BICENTENARY OF KARL MARX



THE ENDURING RELEVANCE OF MARXISM IN SOCIAL MOVEMENTS

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Institute of Political Economy Quezon City 2018

Bicentenary of Karl Marx:

The Enduring Relevance of Marx's Teachings in Social Movements

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The Institute of Political Economy (IPE) undertakes research and other support activities for policy formulation and the development of alternatives for political economy issues in the Philippines and the world. In particular, the IPE shall:

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- Conduct fora, public discussions and similar activities on major issues and significant socioeconomic development; and
- Conduct training on policy studies work.

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PREFACE

ast year was the 150th year since the publication of the first volume of Capital, one of Marx's major works to critique bourgeois political economy. This year, we are commemorating 200 years since his birth. Indeed, in contrast with the various strands of bourgeois political economy of his time, Karl Marx was able to elaborate on the essential features of capitalist production.

He came up with foundational insights on how capital accumulation is based on the exploitation of labour and the capitalists' expropriation of their surplus-value. He went further, describing how the drive for continuous accumulation and the resulting impoverishment of the workers make the system prone to ever-worsening crises.

He also stressed the importance of taking action. Aside from studying concrete revolutionary situations of his time, Marx (and Engels) were members of the Communist League, and eventually the first International Workingmen's Association. He also stressed that the world's workers lead the struggle to break the chains of this exploitative economic system.

Karl Marx studied the prevailing economic system in Britain and parts of Europe during the dominance of "free market capitalism," with huge monopolies still in their infancy. But, we believe that his work laid foundations even towards understanding today's monopoly capitalism.

Movements face a decaying monopoly capitalism still dominated by the financial oligarchy in imperialist countries, with their allies in the governments of developing countries such as Duterte in the Philippines. Even in the time of "neoliberal" globalisation, we continue to face a world economy founded on economic exploitation – despite changes such as technological leaps in the productive forces, the restructuring of world production, and the widespread liberalisation of developing countries' economies.

It is in this spirit of commemorating Marx's living legacies in movements and in our analysis of world capitalism that the Institute of Political Economy (IPE), the International League of Peoples' Struggle (ILPS) and the Kilusang Mayo Uno (KMU – May First Labour Movement) held a study conference that generated this book. We are publishing this towards better understanding the contemporary ways of monopoly capitalism and imperialism, towards setting our sights clearer in defeating imperialism and all reaction in the Philippines and eventually the world.

Antonio Tujan, Jr.

Executive Editor, Institute of Political Economy

Introduction

THE CONTINUING RELEVANCE OF MARX'S TEACHINGS IN SOCIAL MOVEMENTS AND THEIR STRUGGLES

Antonio Tujan, Jr.
Executive Editor, Institute of Political Economy

arx is indispensible for understanding imperialism in its contemporary form. Generally understood, imperialism involves the domination of one political community or state by another. We know that Lenin famously made use of the term to describe a historical phase in the development of capitalism in which monopolistic control of primary goods, technology, finance and markets enabled increasing dominance of ruling classes in imperialist countries and the expansion of this dominance beyond national borders. But the analysis provided by Lenin was an extension of that undertaken by Marx in the first phase of capitalism, which was characterized by competition between individual entrepreneurs and small firms. In this context, Marx first uncovered capital's 'laws of motion' that remain crucial for understanding capitalism in a global context.

Organization of the production process

The global economy, since the 1990s, has become organized to result in an increased concentration of consumption in the North and of production in the South. As we are all well aware, the latter is characterized by low wages, insecurity, health violations, exacerbated gender inequality and environmental degradation.

The historical conditions for this reorganization of production include the collapse of the Soviet Union, the opening of Chinese economy to capitalism, and the turn of Northern firms towards outsourcing on a massive scale.

In the wake of these events, the global South has become the primary locale of a globalized working class. One measure of this is that Southern share of global exports in manufactures has increased from just above 15% in the early 1970s to between 60% and 70% in the first decade of the 21st century (UNCTAD 2015; cited in Smith 2015). In some sense, this represents an industrialization of the South. But it is clear that this is far from anything that could be termed national industrialization. It represents an exploitative integration of Southern workers into the production networks of imperialism.

The role of technology

Marx viewed the drive toward technological innovation as one distinguishing characteristic of capitalism as an economic system. But, with the incentives organized around profit-seeking and the avoidance of dominance by business competitors, the selection of technology is bound to benefit capital rather than empowering organized labor.

The technological revolution that developed In the late quarter of the previous 20th century and accelerated this century combines two key parts – the development of electronics and semiconductors which provide the machines and digital technology or commonly referred to as information and communications technology (ICT). By simplification – computers and the internet. We should not forget that the machines represented by supercomputers, the downstream industrial and commercial computers and the consumer electronics products are the material basis by which digital technology revolutionized all aspects of production and superstructure – all aspects of social life.

Consistent with this view, advances in ICT and transportation have enabled capitalists to target a greater number of production tasks for cost-cutting by means of outsourcing. The rush of private investors in imperialist countries to finance infrastructure - e.g., by means of public-private partnerships (PPPs) and blended finance – in the South is intricately connected with this. Infrastructure is prioritized where it benefits the establishment of global value chains over which TNCs exert monopoly power and can impose harsher and more exploitative labor regimes. The extent of the exploitation in global value chains is evident in the differential wage rates between Northern and Southern workers of similar skill levels at different points in production.

Related to the wave of outsourcing, advances in ICT have also enabled dramatic increases in profit rates by facilitating the faster circulation of titles to financial assets (and has eliminated much of the labor formerly involved in this process). As far as business services, financial systems are the most important element of global value chains as each stage of production and distribution must be financed. 'The decisions of financiers, therefore, exert an extraordinarily powerful influence, not only on lubricating production circuits, but also in actually shaping them through their evaluative decisions on what (and where) to invest in order to gain the highest (and sometimes quickest return)' (Dicken 2015, p. 56).

The power of finance over Southern productive economies can be seen in the speculation-induced fluctuations in the prices of primary commodities. Upward price movements - e.g., prices soared during the 2000-2012 period – increase the cost of worker subsistence, while downward movements threaten producing industries - the commodities boom ended in 2012 and prices have starkly declined since then (Akyuz 2017, p. 2).

^{1.} Monopoly power is manifested both in upward pressure on the prices of inputs TNCs sell (e.g., genetically modified seeds) and downward pressure on the prices of commodities they buy from contract producers (e.g., Cavendish bananas). This, in turn, suppresses worker wages.

The role of info management to cut inventory

We have seen that technological advances have been selected to reduce the necessary labor time for elements of production, and have facilitated the management from the imperialist core of harsh labor regimes across oceans in low-wage countries. Early in the implementation of these changes, the great geographical distances between customers and supplier proved a major challenge. The inventory systems that were established to cope with this were expensive and complex. These are sometimes described as 'just-in-time' systems, a name indicating the risks they sought to manage. This involved the delivery of stock in large and infrequent batches, and the need for large amounts of warehousing space. ICT and transportation have enabled the move to 'just-in-time' systems characterized by small and frequent deliveries, smaller warehousing needs, and faster inventory turnover. Significantly this now further provides justification for flexibilization of labor since contract work can be arranged also along "just-in-time" production planning.

As an example, Zara, a fashion subsidiary of the Spanish company Inditex, has an inventory turnover rate of five (5) times per year. Hurley and Miller (2005) identify three ways in which this impacts employment. The first is that it has required the relocation of production, which undermines job security – relocation is necessary because suppliers must be close to fabric and trim supply. 'Secondly, "just-in-time" ordering inevitably begets "just-in-time" production' meaning that factories can be informed about changes in quantity on the day of delivery and leads to overtime to be demanded of the workers – what Marx called an absolute increase of surplus value extraction. The last is the increased tendency of sourcing companies to switch suppliers from one season to the next, a practice that has contributed to the increasing reliance on casual and contractual work.

Labor contracting/flexibilization

So as a result in part of 'just-in-time' systems of inventory management, there has been a shift to labor flexibilization, which is the um-

brella term for the elements discussed above: overtime, extended layoffs, casualization and contractualization. This allows suppliers to vary their levels of employment in a way that transfers operation risks to workers – drops in orders and rainy days are typical excuses for laying off workers, while, again, increased orders mean overtime without warning. In the Philippines, the labor contracting industry has ballooned. Workers at the Coca-Cola plant in Laguna, for example, have reported that the company hires through twenty-three different contracting agencies in addition to its own internal contracting agency, which is known as the Red System.

Arms-length labor contracting also allows TNCs to distance themselves from labor and human rights violations that become controversial in the public sphere. The history of Coca-Cola, particularly its operations in Colombia, again offers an example. The trade union SINALTRAINAL, which represents Coca-Cola workers in Colombia, filed a case in the US District Court against the company in 2001 alleging that the corporation's local bottling company assisted paramilitaries in the murder of several union members. The court dismissed the case, and Coca-Cola claimed ignorance of the abuses, citing that an external contractor employed the workers. Yet there were subsequent lawsuits and continued reports of the harassment, abuse and murder of Coca-Cola workers in Colombia attempting to assert their right to free association. Between the years of 1990 and 2012, nine workers were murdered, while union leaders faced constant threats (Gill 2006; Killer Coke 2013).

More flexbilization: control of labor migration

An insufficiently discussed aspect of labor flexibilization relates to labor migration, which can be considered from multiple levels. We will briefly consider factors contributing to the demand, supply and restriction of migrant labor.

On the one hand, the demand for migrant labor stems from the same impetus behind labor outsourcing. Firms seek to get ahead of the competition by offering goods at lower prices and in this way capture

a greater share of the market for these goods. Furthermore, all firms seek to cope with what classical political economists, Adam Smith and David Ricardo, identified as the tendency for the rate of profit to fall - it was Marx who first offered a 'law' explaining the phenomenon. In order to stave off this tendency, cost-cutting measures (such as those mentioned above in the discussion of the role of technology in globalized production) are eagerly pursued. We have seen that the expenditures on capital goods and labor can be lowered by relocating to regions in the South where production can be done less capital intensively and where regimes of low wages are maintained. But wage expenses can also be lowered by hiring migrant workers at higher rates of exploitation. This explains the demand for migrant labor as well as practices such as below-minimum wages, controlled living conditions, strict work contracts to prevent permanent employment, as well as, contrastingly, the maintenance of illegal employment status to cultivate a climate of fear and to make these workers easier to control.

We are all familiar with the reasons for the supply of migrant labor from Southern countries. The Philippines is something of a pioneer in the state brokerage and marketing of the export of workers feeding off a supply of labor driven by the failure of that state to offer self-determination in development for its people. Neoliberalism around the world has since the 1970s privatized public resources, dismantled welfare programs, and attacked the living conditions of the common people. The resulting impoverishment and unemployment have made migration appear more attractive as an alternative.

Despite the increase of demand and supply brought on by pressures internal to the capitalist system, imperialism requires the restriction of labor migration. Capital is free to roam the globe in search of the highest rates of profit, but unskilled workers are prevented from moving across borders to seek higher wages. As a result of harsher immigration policing, international migration has slowed since the 1970s, though the picture is complicated. Highly skilled workers, for example, have greater ease moving across borders. But the restriction of unskilled labor contributes to low wages in regions by limiting their competition with higher paid workers of similar skill level in impe-

rialist countries, and by preserving large reserve armies of the unemployed in oppressed countries.

Invigorated enthusiasm to study Marx amid today's challenges

Smith (2015) points that one way to see the imperialist organization of the economy is with reference to the level of complexity of the traded commodities. Competition exists between capitalists trading in similar commodities - competition which, along with the tendential fall of the rate of profit – drives capitalists to seek higher rates of profit through capital export and arms-length outsourcing, both of which take advantage of low wage rates. Nations with comparably complex goods can be understood to be competitors. US, Western Europe and Japan – the imperialist triad – top the list of countries trading in goods at the highest level of complexity (Abdon et al. 2010).

Of course, the clearest signs of inter-imperialist rivalry are the expressed intersections between economic interests and military intervention. Jose Maria Sison points out that the US has by this point squandered at least US\$5.6 trillion in wars of aggression which are widely recognized, among other things, to be motivated by seeking privileged access to natural resources.

Related to this, Zenaida Soriano's paper speaks about land struggles and the peasant movement. Land grabbing has been a means by which imperialists have excluded local populations from their national resources, and established the conditions for their production networks - a sign that what Marx termed 'primitive accumulation' is an ongoing feature of capitalism.

Eni Lestari, meanwhile, further elaborates upon our discussion of the way in which imperialist competition contributes to problems faced by migrants. Marie Boti reminds us of women's place in the class struggle to change the foundations of society and that class consciousness is key in avoiding the pitfalls of compartmentalizing specific oppression and emphasizing differences, rather than the common class interest.

Pio Verzola takes us further into our exploration of the role of technology in shaping the contemporary global economy; he also discusses the political responses to these changes, and the prospects for socialist technology and economics. Following this, Len Cooper leads us into thinking about concrete steps to realizing such prospects through strengthening the workers' movement.

This book, a product of the Institute of Political Economy's Marx@200 Study Conference, should propel us forward in applying the thought of Marx to the challenges we face today as a movement. Jose Maria Sison reminds us that 'Marxism is not a fixed set of dogmas. It has been extended, developed and applied in correspondence to the emergence and growth of free competition capitalism to monopoly capitalism'. Our work of extension, development and application is ongoing. This book should encourage us to approach it with renewed enthusiasm.

The revolutionary currents of thought and practice that have guided social movements from the Paris Commune, to the Russian Revolution, to the Chinese Revolution, and to ongoing armed and unarmed revolutions and acts of resistance today - let these continue to grow!

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STUDY MARX TO RESIST IMPERIALISM

Message of Solidarity to the Marx@200 Study Conference of the Institute of Political Economy, June 13, 2018

By Prof. Jose Maria Sison Chairperson, International League of Peoples' Struggle

n behalf of the International League of Peoples' Struggle, I convey warmest greetings of solidarity to the Institute of Political Economy and to all the participants in this study conference to celebrate the 200th birth anniversary of Karl Marx. I congratulate the institute for its success in organizing this conference.

The theme of the conference correctly relates the teachings of Marx to the current conditions of the world capitalist system and to the urgent need for revolutionary change by the proletariat and the people: "Continuing relevance of Marx's teachings in social movements and their struggles".

The study of Marxism is indispensable for understanding the current status and crisis of global capitalism. It was Marx who first uncovered systematically the laws of motion of capitalism, how the capitalist class extracts surplus value from the working class in the process of social production, over-accumulates capital and shrinks the wage fund and thereby creates the crisis of overproduction relative to the purchasing power of the working people.

Credit may be resorted to bail out the corporations in distress and buoy up the economy but it merely accelerates the concentration and accumulation of capital in the hands of the few. In the name of free trade, the drive for colonial expansion is propelled. Free competition capitalism leads to monopoly capitalism. Old style colonialism leads to modern imperialism.

Marxism is not a fixed set of dogmas. It has been extended, developed and applied in correspondence to the emergence and growth of free competition capitalism to monopoly capitalism Thus, Leninism is Marxism in the era of modern imperialism and proletarian revolution. Further, Marxism-Leninism has been further extended, developed and enriched by Maoism in the face of modern revisionism and the danger of capitalist restoration in socialist countries.

The topics lined up for discussion in your study conference cover two necessary points: first, the correct analysis of global capitalism that lays the ground for changing the world and second, the process of changing the world to what is fundamentally better for humankind, socialism, through the anti-imperialist and democratic struggle of the proletariat and the oppressed peoples.

You start on the correct track by analyzing the role of investment liberalization and its impact on labor and production. The limits of abusing monopoly finance capital in order to override the recurrent and worsening crisis of overproduction and continue profit-making and the accumulation of superprofits are exposed by the excessive and unrepayable debts at the level of households, corporations and central banks. Since the financial meltdown of 2008, the economic and financial experts of the capitalist powers have been unable to overcome the prolonged stagnation and depression of the global economy.

The unbridled abuse of investment liberalization has been in combination with labor flexibilization and global subcontracting. The rapid overaccumulation of capital in the hands of the monopoly bourgeoisie has been at the expense of the working class which has been subjected to deprivation of job security, to wage freezes and to violation of trade union and other democratic rights. But the blowback is the now prolonged stagnation and depression of the global economy.

The monopoly capitalists have been able to manipulate to their advantage the reserve army of labor on a global scale and in nearly every country in the world. Moreover, they have used global subcontracting and outsourcing as well as compelling labor migration from the underdeveloped and impoverished countries to attain more intensified forms of exploitation by migrant workers who are deprived of democratic rights and are easier subjected to the worst forms of exploitation.

The adoption of higher technology, from the electro-mechanical processes of the industrial revolution to the current digital age of speedier systems of production and distribution, has enabled the unprecedented acceleration of the concentration and accumulation of monopoly capital, the higher organic composition of capital and diminution of wage income. It has led to the now severe economic and financial crisis and the prolonged depression of the global capitalist economy. As Marx pointed out a long a time ago, capitalism creates the conditions and diggers for its own burial.

Monopoly capitalism profits much from the cheap labor of the migrant workers. And the migrants who suffer from separation from their homelands and families are subjected to further suffering by being deprived of democratic rights and fair wages and being subjected to xenophobic, racist and fascist movements. But they are driven to seek international solidarity with their fellow migrant workers and the workers in the host countries.

The monopoly bourgeoisie makes all attempts at mass distraction to conceal or obscure the root causes of capitalist exploitation, socioeconomic crisis, political crisis, social discontent, disorder and wars of aggression, with outright reactionary propaganda as well as opportunism, reformism and revisionism.

But the global workers' movement perseveres in struggle against the evils of monopoly capitalism under the leadership of Marxist-Leninist

parties, which uphold the red banner of proletarian internationalism and inspire the proletarian-socialist revolution in the world and in particular countries.

Contrary to its claims of developing the whole world under imperialist neoliberal globalization, monopoly capitalism has generated grossly uneven development, further enriching a few imperialist countries and impoverishing the majority of countries supplying cheap labor and cheap raw materials. In many underdeveloped countries of the world, where there are still significant vestiges of feudalism persisting, the working class and its revolutionary party strive to lead and generate the revolutionary peasant movement and the struggle for land reform

They build the basic alliance of the working class and peasantry and ensure the mass mobilization of the overwhelming majority of the people, win over the urban petty bourgeoisie and the middle bourgeoisie, and take advantage of the splits among the reactionary classes in order to isolate and destroy the power of the enemy, which is the most reactionary force and most servile to foreign monopoly capitalism.

There are huge sectors of society, such as the women and youth who if aroused, organized and mobilized like the exploited basic classes to take the revolutionary road can accelerate the advance of the revolutionary movement and the downfall of any regime or even the entire ruling system.

The broad masses of the people have suffered for so long from the US-instigated neoliberal policy of unbridled greed since the onset of the 1980s and from the neoconservative policy of stepping up war production and continuous wars of aggression since the full restoration of capitalism in the revisionist-ruled countries and the collapse of the Soviet Union.

But such policies have also been far more costly than profitable to the US and have accelerated its strategic decline despite the passing phase of the US having become the sole superpower in a unipolar world from the end of the bipolar world of the Cold War in 1991 upon the collapse of the Soviet Union.

Since the beginning of the 21st century, it has become obvious that the US has undermined its own global dominance by having financialized its economy and conceded consumer manufacturing to China and squandering at least USD 5.6 trillion in its wars of aggression. Now, there is conspicuously a multipolar world in which the US increasingly finds itself unable to decide global issues unilaterally and dictate on other capitalist powers.

The rise of new imperialist powers like China and Russia is aggravating the crisis of global capitalism. The inter-imperialist contradictions sharpen as the US tries to stop its strategic decline from the peak or primacy of the sole superpower and the new imperialist powers strive to obtain dominance. The intensification of the inter-imperialist contradictions is bringing about worse conditions of economic and financial crisis, oppression and exploitation and wars of aggression.

The broad masses of the people can never accept these conditions which inflict on them terrible and intolerable suffering. We are in a period of transition in which inter-imperialist contradictions and the revolutionary and counterrevolutionary currents are escalating. The economic crises and wars of global capitalism are pressing on the revolutionary proletariat and broad masses of the people to fight back.

We are therefore moving in the direction of the global resurgence of the revolutionary forces of the people and the advance of the movements for national liberation, democracy and socialism against imperialism, revisionism and reaction. We are living in an increasingly turbulent world of crises, social disorder and wars.

But the proletariat and people in the traditional and new imperialist countries and in the less developed and underdeveloped countries are resisting imperialism and reaction through various forms of social movements and revolutionary struggles. We are once more on the eve of great social upheavals and great revolutionary victories on an unprecedented scale in the people's struggle for greater freedom, democracy and socialism against imperialism and all reaction.

Long live the memory and legacy of Karl Marx!

Long Marxism-Leninism-Maoism!

Carry forward the Philippine revolution!

Contribute to the advance of the world proletarian¬ revolution!

Long live proletarian internationalism!

THE ROLE OF LABOUR MIGRATION AND DIASPORA IN MONOPOLY CAPITALISM

Eni Lestari International Migrants Alliance¹

hen Karl Marx was born 200 years ago, the migration of people was very different from the current migration regime. During his time of birth, many nation-states have yet to exist, like Indonesia, where the Dutch was the colonial power. Despite almost two centuries having passed since inking his works, they remain valid and relevant to migrants and to the rest of the working peoples of the world.

Marx pointed out that crisis, the boom-bust cycle, the business cycle as apologists would like to call it, is inherent in the capitalist system. I was already in Hong Kong working as a domestic worker when the 1998 Hong Kong Crisis happened, and ten years after, in 2008, another bust happened, which until now the economies of developed countries have not yet recovered from, much more so the developing countries where most of the migrants and refugees are coming from.

I come from a poor, but rich in resources country, called Indonesia. I came to Hong Kong in the late 1990's to work, as wages in Indonesia is very low, where current minimum wage in Central Java in 2018 is around USD 78 per month, while in the Philippines, minimum wage in the Autonomous Region of Muslim Mindanao is around USD 121

^{1.} Eni Lestari is the Chairperson of the International Migrants Alliance (IMA). IMA is a grassroots network representing migrants and refugees across Africa, Asia and the Pacific, the Middle East, Latin America and North America. While it is not a Marxist organization, individuals in the network study the writings of Marx.

per month. In Hong Kong, there are now around 360,000 domestic workers, of which there are around 160,000 Indonesians. The minimum wage for a foreign domestic worker is around USD 562 per month or more than seven times that of the minimum wage in Central Java. A very enticing opportunity to grab, as employment agencies would advertise to both urban and rural areas in my country, and this is the dominant narrative in most sending countries, including the Philippines.

A quick glance and all seems well for any migrant to move from Indonesia to Hong Kong. But unknown to the migrant, the minimum wage in Hong Kong is around USD 4.4 per hour or around USD 915 a month for an 8-hour per day, 26 days a month work. What foreign domestic workers in Hong Kong receive is only 61% of what local workers in Hong Kong are entitled to under Hong Kong laws.

Hong Kong pegs its poverty line at USD 1912 a month for a family of three (3), while it is common to spend around USD 1275 a month just for rent for a family of three due to Hong Kong being the most expensive city in the world when it comes to housing. This leaves a family of three around USD 637 for other expenses, which clearly is not enough, thus prompting at least two members (father and mother) to work. But who will take care of domestic work, including childcare, if both parents are working? A family can hire a local domestic worker and pay USD 915 a month, but this amount is already equivalent to around 48% of the poverty line. The family is in a conundrum: for both parents to work mean more income, but entails also more expenses and end up worst either way.

Instead of raising the incomes of workers and families in Hong Kong, the Hong Kong Government enacted laws allowing a Hong Kong resident with at least USD 1912 (HKD 15000) monthly income to hire a foreign domestic worker and pay them only 61% of what a local domestic worker is entitled to receive. The local domestic worker, despite receiving crumbs, faces difficulty in demanding for higher wages, since there are thousands of migrants lining up everyday to come to Hong Kong to work for less.

This is what the neoliberal regime wants of migrants: provide cheap and docile foreign labor for the local labor market, skilled foreign workers who will take up jobs that pay less, adding downward pressure on existing wage levels. The central thesis of Marx in the Wages, Price and Profit is that workers, through their labor power, creates new value, which in turn is divided between the worker, who receives monies called wages, and the capitalist, who take what remains and is called profit. The higher the wages, the lower the profit, and vice versa.

But the picture is not yet complete. Foreign domestic workers are required to sleep in the homes of their employers, resulting in no clear working hours in a day. It is common knowledge that domestic workers often work 12-16 hours a day, with sleep as the only rest. In the Middle East, domestic workers do not have mandatory weekly holiday and spend almost all their days inside the homes of employers, making the situation even worse. Living conditions are also miserable, with occasions of domestic workers forced to sleep on the kitchen floor, or sleeping quarters above toilet bowls. Local domestic workers are not required to reside within the homes of their employers. In Hong Kong, where living on the poverty line allows you to hire a foreign domestic worker, one can easily use their imagination as to the living conditions of both the family and the foreign domestic worker.

Marx stressed that in the class struggle, between the proletariat and the bourgeoisie, whoever is more organized among the contending parties, will prevail. For us migrants, we need to be constantly aware of the myriad of schemes the ruling elite in the receiving countries employ to exploit and divide our ranks.

During times of boom, the capitalists and the State will allow the hiring of migrants to undermine the rates of local wages and continue depressing wages. This allows the capitalists to earn more profits due to the low wages.

During bust, capitalists continue to hire migrants and refugees, since many of them are desperate to take any job. In a study done by the Asia Pacific Mission for Migrants, the small and medium enterprises

in receiving countries need migrants, who can work in precarious employment.

The intensification of crisis conditions magnifies class antagonism, and to hide capitalism as the culprit of the crisis, the ruling elite with their propaganda machine, will begin to hype the job theft supposedly being done by foreign workers, inflating xenophobia. Migrants and refugees are the scapegoat, both by the State and the capitalists, in order to deflect the anger of the working people who are suffering under capitalism.

The analysis of Marx on capitalism was further developed by Vladimir Lenin, the great leader of the Russian Revolution, which last year marked its 100th year as it culminated in November 1917. Lenin developed his theory on imperialism, wherein he applied the analysis of Marx on capitalism and crisis to the Russian and global context during his time.

Marx described that competition of firms under capitalism will eventually lead to monopoly, wherein a few firms will dominate. Lenin further developed this into his theory of monopoly capitalism, wherein firms go beyond their national markets and into the global markets and dominate the whole world. But since markets are finite, the expansion of global firms is also limited and will eventually lead to fierce competition between the global firms supported by their States. At first, competition happens through global trade agreements, but when crisis strikes, capitalists and States result to war to resolve the crisis.

This was the cause of the First World War and the succeeding World War and the many wars to follow. The capitalists and the State have launched various wars in many corners of the world, to re-divide and maintain hegemony over resources and markets. Such wars of aggression have destroyed the lives and displaced millions across the globe, all in the name of resources and market. This has created a steady stream of refugees running away from war and destruction.

Syria is just the recent example of this war of aggression, where the United States want to effect regime change in order to better control

Syrian resources. Thousands of bombs have been dropped by forces of the North Atlantic Treaty Organization (NATO) and forced millions to become refugees. These same refugees are now being blamed by the European Union and the United States as the source of instability and crisis.

Inscribed upon the tomb of Karl Marx are the words, "The philosophers have only interpreted the world, in various ways. The point, however, is to change it." For many years, various groups have tried to describe, analyze and ponder on the phenomena of modern migration. Voluminous documents have been written about us migrants and refugees, and even international platforms like the United Nations have started discussing our plight, organizing meetings and conferences to talk about us. But for many years we were excluded from all of this, until we said to ourselves that it is time for us migrants and refugees to take the lead in the struggle and we will be the one speaking for ourselves. This was the birth of the International Migrants Alliance (IMA).

It was 10 years ago when more than a hundred migrant and refugee organizations came together and declared that we will no longer sit idly by and wait for better things to come. We proudly shouted our battle cry: "For a long time, others spoke on our behalf. Now we speak for ourselves." And we did not end with mere speaking for ourselves. We organized more migrants and refugees, we undertook campaigns and struggles, we engaged in many platforms, we were changing our conditions and we are part of the global peoples' movement trying to change our societies towards a democratic, equitable, peaceful and prosperous world.

Indeed, the point is to change it. We, the migrants and the working peoples, promise to change the world.

LAND STRUGGLES AND THE PEASANT MOVEMENT

Zenaida Soriano National Federation of Peasant Women (Amihan)¹

he Philippine peasant movement is national democratic, anti-imperialist and anti-fascist. It aims for a society free of imperialist dictate, and a political and economic system that is democratic, or beneficial to and serving the majority of the population, that is, the peasantry.

To be a movement, an analysis of society is integral. The peasant movement asserts that Philippine society is semi-feudal, not capitalist nor "pre-capitalist, backward agricultural" nor classical feudal. Semi-feudal in short is about serving as a social base for imperialism, or that imperialism will not persist if landlessness in the countryside has been wiped out through agrarian revolution. This analysis utilized Marx's materialist conception of history and modes of production, determining the relationship between classes, the exploiter and the exploited, and what must be done by the latter to advance to the next stage.

Philippine society is a victim of arrested development, by serial colonialism and semi-colonialism. Spanish colonialism was based on feudalism and parasitically fed on the surplus product created by the Filipino peasants. Subsequently, American colonialism plundered surplus product, as well as surplus value, and made the society a market for their expanding imperialist economy, as well as transforming the country as their base for geo-political interests in Asia. From these historical epochs, peasant struggles or unrests have exploded until these

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acquired a national character during the Philippine Revolution led by the *Katipunan* movement, whose main aim was freedom from foreign dominance and taking back the friar lands which were grabbed from poor Filipino peasants. The *Katipunan*-led revolution was itself a manifestation that "men and women make history," a giant leap from the ideological domination employed by Spanish colonialism.

Since then at present, US imperialism feeds on local feudalism. It transformed the country as a vast farmtown for sugar, coconut, banana, pineapple and other crops that serve as raw materials for their expanding economy. At present, top on its menu is oil palm, which is usually used in manufactured goods, thus explaining the pandemic expansion of its plantations in the country.

As imperialism and semi-feudalism generate poverty and misery for the peasants, these are innately countered by the Filipino peasants' resistance and defiance, thus, the emergence of the Philippine peasant movement. From the peasant initiative in 1922, the *Kalipunan Pambansa ng mga Magbubukid sa Pilipinas* (KPMP), to its merger with the *Katipunan ng mga Anakpawis* (KAP) to form the 1930 Communist Party of the Philippines, to the active participation in the Hukbalahap anti-Japanese resistance and continuation of peasant war by the *Hukbong Mapagpalaya ng Bayan*, until majorly composing the New People's Army since 1969, who is waging the agrarian revolution until the present, and being a major force in ousting the Marcos dictatorship via People Power, and finally as brought about by the development of legal-democratic regional peasant movements, the Kilusang Magbubukid ng Pilipinas (KMP) was established in July 1985.

Peasant women have actively participated in the land struggle since the Spanish colonial period. Some peasant women took the lead of the peasant uprising and took up arms against the colonizers. However, particular women's issues and rights were only given specific attention during the 1970s when the national democratic movement acknowledged the equal roles of men and women in political matters. The establishment of *Malayang Kilusan ng Bagong Kababaihan* (MAKIBAKA) in 1970 is significant as it laid down the need to address women's issues in the context of national and class exploitation and paved the

way for the formation of the National Federation of Peasant Women (Amihan) in 1986.

Basing on the concrete condition of society where majority of the population are peasants, the national peasant movement led by KMP and its regional chapters are demanding genuine agrarian reform in the country. It is basically free distribution of lands to poor peasants, and genuine rural development as bridge to nationalist industrialization. Its major campaign is to defend the peasants' rights to land and oppose fascist onslaught.

As a semi-feudal society, the mass Filipino peasants are victims of feudal land rent and other semi-feudal forms of exploitation. On the exploitative side are the big landlords, compradors and foreign monopoly; while on the exploited side, the peasants are joined by the workers, youth, women and other oppressed classes. As peasants by class trait are empiricists, their education with Marxist analysis by the peasant movement provided them a clear picture of how they are being exploited or even conned by the landlord. The very point that they end up in debt, while landlords did nothing, traders of inputs and owners of farm equipments raking profits, even oil monopolies hiking up prices of petroleum prices, and rice cartels depressing farmgate prices, all this is essentially plunder of the surplus product made by the peasants. The peasant movement campaigns nationwide to reduce feudal land rent being paid by tenants and increase the share of farmworkers who toil on the land. This is an enduring class contradiction across the country.

Worse or more backward than this, is the outright displacement from the lands, as imperialism treats land as real estate, as commodity where giant profits are to be extracted from. What we frequently see as agrarian dispute is class contradiction itself. Aside from the fight over big haciendas such as Hacienda Luisita, at present there is an ongoing dispute in Sanggalang Estate in Nueva Ecija and Lupang Ramos in Cavite, and in Mindanao against big plantation owners such as Lapanday, Tadeco and others. The resolution over these issues, which are history in the making, shall depend on the balance of power, on whether the united strength and mass actions of the peasant-worker alliance would be enough to counteract the political and economic influence of the imperialist-comprador-landlord collusion.

The peasant movement itself is a product of determining the correctness of the national democratic struggle. During the period of errors in the 1980s, the deviation that the peasants already need not land, but capital, or the farmworkers in increasing population embraced wage increase as their primary demand, thus, the arena for struggles are at the urban centers, to generate waves of spontaneous mass actions from other sectors, the sheer detachment of the peasant from their land as a result of retaliation of the landlord colluding with state forces, instigated the weakening of the peasant movement. But since the rectification movement in the early 1990s, "the question whether objective truth can be attributed to human thinking is not a question of theory but is a practical question," or "where do correct ideas come from? They come from social practice alone; the struggle for production, the class struggle and scientific experiment," has been resolved that the Filipino peasants demand land and they are actually in the forefront of struggling for this vital objective. Its manifestation today is the nationwide bungkalan or land cultivation campaign, being launched by KMP's regional and provincial chapters, gaining expanded partaking from the poor peasants in the countryside. This is declared by the peasant movement, as fruitful application of dialectical materialism to establish the correctness of a theory or idea.

As part of the national democratic movement, the peasant movement does not act as a class for itself. It has joined the workers movement in demanding political and economic reforms, thus, successfully gained the vigorous involvement of other basic sectors and middle class. The anti-imperialist gains of the workers' movement are gains of the peasant movement. As contribution, the workers' movement deploys organizers and educators of Marxist studies. The organized and scientific launching of mass campaigns and actions, imparted by the workers' movement has been instrumental in the victories of farm strikes, camp-outs, *bungkalan* and other peasant actions. In some advanced bungkalan areas, peasant organizations were able to execute the "work-point system" on communal farms.

The peasant movement also emancipated the localized perspective of the peasant that used to be limited to the barrio and municipalities. Through waves of mass actions and sustained campaigns, the poor peasants were involved in numerous *lakbayan* (caravan) protests within the province, region and the national center, thus, educating them that they are not alone in their struggle. At present, the Filipino peasants are even aware that imperialism is the number one enemy of the world peasant and producing population, thus, forging international solidarity with other peasant movements especially in Asia, against landlessness and plunder of foreign monopoly. Together, the international peasant movement has launched joint campaigns including the intensifying land grabbing of China through its Belt and Road Initiative (BRI) in Sri Lanka, Pakistan and Cambodia and other foreign investors; against oil palm plantation expansion particularly in Indonesia, Malaysia, Thailand and the Philippines; against agro-chemical TNCs; free trade and investment agreements; and the increasing militarism particularly in the Philippines, Indonesia and Cambodia. Land occupation and cultivation campaigns similar to bungkalan are also conducted in Thailand, Indonesia, Pakistan, Bangladesh and India. Through this international solidarity, peasant movements in the world affirmed that imperialism is the common enemy and that strengthening the unity of the exploited class is necessary for its defeat.

As being armed with political consciousness, with historical and dialectical materialism, that the masses are the makers of history, that the "rights to land shall only be possible through united strength and mass actions," that the bungkalan campaigns across the country make the landlord, compradors and the reactionary state "tremble," the primacy of fundamental call for land, class contradiction will not make the landlord nor any sitting president benevolent, the prerequisite of the worker-peasant alliance and unity with the peoples of the world, the Philippine peasant movement is determined to fight for a national democratic society, to a society embracing "from each according to his ability, to each according to his work," towards one of "from each according to his ability, to each according to his needs."

MARXISM AND THE WOMAN QUESTION IN THE 21ST CENTURY

Marie Boti International Women's Alliance¹

he International Women's Alliance (IWA) brings together women from the grassroots of women's and people's struggles in four continents.

We are rural women in Indonesia fighting against land grabbing and environmental destruction; we are women in the Philippines, fighting against martial law and tyranny, extrajudicial killings and forced displacement of our communities; we are indigenous women in Ecuador fighting large scale mining projects that threaten our mother the earth; we are women in Mexico and Guatemala fighting gender-based violence that has reached femicidal proportions, migrant women in Europe fighting for the right to be treated with dignity; we are toiling women in Canada and the US, fighting against austerity policies and growing racism and discrimination by the state, First Nations women fighting the remnants of colonialism and genocide; and we are women in Palestine and Kurdistan, taking up arms to defend our land and our people's right to exist.

What unites us? The understanding that capitalism at its most advanced stage of imperialism today is at the root of our oppression and exploitation. This system is in decay, at its most exploitative and oppressive, and can only maintain itself through war and destruction.

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While we in IWA are of different nationalities, ethnic origins, different cultures, different languages, different races, sexual orientation, different abilities, we are united in the conviction that we must tackle the roots of our oppression and exploitation, the economic and political system we live in, to achieve liberation.

Capitalism - imperialism has enabled a tiny minority of people to accumulate unspeakable wealth from industrial labor, the labor of the majority of working people of the planet, treated as a cheap commodity.

It allows a handful of powerful nations and corporations, to rule over weaker nations and peoples, as they resort to unspoken atrocities to maintain their power - waging wars of destruction and aggression, feeding on the military industry and weapons that could destroy the entire planet, pushing for growth and unbridled production of commodities that we do not need or cannot afford to buy. They generate profit from famine and from forced migration of populations. Their system thrives on discrimination of gender and race, and on differences between the level of development in various regions of the world and between peoples and nations.

It was Marx who revealed how this system operates – his explanation of capital, of private property that allows a minority of owners to control the resources of the planet; it turns human labor into a cheap commodity that produces obscene profits for the owners, and chains the workers to the owners for their livelihood.

Marx brought the understanding of the concept of surplus value - that our wages represent only what is necessary for us to live and reproduce, but not the value of all we produce - that the fruits of unpaid labor goes to the owners, the owning class, the bourgeoisie.

He also pointed out that women become a global reserve army of cheap labor, which we have seen vividly with the feminization of migration. Marx brought us the understanding that women's unpaid work in the domestic sphere is part of that class exploitation; his materialist analysis is the first to reveal that the unpaid labor of women in the home, their work of reproducing life, has value, and indeed value that is appropriated by the owning class in society. The value of housework has been a key element to women's liberation thought. It inspired many feminists to develop their own theories about the source of women's oppression.

As a result, some feminists have concluded that our priority must be to target patriarchy, the system of gender oppression, to resolve the contradiction between men and women, as the key to revolutionary change (because it was the earliest form of oppression between humans.) Other progressive forces believe that tackling racial oppression and discrimination is the key to transforming society.

Indeed, we have taken to mentioning not only these, but all forms of oppression in our demands at rallies and protests, fearful of forgetting a particular group, and to emphasizing the privilege of those who do not suffer from these oppressions if they are forgotten or unmentioned. (White privilege, male privilege, hetero privilege, etc.)

This practice is prevalent in the feminist movement today, looking at how all of the different forms of oppression intersect as key to waging the struggle for emancipation of all. There is no doubt about the powerful potential of movements like the women's Me Too against sexual violence, or the Black Lives Matter movement against the violence of systemic racism in the US. But they generally lack a crucial aspect: class.

We have witnessed a phenomenon some call ABC - Anything but Class in many of our people's movements in the west in particular. It is justified by the changing nature of work, of production, the fact that many are self-employed, work in precarious jobs, in the informal and service sector, and it has led to theorizing about the death of the proletariat, and to a de-politicized workplace. This serves the powerful very well.

Marx points us in a different direction.

What does Marxism bring to our struggle for liberation?

- 1) Historical materialism that we are material beings, we exist, therefore we think, we enter into relations with each other to feed and protect ourselves, called the social relations of production; that in the history of society women were not always subordinate to men, and that this systemic subordination arose with private property.
- 2) Dialectics that each thing, that each process in life and in the world contains its opposite, that a bad thing can be turned into a good thing, that women's oppression can become a powerful force for change in the world, as can the other forms of discrimination.
- 3) That at each time in history, in each context, there is a principal contradiction in the world, in our society, that is key to unravelling all of the others. That the class contradiction is the key to transforming the foundations of society.

A woman's place is in the struggle... in the fundamental class struggle to topple the old order and change the foundations of society. Marx traces the history of society as one of class struggle, from the early human hunters and gatherers, to slave society, to feudalism and now capitalism. He also foresaw the advent of socialism, where the toiling majority rule, and classes disappear.

This struggle cannot be successful without the participation of half of humanity, the women. For women to participate, to feel their vested interest in the struggle, the revolutionary movement must also oppose their oppression, and the oppression of other sectors and groups who have suffered discrimination; and make it fuel the revolutionary class struggle of the toiling masses.

But without class consciousness, without the class struggle, we are destined to fritter away our energy, compartmentalizing our specific oppression and emphasizing the differences between us, rather than the common class interest that binds us.

And when the class struggle erupts, as it inevitably does, it can shake society. We have just witnessed the strikes that paralyzed France in the last few months: three nationwide work stoppages by public sector workers opposed the government plan to cut 120,000 jobs by 2022; how hundreds of flights were cancelled when air traffic controllers walked off the job, and how the country was paralyzed with the railway workers' strike.

In the US, it is the women, women of color and migrants who have waged massive strikes in the hospitals, hotels and food service industries involving thousands; the teachers' strikes waged mainly by notoriously underpaid women have spread like wildfire from West Virginia to Oklahoma and Kentucky, states that are Republican Party strongholds, where Trump won a majority of votes, as they protest cuts in pay and benefits and overcrowded classrooms.

These are powerful movements that send shockwaves through the halls of power.

Women are and must be involved in these struggles, as they sharpen class consciousness and are schools of struggle against other forms of oppression, too.

The Philippine Women's Movement as an example

The Philippines is fortunate to have a vibrant women's movement that sees the struggle of women for liberation as being one with that of the liberation struggle of the people. The path to revolution and determining who is your enemy and who are your friends are clearer. Thanks to a strong revolutionary and national democratic movement that have clear sighted political leadership.

All toiling women must be part of the women's movement, not only women's organizations.

IWA was established in 2010 to contribute to building a powerful women's movement that will contribute to making these fundamental changes in society. The largest and most advanced women's organizations in our ranks come from the global south, particularly the Philippines.

The Philippine revolutionary women's movement has actively called for the widest participation of women in the various tasks of the national democratic revolution. Various people's movements have responded to this call by recruiting more women into their fold, paying attention to building specific organizations of women, raising women-specific issues, and addressing problems related to housework and child care. At the helm of various people's and class-based movements are women who fight not only for the resolution of their class demands but also for their demands as women.

It is clear that the revolutionary women's movement in the Philippines is an integral part of the national democratic movement. This is because the interests of women are one with the interests of the entire nation for liberation.

Recent history has shown that the status of women in society can change virtually overnight through social revolution.

For example, the October Revolution, inspired by Marx's teachings, changed the history of the world. Women played an active role from organizing strikes to joining the red army. The victory of the Soviets was also a women's victory.

Immediately after the new Bolshevik government took power in 1917 among its first legislations was to guarantee the right of women to directly participate in social and political activity in their workplaces, eliminating all systemic obstacles which had entrenched their subordination and subservience to men. New legislation on maternity and

health insurance was adopted in December 1917. A public insurance fund was created, with no deductions from workers' wages, benefitting both women workers and male workers' wives.

After the victory of the revolution, Alexandra Kollontai entered the new Soviet government as commissar for social services. This position enabled her to participate in passing new laws that recognized women as citizens, with equal rights to men. (This placed the Soviet Union among the first countries to grant women the right to vote.)

Six weeks after the revolution, civil marriage was introduced and a year later the new civil code established an equal legal status between husband and wife. The distinction between legitimate and illegitimate children was eliminated. Divorce procedures were made much easier, based on the concept of mutual agreement allowing immediate divorce, and access to a court when mutual agreement was not forthcoming; maintenance allowance would be guaranteed in cases of unemployment or economic difficulties.

In January 1918 the department for the 'protection of maternity and youth' was officially established. It granted assistance to pregnant women workers and mothers that had recently given birth. It included a period of 16 weeks leave from work, before and after giving birth - something that is still not provided in the US, the richest country in the world, where only 12 weeks of maternity leave is granted, a century later!

The special commissions established during the 1917 Congress were closely involved in the adoption and rapid implementation of all these reforms. The commission's main task was to promote the acceptance of the reforms by the population at large, which had to overcome old residual prejudices from the past period of capitalist oppression.

Socialism is still on the agenda, and Marx's basic teachings are more relevant today than ever.

We are in the era of imperialism, where capitalism is decaying, torn by its own contradictions. As women, we have every interest in helping to tear it down; as women workers and part of the toiling people of the world, capitalism and imperialism cannot be smashed without us, without our participation in the struggles in each of our countries; we hold up half the sky, as Mao Zedong said, and it is up to us to play our role in smashing the old order and building a new world and a bright future for our children.

The future of humanity requires it!

Marxism in the Digital Era

Impacts of Electronic-Digital Technology on Early-21st-Century Economies

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he world is now well inside the digital era, where so-called information/communication technologies (ICT, or more properly, electronic-digital technologies or EDT) are used in our daily lives. Bourgeois theorists now talk routinely about the Third Industrial Revolution, with EDT as its cutting edge. Some even claim that we are entering a Fourth Industrial Revolution. The implication is that the world is fast evolving, or has already evolved, into a "new" and "digital" or "information-based" (even "post-industrial") economy together with new economic values, new social relations, even new worldviews.

Most Marxists also see the reality of this new technical revolution. Nevertheless, taking the standpoint of the working class as Marx did, we need to ask further: What exactly is the character and socio-historic significance of this revolution? How much of the "new digital economy" is really "new"? Or is it just the same old and ailing capitalist society still getting older despite high-tech prosthetics? Are the technological and social changes we see unfolding before us for the benefit of the toiling masses of the world, or only for the few monopoly capitalist exploiters and oppressors?

^{1.} The reason I add "so-called" to the term "information/communication technologies" is that the preferred term is not ICT but "electronic-digital technologies" (EDT), which is technically more accurate. Strictly speaking, ICT include millennia-old implements such as pen and paper. I give credit to Tony Tujan for this conceptually important semantic correction. He promptly pointed out the difference between ICT and EDT, and suggested the change of term to avoid confusion. Hence in this paper EDT is used consistently. A more technical description of EDT is provided in the section on the Third Industrial Revolution (Electronic-Digital Era).

Many related questions need to be asked and answered, to help orient the working-class and people's movements in their tasks and directions as the 21st century unfolds. In this paper we hope to at least pose the questions more rigorously as continuing research topics using the framework of Marxist theory, and to offer some provisional answers.

1. Marxism on Technology and Production

Our first task is to locate the concept of "technology" within the Marxist theoretical framework.

Marx and Engels defined a society's forces of production (F/P) as: (a) people who exert work to produce goods; (b) the raw materials they work on; and (c) the instruments that they work with. The last two are also called the means of production (M/P).² Relations of production (R/P), on the other hand, are how people relate to each other in the course of production, in terms of (a) ownership of the M/P, (b) the various roles in the production process, and (c) how the resulting products are appropriated and distributed.

Marxist theory asserts that a society's level of F/P determines its R/P, as a whole, but the R/P also impart feedback that can hasten or dampen the further development of the F/P. In any specific society, F/P and R/P are tightly and dialectically intertwined — driving an inherent contradiction that defines the material base of that society. This material base, in turn, is dialectically intertwined with the socio-political, cultural-ideological superstructure of that society. These two dynamics are at the core of how Marxists analyze the workings of various societies as history unfolds.³

The term "technology" thus approximates the Marxist "means of production" (M/P), although we must remind ourselves that technology encompasses the folk and scientific know-how and skills that peo-

^{2.} In a larger sense, the people engaged in production include their families and communities, because production always has a social character. In addition, the means of production ultimately involve nature's original raw materials and nature's forces that could be harnessed in production.

^{3.} The famous quote from Marx is included as Appendix 1 of this paper.

ple wield in the production process.⁴ In this broader but still Marxist sense, we should view technology as also encompassing the whole range of facilities, tools and other devices that society utilizes to interact with itself and the world at large, in most other realms of their social practice — and not just those used for production proper. Cell phones, microwave ovens, cars, or the entire US ballistic missile defense system — all these represent technologies. We emphasize this point because electronic-digital technologies in the past 50-plus years have impacted not just production but nearly all realms of social life.

We likewise take this occasion to recall that the Marxist usage of "production" is always in the context of a much broader view of how society reproduces itself. Production is always tightly interconnected with consumption and labor, including reproduction of labor power. In that interconnection, distribution and exchange play important roles. While Marx did focus on production as the starting point of his investigations into political economy (cf. Capital vol. 1), he also explored its live connections with the rest of daily social life under capitalism.⁵ These questions of Marxist political economy are gaining importance today, because the scope of capitalist production has tremendously expanded in the past century. Thus our critique of the capitalist system as it now exists must also expand accordingly.

2. Review of the 1st Industrial Revolution

Marx and Engels grew up at the height of the original Industrial Revolution (1750s-1860s), and worked out their principal theories during the long 50-year cusp that linked the First and Second Industrial Revolutions. In our effort to understand the patterns of technological and social changes in today's electronic-digital era, it is instructive to see

^{4.} As Marx remarked in Grundrisse, Ch.1: "... no production is possible without an instrument of production, even if this instrument is simply the hand. It is not possible without past, accumulated labour, even if this labour is only the skill acquired by repeated practice and concentrated in the hand of a savage."

^{5.} For recent studies that reviewed Marx's writings on what are now called the "service sector" and "social reproduction" (aka domestic work), see for example Fiona Tregenna's "Services" in Marxian Economic Thought (2009), Ricardo Antunes' "The New Service Proletariat" in Monthly Review (April 2018 issue), and Ian Gough's "Marx's theory of productive and unproductive labour" in New Left Review (1972). Other sources are also listed at the end of this paper.

how Marx and Engels analyzed similar patterns in their own historical period. The transition from feudalism to capitalism, and capitalism itself, are very long periods divided into stages; each stage carries its own associated changes in productive forces and relations.

For example, we find incipient capitalism growing in the womb of feudalism, first in the form of the "putting-out" system or "domestic industry". This mode of production became prevalent in England in the 15th century. "The merchant-employer (almost a capitalist) bought raw material ... and 'put it out' to the smaller craftsmen..." who typically worked at home with their own hand implements, say, a spinning wheel or weaving loom. The "capitalist" paid each worker for her labor and became the owner of the finished cloth, which he sold at a profit. (Eaton 1963, 54)

The crucial next step occurred when a successful master craftsman or merchant brought the artisans under one roof and made them work together in close cooperation, in exchange for wages. These became the first fully capitalist workshops. "Cooperation brings with it a great increase of productive power, overhead costs (per unit of output) are reduced, efficiency is stimulated by the contact of workers with one another in production, joint efforts make possible achievements of an altogether different kind from those within the power of individual workers. x x x This new productive power... is the fruit of the new technical developments and consequently new social conditions... " (Eaton 1963, 55)

This revolutionary step led straight to fully capitalist "manufacturing," which became dominant from the mid-16th to the end-18th century. In each "manufactory," a big number of workers still used hand implements; but these were now adapted to highly specialized functions according to the complex division of labor under one roof. As Marx said, "The collective laborer, formed by the combination of a number of detail laborers, is the machinery [mechanism] specially characteristic of the manufacturing period." During this same period, in general, machines played only a secondary part. (Capital, Vol. 1, Ch. 14)

Marx then analyzed the first Industrial Revolution, describing its capitalist essence as large-scale mechanized production, which used powered machinery operated by wage workers to mass-produce commodities. He explained: "In manufacture, the revolution in the mode of production begins with the labour-power; in modern industry it begins with the instruments of labour." He devoted an entire chapter of Capital on machinery and modern industry (Vol. 1, Ch. 15), with in-depth analysis into specific technological innovations and their impact on specific industries.

Dissecting the soul of industrial machinery as thoroughly as that of the commodity at the very beginning of Capital, Marx further said: "All fully developed machinery consists of three essentially different parts, the motor mechanism, the transmitting mechanism, and finally the tool or working machine." He then proceeded to trace how great strides and synergies were achieved in all three mechanisms throughout the Industrial Revolution. For example, Marx described in minute detail how steam engines came to run "an organized system of machines, ... a mechanical monster whose body fills whole factories" employing more and more cheap labor.

He and Engels lived long enough to assess the impact of other technical innovations in the later phase of the Industrial Revolution, when heavy industry grew particularly in iron and steel (e.g., mass production of cheap steel through the Bessemer process and Siemens furnace) and capital-goods industries (e.g., more powerful and precise machine tools).6 These, combined with the rapid expansion of railways and steamship transport, resulted in the overall maturation of free-competition capitalism and the intensification of its fundamental contradictions.

We take particular note of railways, which served as a strategic engine of growth in the 19th century because they evened up the level of industrial development across vast territories of Europe and North America. They sped up the pace of production everywhere, enhanced

^{6.} In fact, as Regina Roth says in her paper "Marx on technical change in the critical edition", which analysed thousands of unpublished pages in the Marx-Engels Gesamtaushgabe (MEGA) and Marx-Engels Collected Works (MECW) collections, Marx had a sustained interest in the history of mechanical invention and the role that machines play in the economic system of capitalism.

labor force mobility, and spurred commerce and consumerism. This strategic role of railways multiplied further when combined with telegraph lines. The railway-telegraph network did much to consolidate the capitalist home market and the capitalist state.

The railway-telegraph combination is perfectly illustrative of a technology cluster which, in a conventional sense, "does not produce" anything but serves entire economies as an ubiquitous nationwide infrastructure. This would be repeated twice more in the history of capitalism: the road systems and radio/telephone networks in the 2nd Industrial Revolution, and the Internet and other computer networks at the core of an increasingly integrated telecommunications and automated transport system in the 3rd Industrial Revolution.

The first Industrial Revolution (1st IR) did not of course do away with agriculture, which provided food for the fast growing urban worker population. The change was that capitalist farms became more commercialized, consolidated and concentrated, and consequently grew bigger. The ability to mobilize bigger capital led to mechanization, fertilizer inputs, and infrastructure improvements on the land. In a manner of saying, agriculture was transformed into "just another industry." This example, of one type of production transforming another, would be seen again in the current digital era.

The introduction of more efficient machines and processes in the workplace increased the "organic composition of capital," as Marxists call the proportion of the value of the means of production ("constant capital") over the sum total of wages ("variable capital"). Increasing composition of capital drove down costs per unit of output and drove up rates of exploitation for the capitalist, even as it also tended to drive down rates of profit.

Meanwhile, workers turned into the machine's appendages. Superficially or hypothetically, mechanization could lighten the workers' physical burden for a while. But the bigger and longer-term impact was that more workers were thrown out of jobs. Also, speed-ups and work intensification became easier to implement. The same would be true for the next waves of industrial mechanization and automation.

The 1st IR fueled boom-and-bust cycles, intense competition and much restructuring among capitalists: some enterprises grew bigger, many others went bankrupt. Thus also grew a "reserve army of labor" the often unemployed — which further pushed down wages. Increasingly, the big machines required more unskilled labor (including more women and children) and fewer skilled ones. These further pushed up rates of capitalist exploitation and economic inequalities.

The modern corporation emerged as the collective capitalist, through which industrial capital was able to dominate over commerce and banking, and further hasten capital accumulation. The business corporation (with monopoly characteristics emerging later) would serve as the basic economic unit of the capitalist system in the next 150 years. Corporations supported science and technological innovations, and expanded their foreign markets. These technical and market measures appeared to solve the periodic crises, but in fact only provided temporary relief while gathering fuel for more crises in the long term.

3. On the 2nd Industrial Revolution

The Second Industrial Revolution⁷ (1880s-1920s) proceeded alongside the rise of modern imperialism or monopoly capitalism most clearly seen in Western Europe, US-Canada, Russia, and Japan. In this period, Marx's and Engels' fundamental critique of capitalism were even more clearly validated. But it was Lenin who synthesized all the new developments into his theory of imperialism.

Starting in the 1890s and advancing further from the steam engine, industry gradually developed two sources of power that were more efficient and more scalable: the internal-combustion engine (which ran on petro-fuels) and electric power (which could be generated by steam, flowing water, or internal-combustion engines). In close com-

^{7.} The author is aware that, given the many essential continuities between the 1st and 2nd Industrial Revolutions, we could view the latter as basically just a continuation or just one distinct phase of the former. Admittedly, this point needs further study. However, the term "Second Industrial Revolution" has already gained some traction in social science and popular literature. Also, great advances in productive forces during the 1880-1930 period did help catalyze and shape monopoly capitalism. Thus I adopt the term in this paper for lack of a more convenient one.

bination, electrification and automotive power produced more industrial cities and industrial belts. They also provided factories a better capacity to drive conveyor belts, lifts, and other materials-handling facilities. Together with Taylor's time-and-motion studies, these innovations enabled capitalist firms to widely adopt the moving assembly line as the dominant form of mass production and factory organization.⁸

The earlier technologies of the 1st IR expanded into more industries. The synergies among iron-steel and coal industries, railways and telegraph networks continued. The machine tools industry greatly expanded due to easier access to electric power combined with the mass production of interchangeable (standardized and precisely crafted) parts. Meanwhile, 2nd IR technologies (internal-combustion engine, electric devices and machinery) and new processes developed by science labs created totally new industries for civilian and military use. They churned out new producer and consumer goods and services, such as cars, planes and fast ships, new alloys and synthetics, and electrical appliances for home and business use.

Fueled by imperialist greed and ambition, war and militarism became powerful drivers for scientific breakthroughs and technological innovation during the 2nd IR, especially in engineering, pharmaceuticals and petrochemicals, electronics, and nuclear physics. These would find expanded industrial, agricultural, service-based and consumer applications in the 1930s, during World War II, and in the early Cold War period, on top of their original military application which of course led to bloated war industries.

In *Monopoly Capital* (1966, 217-219) Baran and Sweezy focused particularly on three "epoch-making" innovations: steam engines of the 1st IR, railways that spanned both 1st and 2nd IR's, and automobiles that dominated the 2nd IR. "The automobile industry," the authors said, "has had a much greater indirect than direct effect on

^{8.} In the moving assembly line system, complex processes were divided into discrete and simple steps laid out in sequence along a line under one roof. Workers operating tools in stationary work stations would install components step by step down the line, keeping pace with the mechanized conveyor belt. This system was iconized by Ford's assembly line of its famous Model-T cars. Thus Taylorism is often equated with Fordism.

the demand for capital. The process of suburbanization, with all its attendant residential, commercial, and highway construction, has all along been propelled by the automobile." They also argued that the petroleum industry "is in large part a creation of the automobile", in addition to some upstream industries (e.g., rubber and glass) and downstream service industries.

The 1st IR had revolutionized mass communications through the railway-telegraph system, the steam-powered rotary printing press, mass marketing, lithography, and photography. The 2nd IR, in turn, greatly expanded the public demand for mass communications through such media as radio, films, telephone and high-speed teleprinter systems, and cheaply printed books and periodicals. We shall see this trend grow further and turn qualitatively into an all-encompassing and irresistible tide in the current digital era.

Related to these is the rise and astronomical growth of the advertising industry. As statistics cited by Baran and Sweezy (1966, 122) show, US ad expenditures in 1890 amounted to \$360 million, or seven times more than in 1867. By 1929, the figure had multiplied nearly 10 times to \$3.426 billion. This trend would further intensify in the 3rd Industrial Revolution. (Further down we will return to this trend, in the context of interpenetration of production and the sales effort under mature monopoly capitalism.)

Corporations grew rapidly in size and concentration as the natural result of boom-and-bust cycles and competition, vertical and horizontal mergers and acquisitions. Their rapid growth was also spurred by new laws granting separate legal personality and more incentives to corporate business entities. Capitalist monopolies and cartels began to dominate entire industries, while huge finance capital accumulated in the hands of powerful finance oligarchies. Monopoly capitalism tended to become state monopoly capitalism. The biggest monopolies, spreading their tentacles to other parts of the world, turned into transnational corporations (TNC).

These new modes of capitalist ownership intensified the extraction of surplus, and worsened the exploitation and oppression of workers

as well as entire peoples of colonies and semi-colonies. The social character of production became even more marked. Marxism became dominant among working-class parties, and great class struggles and anti-imperialist struggles broke out — as represented by the Great October Socialist Revolution and militant workers' movements worldwide. All these sharply pointed to the socialist revolution and its alternative strategies for achieving industrialization and social equality under proletarian rule.

4. The Third Industrial Revolution (Electronic-Digital Era)

Conditions and factors

The Third Industrial Revolution (1950s to the present) was ushered in by a complex combination of factors and conditions after World War II. While we need more in-depth studies on this, several factors and conditions clearly favored a big push towards a new industrial revolution.

- First, the post-war US financial-economic-military superiority and the long period of business boom in 1950-1973.
- Second, the military-industrial complex in imperialist countries, the Cold War, and costly military interventions as imperialist responses to national liberation struggles in the neocolonies.
- And third, the worsening cycles of global crises after 1975, and new imperialist offensives under the flags of neoliberal globalization and neoconservative militarism.

All three conditions created a multiplicity of other factors, simultaneously and successively. These factors impelled the strongest imperialist states and TNCs to invest tremendous capital, human and natural resources in strategic research and development (R&D) programs and facilities. On such basis, they fed a continuous stream of technological innovations to expand old industries and create new ones — in the hope of dampening the boom-and-bust business cycles and relieving the general crisis of imperialism.

To some degree, these factors likewise impelled socialist states (or former socialist states) to also engage in strategic R&D and compete with the major capitalist powers in high-tech fields, if only to fend off the relentless US-led imperialist military, economic, and other offensives, and to scale up their own capacity.

Basic character of the Third IR

The basic character of the 3rd IR — thus far — is the rise to dominance of high-tech industries and types of services powered by ICT, or more accurately, electronic-digital technologies. EDT enables increasingly higher degrees of automation and precision, tighter integration of operations from design to sales, greater diversity in product types, and other advantages. These ensure super-low costs and super-high profits for the monopoly capitalist groups that control the said technologies and the production chains dependent on these.

The core technology of the 3rd IR is the electronic-digital computer, or more accurately, the microprocessor ("computer chip" in street parlance) that is at the heart of computers, computer-driven systems, and other high-tech machinery. The microprocessor's power is multiplied by closely related hardware: memory devices, storage media and input/output devices for handling massive amounts of data, and communication systems for sharing such data across networks.

We consider computer languages, microprocessor instruction sets, and communication protocols, together with the resulting firmware and software, as a crucial part of EDT. Without these logic-and mathbased tools for data processing, it would be impossible for computers to do any work or to work together, and for humans to operate them.⁹

^{9.} It is important to consider both computer hardware and software (including the in-between hybrids called firmware) as interdependent tools. The strongest reason is that firmware and software are mental tools that have become "objectified", and such can already function outside the mind of individuals, be embedded in hardware, and be replicated and modified.

What makes the computer chip truly revolutionary is its capacity to mimic mental functions of the human mind, in programmable ways and at incredible speeds, and thus be able to run myriad other devices — from coffee pots and calculators to "lights-out" factories and spacecraft. It is as if bits of congealed human intelligence or tiny "brains", representing high concentrates of mental labor, could be pieced together into complex, versatile, tireless, and teachable tools, which in turn could be embedded into most kinds of machines.

The computer represents an intelligent multipurpose machinery. It is an enormously productive tool because, through a wide selection of software programs and options, it can be quickly reconfigured to do many things much more automatically, rapidly, continuously, and accurately compared to human faculties. It can thus do away with tedious manual operation or constant human attention. It can run as a stand-alone device, or drive other machines where it is embedded (industrial and construction machinery, transport vehicles, scientific instruments, office and home appliances, POS and ATM machines, etc.), and also function cooperatively with other computers through digital networks.

The 1st IR had mostly replaced the manufacturing worker's manual skills and physical strength with the tireless energy and the mechanical virtuosity of power-driven machinery. The 2nd IR expanded the power sources and functional roles of these machinery in more fields of production within and outside industry (including construction, transport, agriculture, etc.), thus further turning more types of manual labor into mere appendages of machines.

In the current case, the 3rd IR is turning more and more types of industrial, agricultural, transport, service, military, scientific, office, and home machinery into intelligent and interconnected machines. These machines require much less direct human intervention, and are replacing more and more kinds of labor (both mental and manual) that are slow, tedious, inefficient, uneven, error-prone, or hazard-prone.

This development has tremendous impacts on the organic composition of capital, on rates of exploitation, on the very structure of pro-

duction and work force, and on the resultant situation of the working class in terms of employment, wage arrangements, and workplace conditions.

Digital technologies further enhance monopoly capitalism's capacity to speed up, expand and globalize the great economic cycle of production-distribution-exchange-consumption. Computerization and the Internet are pumping up all aspects of this cycle, from research and development, to finance and trade (including the bloated sales effort and advertising industry), all the way to super-consumerism and super-waste.

Because of computers and the Internet, it is now possible for big capitalists to carve out new spheres of production, and to privatize, commodify, and mass-reproduce ever-wider types of social resources. Information-rich (cultural, educational, media, scientific) goods and services are now mass-produced in customized ways, precision target-marketed, and delivered in volume as profitable commodities. The same is true for previously marginal but now lucrative aspects of natural and human resources, such as pharming and other biotech processes, and tourism-oriented goods and services.

Foundation and phases of the Third IR

Information and communications have always been part of our social evolution as Homo sapiens. ICTs have existed for at least a million years, since primitive hominin bands learned to enhance human memory and extend human speech through symbols on media — even if these media are just hollow logs used as drums, cave paintings, notches on ivory tusks, or decorated pottery.

ICT has come a long way from Sumerian cuneiform tablets ca. 3500 BCE to modern civilization's printed books, telegraphy, telephones, and audio-visual media of the pre-digital era. In the mid-20th century, electronic-digital technologies began to take shape, subsume and reconfigure earlier ICTs, many other production technologies in fact, and thus usher in the Third Industrial Revolution.

Practical electronics for communications and instrumentation started in the 1920s (e.g., radio) and greatly diversified in the 1930s (e.g., television, radar, scientific instruments, xerography). Likewise in the first half of the 20th century, analog (i.e., non-digital) computers based on electro-mechanical devices began to be used for scientific computing. Right before and during World War II, information scientists and military intelligence started employing fully electronic, digital and programmable computers.

The crucial turning point in EDT was the invention in 1947 of the transistor as the first practical semiconductor device. From 1955 onward, transistors rapidly replaced the much bulkier and power-consuming vacuum tubes in radio and other electronic devices. Next, the invention of the semiconductor-based integrated circuit (IC) in 1958-59 and the microprocessor-type IC a few years later provided computers and electronic systems with tremendous computing power and storage capacity in increasingly mini-sized architectures.

Succeeding generations of EDT further advanced along the IC/microprocessor's many inherent advantages, e.g., smaller size, lighter weight, less power consumption, less failures, and of course the ability to execute vastly complex programs and to process immense volumes of data at lightning speeds.

Thence, EDT systems steadily replaced electro-mechanical and electronic-analog systems — at first in scientific, military and administrative fields, then in industries and services, including education and media, and eventually in households and personal devices. Thus we say that the 3rd IR began in the 1950s with EDT at the forefront.

The 3rd IR underwent three phases of EDT innovation. ¹⁰ In the first phase (1950s-60s), transistors and later ICs were used in telephone networks, radio communications, and military and civilian computers mostly for research, including defense and aerospace programs. EDT was barely used in industrial production, and digital consumer goods were almost unknown.

^{10.} See Josef Taalbi, Origins and Pathways of Innovation in the Third Industrial Revolution, 2017.

In the second phase (1970s-80s), cheap miniaturized IC's with microprocessors at the core (by now popularly known as "chips") began to be mass-produced and sold commercially. These led to their wide use in computer numeric control (CNC) systems, which automated industrial machinery and telecommunications. IC chips also powered the rapid diversification of consumer electronics, from personal computers and peripherals, to game consoles and digital watches, to microwave ovens and vehicle dashboards.

In the third and current wave (1990s-2010s), computerization continued to permeate the majority of capitalist economies and a growing number of households. Alongside this is the rapid expansion and convergence of telecommunications, the Internet, and digital media. Telephone networks and consumer electronics are fast converting to digital, alongside the rapid spread of cell phones. These, in turn, reinforce the expanding mass production and distribution of information-based or information-rich commodities by online, software, and multimedia giants.

5. The Current Extent of EDT Use in Society

Semiconductor production and sales

The tremendous impact of EDT in today's world can be seen in the statistics of semiconductor chip production, sales, and usage. In terms of markets and usage, global IC-chip sales have steadily risen (in both volume and value) from 1987 to the present, despite three marked dips in 1996-98, 2001-02, and 2008-09.11

As of 2017, the biggest shares of the microprocessor market were for data processing needs (mostly computers) and communications needs (including mobile phones), with USD140 billion and USD115 billion in global revenue, respectively. The next largest markets were

^{11.} Most of the statistics mentioned in this and the next paragraph are from Statista, the US Congressional Research Service, and US Dept. of Commerce, as cited by Brandon Gaille in https:// brandongaille.com/25-microprocessor-industry-statistics-and-trends/ (posted June 18, 2018).

for industrial needs at USD45 billion, consumer electronics at USD43 billion, and automotive needs at USD 37 billion.

IC-chip production (which covers microprocessors, memory devices, logic devices, and analog devices) is spread around the world. A handful of firms, because of their high sales volume, operate their own fabrication facilities ("fabs"). Other chip firms are "fabless": they design and market chips, but contract out the actual chip production to "foundries" around the world, much of it in Asia.¹²

The semiconductor industry as a whole is tightly controlled by a small number of monopoly-capitalist firms based only in a few countries. Of the top 20 IC-chip firms, some 50% are located in the US. These include such powerhouses as Intel, Qualcomm, AMD, Texas Instruments, NVIDIA, Apple, and Sandisk. Other top firms are based in South Korea, Japan, Taiwan, and EU. (CRS 2016) The US remains the global leader in design work — the most critical first stage of IC production. It also produces almost half of the world's semiconductor fabricating equipment, followed by Japan and the Netherlands. While China does not yet have a global-top-20 semiconductor firm, it is fast catching up on other metrics.

Industrial automation; robot production and deployment

Yet another measure of EDT's long-term impact on the economy is the dramatic growth of EDT-based automation in various production and service industries.¹⁶ The capacity for advanced levels of automation, which combine various levels of mechanization and artificial

^{12.} Although about 90% of fabrication work needed by the global semiconductor industry is based outside the US, in terms of control the US can still claim a 50% global market share in semiconductor production as of 2015. Korea is in 2^{nd} place at 17%, Japan next at 11%, then EU at 9% and Taiwan at 6%.

^{13.} http://www.semiconductors.org/clientuploads/Industry %20 Statistics/White %20 Pape %20 Profile %20 on %20 the %20 U.S. %20 Semiconductor %20 Design %20 Industry %20-%20 06 1016 %20-%20 Final.pdf

^{14.} https://www.trade.gov/topmarkets/pdf/Semiconductors_Top_Markets_Report.pdf

^{15.} https://qz.com/72542/china-just-surpassed-the-us-in-semiconductor-manufacturing-and-the-trend-is-likely-to-accelerate/; https://www.eetasia.com/news/article/8_on_Chinas_Semiconductor_Industry

^{16.} Some authors differentiate between mechanization-type automation of physical tasks, such as materials-handling, and computerization-type automation of mental tasks, such as control of production procedures. For a finer distinction of the different levels and types of computer-based automation as applied to manufacturing, see Jörgen Frohm et al. 2008.

intelligence, is dramatically seen in the growing deployment of industrial robots.

The number of robots used in industrial production (both in factories and in warehouses) is rising. In the 2005-2008 period, the average number of robots sold was about 115,000 units per year. In the 2011-2016 period, the average annual figure rose to about 212,000 units, or 12% growth per year. In terms of industrial line, the main buyers and users of robots are the automotive, electrical and electronics, metal and machinery, rubber and plastics, and food and beverage industries. (IFR World Report 2017)

The world's total stock of operational industrial robots rose from 1.2 million in 2013 to 1.8 million in 2016. This represents an average increase of 10% per year since 2010; this is 10 times faster than the annual increase in the global human population. In terms of absolute number, as of 2014, Japan led the world with over 306,000 robots in use, compared to 237,000 in North America, 182,000 in China, and 175,000 in South Korea and Germany each.¹⁷

In terms of industrial robot density, Japan also led the world up to 2009. Up to now, Japan is the world's leader in robot development and production. As of 2016, however, the countries with the highest industrial robot density were South Korea (631 robots per 10,000 employees), Singapore (488 per 10,000), and Germany (309 per 10,000) — all three thus outranking Japan's 303 per 10,000. As global regions, however, Europe still has the highest industrial robot density (99 units per 10,000), followed by the Americas (84 units per) and Asia (63 units per).

In service industries, robot use for materials-handling is also increasing, on top of the already high levels of computerization of data processing and customer services in recent decades. The IFR notes that the sales of service robots, which reached a total of USD5.2 billion in 2017, are highest for medical, logistics, and field use, while sales of robots for personal and domestic tasks (e.g., house-keeping and

^{17.} https://www.brookings.edu/blog/techtank/2016/06/02/how-technology-is-changing-manufacturing/

care-giver robots) are also fast rising. ¹⁸ Food businesses now increasingly use robots to deliver food. Wendy's (the US-based restaurant chain) has deployed self-service kiosks for customer ordering in its 6,000 restaurants. Amazon has around 15,000 robots working with its 50,000 human labor force. The number of driverless cars on the road are increasing. ¹⁹

In recent years, robot production has increased while costs have gone down. Over the past 30 years, the average robot price has fallen by half in real terms. Cheaper robots are the result of faster and less costly methods of assembling, installing, and maintaining them. Robot assembly and maintenance are now easier with plug-and-play and self-diagnostic technologies.

Rapid advances in automation across many economic sectors are affecting, to a greater or lesser degree, the basic parameters of capitalist exploitation of labor through extraction of surplus value. These are posing new questions of political economy of capitalism and on the character and direction of the workers' movement. Economic, political and other social struggles will continue to intensify around such issues as wage scales, hours of work, occupational health and safety, employment and unemployment rights, migrant labor, social services, environment, and new forms of workers' organizations and collective bargaining. Marx's analyses of the inherent contradictions of capitalism within the whole economy and right inside the workplace remain valid in general, even as their application on the concrete situation of various economic sectors and different aspects of the toiling masses' daily lives will certainly require more extensive ground-level investigation.

The global reach of the Internet

By 1994, the Internet became truly global, producing new EDT-based corporate giants, fueling the dot-com bubble that burst in 2001, and giving rise to new conflicts. Young and old giants in media, telecom-

^{18.} https://ifr.org/ifr-press-releases/news/why-service-robots-are-booming-worldwide

 $^{19. \ \} https://www.brookings.edu/blog/techtank/2016/06/02/how-technology-is-changing-manufacturing/$

ms, and software continue to rule the field. They monopolize and maximize online opportunities for profit, for example, through social media, mobile platforms and apps, cloud computing, and e-commerce. At the same time, they are threatened by (or have to cope with) popular and free/cheap online services and small aggressive startups. The Internet has thus become a mirror and leveraging tool of social relations, competition and conflicts, in the real world.

As a third metric of EDT's social impacts, the increasingly global reach of the Internet is crucial in measuring how much of the globalized digital economy is directly affecting the world's population and reshaping (if at all) non-computerized economies and social relations. We especially focus on its effect among the workers, peasants, and other impoverished masses in the developing and least-developed countries that are most affected by the so-called digital divide.²⁰

Of the world's total population of 7.6 billion (as of end-2017), nearly 4.2 billion are considered to have Internet access in at least one of various ways. This means a global 54.4% Internet penetration rate, with slightly higher rates for men compared to women. Of the youth population (15-24 years old) in 104 countries, some 830 million (around 80%) are online. Based on another dataset as of April 2018, globally there are nearly 4.1 billion active Internet users; 3.8 billion of these use mobile Internet access. Of all active Internet users worldwide, almost 3.3 billion are active social media users.²¹

The highest penetration rates are in North America (95.0%) and Europe (85.2%), representing 25.3% of all Internet users. Above-halfway rates are seen in Oceania/Australia (68.9%), Latin America/Caribbean (67.0%), and Middle East (64.5%). The penetration rate in Asia is nearly half (48.1%); at the same time, this represents nearly half (48.7%) of all Internet users worldwide. The Internet's penetration rate is lowest in Africa at 35.2 percent.²²

^{20.} The various statistics on Internet access in this section are from the ITU 2017 Measuring the Internet Society Report, as well as from the Internet World Stats 2018 updates (https://www. internetworldstats.com/stats.htm)

^{21.} https://www.statista.com/statistics/617136/digital-population-worldwide/

^{22.} https://www.internetworldstats.com/stats.htm

The key factor in expanding Internet access among the masses is the rapid expansion of mobile broadband (MBB) subscriptions, which have grown more than 20% annually in 2012-2017. This presumes rapid expansion of the market for affordable smartphones. The figure is expected to reach 4.3 billion globally by end-2017. In comparison, fixed broadband (FBB) subscription grew by 9% annually in the same period. MBB access is more affordable than FBB especially in developing countries, with steep price drops between 2013 and 2016. Even though least developed countries (LDCs) showed only a 23% of the population enjoying online access, they also registered the highest MBB subscription increases in the 2012-2017 period.

Despite great advances in basic Internet access for the masses, the more fundamental digital divide (not just online access, but effective control of access and content) remains a big issue between the advanced capitalist countries (especially the imperialist countries) and the rest of the world. This reflects monopoly capitalist control over what is emerging as a strategic global infrastructure for commodity distribution and exchange, as well as for free information and cultural exchange. Economic, political and other social struggles will continue to intensify around the key issue of privatized, commercialized, stratified, and unequal control over Internet access and content.

The so-called "Fourth Industrial Revolution"

The World Economic Forum and other capitalist think-tanks have recently announced the arrival of a "fourth industrial revolution" a.k.a. "Industry 4.0". As described thus far, the so-called "4th IR" is still part of the 3rd IR. It merely serves to complete the gaps and maximize capitalist gains in the still-evolving digital era.

The newest focus appears to be in the following technologies and their possible applications: Internet of Things (IoT); big-data analytics; artificial intelligence (AI); blockchain and crypto-currency; cloud computing; robotics; and virtual and augmented realities. The actual and imaginable applications of these new technologies are not just in the online world, but also in the real world, such as the growing use of drones and self-driving cars, ultra-realistic games and training en-

vironments, digital cash, and still cheaper and smarter phones in the hands of billions.

Whatever actual and potential advances might be achieved in these cutting-edge technologies should be monitored and estimated. Marxists can hone and use their tools of analysis to carefully project (or even guardedly speculate on) the interconnected social impacts of such new technologies. But those are no longer within this paper's scope.

6. Emerging Issues in the Digital-era Economy

In Grundrisse (1857-58) and Capital Vol. 1 (1867), Marx had already anticipated the fundamental impacts that increasingly automated machinery would create for labor in general. But neither he, Engels nor even Lenin could anticipate the magnitude and complexity of the technological advances and their social impacts that would occur a century later in the digital era.

Recent 20th-century and early 21st-century scholars and authors, both non-Marxist and Marxist, have offered their own analysis and synthesis of such advances and impacts. Many bourgeois and non-Marxist futurists, while critical of certain aspects of capitalism, generally welcome the 3rd Industrial Revolution as the starting point for a reformed capitalism — a post-industrial, gentler, greener, and thus more palatable version.²³ We will not critique these in this paper. There are, however, at least equally significant, theoretically more rigorous, and fast-growing Marxist or Marxian literature on this subject. These need to be critically studied and more widely discussed.

As early as the mid-1950s, Marxians such as Paul Sweezy and Harry Braverman were already noting the "scientific-industrial revolution" that was sweeping the US economy, with the computer and telecommunications at its very center. Sweezy predicted that these dramatic

^{23.} These non-Marxist authors famously include E.F. Schumacher (Small is Beautiful), Alvin Toffler (Future Shock, Third Wave, Powershift); Jeremy Rifkin (works on the Third Industrial Revolution), and Daniel Bell and Alain Touraine. (works on so-called "post-industrial society").

advances would be as profound as the original Industrial Revolution, while Braverman prefigured some of its deeper impacts on the US labor force.24

The current generation of Marxists, though, still face great challenges in studying and synthesizing these trends more comprehensively and conclusively. The world is still probably in the early phases of the current Industrial Revolution. As Marxists ought to be most rigorous in seeking truth from facts and in combining theory and practice, we can only train our searchlights on the road and terrain up ahead, and only try to discern glimpses of future scenarios.

Overall social impacts of the Third Industrial Revolution

EDT has generated powerful factors for reshaping and advancing the forces of production under capitalism. Some impacts, especially in the advanced capitalist countries, are changing social relations and attitudes in obvious and not-so-obvious ways. As a whole, however, these changes merely represent new forms that prettify, new areas that replicate, and new methods that try to reinvigorate, the same old and exploitative capitalist ways of doing business. While this paper's limitations prevent a comprehensive and well-balanced listing and analysis of these impacts, we will at least highlight the main trends and share tentative Marxist views on the most important points.

At the basic enterprise level, EDT is speeding up, linking up, and finely coordinating so many types and stages of mass production through management software, computerized design tools, and still higher levels of mechanization through expanded deployment of intelligent machinery and industrial robots. At the industry level, EDT is enabling transnational corporate (TNC) giants to adopt just-in-time strategies, modularize their production, automate their cargo-handling facilities,

^{24.} Monopoly Capital (Baran and Sweezy 1966) only marginally touched on the 3rd IR, but the authors had a draft chapter that discussed "the political economy of communication." Its finalization was overtaken by Baran's death in 1964. (Foster and Chesney 2015, 67-69) In the case of Braverman, his insightful 1955 article "Automation: Promise and Menace" foresaw important issues that Marxist political economy would grapple with in the next decades. His Labor and Monopoly Capital (1974) would explore these issues, especially the rise of the service sector and proletarianization of non-productive workers, more extensively.

maximize subcontractors, and manage their complex global value chains (GVCs) also known as global production networks (GPNs).

Beyond the mainline industries, EDT has also applied automation in capitalist agriculture, extractive industries, and construction. These are enabling TNC giants to further expand and intensify their global raw-materials extraction and mega-structure facilities on land, underground, and under the seas.

EDT is reshaping the whole services sector (apart from banking and finance — which were the first to go digital). These include transport and trade, as well as social services (e.g., education and health) and public works, which were supposed to be state responsibility but now increasingly privatized. Personal and domestic services, which in the time of Marx did not create surplus value, 25 are now being incorporated piece by piece into very profitable capitalist operations with the aid of computerization and smart mechanization. The political economy behind e-commerce, online media, and other network-based services, with business models represented by the likes of Facebook and Google (in online media-ad platforms), Amazon and eBay (in retail buying and selling), Airbnb (in transient housing) and Uber (in taxi-like car transport), also deserve study.

EDT is speeding up great advances in science and technology — if not across-the-board, then at least in those areas with huge potentials for super-profit and other monopoly-capitalist advantages. Under capitalism, only the TNCs and imperialist states can harness enough funds to build and operate high-tech facilities for scientific research on anything beyond normal human-scale, i.e., from quantum-scale to cosmic-scale. Their advanced research programs always prioritize strategic industrial/financial and military/security applications. Thus, in monopoly-capitalist countries, the 3nd IR also enhances the military-industrial complex, the state's military, police, intelligence and

^{25.} The reason for excluding personal and domestic services in the surplus-value creation chain during the time of Marx was because most servants back then were employed by rich families outside capitalist production. Nowadays, however, personal and domestic services are delivered more and more through capitalist businesses that provide temp labor and special facilities and equipment.

security capacities, and tighter economic control by the financial oligarchy.

We must continue to investigate and analyze the 3rd IR's tremendous impact on specific relations of production under capitalism. These include new forms of monopoly control beyond conventional ownership and control of TNCs, such as via GVCs, financial control, and intellectual property rights. We can also discern new forms of capitalist competition and new forms of profits and rents. A deeper understanding of GVC operations, and how they use EDT to leverage areas of cost reduction and profit maximization across the world, are particularly valuable for analyzing the political economy of neocolonial countries in their relation to imperialism.

The 3rd IR's impact on the globalized economy also includes new categories and new segments of the working class, even as Marx's fundamental characterization of the proletariat and its historic mission as the "gravedigger of capitalism" remains eminently valid. The relentless redivision of labor in the workplace beyond the blue-collar-whitecollar dichotomy raises interesting issues about the changing structure and composition of the proletariat.²⁶

We need to better understand the impact of the digital era on the changing conditions of social reproduction (reproduction of labor power) through households, domestic labor (or women's "unpaid labor"), and state/privatized social services. We need a deeper understanding of how service-type work is blending into all kinds of industries, generating factors for the expansion of the so-called "precariat" and "cybertariat" (including the phenomena of business-process outsourcing and independent online worker-contractors), increased global labor migration, women's roles in the labor force, and the implications for the working-class movement in the coming decades of the 21st century.27

^{26.} There is, for example, an interesting discourse between Braverman (1974), who viewed scientific management of the workplace (aka intensified Taylorism or Fordism) and labor fragmentation and deskilling as the new realities of labor process in the late 20th century, and his critics who insisted that much of these "new phenomena" were already covered by Marx and that the revolutionary impulse for class unity and class struggle among the workers remain as valid as before.

^{27.} I have clustered these related theoretical issues into separate headings in the list of references at the end of this paper. It would be good, for example, to critically study the works of Finn

Patterns of consumption are fast changing, especially in capitalist countries but also in urban areas of developing countries. This is spurred on by at least two related drivers. One is the immense diversity in the more conventional types of goods, due to the hyper-capacity especially of giant TNCs to produce and distribute across the globe, to localize and customize their products, and to embed the sales effort throughout the entire production process — from inception and design all the way to after-sales service. (As early as Grundrisse, Marx already provides glimpses of this inter-penetration of production and consumption via distribution and exchange.)

The other is the tremendous growth in services (such as telecomms, multimedia, trade and finance, transport and cargo handling) and goods that perform services (such as digital and online gadgets). This trend greatly telescopes the whole chain from production to distribution/exchange to consumption. Marxist political economy must analyze the phenomenon of shifting or blurring delineation between goods and services, which the OECD calls the "hybridisation of goods and services," and in particular the entire question of "information goods" (including the role of labor in their production, and the source and behavior of their value as commodities).²⁸

All in all, the 3rd IR has further increased the social character of production under capitalism and the potential for humanity to meet all its basic needs in more sustainable ways. And yet, the other side of the coin, the private appropriation and monopolization of wealth, remains equally true. EDT reduces production costs to bare minimums, and achieves dramatic increases in volume, diversity, and (arguably) quality of goods and services. But EDT is unable to generate more jobs to compensate for the millions of workers that capitalism deskills and unemploys. Instead, EDT wielded by the bourgeoisie heightens the capitalist crisis of overproduction and worsens the impoverishment of the planet and its peoples.

Hanson (1979), Alena Heitlinger (1979), and Silvia Federici (2009) on social reproduction, women's rights, and state policies.

^{28.} In 1999, I wrote an essay, "Towards a People's Alternative to 'Intellectual Property Rights'", which addressed important points on this issue using the framework of Marxist historical materialism and political economy. It was subsequently published serially in the IBON Perspectives magazine Vol. 1 (1999) Nos.18-20. A content outline of the essay is available at https://www.iraia. net/2017/11/07/alternative-ipr/.

Thus, at a fundamental level, EDT intensifies the basic contradictions in capitalism by further revolutionizing the productive forces, increasing the social character of production, yet turning the capitalist relations of production even more exploitative and oppressive, with more and more victims and less and less beneficiaries.

Conclusion

Many bourgeois theorists and utopian-socialist or anarchist futurists welcome the digital era as the advent of "information society". They imagine a society where wealth is no longer exclusively found in land (as in feudal society) or in using the power of capital to extract value from labor and Mother Earth and flood the market with commodities (as in present-day capitalist society). Rather, they see the immense potentials of tapping into the endless wellsprings of knowledge to create wealth and share it with everyone.

Indeed, one obvious long-term impact of the 3rd IR is that it enables society to turn people's collective knowledge, mental labors, intricate skills, and intelligent creations into objectified form — as useful and palpable goods that can be mass-produced, yet with high fidelity if not near-perfect accuracy compared to the original. The most obvious examples are all kinds of firmware and software, scientific databases, and entire libraries and archives of digitized books, films, music and art. In the future, science and industry may mass-produce even more mind-boggling consumer and producer goods with built-in intelligence, and at minimal cost.

Under capitalism, however, such "objectified knowledge" are not free; most information goods are mass-produced by capitalists into profitable commodities. The authors or creators of the original content — as owners of "intellectual property," and often hand in hand with big business — typically get state protection and earn from royalties (a kind of rent) or from outright sale. On the other hand, producing digital copies of the original entails very minimal cost. This contradictory phenomenon under capitalism generates new issues that require analysis by Marxist political economy.

In a socialist society, the mass production of intellectual/information goods should be a welcome aspect of the collectively owned, planned and managed economy. Such goods will no longer be alienated from the proletariat and people as costly commodities or privately owned resources. Rather, they will be freely accessed and used to meet the proletarian and non-proletarian masses' growing material and cultural needs and to raise the conditions of life in society as a whole.

In further anticipation of what advanced EDTs may bring, bourgeois theorists and futurists claim that the most advanced capitalist societies are now entering (if they have not yet entered) a "post-industrial economy." At best, this is a very premature expectation. That more and more parts of the world have now entered the digital era is undeniable. But it has not enabled modern society to start phasing out industrial methods of production, much less enter a new "post-industrial" society where most material things we need are produced automatically by machines on demand.

If we consider just technological advances per se, the most definite long-term impact of EDT is that, for the first time in history, highly automated production creates the potential to provide all the basic goods and services needed to equitably sustain decent standards of living for all members of society, and likewise to incrementally respond to humanity's additional needs for higher (social and individual) development. All these are now technically possible to reach, requiring only a smaller fraction of labor and natural resources as compared to 100 years ago.

Hypothetically, the capitalist system may achieve more and more automation in the future. After all, it always strives for higher productive capacity through the introduction of improved automated machinery (all the way to AI-enabled robots). But its fundamental motive is always to pursue unhindered the circuit of capital, to produce "more and better" at less cost per unit, and thus to increase profits. The capitalist motive is not to make the workers' lives easier and their labors lighter, and certainly not to equalize the access of all members of society to the social wealth thus created.

Capitalist innovation may indeed bring some superficially positive results, such as a lighter workload and higher pay — in some industries, for some workers, some of the time. But the bigger, more prevalent, and more persistent result is the worsening fundamental problems of unemployment and crisis — as part of capitalism's laws of motion that Marx and Engels tirelessly investigated and explained in their time. After centuries of capitalism and 150 years since the *Communist Manifesto*, experience of the working class and people have repeatedly revalidated the Marxist critique of capitalism.

In a socialist society, such highly automated machines, processes and facilities should serve to greatly lighten the labors of the working class, both in the workplace and in the home, and allow more time and facilities to pursue their all-sided and long-term development as individuals, as collectives and communities, and as an entire civilization. In addition, such automation should also more effectively meet the growing material, cultural needs of the people — in terms of cheap and accessible goods and services for their daily use and also in terms of socially managed facilities for such all-sided development.

Robots and artificial intelligence are welcome additions to humanity's advance. But they will (and should) never replace human work and the human role in production, which are inherent to our humanity. Technology and human wants are neither perfect nor static. Human intervention will still be needed to fill in unavoidable gaps and to correct unexpected errors or breakdowns in automation. Also, environmental and social changes will eventually entail new products and processes, and vice versa.

Even with a comprehensively planned and balanced socialist economy, production cannot always respond automatically and perfectly to these old gaps and new demands. There will be unevenness and imperfections in the capacity of machines to supplement and complement — not to mention replace — human physical capacities, intelligence and other faculties, which after all will continue to co-evolve with technology and environment.

The living tools of Marxist theory are robust and resilient enough for us to better analyze these new trends in order to enrich and deepen our understanding of the fast-changing landscape of 21st century technologies, whether under capitalism, or as part of more advanced forces of production with which to build socialism. A truly "post-industrial era" is foreseeable only after capitalism is overthrown and replaced by a socialist society that continues to move forward into a bright communist future. #

EPILOGUE NOTE

Readers will note that this paper avoided any mention of how the various trends of the digital era apply to the Philippines; it dwelt on implications for the Third World or developing countries only at very specific points. This is intended, because we want to first establish the validity of these conclusion for the global capitalist system as a whole, before we address the unevenness — which is always present in the imperialist era, as Lenin observed.

APPENDICES

1. Karl Marx on forces and relations of production

In the social production of their existence, men inevitably enter into definite relations, which are independent of their will, namely relations of production appropriate to a given stage in the development of their material forces of production. The totality of these relations of production constitutes the economic structure of society, the real foundation, on which arises a legal and political superstructure and to which correspond definite forms of social consciousness. The mode of production of material life conditions the general process of social, political and intellectual life. It is not the consciousness of men that determines their existence, but their social existence that determines their consciousness. At a certain stage of development, the material productive forces of society come into conflict with the existing relations of production or – this merely expresses the same thing in legal terms – with the property relations within the framework of which they have operated hitherto. From forms of development of the productive forces these relations turn into their fetters. Then begins an era of social revolution. The changes in the economic foundation lead sooner or later to the transformation of the whole immense superstructure.(Karl Marx, A Contribution to the Critique of Political Economy)

2. On new commodities in the digital economy

Ursula Huws has written two successive books on what she calls the "cybertariat".²⁹ In "iCapitalism and the Cybertariat: Contradictions of the Digital Economy" (2015), she says: "We have now entered a period ... when new waves of commodification set in motion in earlier periods are reaching maturity. The new commodities have been generated by drawing into the market even more aspects of life that were previously outside the money economy, or at least that part of it that generates a profit for capitalists. Several such fields of accumulation have now emerged, each with a different method of commodity genesis, forming the basis of new economic sectors and exerting distinctive impacts on daily life, including labor and consumption. They include biology, art and culture, public services, and sociality."

^{29.} The Making of a Cybertariat: Virtual Work in a Real World (2003) and Labor in the Digital Economy: The Cybertariat Comes of Age (2014).

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KARL MARX AND THE WORKING CLASS

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Unity is Key

arl Marx taught that the role of the working class was not just to understand the world, but its mission was to change the world.

Marx, through his historical materialist studies, showed that human society had developed through specific key stages or epochs. Moving from primitive communal society initially, then to slavery, then on to feudalism, then capitalism, and that this progression would lead to socialism and then to communism.

Marx demonstrated that the key to each change in social organisation of human society, that is, what brought about the change, was class struggle – the slave owners were overthrown by the slaves, the feudal lords were overthrown by the peasants and developing bourgeoisie, that capitalism would be overthrown by the proletariat who would establish socialism, and (after a long period of class struggle against the overthrown capitalist forces who never accept their overthrow and continuously work to restore capitalism) the socialist epoch then would eventually move to communism, a classless society.

Marx taught, based on this historical scientific analysis that the proletarian revolution would liberate the proletariat and the rest of man-

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kind from capitalism, and for the first time since primitive communalism, the majority would become the ruling class.

Marx taught, therefore, that the unity of the working class was the key, thus his call "Workers of the world unite!"

Conditions Faced in the 21st Century

What conditions exist in the 21st century that must be faced to help unite the workers of the world?

One of the things we have to face is the temporary weakening of militant class struggle unionism in many parts of the world. Militant class struggle unionism is being built and rebuilt in a number of countries and this must and will continue. This is a fundamental task.

The employers, the ruling class, have exacerbated the problems for the working class, through contracting out, offshoring of work, privatisation, individualisation of employment contracts, mass lay- offs, new technology, "contractualisation", intimidation, fear and bullying. Each of these aspects of work reorganisation and industrial tactics by the capitalists, by the bourgeoisie, must be resisted in various ways by the organised working class.

Further, bourgeois parliaments in most countries have introduced and continue to introduce undemocratic, anti-worker, anti-union laws and regulations, attacking workers' organisational strength, and their right to strike, to picket, and to assemble, in order to further attack workers' wages and conditions.

Mass campaigns against these anti-working class, undemocratic measures are being waged in a number of countries, and must continue to be waged, including the demands for protection of workers from bullying and intimidation by employers and from unsafe and unhealthy workplace conditions. In Australia, for example, the national union movement and supporters are conducting a mass campaign to "change the rules" and recently had mass demonstrations highlighting the call

for the right to strike, to picket, and to assemble. In Melbourne, over 100 thousand people took to the streets.

There is a growing movement to criminalise offences by employers for "wage theft" (underpayment) and breaches of health and safety laws in Melbourne and other states.

In many parts of the world we see a growth of extreme right-wing and fascist parliamentary and extra-parliamentary activities which are leading the drive to divide the working class on the basis of country of origin, race, and colour and on the basis of opposition to migrants, asylum seekers and so-called temporary visa workers.

We know from history that in times of crisis the capitalist class more and more turn to fascism, fascist measures and fascist organisations, to weaken workers and workers' organisations in order to make it easier for the capitalists to cut workers' wages and conditions.

There is a need to build a mass united front against these attacks on democratic rights and human rights in order to help the workers to defend themselves and their pay and conditions, and to help the community defend their social conditions generally.

Workers solidarity networks are being built, which support workers on picket lines, and which provide community support for their struggles. This has been demonstrated to be very effective. These organisations are reaching out to workers in struggle internationally as well as nationally.

Workers solidarity networks are providing mass support for workers on picket lines, providing food and other forms of assistance, helping to fund and sustain workers and providing political and public support for their struggle.

May Day movements continue to be built across the globe to help foster support for militant class struggle unionism and to publicise the need for socialism and continued opposition to imperialism. These movements are not only organising the annual May Day protests and demonstrations, but work on throughout the rest of the year to keep the socialist objective, opposition to imperialism, opposition to imperialist war, and support for militant struggles before the people.

For example in some countries the organisations and parties that came together to celebrate and commemorate the Great Russian Proletarian Revolution are continuing to work and cooperate by having an ongoing programme of study conferences to consider and debate the important political and ideological questions and to do national and international solidarity work in line with the path charted by the Soviet Union when it was still Socialist.

In some countries, specialist organisations are being built for subcontract labour, in cooperation with and under the guidance of unions, to more effectively cater for the specific needs of workers who have been "contractualised". These specialist organisations are helping to collectively organise these "individualised" workers and ensuring that they learn how to organise themselves and engage in militant struggles over their wages, conditions and unfair treatment.

There is growing cooperation between migrant organisations and workers' organisations and unions to defend the proper treatment of migrant workers and help protect workers' wages and conditions. This must be continued, stepped up and put on a more concrete level. We, of course, must build unity between all workers whether they are local workers, offshored workers, migrants, or asylum seekers, and regardless of their religion, race or creed. Much more can and must be done in this regard.

Workers organisations need to upgrade their utilisation of new digital technology to help attract young workers who utilise the new digital technology daily.

Workers organisations must and are building the peace movements of the people. The widespread sentiments against war must be mobilised against imperialism and imperialist wars and aggression. Of course, it is a fact of life that whilst mass anti-war mobilisation can have a very favourable outcome against particular wars of aggression (e.g., the U.S. war of aggression against Vietnam), war can only be ended forever by the overthrow of capitalism.

We have just passed the 100th anniversary of the Great October Revolution in Russia in 2017.

Lenin and the Bolsheviks developed Marxism in the era of imperialism and socialist revolution and brilliantly united the working class, the peasants and other social allies to overthrow Russian tyranny and capitalism and successfully introduced socialism in the Soviet Union.

History is a good teacher of what needs to be done, to build a united, militant working class movement, to build a united peoples movement to overthrow capitalism. We must avidly study these historical teachings and spread the study of these teachings much more widely.

Because of the signs and the danger of the restoration of capitalism in the Soviet Union and other places in the 1960s and even earlier, Mao Zedong and the Chinese Communists turned their attention to trying to prevent the restoration of capitalism after the establishment of socialism. As a result In China, the Great Proletarian Cultural Revolution (GPCR) was conducted for over 10 years of mass class struggle against the "capitalist roaders" in China, but although the GPCR achieved many victories, it was still unable to prevent capitalism's come back.

Preventing capitalism's restoration is a problem to be solved in the proletarian revolution. It will be solved, of course, and the GPCR in China shows us a way. This is an important area of study also.

Unite the People to Overthrow Capitalism

At present we need to step up our unity and cooperation across the globe. We need to exchange detailed views on how we are tackling all of the issues we face in common in the global workers' movement, some of which I have mentioned. There are rich experiences to be shared.

The International League of Peoples' Struggle (ILPS) is an important organisation to help this vital and urgent work through its policies, democratic structures and ongoing programme.

There is a need to exchange views about even more effective ways to build on the advice of Marx and Engels, which called on the workers of the world to unite because we have nothing to lose but our chains.

We need to unite the people in their millions to overthrow capitalist rule and dictatorship, and usher in socialism, a social system to resolve the problems of poverty, war, exploitation, and environmental destruction, and then to start the long march towards communism, a classless society, the social principles of which Marx explained so beautifully, and so simply as being "from each according to one's abilities and to each according to one's needs".

Long live the unity of the workers of the world!

Annex

CONTINUING VALIDITY AND VITALITY OF MARXISM

Prof. Jose Maria Sison Founding Chairman, Communist Party of the Philippines Chairperson, International League of Peoples' Struggle May 5, 2018

presume that the best way for us to celebrate the 200th birth anniversary of Karl Marx is to study his works and how relevant have been his revolutionary teachings to social history and current circumstances and to consider the continuing validity and vitality of his teachings.

We make a renewed critique of capitalism and monopoly capitalism and strive to reinvigorate the revolutionary movement of the proletariat and people to end the monstrosity that monopoly capitalism has become and realize socialism preparatory to communism. As Marx has long admonished us, the point is to change the world.

At the age of 26, Marx fully embraced the communist cause of the working class in 1844. This was the year when he published his *Economic and Philosophic Manuscripts of 1844*. He pointed to the inhumane process of capitalism by which the capitalist class alienates from the working class the products of its labor and thus accumulates capital. This is congealed unpaid labor which is used to dominate and exploit living labor in further cycles of exploitation.

It was also in 1844 when Marx started his lifelong comradely partnership with Engels whose work, Condition of the Working Class in

England, impressed him immensely and profoundly. He and Engels agreed to collaborate on research and theoretical work in connection with the working class movement.

Marxism as Theory of Proletarian Revolution

Marx developed the theory of proletarian revolution on the high road of the development of civilization. He drew from the most advanced sources of knowledge of his time in order to formulate the three component parts of Marxism: materialist philosophy, political economy and social science. He put these forward as integral weapons of the proletariat for understanding its plight and for liberating itself and the rest of mankind.

1. He studied German philosophy, especially the idealist Hegel and materialist Feuerbach. He adopted the scientific materialist outlook and formulated materialist dialectics as the law of contradiction within nature and society and as the method of thinking and acting by putting the erstwhile metaphysical dialectics on a materialist basis, not just the perception of sensuous reality but up to the critical-revolutionary activity to change social reality.

He applied dialectical materialism on social history and founded historical materialism to explain the transformation of one form of society to a higher one through class struggle and through the class contradictions within and between the mode of production and the social superstructure. He traced the progressive sequence of the primitive communal society, slavery, feudalism, capitalism, socialism and communism.

Marx's major philosophical works are the Economic and Philosophic Manuscripts of 1844, Theses on Feuerbach, The German Ideology (co-authored with Engels), The Holy Family or Critique of Critical Criticism against Bruno Bauer and Company (also co-authored with Engels) and The Poverty of Philosophy in riposte to Proudhon's The Philosophy of Poverty. These works are complemented by Engels'

Ludwig Feuerbach and the End of Classical German Philosophy, Anti-Dühring and Dialectics of Nature.

2. Marx studied British political economy, especially the exponents of the labor theory of value, Adam Smith and David Ricardo. By applying Marxist dialectics rigorously on abundant economic data, he wrote Das Kapital, his colossal and penetrating critique of capitalism. He studied the commodity as the cell of large-scale machine production and as the embodiment of labor power (measurable in average socially necessary labor time) and came up with the theory of surplus value to explain exploitation, with surplus value (unpaid labor) as the source of industrial profit, bank interest and land rent) in the very process of capitalist production.

He traced the accumulation of capital through profit-making by the capitalist competitors, the speedier growth of constant capital in plant, equipment and raw materials over variable capital for wages, the tendency of the profit rate to fall, the crisis of overproduction in relation to the decline of real wages and consumer demand and the desperate use of finance capital and colonial expansion under the slogan of free trade to maintain the industrial capitalist economy.

The works of Marx in political economy include A Contribution to the Critique of Political Economy, the four volumes of Das Kapital (on the capitalist process of production, process of circulation, the capitalist process of production as a whole and the theories of surplus value) and Wages, Prices and Profit, which can be used to facilitate the study of Das Kapital. The Communist Manifesto and the Critique of the Gotha Program explain how socialism is realized and proceeds to communism.

3. Marx studied French social science, especially the revolutionary democrats and the utopian socialists. He recognized the series of class struggles in history as the cause of social transformation. He appreciated the class struggle of the proletariat as the key to the democratic mass struggle for socialism and combated the voluntarism and wishful thinking that characterized utopian socialism.

He ascribed to the French revolutionary democrats the earlier conception of class struggle and asserted that his contribution is the conception of class struggle as one leading to the class dictatorship of the proletariat in socialist society. This is the core of the theory of scientific socialism, which is based on revolutionary mass struggles, as so well explicated in the Communist Manifesto published in 1848.

This is the best known of the works of Marx and Engels. It was written in connection with the Communist League. It presaged the Europe-wide uprisings of the workers and peasants but did not yet directly exercise influence among them. Marx and Engels were active in the First International, the International Workingmen's Association. Members of this association took part in the Paris Commune of 1871, which lasted as the prototype of proletarian dictatorship for a little over two months until it was drowned in blood by the bourgeoisie.

As a social scientist, Marx took into full account the vestiges of feudalism in France, Germany and Russia and the validity of the demand for democracy among the peasants, who are at best led by the proletariat but took notice of how the bourgeoisie try to seize the initiative from the proletariat. He had a comprehensive view of the situation of the 1848 uprisings in Europe as reflected in his The Eighteenth Brumaire of Louis Bonaparte and The Class Struggles in France, 1848 to 1850 before the Paris Commune in 1871 could occur and come under his study in Civil War in France.

The First International withered away when its headquarters were shifted from Europe to New York. But the influence of Marxism would spread faster through the Second International, with Engels and others propagating Marxist theory and practice after the death of Marx on March 14, 1883 at the age of 64. By the last decade of the 19th century, Marxism became the main current in the European working class movement, both in the social democratic parties and trade unions.

Leninism as Further Development of Marxism

Since the defeat of the Paris Commune in 1871, free competition capitalism developed into monopoly capitalism or modern imperialism on the scale of several industrial capitalist countries, with the newcomers to the colonial game struggling to redivide the world as economic territory and as geopolitical domain. Lenin upheld, defended and developed Marxism in the era of modern imperialism and proletarian revolution.

Lenin recognized clearly that monopoly capitalism or imperialism was the highest and final stage of capitalism and was the eve of socialist revolution. He saw imperialism as decadent, moribund and aggressive and that the imperialist wars of aggression could be turned into revolutionary civil wars by the proletariat in both capitalist and underdeveloped countries.

He contributed greatly to the development of dialectical materialism by identifying the fundamental law of dialectics, which is the unity of opposites, and stood firmly against empirio-criticism and the logical positivist trend in philosophy and successfully navigated the complicated political waters of Russia, in which the Mensheviks, constitutional democrats, Narodniks, anarchists and czarist diehards were obstacles to proletarian revolution.

Lenin debated with and defeated the classical revisionists headed by Kautsky in the Second International. Unwittingly, Kautsky gave Leninism the highest praise by labeling as Leninism his Marxist position against social chauvinism, social pacifism and social imperialism, As thinker and leader of the Bolsheviks, Lenin also prevailed over a wide array of bourgeois parties and currents in the struggle against Tsarism and subsequent bourgeois rule in Russia.

Without Marxism firstly and Leninism consequently, the Bolsheviks could not have won victory in the Great Socialist October Revolution under the circumstances, during and after the first inter-imperialist war, World War I. Lenin and Stalin made a series of ideological and political victories along the Marxist-Leninist and proletarian-socialist line to establish and develop a powerful socialist country over onesixth of the surface of the earth.

They promoted the Third Communist International and inspired the proletariat and the oppressed peoples of the world to rise up and defeat imperialism and the local reactionary classes. Several socialist countries and people's democracies arose as a consequence of the persistent general crisis of monopoly capitalism, the second inter-imperialist war and the decisive role of the Soviet Union and various peoples in defeating the fascist powers. By 1956, socialist countries and national liberation movements embraced one-third of humankind and became a bulwark against the rise of US imperialism.

But alas this was also the same year when the modern revisionists headed by Khrushchov seized power from the followers of Stalin in the Soviet Union and started to undermine socialism and promote modern revisionism and capitalist restoration not only in the Soviet Union but also in Eastern Europe and elsewhere. In 1964, Brezhnev in turn grabbed power from Khrushchov only to deepen and accelerate the restoration of capitalism.

The great communist Comrade Mao resisted modern revisionism as soon as it reared its ugly head in the Soviet Union and in the Moscow meetings of communist and workers parties in 1957 and 1960. He also contended with the Rightists and worshipers of Soviet modern revisionism within China who opposed the Great Leap Forward and the socialist education movement.

Maoism as Further Development of Marxism-Leninism

By 1966, in consonance with Marxism and Leninism, Mao put forward the theory and practice of continuing revolution under proletarian class dictatorship through the Great Proletarian Cultural Revolution in order to combat revisionism, prevent capitalist restoration and consolidate socialism. He won great victories in the next ten years of the cultural revolution through twists and turns.

But after his death in 1976 the revisionists headed by Deng Xiaoping succeeded in carrying out a coup and the consequent restoration of capitalism under the guise of pursuing reforms and opening up to advance "socialism" (capitalism in fact) with Chinese characteristics. The restoration of capitalism in China has vindicated the Maoist line of pursuing the theory and practice of continuing the revolution under the dictatorship of the proletariat through a series of cultural revolutions.

Mao was to be able to stand up against Soviet modern revisionism and its Chinese agents while he was still alive. For this, he was credited by the Chinese proletariat and people for leading the Chinese revolution to victory in the new democratic and socialist stages until the subversive currents of Soviet revisionism and US imperialism could reverse these after his death.

Mao made major contributions to Marxist-Leninist philosophy, political economy and social science. Thus, he was able to lead the Chinese revolution victoriously. And today, he is still respected as the founder of the People's Republic of China by those who now rule China and use bourgeois nationalism, capitalism and bourgeois cosmopolitanism as their guide.

The influence of US imperialism and Soviet modern revisionism in China cannot be underestimated. Thus, China is no longer socialist. The theory and practice of continuing revolution under proletarian dictatorship was aimed at ensuring that the proletariat and the people of the world would defeat imperialism and march toward the worldwide victory of socialism. But it was frustrated upon the restoration of capitalism in China.

By 1989-91, the revisionist-ruled regimes were ripe for replacement by outright bourgeois regimes in the Soviet Union and elsewhere, with China retaining a thin veil of communism for bureaucrat capitalism. The US became the sole superpower and winner in the Cold War over the Soviet Union which had collapsed due to the final treason of the Soviet revisionists headed by Gorbachov. All the anti-communists and their camp followers prated that humankind could not go beyond capitalism and liberal democracy.

With overweening arrogance, the US spread the notion that capitalism is everlasting, that socialism is dead, and pushed further its neoliberal economic policy and its neoconservative policy of aggressive wars, wasting trillions of dollars. Earlier, in the 1980's under the Reagan regime, the US had outwitted itself by engaging the Soviet Union in a mutually costly arms race and by conceding to China consumer manufacturing in order to accelerate the integration of China into the capitalist world.

Now the world capitalist system has a big problem. Two more big capitalist powers, China and Russia are vying for political and economic hegemony and challenging the old capitalist powers, the US and the European Union. Under these conditions, the crisis of the world capitalist system and aggressive wars are occurring more frequently than ever before. These are conditions favorable for the resurgence of the anti-imperialist and socialist movements.

Transition to Resurgence of the World Proletarian Revolution

After several rounds of domestic and global economic crises, culminating in the financial meltdown of 2008 which continues to depress the global economy, the US now finds itself in an unprecedentedly rapid strategic decline and in what the Pentagon no less calls the post-primacy period. The apparent major rivals of the US are now China in economic terms and both China and Russia in military terms in a multipolar world of escalating inter-imperialist contradictions.

In the meantime, while the socialist cause has conspicuously retreated since 1991 or even earlier, the proletariat and oppressed peoples of the world have undergone terrible suffering under the rigors of economic neoliberalism and aggressive wars. But precisely because of these, the contradictions among the imperialist powers have intensified and the forces of revolutionary resistance have arisen from the proletariat and oppressed peoples.

For several decades, we seem to be trapped in a world of recurrently worsening crises, social turmoil and wars in the era of modern imperialism and proletarian revolution. But we are now in a period of transition to a world of revolutionary flow against the evils and rottenness of decadent monopoly finance capitalism. We are being reinvigorated by the continuing validity and vitality of Marxism and its further advances in history and in the current circumstances.

Proletarian revolutionaries and genuine communist and workers' parties that are guided by Marxism-Leninism-Maoism are the best prepared and most effective in waging revolutionary struggles against imperialism, revisionism and reaction. Arising from their revolutionary ranks are the most resolute and militant thinkers and leaders of the revolutions led by the proletariat in various countries.

We are at a crucial juncture in world history, in which the parties and mass organizations of the proletariat and the people are once more avidly studying the teachings of Marx, Engels, Lenin, Stalin and Mao and grasping Marxism, Leninism and Maoism as their theoretical and practical weapons in the resurgence and renewed advance of the world proletarian revolution for national liberation, democracy and socialism against imperialism and all reaction.

The epochal class struggle between the proletariat and the bourgeoisie will not end until the final and total victory of socialism and communism.

Long live the memory and teachings of Karl Marx! Long live Marxism-Leninism-Maoism! Long live all the genuine communist and workers' parties! Long live the world proletarian-socialist revolution! Long live the proletariat and peoples of the world!

2018 marks the 200th birth anniversary of Karl Marx. In commemoration of Marx's living legacies in social movements today, the *Institute of Political Economy* publishes this book for a better understanding of the contemporary ways of monopoly capitalism and imperialism and the urgent need for fundamental change through various forms of resistance and struggles.

