularly advanced economies, the unintended consequences of globalization and unequal distribution of benefits are a topic of discussion, and in the United States, there are concerns about the 'China shock' displacing manufacturing jobs. Several major economies are putting in place legislation making foreign investment deals – particularly where technology deemed strategically important involved – subject to stricter review. These developments could presage lessening disengagement between China and the world. However, a disengagement is not inevitable (McKinsey Global Institute, 2019a, p. 18).

Given the role that China has played in the global economy, the disengagement or decoupling anticipated by the MGI and other observers represents an "unstructuring" of the current modality of capital accumulation, being at the same time a regression of the global division of labor and of the dynamics of technological change. In this sense, the further advance of capitalism would be slowed down and what results from the segmentation of the global geo-space is opposed to the fundamental capitalist goal of universalizing its property relations in the world.

To provide a foundation for the hypothesis, the starting point is the gradualist, experimental and decentralized reform that China adopted, as opposed to the "shock therapy" applied by Eastern Europe and the former USSR. From there, the successful reform leads us to an industrial powerhouse, with growing technological capacity and, therefore, a global player.

We will see that China's role in the Global Value Chains (GVC) has created a new reality since it redefined the organization, logistics, cost structure, supply and cycle of models, delivery speed and relationship with suppliers of the manufacturing industry, creating a new pole of the global division of labor equivalent to that formed by other industries, for example, high technology or finance. It is doubtful that the promoters of decoupling have the resources to duplicate the numerous sectors and subsectors of the manufacturing industry, now dominated by Chinese companies, and that they additionally use this means to recover jobs, supplying smaller-scale markets.

The chapter is organized as follows: in Section I is discussed some of the most outstanding implications of the geospatial expansion of contemporary capitalism and the way in which it expresses, in the current long upswing accumulation, a new structure of global production. Next (Section II), starting on the concept of **symbiosis** between the USA and Chinese economies, we will refer to what Breznitz and Murphree (2011) call **co-dependency** of global chains, as they split into several subchains regional in nature that merger with the main one. Those regional subchains, based on the southern coast of China, are led by Chinese Original Equipment Manufacturing (OEM). In Section III the implications for both powers of the passage to global economic stagnation and the social crisis in the USA are analyzed. Finally, in Section IV, it is briefly exposed what the Chinese system of management and social organization means, contrasting it with the neoliberal regime and the hybrid systems instituted in other countries. The conclusions revolve around the declining role of the US as a provider of global order, probably the most direct expression of the deconcentration of its leadership.

## I. The scenario: global geo-space and China's positioning The amplification of geo-space for capital accumulation

Starting in the 1980s, the expansion of capital accumulation began to require new territories, as Europe completed the **catching up** around the 1970s, driving down the world growth rates (Piketty, 2014). Africa offered minimal possibilities, while

310

countries in Latin America and South Asia were had a limited role due to the low level of their **per capita** income. Northeast Asia and the Pacific played a role as poles of dynamism, but the shift of the centre of gravity of the world economy to Asia was still incomplete (Dicken, 2015).

The fall of the Berlin Wall opened new possibilities, since the economies that were abandoning socialism in Eastern Europe and the USSR apparently offered high potential, due to their abundant reserves of labor power, their wide markets, and their space for making substantial investments. The question to be resolved was under what rules would these countries be integrated into the capitalist orbit. The answer was prepared years before, it was the "shock therapy", first applied in Chile under the Pinochet dictatorship, and after used as the core of the Washington Consensus and applied in Brazil and Bolivia after the outbreak of the Debt Crisis of early 1980s (Klein, 2007; Bruno, 1993). As is known, the shock therapy was designed to instantaneously establish a complete market economy (Lipton and Sachs, 1992; Williamson, 1990).

The integration of these national spaces into the orbit of global capital accumulation gave rise to two distinct processes:

a) Opening economies under the control of foreign capital and supervised by global governance organizations; that mean a weak endogenous core for development.

b) Integrity and autonomy of the national space, to create a strong endogenous nucleus. Foreign capital has open access but by the terms set by national governments.

Russia is an atypical case because under the government of Boris Yeltsin and Putin tried to modulate integration, but tending towards isolation that constituted a predatory state under the aegis of the oligarchs and the security services, who imposed possibly more restrictive conditions for workers than foreign capital (Freeland, 2010; Nolan, 1995).

The former socialist countries of Eastern Europe fall into category a) because they experienced a loss of national autonomy and suffered a severe socioeconomic dislocation exacerbated by pre-existing problems (Weber, 2021; Stiglitz, 2000; Kagarlitsky, 1990). What more directly contravened initial expectations was to verify the limited capacity of capital absorption in the region, which was related to the obsolescence of the industry, the primitive structuring of distribution systems and the non-functional culturization of the workforce (World Bank, 1996). The annexation of East Germany to West Germany worked in the opposite direction to how its creators envisioned it, instead of acting as a magnet for new investment and providing a boost to German capitalism, it translated into an onerous flow of subsidies throughout the following years. China is the emblematic case of group b). The disasters of famine and the Cultural Revolution paved the way for economic reform from *plan to market* (Naugthon, 1995). In fact, modest changes were taking place since the early 1970s to make pricing more flexible (Weber, 2021). In those years, there was also a lively discussion about the advisability of applying a gradualist policy or adopting shock plans (Weber, 2021). We know that gradualism prevailed, ultimately resulting in the following repercussions (in contrast to the economies of Eastern Europe and Russia):

a) The integrity of the state structure, the political system and the territory was maintained. Therefore, it had the possibility of setting strategic national objectives.

b) The Special Economic Zones (SEZ) attracted large flows of foreign investment, related with the reserve of millions of workers of first entry to the manufacturing sector. It was the starting point for the new Chinese industrial take-off.

c) A core of state-owned companies was gradually reconverted to supply the domestic market and act as suppliers in GVCs and later as regional OEMs.

#### China's Global Positioning

By becoming an industrial power, China qualitatively amplified the geo-space for capital accumulation and contributed to sustaining the globally integrated production system; the latter meant an economic symbiosis with the leading power, the United States. The US-China symbiosis defines the modality of globalization because it unifies the world's main technological center with what was, at first, a huge semi-virgin space with resources susceptible to be relocated with flexibility and speed. The interaction between both national spheres produced a general drop in production costs so intense that formed the basis of the transitory macroeconomic stability, encouraging world expansion until the 2008 crisis. Thanks to this general drop in the growth rate of prices, the powerful credit expansion that triggered the banking deregulation of the 1970s did not translate into an increase in inflation (Howell, 2020). This, in turn, contributed to the trend decline in real interest rates, which was presented as one of the main goals of monetary policy and is closely related to the new role of financial assets. The so-called financialization constitutes one of the most characteristic processes of the capitalist valorization cycle in this phase.

The expanse of the capitalist geo-space, that is, what is called globalization, was preceded by a displacement of its centre of gravity (see Dicken, 2015: chapter 2). Between the end of the 19th century and most of the 20th, the Atlantic powers

led by the United States formed the largest productive and technological center, dominating the capitalist dynamics. The shift to Asia, primarily Asia Pacific, began in the Golden Age with the rise of Japan, spreading to the Northeast, and then focusing on China after the 2000s.

Region-country	1970	1980	1990	2000	2005	2010	2015	2018
Africa	2.4	2.8	2.4	1.9	1.9	2.0	2.0	1.9
Latin America	7.8	9.8	8.1	7.8	7.3	6.8	5.9	5.3
Asia	14.8	18.5	25.5	31.9	36.4	44.9	50.1	52.2
Japan	9.6	10.5	12.6	10.2	9.4	8.3	7.5	7.1
China	1.3	2.3	4.2	9.9	13.6	21.5	26.6	28.6
Europe	43.1	41.6	38.0	30.4	28.0	24.0	22.1	21.6
Germany	n.a.	n.a.	9.4	7.3	6.5	5.9	5.6	5.5
French	3.9	3.8	3.3	3.1	2.8	2.3	2.1	1.9
United Kingdom	6.7	5.3	4.8	3.8	3.2	2.6	2.2	2.1
Italy	3.9	5.0	4.6	3.9	3.3	2.6	2.2	2.1
USA	27.5	23.1	22.3	24.3	23.2	20.0	17.8	16.9

Table 1 presents data related to shift of centre of gravity based on Dicken (2015) definition. But instead of using GDP data, we rely on manufacturing, which better reflects techno-productive change. As can be seen, the share of the West in global manufacturing has been declining since the 1970s, while the share of Asia has risen, experiencing a jump since the 1990s. China's share, from being insignificant in the 1970s, it is close to a third of the world in 2018. This participation gives China the role of articulator and implies a growing participation in various segments of the global market, as we will see later.<sup>1</sup>

The pivotal role play by China in the global economy has two impacts. One is its technological and commercial link with the USA, which some analysts call ChinAmerica (Jones, 2010); the other refers to the growing presence of the Asian giant in the world, which we will call the "Chinese effect" (McKinsey Global Institute, 2015), implying that it is the first, or is among the firsts exporter and importer of a range of goods and services.

As an exporter	Labor-intensive sectors with greater Chin		
11.2% of world exports	share of exports		
50% of solar panels	1. Textiles and clothing		
45% of cargo ships	<ol><li>Computers, electronics, and optical products</li></ol>		
40% of textiles and clothing	3. Electrical equipment		
26% furniture	Labor-intensive sectors with greater China's		
25% of smartphones	share of imports		
23% metal products	1. Mining and quarrying		
19% of agricultural machinery	<ol><li>Agriculture, whether forestry and fisheries</li></ol>		
15% of industrial robots	<ol> <li>Computers, electronics, and optical products</li> </ol>		
As an importer	Main market of:		
10% of world imports	Pharmacists		
60% of semiconductors	Motor vehicles		
18% of agricultural products	Mobile phones		

As regards the second impact, the integration of China into the global economy implies a double flow of imports and exports that are, for that country, strategically linked to the objective of technological learning and lead to the global factory<sup>2</sup>. Table 2 highlights the presence of China companies in various markets, either as buyer or seller, playing a decisive role in shaping the world market.

Since 2009 China is the world's largest exporter. According to MGI, this country is the main export market for 13 other countries and the main supplier for 65. It's a large exporter and importer of services. Countries, rich in natural resources, are increasingly dependent on Chinese demand; it exports about 16% of what South Africa sells and imports and 16% of Australia's GDP (McKinsey Global Institute, 2019a).<sup>3</sup> But unlike other powers that broke into the world market before the 1980s (the case of Japan), China's role depends on its participation in GVCs. We will now analyze the two-way relationship that arises from the global chains in which Chinese companies participate.

#### II. Co-dependency and Global Value Chain Split

#### Cross-linking of GVCs and regional value chains

Chinese companies managed to position themselves in GVC by meeting two requirements to play an active role. Ernst (2003) defines these requirements into two: a) prior technological knowledge base<sup>4</sup> and b) intensity of effort. The latter must be redefined essentially not as a merely business factor but as a socio-institutional one, that is, the conductivity by the "rules of the game" at the national level to promote collective learning.<sup>5</sup>

Having achieved it positioning in manufacturing sectors with low entry barriers, the Chinese strategy to position itself as an imitator-innovator, as we apply later (Breznitz and Murphree, 2011). The next settle was reached by companies that absorbed generic technological knowledge to offer "imitations" of basic manufactures for the domestic market (Breznitz and Murphree, 2011; Yueh, 2010; Naugthon, 2007). The subsequent stage involved significant interaction in the GVC, forming a subchains, led by Chinese OEM companies, that export to global markets. This is the realm of the global factory (Breznitz and Murphree, 2011; Ernst, 2010).

Breznitz and Murphree (2011) explain some of the basic causes and implications of the split of the GVCs. They emphasize that globalization has fragmented industries and services, which are concentrated in clusters scattered around the world. This has brought a new logic in the creation of value, together with new forms of specialization and innovation. In this process, China created two innovation systems, one national and one regional. As a supplier to global companies, China has become what both authors call a second-generation innovator, which implies building new solutions on the base of established technologies and products. The second-generation innovator fulfills two roles: as a supplier, it offers inputs, services or products of increasing quality and decreasing costs. The second role refers to Chinese companies that act as autonomous providers of what are primarily imitations of Western products or services. One of the implications of second-generation innovation is its great importance at global level, despite being some distance from the technological frontier (Breznitz and Murphree, 2011).

The CGV ended up in Chinese clusters of the south coast and was linked with a range of companies that we will call second generation. This companies form other national and regional chains that culminate in a good or service upgraded to high global competitiveness, like computer equipment and/or mobile telecommunications equipment.<sup>6</sup> This is the case of the Pearl River Delta, traditionally conceived as a gigantic region for assembly, but which is the cradle of Huawei, ZTE and Tencent. Thus, we must:

Furthermore, and crucial to the story of China, this changed model of globalized production creates new dependencies between countries and industries. China's rise to prominence in the IT industry has been due, in large part, to the new opportunities in specific stages of production opened by the fragmentation of the IT industry. However, China's excelling in these stages has not only transformed China into a critical part of the global production networks of the IT industry, but also created a new mutual dependency. On the one hand, the Chinese IT industry needs foreign novel-product-innovating companies to keep producing in China. On the other hand, foreign companies completely rely on Chinese companies to produce their novel products, a capability they no longer (or never did) possess. China needed Apple to develop the concept and definition of the iPod and the iPhone, but Apple cannot produce and sell these products without China. In the world of flexible mass production, the Red Queen country needs the novel-product innovators to keep churning out new ideas, and the novel-product-innovating countries need the Red Queen country to keep innovating on almost every aspect of production and delivery (Breznitz and Murphree, 2011, p. 17-18).

Co-dependency has, obviously, two directions. It goes from the Chinese company to the USA company, and from the USA company to a Chinese company or system of companies. In turn, co-dependency is the basis of the symbiosis of both economies and its most advanced forms implies an unfolding of the sources of technological knowledge: internal and external.

Naturally, the two fundamental questions are whether the dependence on external sources of knowledge, be they Asian in general and Chinese in particular, is irreversible and whether it erodes the power of the leading corporation. Next, we will make a brief discussion on reversibility/irreversibility to emphasize that this dependence is economically reversible. The analysis will make clear that there is a limited decline in the power of the leading company, but that can be partially reversed if it advances to new fields of innovation (which is what has happened so far).

Let us remember that the central feature of the vertical disintegration of production is for the leading company to focus on core activities, that is, on what they do best, and delegate the rest to external companies, outsourcing functions. For the leading company, the central activity is the design or nucleus of innovation, relying on product development. What is delegated to external companies is manufacturing, which primarily involves assembly and sub-assembly in low-wage countries. The transfer of knowledge in the form of know-how in this first stage of subcontracting is relatively simple, but the relationship between the leading company and the supplier company goes further. This passage is described by Ernst (2010) in the following terms: as the global corporation moves to more complex products, it finds that it's not profitable to manage all the knowledge involved in production. This implies differentiating between knowledge under the direct control of the leading corporation (internal knowledge) and external knowledge. The latter one was, at the time, internal knowledge, but it acquired a complementary character and was transferred to another company, generally foreign, which gradually mastered and perfected the process (Arora, Fosfuri and Gamberdella, 2011).<sup>7</sup>

This subdividing of task is a complex process that advanced rapidly when the modular methodology went from production to design. Arora, et al. (2011) point out that one of the difficulties in dividing the innovation activity concern converting a task into subtasks. This technology transfer requires the recipient to carry out various activities that belong to the original innovation. If the knowledge contained between the members of an organization has the attributes of articulable, teachable, observable, simple, independent of the system, independent of the context and mono-disciplinary, it is possible to subdivide tasks and delegate them. Knowledge must be reorganized into universal rather than idiosyncratic categories. With more precise instruments and greater computing power, articulated knowledge can be exploited more widely (see Baldwin and Clark, 1997).

Thus, the decomposition of a complex problem into relatively independent tasks, that is, into modules, is difficult in new technologies and easier in those that have reached an explicit level. This is because the subtasks in the latest technologies are interrelated with each other. Such interrelation can imply important transaction costs, inducing to maintain the process within the organization.

As pointed out by Arora, et al. (2011), due to competitive pressures, the original producer of knowledge, that is, the leading company, lacking the downstream resources to generate the complementary knowledge to reach the commercial phase, must seek it from external sources. This is how the way is paved for the technological unlearning experienced by leading companies when delegating long-term functions (Ernst and O'Connor, 1990). The result of the complementarity of internal and external knowledge of the corporation gives rise to what we already call co-dependency, as a two-way relationship. The leading company owns the technology and external providers depend on its know-how and patents; but at the same time, the central company depends on the capabilities of the supplier company, which introduces specific innovations in the products and processes with which they supply the leading company.

With the passage to explicit knowledge, a general architecture of the new products can be defined as the one that specifies the way in which the components interact with each other and within them. The important thing is that this architecture can be developed independently of the individual components. One implication is the possibility of upgrading the components independently of the whole product, if the architecture interface is maintained.

The IBM/360 system was the first computer whose design and production depended entirely on modular methodology; in that system the design of the same operating system and peripherals is shared among participants in order to innovate in the specific components, without the interference of the others, of course up to a certain limit. But the improvement of the modular system is reflected in the ASICs (Application Specific Integrated Circuits) which is a highly complex application-specific integrated circuit, used in telecommunications. The traditional way of producing it is through customization. To reverse that trend, a new architecture has been created to reduces the amount of semiconductor engineering required. The idea is that manufacturers develop small pre-specified systems whose functions are usable by several users. Thus, the manufacturer is not facing a circuit that requires complete specification for individual use. What follows is that those pre-specified systems can be combined and reconnected as required.

Ernst (2010) explains the process that led to organize semiconductor production in modular methodology. He points out that until the mid-1980s, global companies specializing in systems and semiconductors did almost all design in-house. Vertical integration focused on the design of an individual component that would be imprinted into the printed circuit board. Since the mid-1990s, there has been a rethinking of the methodology due to competitive pressures, which implies giving answers in terms of productivity and performance.<sup>8</sup>

As Ernst (2010) points out, the so-called system on a chip combines modular and automatic design<sup>9</sup> to move from individual component to system integration. This approach relies on vertical specialization in project execution, allowing the firm to disintegrate the design and disperse it geographically. This has given rise to CGV with multiple levels, starting with the system company (such as IBM) to manufacturing contractors such as Flextronics or Foxconn of Taiwan (Ernst, 2010). After the ASICs, the TSMC of Taiwan established in 1987 acted as an important catalyst, providing the manufacture of the chip by contract, acting as a foundry (or factory). Over time, however, vertical specialization increased the number and variety of participants.

To conclude this section, it can be said that the production of electronics, telecommunications equipment, components and software depends on modular design, translating into the constitution of what Arora, et al. (2011) call the global technology market, based in Asia Pacific. Taiwan and South Korea dominate that market, complemented by American and Japanese companies. The role of Chinese companies, previously confined to assembly and packaging, has been escalating as they participate in architecture-defining systems companies (Ernst, 2010), to name one example. However, even though they delegate important operations, such as specific design modules, foundry, automatic equipment, conception and basic chip design, control its under global OEMs such as INTEL, IBM and Qualcomm. The most important thing is the centrifugal force that disperses innovation activities globally. Decoupling would imply counteracting this process to exclude China, which would imply substantial economic costs for leading companies that would pass on to consumers.

#### Collaborator and Competitor. From assembler to industrial powerhouse

As we saw, China has been able to participated in the new global production system based on modularity, which redefines the logic of innovation and technological learning, to its advantage. We are not talking about the conversion of a newcomer into imitator, since that possibility existed even before the GVC, as explained by many authors. What is involved is selective specialization within the GVC to advance in the manufacture of more advanced products and win share of global market, without the requisite of national self-sufficiency in components, systems and subsystems.

As explained, production to win the market implies the formation of a subchains, which is formed under the command of Chinese OEM companies, linking itself to the chain of global leaders. On China side, the axis of the process rest in a national company that assumes the leading position of a secondary chain, interacting with high or low level suppliers to offer its own product. This is Huawei's archetype.

The foregoing is inscribed in two opposing ways: there is skepticism about the possibility that this process will take China to the technological frontier or, on the contrary, that it is the main vehicle for China to become a technological power. Breznitz and Murphree (2011) are in the middle of both interpretations: they metaphorically call it the run of the Red Queen, which refers to the fact that the advance of China coincides with the shift of the technological frontier. The data we quote below are close to this interpretation with three caveats. One, that the Red Queen can achieve a superior competitive position, in subsectors, be they generic (solar panels) or close to the border, in which the barriers to entry have lowered, such as mobile telephony, but always with the intersection of the global and regional-national chains. This intersection is essential to obtain key inputs such as operating systems and semiconductors.

The second caveat is that China has approached the technological frontier supported by the turn of digitalization into a generic technology. That has allowed it to create an ecosystem that places it on an equal footing with the American digital ecosystem. However, both ecosystems and their digital platform companies have not entered into direct competition, that is, the conditions have not been met for two or more competitors to seek to dominate a certain market, as was the case in the 1970-1990s in semiconductors between American and Japanese companies.

The third is that, as second-generation innovators, Chinese companies capture subsectors or niches in which knowledge has passed to its generic state, as explained

in the previous section. Amsden (1988) refers to leading Asian companies that assume this role as second movers. For USA corporations such industries are no longer profitable, but architectural and incremental innovations enable Asian companies to relaunch products.

We will now take a brief look at China's competitive positioning in the recent period. According to data from MGI, after 2015 Chinese companies managed to position themselves as leaders in five subsectors. Superior market positioning is defined when participation in the world market is at least 10% (see Table 3). There are six sectors in which it exports more than 20% of the world: computers, electronics and optics, electrical equipment, textiles and clothing, furniture, other non-metallic products, metal products and wood products. In turn, in five sectors import more than 10% of the world: computers, electronics and optics, mining, chemicals, paper and paper products. The central distinction refers to the origin of the inputs, distinguishing between national versus imported. The subsectors with the highest technological content use, as shown in the table, imported inputs; this is the case of smartphones, cloud services and robotics. This confirms the role of GVCs in China's technological development.

National inputs	Percentage			
Solar panels	50			
Digital payment systems	10			
Cargo ships	45			
Importable inputs	Percentage			
Agricultural machinery	19			
Smartphones	25			
Cloud Services	8			
Robotics	15			

Table 3 shows that China is at the forefront of technological competition, as it has positioned itself in subsectors such as robotics, cloud services, digital payment systems, and smartphones. They are important subsectors, but it must be stress that they are not the main source of technological rents, since competition has intensified with the presence, in addition to China, of Korean, Japanese and German producers. Furthermore, they are all dependent on semiconductors, which in turn have varying degrees of complexity. So, the leading position in global competition depends on technological superiority in what was from the beginning called the basic cell of digitalization, the semiconductor, specifically logic circuits. In addition, we can refers to operating systems. Mastering these components and applications has led to the formation of digital ecosystems and the platform economy, in which a handful of USA corporations have the undisputed global leadership. Based on its own ecosystem and its respective platforms, China is preparing to compete in the first wave of artificial intelligence applications (Lee, 2018).

What we have called the Japanese model would allow us to understand the requirements and implications of direct competition. At the time of 1970s, it seemed that the Japanese industry would sweep away American companies, by competing directly by exporting to the USA, taking almost complete markets from them, and becoming the second or third main supplier in others such as: the automotive industry, telecommunications equipment, equipment of computing, machine tools, chemistry and semiconductors (Mowery and Nelson, 1999). However, the decisive fight was in semiconductors because their centrality in the digital paradigm.

The automotive industry and the rest of the sectors either belong to the previous paradigm (although they rejuvenated later) or have approached the status of commodities, as is the case of basic computer equipment. In the machine tools or telecommunications equipment sector, although high entry barriers still prevailed technology rents fell due to increased competition between three leading corporations.

The outcome of the competition between the USA and Japan was resolved in favor of Intel (Mowery and Nelson, op. cit.), but sharing the market; USA corporation taking on logic circuits of greater technological complexity and memory circuits, mainly DRAMs, on Japanese companies.

As in the 1970s, today industrial and technological supremacy is based on logic circuits, although it has undergone a relatively recent change determined by the transition to modular design, forming a global technology market. This means that technological knowledge has been distributed among companies from different countries, certainly within a hierarchical structure, but that it is not under the command of a single national business structure.

# III. Implications of the passage to global economic stagnation and the social crisis in the U.S.

The global economic stagnation, after the outbreak of the financial crisis in 2008, has impacted all the process we were discussing, including the U.S.-China symbiosis, creating instability in international relations, foreshadowing a new global order. As in previous periods of prolonged recession or economic depressions, patterns of competition change as capitalist countries undertake defensive and offensive actions to counteract domestic over-accumulation and over-production. We

are thus witnessing the resurrection of protectionism and the manipulation of the exchange rate to favor expansion into external markets and restricting access to the domestic market.

What are the implications of this actions in countries who try to close the technology gap? During the 1970s, years of global recession, the Asian Tigers took advantage of overproduction by buying industrial plants and technology at very favorable prices (Amsden, 1988). The plethora and drop in demand lowered entry barriers and led to newcomer's entry. South Korean push in the chemical and heavy industry took was developed in this environment.

In the USA, on the other hand, two processes took place: first, its neoliberal institutional transformation the country politically gave rise to a society governed by the rules of plutocracy. The turning point unifies several events: a) Reagan's dictum: the government as a problem and not as a solution; b) the end of the baby boomer's generation, which liquidates the sense of the American nation; c) the September 11 attack, the result of which was hostility to immigrants and d) the financial crisis of 2008 as the definitive end of the American dream (Bryant, 2021). What unifies these events was the law issued by the supreme court, called Citizens United, which gives the super-rich the legal possibility to flood congress with unsupervised money (Bryant, 2021; Freeland, 2012).

Second, the New America is a nation afflicted by a chronic social crisis. Having experienced a change in its productive structure in favor of technological and financial services, the USA left unfinished the socio-labor adjustment required to respond to the change in the global division of labor. For this reason, its social fracture opened since early 1970s deepened. Naturally, the conversion of China into a global factory, but also the beginning of a prolonged period of low global growth, dramatically highlighted the cost of political inaction.

In recent decades, the leading power has reduced employment opportunities and workers' income. Some of the 150 million adults in USA have had an unfavorable work experience, either due to job insecurity or precarious pay conditions (see McKinsey Global Institute, 2019b). According to the same source, the USA can be classified as a fractured country, although there is no definitive rural urban divide, or a specific geography of inequality. There is prosperity in the big cities, about 25, which encompass a population of 95 million people. But in small cities and the rural sector (54 cities and 2,000 counties) in which live about 77 million Americans, have few job opportunities. In between these two extremes are close to 94 million who define themselves as middle classes, but with modest growth and low employment opportunities (Bryant, 2021; McKinsey Global Institute, 2019b; Moretti, 2018). It would be expected that this divergence would induce the population to abandon the decaying areas and go to the ascending ones, but this has not happened because mobility has been limited: by 1990 6.1% of Americans moved from county or province, but in 2017 only 3.6% did so (McKinsey Global Institute, 2019b); the reason for such drop rest mainly in the high cost of living and the cultural divide. Furthermore, the gains from capitalist development have been concentrated in the last 20 years in a compact group of 5 sectors (finance, real estate, technology, pharmaceuticals and business services); the concentration is also in territorial term: As a result, only 6% of counties absorb 60% of product growth (McKinsey Global Institute, 2019b); that is what the MGI calls the territorial superstar effect.

The corporate superstar effect has been devastating. Among large corporations (over a billion in revenue) the top 10 captures 80% of the profits. Their investment is mostly in intangibles, with highly skilled workforce and digital capabilities. They obtain a high proportion of their sales and their inputs from abroad (McKinsey Global Institute, 2019b). To get to the top, they those superstars had to endure a relentless struggle in which almost half of them succumbed (Meagher, 2020; McKinsey Global Institute, 2019b); but once they got there, as is well known, start limiting competition.

Furthermore, lower investment in public goods, from education, training and social infrastructure, have declined in relation to the needs of those left behind. Federal spending on education, infrastructure, and scientific research went from 2.5% of GDP to less than 1.5% today (McKinsey Global Institute, 2019b). The retraining provided by the company and public-private investment also declined. Unemployment protection is lower and the guaranteed pension decreased as part of what has been called the individualization of the social contract (Hacker, 2019; Shafik, 2021). Net job creation is expected to be concentrated further in a few urban areas within the next 10 years (McKinsey Global Institute, 2019b).

This is also a symptom of the enormous disparity between the income of corporate executives and the average worker. Gelles (2021) points out that the former earns on average 320 times more than the typical worker. This is one of the reasons for the high concentration of income, since billionaires received the equivalent of 20% of country's GDP in 2021, that is, twice what they captured in 2017 (see Sharma, 2021). Such dislocation has a remote origin: the dismantling of the Fordist-Keynesian regime that created the rust belt and the dust bowl. Its immediate cause is the one indicated at the beginning of this section: the change in economic structure without a social policy of labor requalification. The claim that Chinese industry "stole" these jobs is conducive to ideologically reproducing the society of inequality that the USA has become.

#### IV. The new socialism in the PRC

#### Background

The gradualist and experimental policy of economic reform that took place in the PRC, in contrast to the widespread shock therapy in Eastern Europe and the former USSR, is fundamentally related to the differences between the Soviet Model and the Chinese Model of socialism. However, there are similarities between the two that help explain the differences. Let's start by looking at the similarities.

In terms of production, both countries adopted central planning based on material balances (Nove, 1992). The shortcomings and risks of complete eradication the market and private property were perceived early, when the New Political Economy was discussed in what would become the USSR in the 1920s (Preobrazhensky, 1971). As is known, that line was defeated, and the priority was giving to eradicate market anarchy. Decades later, in the 1960s, as economic growth slowed in Eastern Europe and in the USSR, interest in reform to combine the plan with the market revived, which meant, first and foremost, a new price management regime. Reform advanced in Czechoslovakia, Hungary and Yugoslavia (Popov, 2000 and 2007). The Soviet leadership ended abruptly those processes, which brings us to the crucial difference we talked about above.

The central planning system, as established in the 20th century, empowered the high bureaucracy that manage it, isolating it from the proletarian base. If there were no counter tendencies, a new exploiting class would be formed, whose social reproduction would depend on the centralization of production and distribution, as happened in the USSR (Bettelheim, 1974).

In China, the Soviet system was adopted from the early 1950s to the 1960s, which implicitly led to the trend towards political centralization. Another characteristic of the Soviet system was the priority given to heavy industrialization, a strategy that began to be implemented in China with the first five-year plan (Shirk, 1993; Naugthon, 2007). This implied concentrating investment in machinery and equipment, steel, generators, railway equipment, etc. Although the Sovietization in China had limits for historical and cultural reasons, it did have important repercussions on the political dynamics.

China's heavy industrialization strategy has been the subject of various criticisms. Supporters of Perkins (1994), one of the most renowned American sinologists, described this strategy as inefficient, taking the capital output-factor productivity ratio as indicators. Another criticism comes from Naugthon (2007), who argues that it was contrary to the resource endowment of an economy with abundant labor and, therefore, it was prone to distort the change in the production structure. A more general criticism refers to the implications in the industry-agriculture relationship, specifically peasant income. There are merits in those criticisms, but they sidestep the main problem.

The main issue laid in the internal struggle into the high level of the PCCH; the groups adhering to the Soviet model, including the promoters and beneficiaries of the growing concentration of power in decision-making, modified price management, excessively accelerating investment in heavy industries and causing pronounced ups and downs in productive activity (Shirk, op. cit.). Mao stood for, as is well known, for decentralization, so that a political struggle ensued amidst economic instability. The rectification of the excesses of the first five-year plan (1953-1957) through the withdrawal of the 100 flowers, gave the initiative to moderate groups to define what Naugthon (2007) called a new type of socialism. But the attempt to reconcile the two currents, through the so-called Great Leap Forward, and the consolidation of this new type of socialism gave contradictory results and generated risks for the future of China.

The Cultural Revolution, centered on the years 1967-1969, represented Mao's last triumph to overcome the process of bureaucratization and centralization of power that still prevailed. Through the mobilization of young radical cadres, the Red Guards, with the aim to dismantle the over centralize system had a very high social and political cost. But the decentralization a consensus the decision-making system was a foundation for the post-1978 period reform (see Shirk, 1993; Lin, 1975; Snow, 1974).

Previously, at the Eighth Congress held at the end of 1956, open discussions took place among delegates in order to decide the course of reform of the planning system, with a plurality of opinions (Shirk, 1993). Such an atmosphere of openness was the reference point for the Eleventh Congress of 1978, shaping gradualist approach as a superior alternative to shock therapy approaches in Eastern Europe (Weber, 2021).

The Four Modernizations are the subject of two interpretations. We will call one of these interpretations "the normal country", taking up the concept proposed by Naugthon (2007), who claims that the reform was the vehicle for the transition to a conventional market economy. In this vision, the "transitional institutions" are the prelude to the conversion into a "normal country". The other interpretation is the continuity and change after the hecatomb of the famines and the cultural revolution, proposed by various authors, including Cheng (2021). It is not only a question of what was called "market socialism", whose definition became ambiguous in the process in Eastern Europe, but a new form of socialism.

If it is admitted that, with this new type of socialism, the PRC seeks the same objectives but with other instruments, the implications for the rest of the world are formidable. Now that the vision of the "normal country" has collapsed, the emergence of the new paradigm of society is perceived, which arises precisely when Western democracy is going through its worst crisis, largely induced by the de-concentration of USA hegemony and the conversion of the big capital into plutocracy, that Ferguson (2012) calls the great degeneration, that is, the institutional decay and economic agony of the liberal democratic system.

For the USA plutocracy, the emergence of a new social philosophy based on great productive power represents a formidable challenge, since they interpret it as an existential threat. The foregoing refers us to our hypothesis: preventive actions are aimed, simultaneously, at discrediting Chinese social philosophy through a "screen strategy", consisting of blocking its industrial rise and technological capacity.

#### The economic model of the PRC and its strategic goals

As a part of the socio-economic and political change in the PRC, which unifies the historical legacy with the Four Modernizations, a new form of socialism has emerged, transforming the functioning of society. Cheng Enfu, in his book *The Original Intention of Reform* (2021), analyzes the fundamental characteristics of this system: i) multiple property rights with preponderance of public property; ii) income distribution based on work;<sup>10</sup> iii) dual resource allocation given by the market and the State and iv) open, diversified and self-sufficient economy. We will go on to analyze each one in detail following this author.

One of the most important characteristics of property rights in China is the preponderance of public ownership over operating assets. In Western countries such as the USA, Cheng (2021) explains, public ownership is usually reduced to total social assets (such as natural resources), the usufruct of which is carried out by private agents, granting limited social benefits. In the PRC, on the other hand, public property has the function of creating social income through state-owned enterprises and thereby laid the foundations for a labor-based income distribution. This conception is summarized in the phrase "getting rich first–in order to reach common prosperity welfare" (Cheng, 2021, p.5). Let's see how it works.

Income distribution in the PRC is determined by two axes: competition in the market according to work and social protection (Cheng, 2021). This is intended to ensure that salaries are assigned based on individual competences, maximizing human potential and optimizing the use of the work factor (Bell, 2015 agrees on this idea). The result is that family income is highly dependent on wages, a situation that leads the State to assume the commitment to gradually increase the minimum standard of living for people with low and middle income, expanding social security coverage. On the other hand, as Cheng (2021) criticizes, in capitalist countries the main determinant of income is private property of assets, with little

social protection, factors that induce a high concentration of income and reduce opportunities for social mobility.

The Chinese "dual" model gives a new meaning to market socialism, since it goes beyond the distribution of income, while the allocation of resources also passes through the sieve of this new system. Cheng (2021) points out that market regulation and state regulation maintain a dialectical relationship of unity of opposites in three aspects. The first is what the author calls functional adequacy, referring to the complementarities between both systems that lead to micro and macro balances. In the short term, market allocation prevails, but in the long term the State directs allocation according to its objectives, such as industrial development and income redistribution. The second aspect is the synergy of effects, which works in a bidirectional way, where the State intervenes in the market allocation mechanism and the market in State planning, in a gradual, stable and orderly approach so that its effect is positive. The last aspect is the opposition between the two, which will arise naturally from a unity of opposites, and which must be properly managed to avoid its breakdown.

Due to the liberalization, diversification and self-sufficient PRC economy, it has been possible to establish, according to Cheng (2021), a nexus between foreign capital and technology, domestic stocks of capital and the structure of intellectual property rights, which jointly promotes the transition from extensive growth (based on an expansion of the factors of production) to intensive growth (based on a complexification of the factors and relations of production). The goal is "to create a world factory in China rather than a world processing factory" (Cheng, 2021, p.6).

The question arises frequently is to what extent social reform in the PRC can or cannot be qualified as an application of the Neoliberal Model or the Socialdemocratic Model. As Cheng (2021) points out, China has incorporated market discipline into its economy, but at the same time the State plays a major role in the allocation of resources, in the structure of property rights, income distribution, political and economic regulation political and upgrading in GVCs. If China had followed the neoliberal doctrine, its economy would have been subject to its comparative advantages, state regulation would be minimal, as public ownership, and income distribution would be as unequal as Latin American economies that followed the rules defined by the Washington Consensus.

According to Cheng (2021), the Chinese economy cannot be considered to have followed the Social-democratic Model, either, for two main reasons. First, because the ownership structure in the PRC is mostly public, while in capitalist countries, such as Scandinavia, it is private. The second reason is that the economic reform in China follows the original principles of emancipatory socialism and pursues the objective of building a modern economic system, different from the capitalist system. For those reasons it is concluded that China is neither neoliberal nor social democratic, but, in the words of Cheng, the economic system of the PRC "represents a great initiative in the historical development of scientific socialism, and a major theoretical innovation in the Marxist political economy" (2021, p. 8).

Therefore, we can point out that the PRC is the emblematic example of a country that managed to maintain, as we previously indicated, a political-institutional cohesion that allowed it to integrate into global capitalism with national autonomy. The industrial core base for a gradualist strategy with mass mobilization strengths collective learning and social investment. Although at first it used the comparative advantages determined by its low salary costs, it later transformed them into competitive advantages through second generation innovation (see Cheng, 2021, chapter 7), strengthening its basic science and technology system. Due to the above, they were able to establish national technological protocols: IGRS (Intelligent Grouping and Resource Sharing), EVD (High-Density Digital Laser Disc System), TD-SCDMA (Mobile 3-4G Network Model), WAPI (a network security protocol wireless), among others.

Currently, the modernization of the economic system of the PRC goes through "six systems and one institution", whose pursue a series of strategic goals established by the Political Bureau of the Central Committee of the CPC in 2018 (Cheng, 2021). The first system is the industrial one, which seeks to become a technologically advanced system, leader in innovation, that synergistically integrates finance and industry. The second seeks to unify the opening and competition of the Chinese market, based on the improvement in transparency, in the setting of prices and equality in market access.

An income distribution based on efficiency and equity is the third system, which should promote the redistribution of income based on fiscal policy to mitigate the gap between the rural and urban population. In line with the above, the fourth system seeks to coordinate urban-rural development by further expanding the Beijing-Tianjin-Hebei regional development. The fifth system seeks an economic development that is friendly to the planet, from the promotion of ecological production and consumption. Building an open, diversified, balanced, safe and efficient system is the sixth system for modernization. For Cheng (2021), the increase in factor costs and global tensions threaten the current openness system, making necessary a technological upgrading, the design of new forms of trade and influence on the environment agenda to find solutions to global problems.

Among the various China strategic goals are: the implementation of a development focused on social welfare and the improvement of the productive system together with military-civil coordination. It is, however, the goal of leading economic globalization that is the most relevant, due to its repercussion on balance of power and mitigate the threat posed by the West to this role. For Cheng (2021) the current socioeconomic indicators tells us that China is already in a quasi-centric position, assuming a role of intermediary and promoter of cooperation relations in three regional circles: Asia-Pacific, North America-Europe and Latina America -Africa. The objective is to rise to a position of world leadership with the financing and investment of infrastructure projects for the interconnectivity and economic development of countries such as the Belt and Road, the Asian Infrastructure Investment Bank and the New Development Bank of the BRICS.

# V. Conclusion: global hegemony and capitalism stability.U.S. as a low supplier of global order

George Modelski (1987) distinguishes four phases in the global power cycle, which occur regularly in the history of capitalism. The relevant variable is the supply/demand of order or global stability. We will review his approach with Figure 1 support. Phase 1 corresponds to the gestation of the political conflict that can later take the form of global warfare. In it, the demand for order is high, but availability is low due to disoriented and disorderly conditions worldwide.



In Phase 2 the imbalance is resolved through a systematic decision and a major test of strength (the global war) that involves raising the supply of order to a high level. Such order is the product of the recently established global leadership. However, the high priority of order may deteriorates depending on the achievement of the antithetical objective such as experimentation, development and even speculation. Phase 3, de-legitimation, results from this, since the demand or preference for order declines. The low demand for order induces a decline in its supply and the system reaches a de-concentration situation. In this phase, both, the demand and supply for order, reach the lowest point.

Using the approach of Modelski (1987), we will analyze the case of the USA. It should be noted that although the USA is the global leader, it does not currently exercise its hegemony or provide order in the same way as it did in the Golden Age. After 1970, as part of the passage to de-legitimation, unable to act alone, it has to coordinate with the other capitalist powers that formed the G-7 (see Dicken, 2015, chapter 6). This new status has been interpreted by some authors as equivalent to multipolarity, with Germany and Japan being two poles that have equated their industrial power with that of the United States. However, this is not the case, these two powers have a subordinate position in the new technological paradigm and are nations without an army or base for US military.

With that exception, everything indicates that US leadership is between Phase 3 entering Phase 4. The relevant issue is not that the challenger, whoever is it, wants to take the place of the leader, taking the lead in a supposed technological race, as is commonly claim, but rather that the leader is not able to provide the order required by the global system. Let us remember that the demand for order is low in Phase 3 and Phase 4 because world conditions relegate that priority, due to the conditions created specifically by global stagnation. In turn, the supply of order is low, above all because the leader this time is going through a process of social disarticulation produced by the inability to advance in the restructuring of its economy and to reverse the deterioration of the living conditions of broad sections of the population, as we saw previously.

The de-concentration of USA global power is expressed in the inability to strategically conduct the relationship with the rising power, the PRC, but also in several critical issues, such as the fight against cyber-crime and the absence of digital standards, as well as the global regulation of Big Tech. That inability increases instability in the world. The current confrontation process differs from previous experiences in several crucial respects, in which the challenger had achieved technological and military (essentially naval) capacity to challenge the leading power. In our days, the challenger (China) has not achieved technological equalization with the leader (USA), but the latter has taken the actions already discussed, putting the global system at risk of a fracture.

As has been stated, the USA is a fractured nation: that of technological dynamism and great prosperity and the other of marginalization, exclusion and survival. This fracture led to the formation of a power bloc that feeds and reinforces that fracture (Chesnais, 2016), dismantling the meritocratic principles that had presided over the first configuration of the digital economy until before the 1990s.

330

Faced with the growing social deterioration in a context of low world growth, the strategic response remained in the hands of USA plutocracy (Giridharadas, 2019; Philippon, 2019). Although the various factions that constitute it don't have the same sign, since the so-called corporate America opposes the marginalization of China (Mitchell, 2020), the initiative seems to have been won by the ultra-nationalist and protectionist affiliation group, which provided the political platform to the presidency of Donald Trump.

The rebellion of the ultranationalist sectors in the USA is not against Chinese companies, but against that systemic capitalism change. His offensive based on reactionary critics of globalization, doesn't pursue a single objective. The argument of reversing or stopping the advance of globalization obscures another purpose: to divert or manipulate the social crisis that afflicts most of the American population. This take us back to the role of China in a new world, that we discuss in the previous section.

The outcome of this monumental conflict is not only the responsibility of the elite where is supposed crucial decisions are made, but it is a matter for all humanity, since the future of the world is at stake. If in the past the establishment of a new world power meant the death of millions of human beings, but today the scenario should be different. The interconnectivity-world is so high that the possibility of extending the power of a single power vanishes. The great current challenge rest on the pacific coexistence of these two superpowers, overcoming the convulsions that we are witnessing.

#### Notes

1. Researcher, even the unconventional ones, when analyzing GVCs, although they recognize the scope of China's influence, disregard those two great impacts of its role at global level. Two of the best-known books on globalization and GVCs (Dicken, 2015; Milberg and Winkler, 2013) do not committed any chapter to discuss this relationship, thereby limiting the scope of their vision of the global process and favoring an ambiguous interpretation of its main implications.

2. Ernst (2010) defines the global factory as a stage in China's global projection based on the assembly and manufacture of a range of basic industries, which as a system experienced diminishing returns towards the end of the 1990s. In this chapter we define the global factory in a broader sense, based on MGI. It is the revolution in the manufacturing system supported by organizational innovations of the first order, such as speed production, based on platforms. Certainly, a more advanced process takes place in what Ernst calls diversification, to refer to goods and services with higher added value, but it must be understood as a derivation of the global factory. 3. Additionally, China is the second direct investor and the second recipient of FDI. It depends on foreign technology and its technology import contracts come from three countries, the USA being the first (31%), then Japan (21%) and Germany (10%). Therefore, in intellectual property it paid 29 billion in favor (McKinsey Global Institute, 2019, p. 3).

4. Without prior accumulation of knowledge that must be done before taking part in the GVC, the supplier company of a developing country will be trapped indefinitely in subaltern activities. In his early writings, Gereffi (1995) made an over-optimistic approach, implicitly dismissing the accumulation of prior knowledge.

5. The basic requirement for positioning in the GVC is the massive flow of FDI, which was achieved by combining the lure of cheap labor and access to the domestic market, that Cheng (2021) calls potential Chinese comparative advantages. The objective wasn't to turn the SEZ assembly companies into export engines, but to serve as a bridgehead to ensure the extension of the global production chain to the southern coast of China. The local-national companies that played the active role come mostly from adjacent clusters, which in this sense represent a second generation of businesses.

6. An American author, hostile to Chinese industrialism and an advocate of decoupling policies, was forced to acknowledge the scope of the transformation outlined above, noting the following: "China is achieving incremental progress by benefiting from its strong capacity in manufacturing, the accumulation and diffusion of tacit knowledge, and the opportunities provided by such a large market [...] Foreign governments and multinational businesses likewise need to decide how to strategically respond to China's approach. They could take a firm stand in opposition, try to influence China's approach at the margins, or go along with the strategy as best they can. In any case, if they are noy careful, they could end up under the heavy foot of a fat tech dragon" (Kennedy, 2017, p. VI).

7. What follows come is from this source unless another author is quoted.

8. "Design methodology is the sequence of steps by which the design process approaches the goal while maintaining viability with respect to the constraints" (Ernst, 2010, p. 47).

9. "Modular design is one in which the methodology on which the parameters and tasks are based constitute interdependent units between units (modules) and independent throughout them" (Ernst, 2010, p. 47).

10. It naturally constitutes an application of the Marx principle formulated in the Critique to the Gotha Program: "from each according to his ability, to each according to his needs" (Marx, 1972, p. 17). The first corresponds to the first stage, the socialist one; the second to communism.

#### References

Amsden, A. 1988, Asia's Next Giant. South Korea and Late Industrialization, Oxford, London.

Arora, A., Fosfuri, A. and Gamberdella, A. 2021, *Market for Technology. The Economics of Innovation and Corporate Strategy*, The MIT Press, Cambridge.

Baldwin, C. y Clark, K. 1997, "Managing in an Age of Modularity", in *Harvard Business Review*, Vol. 75, Issue 5, pp. 84-93. https://hbsp.harvard.edu/product/97502-PDF-ENG

Bell, D. 2015, *The China Model: Political Meritocracy and the Limits of Democracy*. Princeton University Press, New Jersey.

Bettelheim, C. 1974, *Cultural Revolution and Industrial Organization in China*, Monthly Review Press, New York.

Boustany, C. Jr. & Friedberg, A. 2019, "Answering China's Economic Power, Enhancing Prosperity", in *The National Bureau of Asian Research*, Issue. 76, February.

Breznitz, D. & Murphree, M 2011, Run of The Red Queen. Government, Innovation, Globalization and Economic Growth, Yale University Press, New Haven.

Bruno, M. 1993, Crisis, Stabilization and Economic Reform, Clarendon Press, Oxford.

Bryant, N. 2021, When America Stopped Being Great: A History of the Present. Bloomsbury Continuum, New York.

Cheng 2021, The Original Intention of Reform, Left Word Books, India.

Chesnais, F. 2016, Finance Capital Today. Corporation and Banks in the Lasting Global Slump, Brill Press, Leiden Boston.

Dicken, P. 2015, *Global Shift. Mapping the Changing Contours of the World Economy* 7<sup>a</sup> Edition, The Guilford Press, New York.

Ernst, D, and O'Connor, D. 1990, Technology and Global Competition: The Challenge for Newly Industrializing Economies, OCDE, Paris.

Ernst, D. 2010, "Innovación Offshoring en Asia: causas de fondo de su ascenso e implicaciones de política", in Pozas, Rivera y Dabat coords., *Redes globales de producción, rentas económicas y estrategias de desarrollo: la situación de América Latina*, El Colegio de México, Mexico.

Ferguson, N. 2012, *The Great Degeneration. How Institutional Decay and Economies Dies*, Penguin Books, New York.

Freeland, C. 2012, *Plutocrats. The Rise of the New Global Super-Rich and the Fall of Everyone Else*, The Penguin Press, New York.

Freeland, C. 2010, Sale of the Century: Russia's Wild Ride from Communism to capitalism, Crow Business Press, New York.

Gelles, D. 2021, "C.E.O. Pay Remains Stratospheric, Even at Companies Battered by Pandemic", *The New York Times*, April 24.

Giridharadas, A. 2019, *Winners take all: The elite charade of changing the world*, Alfred A. Knopf, New York.

Hacker, J. 2019, The great risk shift: The new economic insecurity and the decline of the American dream, Oxford University Press, New York.

Howell, M. 2020, *Capital Wars: The Rise of Global Liquidity*, Palgrave Macmillan, New York.

Jones, H. 2010, *Chinamerica. Why the future of America is China*, McGraw Hill, New York.

Kagarlitsky, B. 1990, Farewell Perestroika: A Soviet Chronicle, Verso Press, London. Kennedy, A. y Lim, D. 2018, "The Innovation Imperative: Technology and the US-China Rivalry in the twenty-first century", in International Affairs, Vol. 94, Issue 3, pp. 553-572.

Kennedy, S. 2017, *The Fat Tech Dragon: Benchmarking China's Innovation Drive*, Center for Strategic and International Studies, Washington DC.

Klein, N. 2007, *The Shock Doctrine: The Rise of Disaster Capitalism*, Metropolitan Books, New York.

Lee, K. 2018, *AI Superpowers: China, Silicon Valley and the New World Order*, Houghton Mifflin Harcourt Publishing, Boston.

Lim, D. 2019, "The US, China and Technology War", in *Global Asia*, Vol. 14, Issue 1, pp. 8-13.

Lin, P. 1975, La revolución cultural china, Editorial Grijalbo, Mexico.

Lipton, D. and Sachs, J. 1992, "Prospects for Russia's Economic Reform", in *Brookings Papers on Economic Activity*, pp. 213-283.

McKinsey Global Institute 2019a, "China and the world: inside the dynamics of a changing", July.https://www.mckinsey.com/featured-insights/china/ china-and-the-world-inside-the-dynamics-of-a-changing-relationship

McKinsey Global Institute 2019b, "A new look at the declining labor share of income in the United States", May. https://www.mckinsey.com/featured-insights/employment-and-growth/a-new-look-at-the-declining-labor-share-of-income-in-the-united-states

McKinsey Global Institute 2015, "The China effect on global innovation", October. https://sgc.frankfurt-school.de/wp-content/uploads/2021/07/06242021\_ China-innovation-session\_IFN\_FINAL.pdf

Meagher, M. 2020, Competition is Killing Us: How Big Business is Harming Our Society and Planet, Penguin Random House, United Kingdom.

Milberg, W. y Winkler, D. 2013, *Outsourcing Economics Global Value Chains in Capitalist Development*, Cambridge University Press, New York.

Mitchell, T. 2020, "US Companies Defy Trump's Threats About decoupling from China", *Financial Times*, September 9.

Modelski, G. 1987, Long Cycles in World Politics, Palgrave Macmillan, London. Moretti, E. 2018, *The New Geography of Jobs*, Mariner Books, Boston.

Naugthon, B. 2007, *The Chinese Economy: Transition and Growth*, The MIT Press, Cambridge MA.

Naugthon, B. 1995, *Growing Out of the Plan. Chinese Economic reform, 1978-1993*, Cambridge University Press, Cambridge MA.

Nolan, P 1995, China's Rise, Russia's Fall: Politics, Economic and Planning in the Transition from Stalinism, Macmillan Press, Basingstoke.

Nove, A. 1992, *An Economic History of the USSR*, 1917-1991, Penguin Books, London. Perkins, D. 1994, "Completing China's Move to the Market", in *Journal of Economic Perspective*, Vol. 8., Issue. 2, pp. 23-46.

Philippon, T. 2019, *The Great Reversal, How America Gave Up on Free Market*, The Belknap Press of Harvard University Press, Cambridge.

Piketty, T. 2014, *El capital en el siglo XXI*, Fondo de Cultura Económica, Mexico. Popov, V. 2007, "Shock Therapy Versus Gradualism Reconsidered: Lesson from Transition Economies after 15 years of reforms", in *Centre for Economic and Financial Research at New Economic School*, Issue 49.

Preobrazhenski, E. 1971, *La Nueva Economía*, 2d edition, Ediciones Era, Mexico. Sacks, J. 1992, "Privatization in Russia: Some Lesson from Eastern Europe", in *The American Economic Review*, Vol. 82, Issue 2, pp. 43-48.

Shafik, M. 2021, "What We Owe Each Other: A New Social Contract for a Better Society", in *Finance & Development*, FMI, pp. 53-55.

Sharma, R. 2021, "The billionaire boom: how the super-rich soaked up Covid cash", *Financial Times*, May13.

Shirk, S. 1993, *The Political Logic of Economic Reform in China*, University of California Press, Berkeley.

Snow, E. 1974, China. La larga revolución cultural, Editorial Alianza, Madrid.

Stiglitz, J. 2000. Whither reform? Ten years of the transition, in *Annual Bank Conference on Development Economic*, World Bank Mundial, Washington DC.

UNCTAD 2021. Data Center unctadSTAT. https://unctadstat.unctad.org/EN/ Weber, I. 2021, *How China Escape Shock Therapy. The Market Reform Debate*, Routledge, London.

Williamson, J. 1990, "What Washington Mean by Policy Reform", in *Latin American Adjustment: How Much has happened*. https://www.piie.com/commentary/speeches-papers/what-washington-means-policy-reform

Popov, V. 2000, "Shock Therapy Versus Gradualism. The End of the Debate", in *Comparative Economics Studies*, Vol. 42, Issue. 1, pp. 1-57.

World Bank 1996, *World Development Report 1996: From Plan to Market*, Oxford University Press, New York.

Yueh, L. 2010, The Economy of China, Edward Elgar, Cheltenham.