

# Historicizing the Imperial Mode of Living: Preliminary notes on what we (do not yet) know

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“A comprehensive history of the imperial mode of living could be the subject of an entire research project on its own.”

Ulrich Brand and Markues Wissen<sup>1</sup>

“The history of risk distribution shows that, like wealth, risks adhere to the class pattern, only inversely: wealth accumulates at the top, risks at the bottom.”

Ulrich Beck<sup>2</sup>

## *The challenge*

The global economy is increasingly reliant on collaboration among workers who do not know each other and who are not even aware of each other’s existence. Very occasionally we are given a glimpse of that interconnectedness, as in 2013 when the collapse of Rana Plaza in Bangladesh gave us a chilling reminder that much clothing for rich countries is produced in appalling conditions by women and children –and men of course– in poor countries. Until recently, we did not dwell on such global connections, but more and more historians nowadays want to understand them. This interest in what is also called “teleconnections” signals a new type of historiography, one which “overtakes” old-style labour history from North America and Europe by incorporating its findings in a new globally orientated approach. Since the start of the new millennium growing groups of scholars on different continents in South and North alike tries to explore the linkages between trends in different parts of the world over the centuries in labour relations and ecology.

The present contribution does not deal with *all* aspects of the teleconnections, but takes a perspective “from below”, emphasizing the global interactions of the labouring classes. It builds on the paper I prepared for the IMoL conference, held in Amsterdam in 2020.<sup>3</sup> The central question I want to discuss is whether, and if so, to what extent wage earners (understood here in a very broad sense) in the advanced capitalist countries (also referred to here as ‘the North’) benefit from unequal ecological exchange and exploitative living and working conditions of producers and service providers in the poorer parts of the world (here also referred to as “the South”). In other words, it is about *relational* inequality:

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1 Ulrich Brand & Markus Wissen, *The Imperial Mode of Living. Everyday Life and the Ecological Crisis of Capitalism* (London and New York: Verso, 2021), p. 69.

2 Ulrich Beck, *Risk Society: Towards a New Modernity* (London: Sage, 1992), p. 35.

3 A streamlined version was published as: “Workers Who Benefit from the Exploitation of Other Workers”, *Revista Latinoamericana de Trabajo y Trabajadores*, No. 1 (November 2020 – April 2021), pp. 223-239. <<https://revista.redlatt.org/index.php/revlatt/article/view/8/8>>.

are wage earners in the North partly better off because others in the South are socio-economically and ecologically worse off? And it is therefore about the ecological footprint – that is the impact of human activities measured in terms of the area of biologically productive land and water required to produce the goods consumed and to assimilate the wastes generated of the Northern working classes in the South, and about the South-North value transfer.

How important have these mechanisms of unequal exchange been in history, and under which conditions did they occur? As a first orientation, I suggest to roughly distinguish four periods: the mercantilist period until the 1830s; the first international division of labour, 1830s-1940s; the period of Fordism, with a second international division of labour, from the 1940s; and the period of post-Fordism, beginning in the 1970s.

### *The mercantilist period until the 1830s*

During the 17<sup>th</sup> and 18<sup>th</sup> centuries the global flow of commodities had been mainly uni-directional. The North acquired commodities produced in the South largely through pillaging and exploitation. Forced labourers mined gold and silver in Mexico and Bolivia, and enslaved workers cultivated sugar cane and coffee in Brazil, the Caribbean, and the US South. Trade in minerals and cash crops was still modest. “It consisted of sugar, a few spices, precious metals, and luxury goods. It was then cloaked in much romance, and had caused much bloodshed, but it simply did not amount to much.”<sup>4</sup>

To the first Southern goods that were consumed by workers in the North belonged tea, sugar, coffee and tobacco, and somewhat later cotton. Partly, this was a consequence of decreasing prices. Margrit Schulte Beerbühl observed for England:

In the colonial goods segment, the price of sugar more than halved during the 17th century and halved once more between 1700 and 1750. The consumers of tea – for the first time imported by the East India Company in the 1660s – paid hundred years later only half the price. After the tariffs had been abolished in 1784, the tea price decreased once more by half. [...] The new textiles were [...] clearly cheaper than the old English wool cloths, and the price of cotton cloth dropped even further in the 18th century.<sup>5</sup>

This helps to explain why English working-class families, even when real wages did not increase, could afford a growing quantity of colonial goods. Tea became a popular drink already in the early eighteenth century. The consumption of tobacco increased from 0.01 lb per capita in the years 1620-29 to 2.23 lb in the years 1700-09; sugar consumption rose from 2.13 lb per capita in 1663 to 20.20 lb between 1760 and 1769, and to 26.16 at century’s end. In 1700-09 the English consumed 0.01 lb per capita of legally imported tea, and at century’s end 2 lb.<sup>6</sup> As Craig Muldrew noted:

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4 W. Arthur Lewis, *The Evolution of the International Economic Order* (Princeton: Princeton University Press, 1978), p. 5.

5 Margrit Schulte Beerbühl, “Die Konsummöglichkeiten und Konsumbedürfnisse der englischen Unterschichten im 18. Jahrhundert”, *VSWG: Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte*, 82, 1 (1995), pp. 1-28, at 15.

6 *Ibid.*, p. 8.

By the latter half of the eighteenth century a popular market for sugar existed in England, where even poor agricultural labourers and industrial workers consumed significant quantities as a sweetener for tea imported from China and India. British consumption of sugar rose from four pounds per person at the beginning of the eighteenth century to eighteen pounds per person by 1809.<sup>7</sup>

The ecological consequences of these arrangements were still limited. Monocultures for sugar and cotton began to develop in the Caribbean, the US South, and Brazil, while large scale coffee cultivation started in Ceylon.

The establishment of sugar plantations in the Americas relied on the labour of slaves, imported from Africa. This development had several consequences. First, it led to a relative depopulation in the sending countries. Second, it stimulated European industries that provided goods required for the slave trade (such as commodities that good be used in the exchange trade on the West African coast).<sup>8</sup> Third, it stimulated the production of textiles (especially linnen) as cloths for slaves.<sup>9</sup> And fourth, the slave ships brought the West African mosquito *Aedes aegypti* (to which most Africans were immune) with catastrophic consequences for non-Africans:

“A Dutch slaving vessel from West Africa anchoring at Barbados in 1647 introduced yellow fever to the Americas. In less than two years, this first definitive outbreak of the disease killed over 6,000 in Barbados. The following year an outbreak killed 35% of the populations on the islands of Cuba, St. Kitts, and Guadeloupe in six months, before slashing its way through Spanish Florida.”<sup>10</sup>

### *The first international division of labour, 1830s-1940s*

In the nineteenth century the first international division of labour followed. The growth of metropolitan capitalism increased the need to sell European goods in the colonies. North-South exchange came about: the South continued to supply commodities (tropical and subtropical cash crops), but the North now provided manufactured goods. This stimulated “free” trade. Once, for example, the British East India Company had lost its monopoly of the Indian overseas trade, selling British textiles and other manufactures in India became possible, thereby destroying the indigenous industry. By 1840, a parliamentary petition stated that Britain had “succeeded in converting India from a manufacturing country into a country exporting raw produce.”<sup>11</sup>

The first global division of labour thus led to the tendential de-industrialisation of parts of the Global South. Patrick O’Brien has estimated that “the share of world industrial

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7 Craig Muldrew, “Atlantic World 1760-1820: Economic Impact”, in: Nicholas Canny and Philip Morgan (eds), *The Oxford Handbook of the Atlantic World c.1450-c.1850* (Oxford: Oxford University Press, 2011), pp. 618-633, at 627. Compare Sidney Mintz, *Sweetness and Power. The Place of Sugar in Modern History* (New York: Viking, 1985), p. 67.

8 See for example the detailed study of the large number of local producers in the Dutch province of Zeeland who benefitted from the slave trade. Gerhard de Kok, *Walcherse ketens. De trans-Atlantische slavenhandel en de economie van Walcheren, 1755-1780* (Zutphen: Walburg Pers, 2020).

9 For instance, Silezian weavers produced such textiles for American slaves. See Jutta Wimmmler and Klaus Weber (eds), *Globalized Peripheries. Central Europe and the Atlantic World, 1680-1860* (London: Boydell & Brewer, 2020).

10 Timothy C. Winegard, *The Mosquito. A Human History of Our Deadliest Predator* (New York: Dutton, 2020), p. 170.

11 Quoted in Irfan Habib, *The Indian Economy, 1858-1914* (New Delhi: Tulika, 2007), p. 31.

output emanating from production located within third-world economies declined from around 70 percent, 1750-1800, down into the 10 percent range, ca. 1950.”<sup>12</sup> From around 1750 to 1950 capitalist industrialisation was largely limited to the North Atlantic region, although of course industrial pockets also existed in Brazil, India and elsewhere. This international division of labour occurred in a global market that may be characterised as semi-capitalist, since most of the commodities imported into the capitalist countries were still produced in a non-capitalist manner.

The period from 1848 until the 1860s was a period during which capital accumulation in Western European had not advanced to such an extent that factories could be established in other parts of the world. Bulk shipment of cheap and easily perishable goods over long distances also remained limited because of the high transport costs.<sup>13</sup> From the 1870s on, however, an “expanding crop sequence” developed; the volume and relative importance of imports increased, more crop types were imported, and the average distance over which imports were moved grew (Table 1).

TABLE 1: Average distances which various types of British agricultural imports were moved, 1830-1913

Import type	Average distance from London to regions from which each import type derived (miles)		
	1831-35	1871-75	1909-13
Fruit and vegetables	0	535	1,880
Live animals	0	870	4,500
Butter, cheese, eggs	262	1,340	3,120
Feed grains	860	2,430	4,830
Flax and seeds	1,520	2,770	3,900
Meat and tallow	2,000	3,740	6,250
Wheat and flour	2,430	4,200	5,950
Wool and hides	2,330	10,000	10,900
Weighed average	1,820	4,300	5,880

Source: J. Richard Peet, “The Spatial Expansion of Commercial Agriculture in the Nineteenth Century: A Von Thunen Interpretation,” *Economic Geography*, 45, 4 (October 1969), pp. 283-301, at 295.

Behind the spatial expansion lay also ecological considerations. Alf Hornborg has, for example, revealed how advantageous for British entrepreneurs the replacement of home-grown wool by cotton grown in the US South has been around 1850: 1.1 million hectares of cotton fields in North America generated a revenue of £66,475,547, liberating the over 6 million hectares in Britain that would have been required to generate the equivalent amount of revenue from wollen manufactures.<sup>14</sup>

<sup>12</sup> Patrick Karl O’Brien, “Industrialisation”, in: Jerry H. Bentley (ed.), *The Oxford Handbook of World History* (Oxford: Oxford University Press, 2011), pp. 304-324, at 309. O’Brien means “manufacturing”, when he writes “industry.”

<sup>13</sup> Ernest Mandel, *Late Capitalism*. Trans. Joris De Bres (London and New York: New Left Books, 1975), p. 51.

<sup>14</sup> Alf Hornborg, “Footprints in the Cotton Fields: The Industrial Revolution as Time-Space Appropriation and Environmental Load Displacement,” in: Alf Hornborg, J.R. McNeill, and Joan Martinez-Alier (eds), *Rethinking Environmental History. World-System History and Global Environmental Change* (Lanham: Altamira Press, 2007), pp. 259-272, at 263-266.

The abolition of slavery in British America (1834), the United States (1865) or Brazil (1888) did not stop ecological damage resulting from large-scale monocultures. In the US South for example, soil erosion on cotton plantations seems even to have increased after the Civil War.<sup>15</sup> (Typical was perhaps what happened with cotton cultures in Zululand in the early twentieth century: “In the rush to maximise acreage, land that was recently cleared was put immediately under cotton, diminishing the soil's productivity. Insect pests increased as cotton was planted on the same land year after year without reprieve. Damage due to excessive rains could have been mitigated by planting cotton alongside other crops, a strategy that had been ignored in the hype of the cotton boom.”<sup>16</sup>)

From the 1870s, this development culminated in the first stage of globalisation. During the final decades of the nineteenth century a new global pattern of economic relations emerged; not only did the size and geographic spread of international trade increase sharply, but also “the standard of living of workers and the profitability of industry in European nations came to depend on maintenance of overseas supplies, while the standard of living of the producers of raw materials came to depend on market fluctuations occurring sometimes on the other side of the world.”<sup>17</sup> During the interwar years global growth slowed, world trade declined, autarkic tendencies arose in the Global South, and the establishment of the Soviet Union initiated systemic competition.

It was within the context of the first globalisation that the “economic parity across major regions of the world around 1800—and for several millennia before this—was replaced for the most part by growing regional disparities.”<sup>18</sup> The situation of women in the South in particular deteriorated as a result. An example is Java, where from 1830 the Cultivation System (*Cultuurstelsel*) was in force, which obliged the rural population to devote part of its time to the production of cash crops for which they received compensation from the colonial authorities below the market value. Elise van Nederveen Meerkerk has calculated that by this policy the labour time of women increased by forty-seven per cent. At the same time the East Indian gains enabled the Dutch government to lower the tax pressure in the Netherlands, while real wages in the metropole increased, allowing a male breadwinner model and a decreasing female labour force. Colonial profits therefore “contributed to changing divisions of labour at the household level.”<sup>19</sup>

In the South agriculture shifted increasingly from subsistence to commodity-production. Where colonialism could strengthen its hold on local populations, the situation of these populations deteriorated. The Indian economist Utsa Patnaik correctly observed: “a

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15 Erin Stewart Mauldin, “Freedom, Economic Autonomy, and Ecological Change in the Cotton South, 1865-1880,” *The Journal of the Civil War Era*, 7, 3 (September 2017), pp. 401-424.

16 Matthew A. Schnurr, “The Boom and Bust of Zululand Cotton, 1910-1933,” *Journal of Southern African Studies*, 37, 1 (March 2011), pp. 119-134.

17 Harry Magdoff, *The Age of Imperialism. The Economics of U.S. Foreign Policy* (New York: Monthly Review Press, 1969), p. 32.

18 M. Shahid Alam, “Global Disparities Since 1800: Trends and Regional Patterns”, *Journal of World-Systems Research*, 12, 2 (July 2006), pp. 37-59, at 52-53.

19 Elise van Nederveen Meerkerk, *Women, Work and Colonialism in the Netherlands and Java. Comparisons, Contrasts, and Connections, 1830-1940* (Cham: Palgrave Macmillan, 2019), pp. 104, 112.

surge in exports from plantations and from peasant agriculture, but always at the expense of falling foodgrains output and availability for colonised populations, reducing their nutritional standard and even leading to the extreme outcome of famine.” She therefore argues that there is an “inverse relation between primary exports and domestic food grains availability.” The reason for this is simple: “There is a limited supply of tropical lands and if heavy external demands are made on its productive capacity while insufficient investment is put in, then history demonstrates that the satisfaction of domestic needs is not possible and local populations are plunged into undernutrition and poverty.” Thus emerges “a global asymmetry of primary productive capacities relative to demands on them”.<sup>20</sup> In Java paddy rice per head in kilograms decreased from 199 in 1885 to 162 in 1940, while the production of sugarcane increased more than threefold. In British India the output of foodgrains per head decreased with 29 per cent between 1901 and 1941. Similar trends could be seen in Korea and Taiwan during Japanese colonial rule.<sup>21</sup>

The differential between South and North was expressed clearly in a report published in 1941:

In family budgets of laboring classes in the Orient, four-fifths or more of the family income is commonly required to cover outlay for food composed mainly of the cheapest types. In the Occident, the proportion of the income spent for food is commonly less than half, and more expensive types of food are within reach.<sup>22</sup>

The other side of the coin was the development of effective demand in the metropolises. During the nineteenth century (sub)tropical consumer goods more and more changed from luxury commodities to commodities consumed by working-class families as well. The underlying reason for this shift probably were the increasing real wages: The more technologically advanced the metropolitan production of consumer goods became, the cheaper these consumer goods, and the higher the level of real wages. Growing purchasing power of working-class families resulted *directly* in an increasing demand for tropical products, since these were new, different, exotic, etc.<sup>23</sup> And it led *indirectly* to increased demand for tropical products as soon as the supply of equivalent products from temperate climate zones proved to become insufficient given the growing consumer interest. For example: “During the late decades of the 19th century the European demand for edible fats began to outrun mid-latitude supplies, and the coconut began its rise as an item of export agriculture in the Asiatic tropics.”<sup>24</sup> Something similar seems to have happened in the case of West-African palm oil that was used for soap, candles, etc. In any case, since the late 19th

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20 Utsa Patnaik, *The Republic of Hunger and Other Essays* (Gurgaon: Three Essays Collective, 2007), pp. 2-3.

21 Anne Booth, *Agricultural Development in Indonesia* (London: Allen & Unwin, 1988); George Blyn, *Agricultural Trends in India 1891-1947* (Philadelphia: University of Philadelphia Press, 1966); Richard Grabowski, “A Historical Reassessment of Early Japanese Industrialisation”, *Development and Change*, 16,2 (April 1985), pp. 235-250; Yujiro Hayami and Vernon W. Ruttan, “Korean Rice, Formosan Rice and Japanese Agricultural Stagnation”, *Quarterly Journal of Economics*, 84, 4 (November 1970), pp. 562-589.

22 V.D. Wickizer and M.K. Bennett, *The Rice Economy of Monsoon Asia* (Stanford: Food Research Institute, 1941), p. 104, note.

23 Wolfgang Schoeller, *Die offene Schere im Welthandel: Und wie sie zu schließen ist* (Heilbronn: Distel Verlag, 2005), p. 31.

24 J.E. Spencer and Ronald J. Horvath, “How Does an Agricultural Region Originate?”, *Annals of the Association of American Geographers*, 53, 1 (March 1963), pp. 74-92, at 83.

century tropical products increasingly entered the consumption of low- and middle-income groups.

Obviously, the trend towards more wage-earners' consumption of goods produced in the South was uneven, and depended on prosperity, taste, custom and gender.<sup>25</sup> England was early on a major tea consumer but did not drink much coffee. Other countries showed different patterns. In the mid-19th century, average annual coffee consumption per capita was in Denmark 1847: 5.37 lbs; the German Union 1844-48: 3.25 lbs; Belgium 1845-1848: 8.92 lbs; Great Britain and Ireland 1850: 1.13 lbs; USA 1850: 5.57 lbs.<sup>26</sup> Generally, coffee consumption seems to have increased over time. Take the Norwegian case, for example:

In the 1830s, consumption was very low – little more than 1 kg of unroasted coffee per adult. This amounted to no more than one or two cups of coffee per week, and coffee consumption obviously did not play any significant role in the average Norwegian's daily life during this period. However, in the late 1830s consumption began to increase, reaching a level of about 5-6 kg (corresponding to one or two cups per day) 20 years later. During this period, coffee gradually became transformed from an exclusive and exotic drink of the higher social classes to an everyday beverage of the common man and his wife. The consumption of this new drink continued to increase throughout the century, but at a much slower rate.<sup>27</sup>

Consumption of Southern goods was further stimulated by the introduction of steam ships and refrigeration techniques. Since the 1880s, these allowed perishable fruits to make long journeys.

For the fiscal year ended June 30th, 1912, the bananas imported into the United States reached the enormous total of 44,520,000 bunches, valued at £2,993,000. [...] Estimating the average number of bananas at 140 to the bunch, it appears that the people of the United States consume over 6,000,000,000 bananas a year, or more than sixty for every man, woman, and child in the United States, including Alaska and Hawaii.<sup>28</sup>

But despite all these developments the share of Southern goods in Northern wage-earners' consumption seems to have remained quite modest during the first international division of labour. During the first three decades of the twentieth century the consumption per capita of fruits, sugar and cocoa in Great Britain, for example, continued to be rather low.<sup>29</sup>

It is likely that in the period under review, Northern working-class consumption of (sub-)tropical textiles, such as cotton, increased – not only in the colonial metropolises, but in connected other advanced capitalist countries as well. It is, however, very difficult to substantiate this hypothesis empirically. Studies of family budgets almost always give figures

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25 See e.g., Roman Sandgruber, "Das Essen der Arbeiterfrauen. Geschlechtsspezifische Konsumunterschiede in Arbeiterhaushalten", *L'Homme. Zeitschrift für feministische Geschichtswissenschaft*, 2, 1 (1991), pp. 45-56; Victoria De Grazia with Ellen Furlough (eds), *The Sex of Things: Gender and Consumption in Historical Perspective* (Berkeley: University of California Press, 1996).

26 John Crawford, "History of Coffee", *Journal of the Statistical Society of London*, 15, 1 (April 1852), pp. 50-58, at 54-55.

27 Ole-Jørgen Skog, "Studying Cultural Change: Were the Changes in Alcohol and Coffee Consumption in the Nineteenth Century a Case of Beverage Substitution?", *Acta Sociologica*, 49, 3 (September 2006), pp. 287-302, at 295.

28 "The World's Production and Consumption of Bananas", *Journal of the Royal Society of Arts*, 61, No. 3147 (March 14, 1913), pp. 472-473.

29 See the table in Sir E. J. Russell, "Recent Changes in the Sources of Our Food Supply", *Geography*, 18, 2 (June 1933), pp. 91-101, at p. 91.

for “clothing”, without further specification. And the historians writing on class specific dressing habits have until now mainly focused on the period until 1850.<sup>30</sup>

The (slowly) growing consumption of (sub)tropical goods in the North, also by wage-earners, and increasing exploitation of workers and peasants in the South, had a very positive effect on the economies of colonial powers. In the Dutch case, Frans Buelens and Ewoud Frankema conclude that:

At its peak, in the 1850s, the forced cultivation of sugar, tea, indigo and coffee by Javanese peasants contributed an estimated 52 % to Dutch central tax revenues and an estimated 4 % to Dutch GDP. The net surplus on the Indonesian balance of payments was used to service high levels of Dutch state debt, to finance Dutch infrastructural investments and to subsidize the less ‘productive’ Dutch colonies in the West Indies. [...] We find that returns to FDI in the Netherlands Indies during 1919–1928 were impressive (14.3 %), almost 3 percentage points higher than the world average.<sup>31</sup>

Simultaneously the ecological effects of the changing Northern consumption patterns became visible. A few examples have to suffice. Take the Caribbean sugar plantations.

“Forests [...] were the lifeblood of the sugar complex. Not only was forest clearance a precondition of sugar cultivation, but wood was necessary for the immense fuel needs of the boiling furnaces which turned raw cane juice into semirefined sugar. Timber was needed to construct housing, sheds, and other buildings. It was needed by the metalworkers who made the furnaces, boilers, and tools needed to process the sugar cane. It was needed to construct hogsheads and other large barrels for shipment. And of course, it was needed to build the ships that transported the sugar to market. The steady forward march of sugar cultivation destroyed forests in areas adjacent to the cane fields, of course. Sugar also consumed distant forests. [...] Once the forests were gone, soils became highly vulnerable to erosion from wind and rain. [...] The sugar frontier, in depleting the soil, required ever greater inputs of fertilizer and labor. The challenge of declining soil productivity was met, in part, by bringing in more animals to supply fertilizer, which led to more deforestation for pasturage, which resulted in yet more soil erosion.”<sup>32</sup>

The growing of pepper in the Netherlands Indies (Aceh Province in Sumatra and western Java) during the early 20<sup>th</sup> century was about 20,000 tons, which required 57,000 ha of land. “But because of pepper’s exhausting nature, regular and widespread rotations were practiced, and more like 475,000 ha was cleared, which rarely reverted to forest but usually became grassland.”<sup>33</sup> And so on ...

Imperialism not only resulted in cheap consumer goods. It also created jobs in de metropolises. The British Fair Trade League, founded in 1881, received enthusiastic support from British cotton operatives. “The Lancashire – and what is less often appreciated, the Scottish – textile industry did export large quantities of goods of all kinds all over Africa.” Therefore, “The English working-man did not necessarily mistake his own interest in this. If goods could not be sold, men could not be employed. ... Their support for imperialism, which

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30 See e.g., Giorgio Riello and Prasanna Parthasarathi (eds), *The Spinning World: A Global History of Cotton Textiles, 1200-1850* (Oxford: Oxford University Press, 2009), or Beverly Lemire, *Global Trade and the Transformation of Consumer Cultures. The Material World Remade, c. 1500-1820* (Cambridge: Cambridge University Press, 2018).

31 Frans Buelens and Ewoud Frankema, “Colonial Adventures in Tropical Agriculture: New Estimates of Returns to Investment in the Netherlands Indies, 1919-1938”, *Cliometrica*, 10, 2 (2016), pp. 197-224, at 198-199.

32 Jason W. Moore, “Sugar and the Expansion of the Early Modern World-Economy: Commodity Frontiers, Ecological Transformation, and Industrialization,” *Review* (Fernand Braudel Center), 23, 3 (2000), pp. 409-433, at 419-420, 423, 424.

33 Michael Williams, *Deforesting the Earth: From Prehistory to Global Crisis. An Abridgment* (Chicago: University of Chicago Press, 2006), p. 322.



Engels noted, may well not have been, as Lenin supposed, simply the result of clever deception by the bourgeoisie.”<sup>34</sup>

Charles Guillaume Cramer, a leading social-democratic expert on colonial affairs, said at the so-called “Colonial Congress” of the Dutch Labour Party in 1930:

What are at present the existing interests of the Dutch working class in the colonial question? The colonial wage sources can be split up as follows:

1. Drainage: the outflow of profits made by land reclamation and the exploitation of the Indonesian worker. The profits from this source for the Netherlands can be estimated at on average 400 million guilders per year. Naturally, this profit creates employment; capitalised at 10 per cent, it amounts to 17 per cent of the national capital.

2. Market for Dutch industry. In 1920 the total value of exports was 1700 million guilders, of which 14 per cent went to Indonesia. In 1927 these figures were 1900 million guilders and 7.2 per cent. The textile industry exported in 1922 67.1 per cent of its total production to Indonesia. In 1928 this figure had decreased to 55.9 per cent. [...]

3. Market for personal labour power. ... 43,500 Europeans have leading positions in Indonesia. This is the ‘upper layer.’ The number of people originating directly from the Netherlands is roughly 40,000.

For an estimate of what an immediate severance of the colonial ties would mean for the Dutch workers, the speaker consulted our competent fellow party member Dr Tinbergen; he calculated, globally of course, a loss of employment for 150,000 Dutch workers, that is about 10 per cent of the total number.<sup>35</sup>

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34 M. E. Chamberlain, “Imperialism and Social Reform”, in: C. C. Eldridge (ed.), *British Imperialism in the Nineteenth Century* (London and Basingstoke: Macmillan, 1984), pp. 148-167, at 160, 159.

35 *Verslag van het koloniaal congres der Sociaal-Democratische Arbeiderspartij in Nederland, gehouden op zaterdag 11 en zondag 12 januari 1930 te Utrecht* (Amsterdam: N.V. De Arbeiderspers, 1930), pp. 13-14. Tinbergen was the economist Jan Tinbergen (1903-1994), co-recipient of the first Nobel Prize for Economic Sciences in 1969. In 1945 Tinbergen and his collaborator Derksen estimated that immediate Indonesian independence would cost the Dutch economy annually around 600 million guilders, or 12 per cent of the national income. J. B. D. Derksen and J. Tinbergen, “Berekeningen over de economische betekenis van Nederlandsch-Indië voor Nederland”, *Maandschrift van het Centraal Bureau voor de Statistiek*, 40, 10-12 (October-December 1945), pp. 210-216. In comparison, calculations of the colonial contribution to the English economy vary, depending on time span and economic model applied, from 2.57% to 7.8%. See Michael Edelstein, “Foreign Investment, Accumulation and Empire, 1860-1914”, in: *The Cambridge Economic History of Modern Britain*. Vol. II, *Economic Maturity, 1860-1939* (Cambridge: Cambridge University Press, 2003), pp. 190-226. A study of Belgian investment in the Congo concludes that “Congoese stocks, apart from the start-up period and the point when country risk became a factor, yielded higher returns than Belgian stocks. For the most significant period (that is, 1920–55), the time-weighted total return of Congoese stocks was 7.18 per cent compared with only 2.87 per cent for Belgian stocks.” Frans Buelens and Stefaan Marysse, “Returns on Investments during the Colonial Era: the Case of the Belgian Congo”, *Economic History Review*, 65, Supplement 1 (2009), pp. 135–166, at 162. Further contributions to the debate include: Wytze Gorter, “Enkele gedachten over de economische betekenis van het verlies van Indonesië”, *De Economist*, 108 (1960), pp. 641-658; Patrick Manning, “Analyzing the Costs and Benefits of Colonialism”, *African Economic History Review*, 1, 2 (Autumn 1974), pp. 15-22; F.H. Golay, “Southeast Asia: The ‘Colonial Drain’ Revisited”, in C. D. Cowan and O. W. Wolters (eds), *Southeast Asian History and Historiography* (Ithaca: Cornell University Press, 1976), pp. 368-387; M. J. Baudet en G. J. Wijers, „De economische betekenis van Nederlandsch-Indië voor Nederland. Oude en nieuwe berekeningen,“ *Economisch-Statistische Berichten*, 15 September 1976, pp. 885-888; L. Davis and R. Huttenback, *Mammon and the Pursuit of Empire: The Political Economy of British Imperialism, 1860-1912* (Cambridge: Cambridge University Press, 1987); Patrick K. O'Brien, “The Costs and Benefits of British Imperialism, 1846-1914”, *Past and Present*, No. 120 (August 1988), pp.163-200; Paul Kennedy, “The Costs and Benefits of British Imperialism, 1846-1914”, *Past and Present*, No. 125 (November 1989), pp. 186-192; Patrick K. O'Brien, “The Costs and Benefits of British Imperialism 1846-1914: Reply”, *Past and Present*, No. 125 (November 1989), pp. 192-199; Angus Maddison, “Dutch Income in and from Indonesia, 1700-1938”, *Modern Asian Studies*, 23, 4 (1989), pp. 645-670; J. de Jong, *Van batig slot naar ereschuld: de discussie over de financiële verhouding tussen Nederland en Indië en de hervorming van de Nederlandse koloniale politiek, 1860-1900* (The Hague: SDU Uitgeverij, 1989); M. Kimura, “The Economics of Japanese Imperialism in Korea, 1910-1939”, *The Economic History Review*, 48 (1995), pp. 555-574; Pierre van der Eng, *Economic Benefits from Colonial Assets: The Case of the Netherlands and Indonesia, 1870-1958*. Research Memorandum GD 39 (Research Institute Systems, Organisations and Management (SOM) at the University of Groningen, June 1998); Alec Gordon, “Netherlands East Indies: The Large Colonial Surplus of Indonesia, 1878-1939,” *Journal of contemporary Asia*, 40, 3 (2010), pp. 425-443; Alec Gordon, “A Last Word: Amendments and Corrections to

### *Fordism, 1940s-1970s*

From 1940 the colonial empires collapsed. The independence of Zimbabwe in 1980 was the final piece, but by 1975 the process was already largely completed. Fears of the European empires that the loss of the colonies would bring about economic disaster proved unfounded. Marshall aid and extensive armaments expenditure made it possible to absorb the blow. From the early 1950s a new extended and turbulent period of economic growth commenced. Until the price revolution that began in 1972, “the average annual rates of growth of both world industrial production (about 5.6 percent) and world trade (about 7.3 percent) in this period exceeded by a substantial margin any before experienced.”<sup>36</sup>

In the advanced capitalist countries the growing prosperity facilitated an often cumulative, but planless process of reforms and changes resulting in a relatively wide spreading of the so-called standard employment relationship. These reforms and changes pertained to seven policy areas: (i) protective labor legislation, including the prohibition of child labor, safety rules at work, the prohibition of night work for women, etc.; (ii) legalisation of workers’ coalitions, with the founding of employers’ associations as a (delayed) response; (iii) regulation of labor time through shortening of the working day, shortening of the working week, and introduction of paid holidays; (iv) introduction of obligatory insurances, such as sickness insurance, old age pensions, invalidity insurance, and unemployment insurance (which implies the ‘discovery’ of unemployment as a social phenomenon); (v) institutionalisation of collective bargaining; (vi) spread of labor contracts with unlimited duration; and (vii) arrival of full employment and a high-wage economy.<sup>37</sup>

These developments were accompanied by significant changes in Northern families. Male breadwinning, which, as we have seen, had its roots in the nineteenth century, spread, although it did not become common anywhere.<sup>38</sup> A new needs structure developed; eating customs, leisure habits, entertainment needs changed, and an independent youth culture emerged. Tourism increased and employees were increasingly motorised, a trend that had already started before the Second World War in the United States and continued after 1945

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Indonesia’s Colonial Surplus 1880–1939,” *Journal of Contemporary Asia*, 48, 3 (2018), pp. 508-518; Utsa Patnaik and Prabhat Patnaik, “The Drain of Wealth: Colonialism before the First World War,” *Monthly Review*, February 2021, pp. 1-22; Pilar Nogues-Marco, “Measuring Colonial Extraction: the East India Company’s Rule and the Drain of Wealth (1757–1858),” *Capitalism*, 2, 1 (2021), pp. 154-195.

36 W.W. Rostow, *The World Economy: History and Prospect* (London and Basingstoke: Macmillan, 1978), p. 247.

37 Marcel van der Linden, “The Social Question in Western Europe: Past and Present”, in: Jan Breman *et al.* (eds), *The Social Question in the Twenty-first Century. A Global View* (Oakland, CA: University of California Press, 2019), pp. 23-39.

38 Mari Osawa, “The Vicious Cycle of the ‘Male Breadwinner’ Model of Livelihood Security”, *Voices from Japan*, No. 16 (Winter 2006), pp. 1-5, argues for example that “Japan’s ‘male breadwinner’ model ... was introduced during a period of rapid economic growth in the 1960s. In the 1980s, the ‘male breadwinner’ model was strengthened during the era of ‘Japanese-style welfare society,’ when many fields of social policy were reformed.” Nevertheless, “the mid-1980s was a time when the number of double-income households surpassed the number of households with full-time housewives.” (p. 2) For comparative perspectives, see Angelique Janssens (ed.), *The Rise and Decline of the Male Breadwinner Family?* Supplement 5 of the *International Review of Social History* (1997), and Birgit Pfau-Effinger, “Socio-historical Paths of the Male Breadwinner Model. An Explanation of Cross-national Differences”, *British Journal of Sociology*, 55, 3 (September 2004), pp. 377-399.

in other advanced capitalist countries.<sup>39</sup> These changes were often accompanied by changing male-female relations.<sup>40</sup> At the same time, extensive technological innovations took place that led to “an ever-growing range of new materials, production processes, energy sources, and production and consumption goods.”<sup>41</sup> The demand for raw materials therefore grew dramatically – also for non-traditional ones such as natural rubber (for car tires) from (sub)tropical regions, copper (for wires) from Chile, or germanium (for transistors) from China and Inner Mongolia. Meanwhile, the economic gap between rich and poor countries widened, so that the prices of many complex consumer goods in the North could be kept relatively low.

However, the period of tempestuous growth came to an end around 1970. The average profit rate began to fall again, and economic growth declined. As predicted by Michał Kalecki during World War II, full-employment capitalism did indeed reflect increased power of the working classes, and capital had to answer this challenge.<sup>42</sup> It had four options:

- replacing more costly workers with less expensive ones *within* separate high-wage countries by recruiting migrant labourers from poorer countries and increasing the share of women in the labour force;
- replacing more costly workers with less expensive ones *across* state boundaries, especially by relocating factories to low-wage countries;
- replacing manual labour with machines, i.e. by automating, robotizing work processes, and making them more science-based;
- reducing the wages of the highly waged workers through cost reductions and inflation and by deliberately weakening trade unions.<sup>43</sup>

All four methods were tried. Wolfgang Streeck has shown how capital, with the support of national governments and supranational institutions (IMF, Worldbank) pressed its offensive through in several steps, until today.<sup>44</sup>

### *Post-Fordism since the 1970s*

The relocation of industries (e.g. textiles, shipbuilding) to low-wage countries gave rise to *the second division of labour*. Industrialisation now really got under way in the South and no

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39 Stacy C. Davis and Robert G. Boundy, *Transportation Energy Data Book*. Edition 37.1 (April 2019), p. 3-4, Table 3.2; Eva Jacobs and Stephanie Shipp, “How Family Spending Has Changed in the U.S.”, *Monthly Labor Review*, 113, 3 (March 1990), pp. 20-27.

40 See for instance Ruth Schwartz Cohen, *More Work for Mother: The Ironies of Household Technology from the Open Hearth to the Microwave* (New York: Basic Books, 1983); Margaret Walsh, “Gender and Automobility: Selling Cars to American Women after the Second World War”, *Journal of Macromarketing*, 31, 1 (2011), pp. 57-72.

41 A. G. Kenwood and A. L. Lougheed, *The Growth of the International Economy, 1820-1980* (London: George Allen & Unwin, 1983), p. 275.

42 Michał Kalecki, “Political Aspects of Full Employment”, *Political Quarterly*, 14, 4 (October 1943), pp. 322-330.

43 I have derived the first three options from Giovanni Arrighi, “Marxist Century, American Century: The Making and Remaking of the World Labour Movement”, *New Left Review*, 1/179 (January-February 1990), pp. 29-63, esp. 38-45.

44 Wolfgang Streeck, *Buying Time: The Delayed Crises of Democratic Capitalism* (London: Verso, 2014).

longer focused mainly on the domestic market. “As late as 1960, there was virtually no Third World production of manufactured goods for export. By the late 1970s, however, there many hundreds of thousands of workers in multinationale corporate plants producing for exports from scores of sites in more than 60 countries of Asia, Africa, and Latin America.”<sup>45</sup> Due in part to this shift, industrial jobs dropped sharply in the North, although there was little or no decline in industrial output there.<sup>46</sup> Between 1971 and 1983, “1.5 million workers, mostly women, lost their jobs in the clothing and textile industry in Europe and the United States”, while “two million or more women workers found jobs in the clothing and textile industry in the Third World.”<sup>47</sup> Naturally, this had a positive effect on the income level of the Southern workers involved. At the same time, there was a clearly negative effect on the wages of some Northern working-class groups; however, this effect was probably offset by the fall in prices of commodities produced in the South which increased the purchasing power of the working class in the North. Using detailed United States household consumption data between 1994 and 2005, economists Christian Broda and John Romalis have shown that this “price effect” offset “almost all the rise in inequality measured by official statistics over this period.”<sup>48</sup>

As Michał Kalecki predicted during the Second World War, full employment capitalism actually reflected the growing power of the working class, to whose challenge capital had to find an answer. The average rate of profit gradually fell again and economic growth slowed. This brought about an ideological shift from an expansionist demand-driven policy to an anti-working-class supply-oriented policy with a contradicting demand policy.<sup>49</sup> As a result, the wage share (i.e. the share of wages in overall income) has fallen in many countries at different speeds since the 1980s (Fig. 1).<sup>50</sup>

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45 William W. Goldsmith, “Bringing the Third World Home”, in: Richard Peet (ed.), *International Capitalism and Industrial Restructuring: A Critical Analysis* (Boston: Allen & Unwin, 1987), pp. 270-279, at 272.

46 Whether all this will lead the Global South to become as industrialized as the Global North once was remains unclear. There are signs that the industrialization trend is already starting to taper off in some of the Southern countries, although relative income levels are still significantly lower than they were in the early industrializers. “In Latin America, as manufacturing has shrunk informality has grown and economy-wide productivity has suffered. In Africa, urban migrants are crowding into petty services instead of manufacturing [...]” Dani Rodrik, “Premature Deindustrialization”, *Journal of Economic Growth*, 21 (2016), pp. 1-33, at 28.

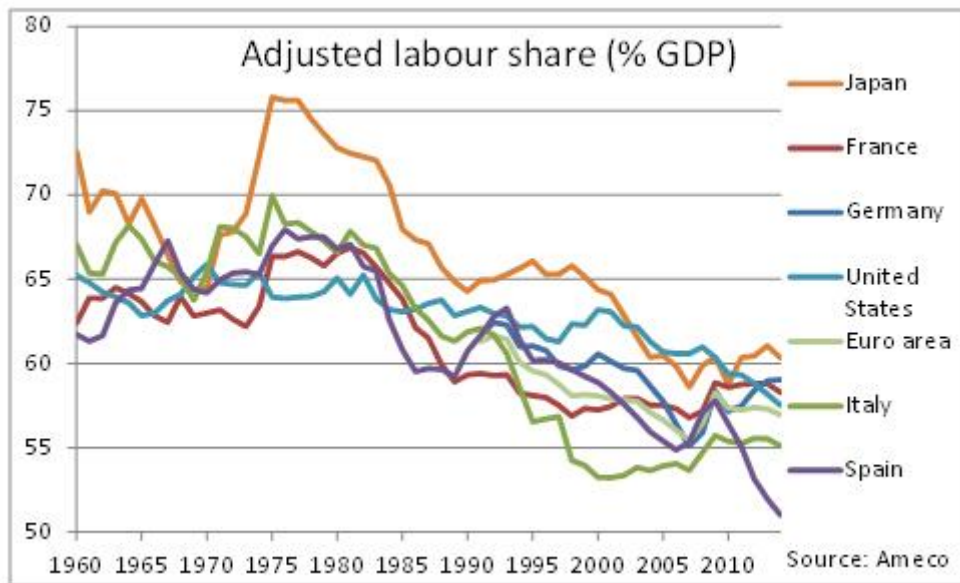
47 Swasti Mitter, *Common Fate, Common Bond. Women in the Global Economy* (London: Pluto Press, 1986), p. 9.

48 Christian Broda and John Romalis, “Inequality and Prices: Does China Benefit the Poor in America?”, Working Paper University of Chicago 2008.

49 Samuel Bowles and Robert Boyer, “A Wage-led Employment Regime: Income Distribution, Labour Discipline, and Aggregate Demand in Welfare Capitalism,” in: Stephen A. Marglin and Juliet B. Schor (eds), *The Golden Age of Capitalism. Reinterpreting the Postwar Experience* (Oxford 1990), pp. 187-217, at 212.

50 ILO and OECD, *The Labour Share in G20 Economies. Report prepared for the G20 Employment Working Group Antalya, Turkey, 26-27 February 2015*: <<https://www.oecd.org/g20/topics/employment-and-social-policy/The-Labour-Share-in-G20-Economies.pdf>>, with graphs for France (1897-), Great Britain (1856-), and the USA (1899-), all on p. 15; Loukas Karabarbounis and Brent Neiman, “The Global Decline of the Labor Share,” *The Quarterly Journal of Economics*, 129, 1 (2014), pp. 61-103 (for the period after 1975). Useful is also Tali Kristal, “Good Times, Bad Times: Postwar Labor’s Share of National Income in Capitalist Democracies,” *American Sociological Review*, 75, 5 (2010), pp. 729-763; Engelbert Stockhammer, *Why Have Wages Shares Fallen? A Panel Analysis of the Determinants of Functional Income Distribution* (Geneva 2013); and John Smith, *Imperialism in the Twenty-first Century* (New York 2016), pp. 145-155.

Figure 1: Labor shares, 1960-2013



Source: Fondation Robert Schuman, 23 September 2013, <https://www.robert-schuman.eu/en/european-issues/0289-labour-costs-and-crisis-management-in-the-euro-zone-a-reinterpretation-of-divergences-in>

Gradually, in the North the working-class achievements of the 1950s and 60s were forced back, and the trade unions were weakened. The problems of the trade unions in the Global North were exacerbated by the changing composition of the working class. While industrial employment decreased, the service and financial sectors expanded. The growing informal economy complicated things further, since workers were provided with short-term contracts and tended to change jobs frequently to earn their income under often precarious conditions. Very often this shift implied a feminisation of the employees. Maria Mies has even suggested that “women, not men, are the optimal labour force for the capitalist (and the socialist) accumulation process on a world scale”. Women are increasingly defined “as 'housewives', not as workers; this means their work, whether in use value or commodity production, is obscured, does not appear as 'free wage labour', is defined as an 'income-generating activity', and can hence be bought at a much cheaper price than male labour.”<sup>51</sup>

The new international division of labour resulted in accelerating “globalisation.” As a consequence, the world’s working class has been growing and changing rapidly. Seemingly contradictory trends have been taking place in labour settings: on the one hand transcontinental connections have become denser and have been intensified, making the world appear increasingly homogeneous while on the other hand fragmentation and heterogenisation are ongoing as well. Homogenisation is clear in part from the continuously increasing share of employees in the world population. Reliable data on the total number of wage earners are lacking for much of the nineteenth and twentieth centuries. There are

<sup>51</sup> Maria Mies, *Patriarchy and Accumulation on a World Scale. Women in the International Division of Labour* (London: Zed Press, 2014), p. 116.

strong indications, however, that in the middle of the last century a subsistence economy still prevailed in Asia and Africa, on the Pacific Islands and in some parts of Latin America. Wladimir and Emma Woytinsky have estimated that in 1948 about 57 per cent of the world's population belonged to the subsistence economy and 43 per cent to the monetary economy.<sup>52</sup> Since then, monetisation seems to have progressed by leaps and bounds. The International Labour Organisation (ILO) estimates that between 1991 and 2020 the proportion of the world labour force in paid employment increased from about 44 to about 53 percent. Additionally there are large groups of “own-account” workers and “contributing family workers”, plus of course employers.<sup>53</sup> A large and growing share of the world's labour force depends directly or indirectly on wages.<sup>54</sup>

Ever greater numbers of workers worldwide maintain direct economic contacts with one another. Transnationalisation of labour processes, which started gradually in the 1960s and accelerated since the 1980s, has been crucial in this process. As a result, goods manufactured in one country are increasingly assembled from components produced in other countries, which in turn contain subcomponents made in still other countries. This process – also known as “slicing up” or “unbundling” supply chains – started at about the same time in North America (twin plants in Mexico and the United States) and East Asia, followed somewhat later by Europe.<sup>55</sup> This had several consequences for the environment. First, it accelerated the consumption of fossile fuels. Second, it increased the actual consumption of energy (and carbon emission) used in the Southern production:

“Most important is the relatively poor infrastructure. States outside of the core lack the tax revenues to finance much new construction or keep up repairs on the old. So roads are less often paved or maintained, rail service spotty, and the electricity grid fragile and prone to frequent blackouts. The trucks and rolling stock using these facilities are themselves second or even third-hand, whether state or privately owned. Finally, power generation facilities use both older equipment and the cheapest fuels, which are often the most polluting. For all of these reasons it takes more fuel to move raw materials in and finished products out of factories outside of the core than those within, and providing power to those factories is more polluting (including productive of CO<sub>2</sub>) than it is within the core.”<sup>56</sup>

In the midst of this development, another kind of radical change took place: “socialism” in the Soviet Union and Eastern Europe collapsed, China and Vietnam converted to capitalism, and India adapted to liberal market thinking. As a result, relatively well-earning segments of the wage-earning classes that are usually included in the vague category of the

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52 W.S. and E.S. Woytinsky, *World Population and Production. Trends and Outlook* (New York: The Twentieth Century Fund, 1953), p. 436.

53 ILO WESO Data Finder (<<https://www.ilo.org/wesodata>>).

54 <[https://www.ilo.org/global/topics/wages/minimum-wages/beneficiaries/WCMS\\_436463/lang--en/index.htm](https://www.ilo.org/global/topics/wages/minimum-wages/beneficiaries/WCMS_436463/lang--en/index.htm)>.

55 Richard Baldwin and Anthony J. Venables, “Spiders and Snakes: Offshoring and Agglomeration in the Global Economy.” *Journal of International Economics*, 90, 2 (2013), pp. 245-254, at 245-246.

56 Peter Grimes and Jeffrey Kentor, “Exporting the Greenhouse: Foreign Capital Penetration and CO<sub>2</sub> Emissions 1980–1996,” *Journal of World-Systems Research*, 9, 2 (Summer 2003), pp. 261-275, at 265-266.

“middle classes” now also emerged in East and South Asia, i.e. outside the “old” core countries of capitalism.<sup>57</sup>

In parallel an important new development took place: the increasing export of hazardous production and hazardous waste from North to South. The deceased Scott Frey, who pioneered the study of this dangerous trend summarized in the late 1990s:

“Reliable data on the production of hazardous wastes do not currently exist, but there is consensus that the production of hazardous wastes has grown substantially since World War II. This has been attributed to market forces requiring economic growth through increased consumption, as well as technological changes in the production of petroleum, chemicals, electronics, pharmaceuticals, and related products. From an annual production of 15 million tons in the early 1940s, the world-system currently produces annually anywhere from 300 to 600 million tons of hazardous wastes.”<sup>58</sup>

Exported wastes included substances that are costly to dispose of: PCBs, acids, sludge, used car (lead acid) batteries, paint solvents, plastics, heavy metals (lead and mercury), dioxin-contaminated incinerator ash, and radioactive waste. Destinations of core wastes in the 1980s tended to be countries located in Africa, the Caribbean, and Latin America, but in the 1990s, the destinations shifted to countries located in eastern Europe, the former Soviet Union, and Asia. Between 1989 and 1994, there were 299 documented cases of hazardous waste exports to eastern Europe and the former Soviet Union, 239 in Asia, 148 in Latin America and the Caribbean, and 30 in Africa.”<sup>59</sup>

While the global class structure thus changed, sweeping shifts also took place in the global relationships between wage earners. First, a growing share of employees became part of supply chains. The ILO’s *World Economic and Social Outlook 2015* report estimated that

in 40 countries representing 85 per cent of world gross domestic product and covering approximately two-thirds of the global labour force, the number of global supply chain-related jobs increased by 157 million or 53 per cent between 1995 and 2013, resulting in a total of 453 million global supply chain-related jobs in 2013.<sup>60</sup>

This equals one quarter of the employees. While transnationalisation has greatly boosted industrialisation in the Global South, the jobs created are largely unskilled and substandard and are increasingly performed by women. The International Trade Union Confederation notes:

Eighty per cent of world trade and 60% of global production is now captured by the supply chains of multinational companies. The majority of supply chain workers are trapped in insecure and often unsafe jobs with poverty wages and long hours. Informal work, forced

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57 Branko Milanovic and Shlomo Yitzhaki, “Decomposing World Income Distribution: Does the World Have a Middle Class?” *Review of Income and Wealth*, 48, 2 (June 2002), pp. 155-178; Sudhir Anand and Paul Segal, “What Do We Know about Global Income Inequality?”, *Journal of Economic Literature*, 46, 1 (2008), pp. 57-94.

58 R. Scott Frey, “The Hazardous Waste Stream in the World-System,” in: Paul S. Ciccantell and Stephen G. Bunker (eds), *Space and Transport in the World System* (Westport, CT, and London: Greenwood, 1998), pp. 84-105, at 88.

59 *Ibid.*, p. 85. Not everybody is convinced that the export of hazardous waste from rich to poor countries is a bad thing. Here is what Lawrence (Larry) Summers wrote in an internal World Bank memo: “I think the economic logic behind dumping a load of toxic waste in the lowest wage country is impeccable and we should face up to that [...]. I’ve always thought that under-populated countries in Africa are vastly under-polluted.” (Reprinted in *The Economist*, 8 February 1992.)

60 *World Employment and Social Outlook 2015*. The ILO has noted on this subject: “The quantity of employment in global supply chains is difficult to estimate, as national employment statistics do not distinguish between different types of workers engaged in global supply chains, nor do they fully capture informal and non-standard forms of work. Furthermore, it is difficult to discern the percentage of workers supplying global buyers or domestic buyers and whether any domestic firms are supplying global supply chains indirectly without being direct exporters.” (pp. 18-19)

overtime and slavery are also found in the mix. A recent ITUC report shows that 50 of the world's largest companies directly employ just 6% of the workers in their supply chains – the remaining 94% are part of the hidden workforce of global production.<sup>61</sup>

Second, international trade has increased considerably, because unlike in the past, goods today are no longer manufactured primarily in one place or in any case in one country, and components therefore need to be transferred.<sup>62</sup> As a consequence the number of jobs in transport and logistics has increased enormously.

Within global supply chains core firms and intermediaries earn by far the most, and producers in developing countries make considerably less. The Samsung Galaxy S7, which retailed at 809 US dollars in 2016, illustrates this point. “Costs for components like the touchscreen were 249.55 US dollars, manufacturing costs were not more than 10 US dollars and total factory costs not more than 260 US dollars.”<sup>63</sup>

A few years ago a Nike representative presented the price composition of a pair of sneakers selling for \$100:<sup>64</sup>

<u>Per shoe</u>	<u>Cost</u>
\$25	Factory FOB cost
\$ 1	Sea freight and insurance
<u>\$ 2.5</u>	<u>Duty (say 10% of FOB)</u>
\$ 28.50	Landed cost (57% of Revenue)
<u>\$ 21.50</u>	<u>Mark-up (43% of Revenue)</u>
\$ 50	Wholesale price
<u>\$ 50</u>	<u>Retail Mark-up (100% of Revenue)</u>
\$ 100	Suggested Retail

The company manufacturing the shoes in the South thus receives only one quarter of the retail price.

Parallel to this trend, contingencies for workers are increasing. Outsourcing and contracting out suggest that no direct relationship exists between the parent company and its “employees.” The workers concerned are employed by contractors and subcontractors

61 <<https://www.ituc-csi.org/supply-chains-resources-hub>>. This hidden workforce thus concerns about 116 million workers.

62 Paul R. Krugman, “Growing World Trade: Causes and Consequences”, *Brookings Papers on Economic Activity*, 26, 1 (1995), pp. 327-377, at 334. In 2003 the economist Kei-Mu Yi noted that “The growth of the trade share of output [...] has been dramatic, averaging 2–3 percent per year for the past 50 years.” Kei-Mu Yi, “Can Vertical Specialization Explain the Growth of World Trade?” *Journal of Political Economy*, 111, 1 (February 2003), pp. 52-102, at 90.

63 Hansjörg Herr and Christoph Scherrer, “Trade, Global Value Chains and Working Conditions”, in: *Who Benefits from Trade? Findings on the Link between Trade and Labour Standards in the Garment, Footwear and Electronics Industries in Bangladesh, Cambodia, Pakistan, and Vietnam* (Bonn: Friedrich-Ebert-Stiftung, 2017), pp. 1-8, at 2-3. See also Jason Dedrick, Kenneth L. Kraemer, and Greg Linden, “Who Profits from Innovation in Global Value Chains? A Study of the iPod and Notebook PCs”, *Industrial and Corporate Change*, 19, 1 (February 2010), pp. 81–116, but this study does not start at the beginning of the supply chain (mining coltan in the Democratic Republic of Congo, etc.), so that the chain ostensibly connects only East Asia with the United States.

64 Matthew Kish, “The cost breakdown of a \$100 pair of sneakers”, *Portland Business Journal*, December 19, 2014. [https://www.bizjournals.com/portland/blog/threads\\_and\\_laces/2014/12/the-cost-breakdown-of-a-100-pair-of-sneakers.html](https://www.bizjournals.com/portland/blog/threads_and_laces/2014/12/the-cost-breakdown-of-a-100-pair-of-sneakers.html).



whose commissions from the parent company remain unpredictable and tenuous; their jobs are therefore perpetually precarious.<sup>65</sup> The current situation thus differs drastically from that in traditional factory relations, in which production was relatively stable, and a substantial share of the risk could be passed on to the retailers. Nowadays, the roles are increasingly being reversed. Retailers tend to place as much of their risk as possible with the manufacturers. In that sense, a “return of merchant capitalism” is noticeable. The classical manufacturing firm is beginning to lose significance.<sup>66</sup>

Very important changes also took place in agriculture. Production per hectare of most crops rose, gradually at first and then explosively after the Second World War.

TABLE 2: Development of productivity on a world scale

Crop	1961			2011		
	Area Harvested (ha)	Production Quantity (tonnes)	Tonnes per ha	Area Harvested (ha)	Production Quantity (tonnes)	Tonnes per ha
Tobacco	3,398,158	3,573,815	<b>1.05</b>	4,251,760	7,568,208	<b>1.78</b>
Sugar Cane	8,911,877	447,977,518	<b>50.27</b>	25,436,924	1,794,359,190	<b>70.54</b>
Coffee	9,757,455	4,527,872	<b>0.46</b>	10,476,355	8,284,135	<b>0.79</b>

Source: FAOSTAT.

An important driver of this growth is known as the Green Revolution, which changed much of agriculture in the Global South from the 1960s by introducing new crop varieties, irrigation, pesticides and fertilizers. This campaign, supported primarily by U.S. institutions, served explicitly to avert a “Red Revolution.”<sup>67</sup>

The increased use of fertilizers and pesticides had major side-effects.

“Fertilizer and pesticide production are highly energy-intensive processes and require substantial amounts of fossil fuels. Additionally, the use of these synthetics in agriculture contributes to a variety of environmental problems—particularly air, soil, and water pollution—and threatens human health. Synthetic agricultural inputs are commonly bought on the world market unlike, for example, organic fertilizers (e.g., manure and crop waste), which can generally be produced locally with low capital intensity using traditional means under non-industrial conditions. Thus, consumption of synthetic inputs is closely associated with the energy, as well as capital, intensiveness of agricultural production and, more generally, environmental degradation.”<sup>68</sup>

But agricultural globalization had other implications as well. The expansion of coffee cultivation, for example, has often “coincided with territorial expansion, the movement of

65 Edna Bonacich and Jake B. Wilson, *Getting the Goods. Ports, Labor, and the Logistics Revolution* (Ithaca and London: Cornell University Press, 2008), p. 15.

66 Nelson Lichtenstein, “The Return of Merchant Capitalism”, *International Labor and Working-Class History*, 81 (Spring 2012), pp. 8-27; Vamsi Vakulabharana, “Merchant Capital in Neoliberal Capitalism: A Mere Appendage to Industrial Capital or a Determining Force?”, *Studies in People’s History*, 2, 1 (2015), pp. 105-116.

67 The term “Green Revolution” was coined by William Gaud, director of the United States Agency for International Development. In 1968 he called the changes in agriculture “a new revolution. It is not a violent Red Revolution like that of the Soviets, nor is it a White Revolution like that of the Shah of Iran. I call it the Green Revolution.” William S. Gaud, “The Green Revolution: Accomplishments and Apprehensions” (March 8, 1968), reprinted in *AgBioWorldArchives*, <[www.agbioworld.org/biotech-info/topics/borlaug/borlaug-green.html](http://www.agbioworld.org/biotech-info/topics/borlaug/borlaug-green.html)>.

68 Stefano Longo and Richard York, “Agricultural Exports and the Environment: A Cross-National Study of Fertilizer and Pesticide Consumption,” *Rural Sociology*, 73, 1 (2008), pp. 82-104, at 84.

settlers into frontier zones where tropical forests were destroyed, 'new forests' of coffee and shade planted, towns established, roads and railroads built, regional identities forged."<sup>69</sup> And what is more,

"In periods of rising prices, cultivated acreage has frequently expanded in regions whose arid and erratic climate or steep slope make them unfit for permanent cultivation. Soil depletion has often occurred during and after a period of prosperity for certain cash crops (for example, wheat, cotton, tobacco, sugar cane, rubber) which expanded as monocultures or near-monocultures in areas suitable for permanent cultivation only under a diversified system of farming."<sup>70</sup>

The Green Revolution seems to have amplified these problems. Many coffee-producing farms, for example, underwent dramatic changes in the last quarter of the previous century. Coffee plants were long grown in the shade of fruit and other trees, which were a natural habitat for insects and animals. Coffee farms were therefore forest-like agro-ecosystems, "providing protection from soil erosion, favorable local temperature and humidity regimes, constant replenishment of the soil organic matter via leaf litter production, and home to an array of beneficial insects that can act to control potential economic pests without the use of toxic chemicals." Moreover, the combination of trees and coffee plants enabled farmers to diversify production and thus to derive additional income from selling fruit, timber, etc. During the Green Revolution international agencies and national governments propagated what was known as "technification" – nowadays also called "modernization" – which consisted of replacing traditional varieties of coffee (*típica*, *bourbón*) with varieties capable of growing without shade, enabling the density of coffee plants to be increased from 1,100-1,500 plants per hectare to 4,000-7,000 plants per hectare. The new-style coffee farms look "industrial", with long rows of coffee plants in the sun, regularly sprayed with fertilizers and chemical pesticides. While coffee output has clearly increased, farmers have become more dependent than in the past on a single source of income, the eco-system has deteriorated, and bio-diversity has been reduced.<sup>71</sup>

Within this context of increasing global connectedness, the part of Southern goods in the consumption pattern of Northern workers is likely to have grown significantly. Let me give two examples. First: mass motorisation, which began in the 1920s in the United States and spread to the other advanced capitalist countries, especially after World War II. Between 1960 and 2015 the number of registered cars increased worldwide from 98 million

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69 William Roseberry, "Introduction", in: William Roseberry, Lowell Gudmundson and Mario Samper Kutschbach (eds), *Coffee, Society, and Power in Latin America* (Baltimore and London: the Johns Hopkins University Press, 1995), pp. 1-37, at 3.

70 S. von Ciriacy-Wantrup, "Resource Conservation and Economic Stability," *Quarterly Journal of Economics*, 60, 3 (May 1946), pp. 412-452, at 417.

71 In general, one can say that, as a consequence of the Green Revolution, significant productivity gains were realized. However, the middle peasantries were the main beneficiaries, while the position of poor farmers worsened. There were also harmful environmental effects, such as greater water use, soil erosion, and chemical runoff. See e.g. R. E. Evenson and D. Gollin, "Assessing the Impact of the Green Revolution, 1960 to 2000", *Science*, 2 May 2003, pp. 758-762; Prabhu L. Pingali, "Green Revolution: Impacts, Limits, and the Path Ahead", *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*, 109, 31 (July 31, 2012), pp. 12302-12308. Vandana Shiva therefore regards Green Revolution mainly as a failure: "It has led to reduced genetic diversity, increased vulnerability to pests, soil erosion, water shortages, reduced soil fertility, micronutrient deficiencies, soil contamination, reduced availability of nutritious food crops for the local population, the displacement of vast numbers of small farmers from their land, rural impoverishment and increased tensions and conflicts. The beneficiaries have been the agrochemical industry, large petrochemical companies, manufacturers of agricultural machinery, dam builders and large landowners. The 'miracle' seeds of the Green Revolution have become mechanisms for breeding new pests and creating new diseases." Vandana Shiva, "The Green Revolution in the Punjab", *The Ecologist*, 21, 2 (March-April 1991).

to 924 million; the share of the advanced capitalist countries is still very large, but decreasing.<sup>72</sup> The enormous diffusion of cars implied, amongst many other things, a significant growth of rubber consumption, in particular for the tires. The world's natural rubber production grew from 94 million tonnes in 1910 to 10 billion tonnes in 2010.<sup>73</sup> A lot is known on the history of the miserable labour conditions on rubber plantations; I probably don't have to illustrate this further.<sup>74</sup> And obviously, the mass diffusion of cars implied an enormous increase in the demand for oil.

“The lifecycle of oil, the most valuable commodity in world trade, is characterized by a multitude of environmental externalities and generally unaccounted for environmental costs. From the early stages of exploration, drilling, extraction, and transport to subsequent refining and consumption, the negative social and environmental costs of oil are pre dominantly borne by indigenous groups, migrant workers, and the poor, both intra and internationally.”<sup>75</sup>

The polluting implications of this trend are well known.

My second example concerns a very recent innovation: the cell phone, the global diffusion of which has been nothing less than explosive. The number of cellular subscribers has grown from 23,500 in 1980 to 2,203,086,000 in 2005.<sup>76</sup> The rare metals used to build cell phones are frequently mined under horrendous circumstances. Cobalt and coltan, for example, are often produced in Sub-Saharan Africa by children, and violently oppressed workers.<sup>77</sup>

In this period we see the arrival of what has been called “the Netherlands Fallacy”: advanced capitalist countries possess the economic and political power to achieve improvements in their domestic environmental conditions by importing resources and exporting wastes to less developed countries. In 1971 Paul Ehrlich and John Holdren explained:

“One of the commonest errors made by the uninitiated is to assume that population density (people per square mile) is the critical measure of overpopulation or underpopulation. [...] We call this notion ‘the Netherlands fallacy.’ The Netherlands actually requires large chunks of the earth's resources and

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72 Stacy C. Davis and Robert G. Boundy, *Transportation Energy Data Book*. Edition 37.1 (April 2019), p. 3-4, Table 3.2. Naturally, the diffusion process was uneven. Australia and Britain were faster, Germany was slower. See T. C. Barker, “The International History of Motor Transport”, *Journal of Contemporary History*, 20, 1 (January 1985), pp. 3-19, at 6.

73 For 1910: Lim Chong Ya, *Economic Development of Modern Malaya* (Kuala Lumpur: Oxford University Press, 1967), p. 94 (table 3.6). For 2010: FAOSTAT.

74 See, for example, Jayadeva Uyangoda, *Life Under Milk Wood: Women Workers in Rubber Plantations* (Colombo: Women's Education and Research Centre, 1995), or Michitake Aso, *Rubber and the Making of Vietnam: An Ecological History, 1897-1975* (Chapel Hill: The University of North Carolina Press, 2018).

75 James Rice, “The Transnational Organization of Production and Uneven Environmental Degradation and Change in the World Economy,” *International Journal of Comparative Sociology*, 50, 3-4 (2009), pp. 215-236, at 224; compare Dara O'Rourke and Sarah Connolly, “Just Oil? The Distribution of Environmental and Social Impacts of Oil Production and Consumption,” *Annual Review of Environment and Resources*, 28 (2003), pp. 587-617.

76 Jonathan C. Comer and Thomas A. Wikle, “The Worldwide Diffusion of the Cellular Telephone, 1995-2005”, *The Professional Geographer*, 60, 2 (2008), pp. 252-269, at 253 (Table 1).

77 “Children as young as seven mining cobalt used in smartphones, says Amnesty”, *The Guardian*, January 19, 2016; Jeffrey W. Mantz, “Blood Diamonds of the Digital Age: Coltan and the Eastern Congo”, *Global Studies Review*, 4, 3 (2008), pp. 12-14; Mantz, “Improvisational Economies: Coltan Production in the Eastern Congo”, *Social Anthropology*, 16, 2 (2008), pp. 34-50.

vast areas of land not within its borders to maintain itself. For example, it is the second largest per capita importer of protein in the world, and it imports 63 percent of its cereals, including 100 percent of its corn and rice. It also imports all of its cotton, 77 percent of its wool, and all of its iron ore, antimony, bauxite, chromium, copper, gold, lead, magnesite, manganese, mercury, molybdenum, nickel, silver, tin, tungsten, vanadium, zinc, phosphate rock (fertilizer), potash (fertilizer), asbestos, and diamonds. It produces energy equivalent to some 20 million metric tons of coal and consumes the equivalent of over 47 million metric tons.<sup>78</sup>

## Coda

There is no doubt that the mode of living in the North (and increasingly in a part of the South) is based on unequal economical and ecological exchange. Not only the wealthy, but also the (blue and white collar) wage-earning classes benefit from this inequality. It is extremely difficult, if not impossible, to quantify the size of these unequal exchanges, but it is likely that they have increased over time. The notes above suggest that the years after World War II witnessed the real take-off of the Imperial Mode of Living, but my reconstruction is, of course, overly impressionistic. For more solid answers we would need much more detailed knowledge of the long-term development of Northern working-class consumption patterns – through family budgets reconstructions and other methods. We would need to know a lot more about transcontinental commodity chains – chains that in the course of time have become much more numerous and complicated.<sup>79</sup> We would also need to have more insight into the ecological „ghost acreages“ (Georg Borgström) necessary to maintain these commodity chains, and then combine this knowledge with the already extensive (but still imperfect) knowledge of the employment and working conditions of the Southern labouring poor.<sup>80</sup>

And then, at last but not at least, there is of course also the overarching *political* question: how to overcome the Imperial Mode of Living. We do not only need global *social* and *economic*, but also *ecological* equality. The total amount of raw materials available worldwide is limited. In the words of Arghiri Emmanuel: “the peoples of the rich countries can consume all those articles to which they are so attached *only* because other peoples

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78 Paul R. Ehrlich and John P. Holdren, “Impact of Population Growth,” *Science*, New Series, 171, No. 3977 (March 26, 1971), pp. 1212-1217, at 1214.

79 The technical complications of transcontinental chain analysis are impressive. “In this context, it is well known that international trade statistics fail to offer a good picture of trade integration and the global division of labour. They cannot answer the question ‘who produces for whom?’ To illustrate the point, let us take an example extracted from Benhamou (2005) [...]. The firm Burberry sends perfume bottles from France to Shanghai to be decorated with a Scottish pattern before bringing them back to be sold on the French market. Standard trade statistics suggest that France is exporting perfume bottles to China and China is exporting perfume bottles to France. Yet France does not export anything for Chinese consumption, as the perfume bottles are consumed in France. China simply exports decoration for French consumption. Suppose the pigments used for the decoration of the perfume bottles are imported by China from Japan. This Japan-China trade flow does not mean that China consumes Japanese products, as the final consumer is in France. Unravelling these long supply chains is impossible using simply trade statistics.” Guillaume Daudin, Christine Riffart and Danielle Schweisguth, “Who Produces for Whom in the World Economy?”, *The Canadian Journal of Economics / Revue canadienne d'économie*, 44, 4 (November 2011), pp. 1403-1437, at 1404. The reference is to Laurence Benhamou, *Le grand Bazar mondial: la folie aventure de ces produits apparemment 'bien de chez nous'* (Paris: Bourin, 2005).

80 Here too, we should be aware of contradictory effects, such as social improvements effected by some multinational corporations in the South. In Central America, banana-producing multinationals like United Fruit provided hospitals and field dispensaries that in 1930 were serving 200,000 employees and nationals. Jesse T. Palmer, “The Banana in Caribbean Trade”, *Economic Geography*, 8, 3 (July 1932), pp. 262-273, at 271.

consume very few or even none of them.” How is equalisation possible? If it cannot be achieved downwards – by lowering the living standards of the developed countries – nor upwards, for technical and ecological reasons, does the solution lie in “a global change in the very pattern of living and consumption, and the very concept of well-being”?<sup>81</sup>

“There’s class warfare, all right, but it’s my class, the rich class, that’s making war, and we’re winning.”

Warren Buffet<sup>82</sup>

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81 Arghiri Emmanuel, *Unequal Exchange. A Study of the Imperialism of Trade*. Trans. Brian Pearce (New York and London: Monthly Review Press, 1972), p. 79.

82 Quoted in Ben Stein, “In Class Warfare, Guess Which Class Is Winning,” *The New York Times*, 26 November 2006.