

**Transformations in capital accumulation:
From the national production of an universal labourer
to the international fragmentation of the productive subjectivity
of the working-class**

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1. The starting point

The revolutionary action of the working-class needs to organise itself through the awareness of its concrete determinations. Since we are focusing on a process characterised by international integration and fragmentation, it could seem that the most concrete approach is that circumscribed to the economic policies that prevailed in the different national processes of capital accumulation involved.¹ Still, this approach ends up by bringing down all historically-specific necessity to the immediate action of those that personify capital. Thus, apologetics of capitalism presents national capitalists and state-bureaucrats as the social subjects whose abstract will rules the historical movement.

Opposite to this sterility it could seem that the starting point lies in capitalism's global unity, once this unity is represented as the movement of accumulation regimes, their rise, 'failure' and fall. Still, then, the subject of historical change seems to have vanished, as if this were 'a process without a subject'.² Once again, abstraction has displaced the concrete.

It could seem, then, that the answer lies on circumscribing the global unity of accumulation to its concrete manifestation: class struggle. Still, considered in itself, class struggle comes down to a series of confrontations in which, now the working-class prevails and advances, now it is defeated and retreats, at the rhythm imposed by the development of working-class consciousness. Thus, consciousness appears as that which determines by itself the working-class as an historical subject.³ Even the most concrete form is turned into an abstraction when it is separated from its determinations.

Human natural history consists in the history of the transformation of the material conditions of social life through labour. The development of the human being as a historical subject is but the development of its capacity to act in a conscious and voluntary way over the rest of nature, to transform it into a means for itself. In other words, it is the development of human productive subjectivity. This development is the only concrete materialistic, and therefore the only scientific⁴ starting point to produce the consciousness about any historical movement. Therefore, this will be our starting point here, to unfold the concrete determinations of the current transformations of capital accumulation and its present crisis.

Machinery and productive subjectivity

The accumulation of capital based on the production of relative surplus-value through the machinery system transforms the materiality of the labour-process. It gradually ceases to consist in the application of labour-power upon the objects in order to transform them. Rather, it turns into the application of labour-power to scientifically control natural forces and to objectify this control in machinery, in order to automatically apply those forces upon the objects to transform them. Accumulation thus determines in three ways the productive

¹ See, for example, World Bank 1993.

² Hirsch 1991, p. 12.

³ Holloway 1991, p. 100.

⁴ Marx 1965, p. 373.

subjectivity of the labourers in large-scale industry.⁵ In the first place, it degrades the productive subjectivity of the labourers that still apply their labour-power to the direct transformation of the objects. It simplifies their work, turning them into the appendages of machinery or into detail labourers in modern manufacture. Secondly, it transforms an increasing part of the working-class into a surplus-population, thus directly depriving it of its productive subjectivity. Thirdly, it develops the productive subjectivity of the labourers in charge of advancing and exercising the scientific control over natural forces, enabling them to perform an increasingly complex labour.⁶

Accumulation under its classic national form

The accumulation of capital is a global process in essence, but a national one in form. Let us start with the countries where accumulation presents the concrete national form that most immediately reflects the unity of its essential determinations (hereafter, ‘classic countries’): Western European countries and the USA. During the 19th century and through the first three-quarters of the 20th century, capital accumulation presented a noticeable tendency concerning the reproduction - therefore exploitation - of labour-power. The labour-power whose productive subjectivity underwent degradation and the one whose productive subjectivity expanded tended to be reproduced jointly and under relatively undifferentiated conditions. This unity had a general technical basis.

The labourers of degraded productive subjectivity lack the opportunity to develop any skills in their labours. Still, the more complex the collective production processes that include their simplified individual labours become, the more they demand the application of universal productive aptitudes whose development escapes from the mere practice of those individual labours. Likewise, these labourers must be able to adapt themselves to any machinery imposed by technical change. Therefore, capital needs to produce them as universal labourers before they enter production, however degraded their participation in it. And this previous formation needs to be extended inversely to the possibility of developing a particular productive skill in practice and directly to the frequency with which capital forces the workers to move from one task to another. In addition, the intensity of labour imposed by the pace of

⁵ As it modifies the materiality of the labourers’ productive subjectivity, capital modifies the scope and content of their consciousness. It is not that the labourers’ consciousness is functional to capital. Functionality would mean that the labourers’ consciousness arises beyond the capital-relation itself, and then, this externally formed consciousness adapts itself to capital’s needs. Contrary to this apparent externality, the labourers become really subsumed in capital through the production of relative surplus-value (Marx 1965, p. 510). Even as working-class, they are the attributes of capital (Marx 1965, p. 573), that produces and reproduces them as human beings, ie. as bearers of consciousness (Marx 1965, p. 578). Their consciousness is inverted - under the appearance inherent in circulation that they are free individuals - into the powers of capital, ie. of their own objectified general social relation that has become the alienated concrete subject of social life. The revolutionary action of the working-class is the necessary concrete form in which the above-mentioned constant revolution in the materiality of the labour-processes - that concurrently entails their direct socialisation - develops its necessity to be organised as a direct social power that transcends the boundaries of its capitalist private form. Therefore, this revolutionary action is the necessary concrete form through which the capitalist mode of production realises its historical necessity to overcome itself through its own development by engendering the general conscious organisation of social life.

⁶ In *Capital*, Marx developed the first two subjectivities, but he referred to the third one only indirectly (eg. Marx 1965, pp. 386-87 and 508-09). Thus, a gap could seem to appear between the degradation and loss of productive subjectivity and the constitution of the working-class’ capacity to consciously organise social life. Yet, in *Grundrisse* Marx presented the latter subjectivity as the one whose materiality directly bears the necessity of capital to annihilate itself through its own development. (Marx 1973, pp. 704-07). In Marx’s time, the subjectivity in question was only just starting to develop. Nowadays, accounting for its development is the key to any revolutionary program of the working-class (Iñigo 2000b).

machines and by the scientific improvement in the manufacturing division of labour requires a shorter working-day.

In turn, the production of labour-power that bears an expanded subjectivity is based on the production of a scientifically structured productive consciousness.⁷ Therefore, it is based on the expansion of the universality of the labourers' productive attributes. These labourers require a longer universal and particular scientific formation of their labour-power before being able to enter production. However, this labour-power only achieves its complete maturity after several years of being actually applied. In the early 19th century, English capital optimised its valorisation by exploiting workers whose natural lives it exhausted in thirty years. Nowadays, the labourers bearing the most developed productive subjectivity, the scientists, only become mature enough to produce surplus-value when they reach this age. Hence, capital needs to extend their useful-life, to dilute their training costs and to fully exploit their aptitude to perform complex labour. The conditions needed to achieve this extension extend the labourers' natural lives beyond the exhaustion of their productive attributes. Besides, it becomes a cost for capital when the labourers lose their productive aptitude because of illness or circumstantial unemployment. The value of labour-power thus includes pensions, medical assistance and unemployment compensations.

The expansion of productive subjectivity does not lie on the multiplication of either handicraft skill nor physical strength. It concerns, above all, the development of the labourers' productive consciousness. It is about constantly pushing this consciousness beyond the limits reached by the control over the natural forces already objectified in machinery. The point is to develop the capacity of the labourers to make productive decisions by themselves in the name of capital. The consumption of use values that corresponds to the reproduction of this labour-power is consequently determined in quantity and quality. In turn, the intensity of labour involves the fixation of the labourers' attention in the process of productively deciding. This demands a shorter working-day.

Both the materiality of their labour and of their individual consumption reinforce in the consciousness of these labourers the appearance of being free individuals, who dispose of what is their own for an equivalent, in pursuing their self-interest. Hence, that unitary materiality reinforces the appearance through which the exploitation of the labourers as forced workers for social capital, paid by it with the product of their own former unpaid labour, and whose individual consumption is not for themselves but for capital, takes concrete shape in circulation. So much so, that the more these labourers develop their productive subjectivity, the harder they find to recognise themselves as what they are, namely, members of the working-class.

In brief, albeit rooted in the divergence of their productive subjectivity, the reproduction of both types of labourers converges towards a certain degree of relatively common universality.

During the above-mentioned period, the lower birth rate (that corresponds to the transformations in productive subjectivity), plus both the pace of capital accumulation and of the increase of its technical composition, the shortening of the working-day, massive emigration and periodic slaughters in war, ended up giving the local labouring surplus-population a peculiar appearance. It did not seem to transcend being a floating one, on a massive scale. And, in this case, social capital needed to maintain its productive subjectivity to place it back in action in due time. Thus, the illusion emerged concerning capitalistic

⁷ The divergent paths followed by the labourer's productive subjectivity directly reflect the historically-specific determination of the division between manual and intellectual labour when the social powers of labour are developed as the alienated powers of capital in large-scale industry. From the standpoint of productive subjectivity, this division is focused as it directly concerns the labourers' activity as the subjects of the labour process alienly ruled as a valorisation process.

accumulation having freed itself from its general law: that which makes the accumulation of social wealth in the pole of capital an accumulation of misery and degradation in the pole of the working-class.

Under these conditions, social capital found it cheaper to undertake the relatively undifferentiated and massive reproduction of the working-class that included the two opposed productive subjectivities. The general political representative of social capital, ie. the national state, was in charge of this task. The reproduction of labour-power thus acquired a specific expression: that of public education, health, pensions, unemployment insurance, housing, transportation, etc. Hence, the labourers reproduced themselves under conditions that individually reached them as an expansion of their equal rights as citizens of the nation. In this way, that which the working-class pays for with its own surplus-labour to reproduce itself as a forced labour-power for capital, and that it necessarily achieves by struggling against the bourgeoisie, appeared ideologically inverted as the gracious concessions that the 'welfare state' granted it.

Nevertheless, the inversion of the political forms on the basis of the relatively undifferentiated reproduction of the working-class through the direct action of the political representative of a national social capital reached a further expression yet. It did so as this reproduction converged with the necessity of reproducing the national process of capital accumulation through the centralisation of individual capitals as immediate units of national social capital and, therefore, as state capital. The most developed form of this inversion arose when the centralisation in question needed to reach the totality of the capitals that underwent valorisation within the country in order to start to realise its powers. This centralisation could only take the concrete political form of a social revolution that abolished the domestic private fragmentation of capital. In other words, it presupposed a social revolution through which the working-class and the peasantry expropriated the bourgeoisie and the landlords, and imposed the collective property on capital and land within the national boundaries. Yet, capital has not ceased to be such because it has been thus centralised. It goes on confronting those that are now its owners as an alien power that dominates them. The national state became then, not only its general political representative as social capital, but also the direct agent of its accumulation in production and circulation through its immediate movement as individual capital. Because of its political concrete form, this process realises itself under the appearance of being its very opposite, ie. realised socialism or communism. That is the case of the USSR.

The Appendix shows the evolution of the conditions of exploitation in the UK and the USA during the period considered, concerning real wages, length of the working-day, education and productivity.⁸

⁸ As it could be seen in the Appendix (albeit distorted by the inclusion of productive and unproductive labour for capital in the computation), the productivity of labour has been steadily multiplied throughout the development of great-scale industry. Insofar as this multiplication has taken place in the branches that directly or indirectly produce the means of subsistence for the workers, the values of these means of subsistence have been falling in consequence. Nevertheless, an important part of this cheapening has been sterilised as an immediate source of relative surplus-value. The individual capitals that introduced the technical innovations have appropriated in a normal way the extraordinary surplus-value that emerges from the possibility of selling below the social value but above the individual value, by individually putting into action a productivity higher than the social one. In turn, as the new technical conditions have been generalised and the social value has turned to be determined by them, the means of subsistence for the workers have become cheaper. Still, this cheapening has been significantly compensated by the necessity of a higher consumption of use values to reproduce labour-power with the productive attributes required from it by capital, given its new general technical conditions. At the same time, the increased intensity of labour that corresponds to these new technical conditions has been imposing the necessity to shorten the working-day in a significant way. Therefore, the increase in the surplus-value rate that the constant revolution in the productivity of labour potentially carries in itself has been restricted to the net balance between the cheapening of the means of subsistence, on the one hand, and the increased consumption of means of subsistence and the shortening of the working-day, on the other.

Handicraft skill in the machinery system and workers' political power

Along with the conditions seen thus far, the labourers whose productive subjectivity declines attained political strength from an historically-specific base to impose on capital their reproduction in conditions close to those of the labourers whose subjectivity expands. The labourers' handicraft skill still stood at the very core of the production based on the machinery system, ie. in the production of machinery itself. Capital had not yet freed its valorisation from it. The calibration of the machinery for serial mechanical production remained subordinated to the labourers' handicraft skill. The same happened regarding the assembling process, however much that skill came down to the simplest operations through the manufacturing division of labour. The assembly line was yet not a true machine; the eye-brain-hand unity still ruled the tools.

Concurrently, the scale of capital accumulation placed those labourers together at work in large masses. Furthermore, the very material conditions of their labour process, devoid of content and controlled in an openly coercive way, made them immediately confront capital as an antagonistic alienated power. The sum of these conditions directly gave the portion in question of the working-class the consciousness of precisely being working-class. Consequently, the direct mediation of its subjectivity in the production of machinery became a particularly powerful weapon in its struggle against the bourgeoisie to realise the value of its labour-power. Moreover, it led the reproduction of the rest of the labour-power bearing the same productive attributes but that was placed in a non-central place concerning the general productive structure of large-scale industry.

However, in a violently visible manner since the mid-1970s, the computerised calibration of machinery and the robotised assembly line - finally turned into a machine itself - revolutionised the production of machinery. Upon which, both automations revolutionised the general conditions of capital accumulation based on the machinery system. The productive subjectivity based on the labourers' handicraft skill started to be expelled from the production of machinery. As far as it remained there, it did so only by descending in its degradation as an appendage of the machinery. Conversely, capital needed to strengthen the development of the subjectivity able to advance in the productive control over the natural forces. This control had gone a step beyond as the only resource to increase the productivity of labour and, consequently, to produce relative surplus-value.

Capital thus deprived the first portion of the working-class of its specific source of political power. At the same time, it needed to reproduce the second portion with an expanded capacity to perform complex labour. Thus, capital doubly eased its necessity to produce the two portions under relatively undifferentiated conditions. Moreover, it needed to cheapen one, extend its working-day and shorten its preparation in a brutal way, whilst it needed to take the other down the opposite path. Still, it could not perform this divorce at once. Both portions reached this point coming from a common history: that of their relatively undifferentiated reproduction through the action of the national state that integrates their members as citizens bearing equal rights. It could seem that the national form taken by accumulation rose a barrier against it. Yet, that very form carried the solution within itself.

Latent labouring surplus-population and cheap degraded productive subjectivity

Outside the classic countries, an increasing portion of the peasantry had been displaced from production and transformed into a latent surplus-population by capital

accumulation. Its birth rate rose, to enable social survival over the weakened possibilities of individual survival. Thus, capital accelerated the expansion of this surplus-population from both ends.

The international separation between the active labouring population and the surplus one necessarily stems from the realisation of the global content of accumulation through independent national processes. The expansion of the labouring surplus-population to the point of characterising a country expresses the pure development of that content. Yet, capitalism apologetics inverts the relation between global content and national form. On doing so, it presents that expansion as if it were the result of the 'underdevelopment' of capitalism in those countries.

On internationally separating the active labourers from the latent surplus-population, the national form of accumulation politically fragments the working-class. On this basis, capital was able to break the barrier contrived by the history of relative productive universality conquered by the labourers in the classic countries. It did so by technically dividing the processes of production along national borders. The parts of these processes in which the expanding productive subjectivity dominates, tended to remain on this side of the border. On the other, the latent labouring surplus-population was turned into an active labour-power. Albeit, one which basically performed the tasks that require a productive subjectivity lowered to absolute simplification as an appendage of the machinery and as a detail organ in manufacture.⁹ The conditions in which this latter part of the working-class was exploited were no longer the concern of the national state where capital exploits the former. Now, they just came to concern the citizens of 'another country'.

Still, not all the latent surplus-population generated beyond the borders of the classic countries was equally apt as a source of labourers bearing a degraded subjectivity.

Capital had engendered a mass of latent labouring surplus-population in Latin America. Nevertheless, it still found it profitable to valorise itself there based on its association with landowners to appropriate the agrarian and mining differential rent. To gain access to this valorisation, capital needs to detach fragments of itself in the classical countries, to put them into action as small capitals of a magnitude specifically restricted to the scale of the internal market, in the countries where the rent is appropriated. Therefore, this modality of valorisation excludes production for the world market - beyond the commodities bearing ground-rent - from the latter countries, and limits the capacity to import from it.¹⁰ Hence, capital waited until this form of accumulation pushed surplus-population a stage forward, before turning it into a source of degraded productive subjectivity nationally differentiated.

In Africa, accumulation had turned former hunters-gatherers, shepherds and farmers of unirrigated lands into latent surplus-population. This population was not accustomed to large-scale collective labour ruled by a central authority. Since it was unfitted for its needs, capital just went on consolidating it as a surplus. Thus, capital even deprives it of its capacity to transform its environment into a means for itself through labour, sentencing it to death.

Quite different was the history of the latent surplus-population in East Asia. Former free peasants, harshly exploited via a strongly structured tributary and rental system, constituted it. This modality of exploitation had its general material basis in the presence of irrigated agriculture organised on a large scale. Hence, these peasants were used to intense, collective and disciplined labour, performed under their immediate responsibility as free individuals, but hierarchically ruled in a general way. Their history made them particularly

⁹ Fröbel, Heinrichs and Kreye 1980. However, labelling this separation a matter of 'core' and 'periphery' obscures its true content that arises from the differentiation of productive subjectivity. The so-called peripheral labour-power is as 'core' to present-day capital accumulation as any other.

¹⁰ Iñigo 2000a.

apt to be transformed into labourers able to function as appendages of machinery and in modern manufacture.

The national process of capital accumulation in Japan

The international division of labour according to the type of productive subjectivity prevailing in each country started to resort to the historical attributes of East Asian rural population before automation reached the point of imposing it.¹¹ The particular origin of Japanese labour-power here comes in. Contrary to the classic countries, the national working-class was not universally reproduced under the conditions imposed by the necessity to expand productive subjectivity. Rather, the expanded subjectivity was able to be produced even under the conditions that simply corresponded to the reproduction of the degraded one.

On this basis, simple labour already started to move from the classic countries to Japan in the 1950s. However, this displacement could not reach the labour that produced machinery itself. The material base that diluted the political strength of the labourers that performed it in the classic countries had not yet developed. The displacement could only start with a type of production where the handicraft skill of the labourers prevailed, but that lacked itself any essential role in the general development of the productivity of labour. Japan became, then, a large-scale producer of apparel and footwear for the world market.

Nevertheless, accumulation moved forward in the classic countries. Productive subjectivity became able to control the microelectronic processes. Then, it was not just a question of producing automatic machines where this control became objectified. It was about producing them by means of equally automated machines. Yet, to automate the calibration of the machinery and to robotise its assembling, the electronic components bearing automation had to be assembled first. Therefore, capital freed itself from the intervention of the labourers' handicraft skill in the mechanical processes of calibrating and assembling at the expense of resorting to a new manual labour process: the assembling of electronic components. This circumstance appeared to counterbalance the political weakening of the working-class in charge of simplified assembly labour. Still, capital had the international division of labour based on the history of each national labour-power at hand.

The assembling of microelectronic components constituted a new operation. Therefore, in the classic countries where the complex labour of research and development started to be performed, a collective labourer that amalgamated the latter with simple assembling labour had not been consolidated at this moment. Potentially, the working-classes of the classic countries could acquire new political strength were that collective labourer constituted within those countries. Yet, this constitution appeared to them as being a decision of capital. Hence, they faced their own potential political empowerment as an alien potentiality. Capital did not need to start by defeating the national unity of the collective labourer in question. It sufficed with putting the assembling of the microelectronic components in the hands of Japanese labour-power of degraded productive subjectivity, which was relatively cheap given its specific history. Furthermore, in Japan, this relative cheapness included the labour-power of expanded productive subjectivity too. Capital utilised the latter to perform research and development that completed the task of the new applied microelectronics collective labourer. This labourer had been finally constituted, based on the Japanese national specificity.

¹¹ It has been debated if it is about the social capitals of the classic countries imposing a new international division of labour or about the social capitals of the 'new industrialised' countries imposing themselves on the world market (Jenkins 1984). Both sides invert the necessary national forms through which the generic global unity of capital accumulation rules social production, by presenting them as the unity itself of accumulation.

Nevertheless, the production of automatic machinery includes a task that demands an expanded productive subjectivity plainly reproduced as such. This task involves the mental labour needed to create and develop the logical structures that control the flow of electronic processes itself. Its materiality specifically determines it as the attribute of labourers that reproduce their labour-power under conditions that feed in their consciousness the appearance of being abstractly free individuals. Therefore, it collides against the conditions of reproduction of a working-class whose specific productive powers arise from its immediate historical origin as a peasantry subjected to labour under a hierarchical and authoritarian rule. Furthermore, if this happens concerning the labour applied to the mere development of logical structures, with all the more reason it happens concerning the labour that develops the scientific capacity itself to advance in the control over natural forces, ie. basic science.

In Japan, research and development labour has been mainly aimed at the technological application of science. Such an immediate scope has manifested itself in the social organisation of scientific and technical production mainly through disbursements realised at the risk of individual capitals.¹² Any revolution in the productivity of labour stems from the development of basic science. Its pioneer application becomes a particularly powerful source of extraordinary profit. However, its productive results normally fall beyond the scope of individual capitals. The same occurs concerning the concentrated capital required for its development. Therefore, its general production is necessarily ruled via the direct disbursement of social capital through the state's political action. International fragmentation thus has even concerned the expanded subjectivity itself as the classic countries have tended to monopolise the above-mentioned labour processes.

Thus, by the mid-1970s, capital had already formed the collective labourers in charge of automating the calibration of machinery and its assembling as subjects fragmented by a first international division of the productive subjectivity of their members.¹³ Likewise, capital had also internationally fragmented the collective labourers in charge of producing the machinery itself. The productive subjectivity of the labourers that apply their handicraft skill to calibrate and assemble machinery had lost its critical intervention in the production of the machinery system. To the extent that capital continued to need it - and the very same automation multiplies this necessity by simplifying existing tasks and by creating equally simple new ones - it tended to be exercised by labourers reproduced in conditions that strictly correspond to their specific attributes.

Accumulation flourished in Japan, already including the production of machinery, cars, electronic equipment, etc. for the world market. The opposite occurred in the classic countries. The old fixed capital could no longer sustain valorisation. It was not just a question of technical obsolescence. Its inability stemmed equally from being located in countries where the value of labour-power corresponded to its reproduction with the relatively universal material and moral attributes that tended towards the general development of its productive subjectivity. The crisis of general overproduction detonated in the classic countries.

The fragmentation of the working-class within the classic countries

The reproduction of labour-power in the classic countries suffered substantial changes. Crisis threw labourers that worked in the now obsolete conditions into the industrial reserve army. This enabled the bourgeoisie to break the unity of the national working-class regarding the process of determining the value of labour-power. An increasing differentiation in the reproduction of the respective labour-power of degraded and expanded subjectivity replaced

¹² Okimoto and Saxonhouse 1987.

¹³ Jang-Sup Shin 1996, p. 113.

the tendency towards a relative universality. The latter tendency necessarily took shape through the political and trade union advances of the working-class. These advances were then expressed through the direct action of the national state that reached the bearers of different labour-powers as citizens bearing equal rights. The reversion towards relative differentiation took the opposite shapes.

Trade union power stepped back, unable to resist capital's charges to intensify the exploitation of the labourers bearing a degraded subjectivity. Of course, capital did not miss the opportunity offered by an increased industrial reserve army, to intensify the exploitation of the labourers bearing an expanded subjectivity too. Thus, while the average real wage (direct plus indirect) arrested its increase, the gap between high and low wages deepened. See the Appendix, particularly for the USA.

The retreat from the relative universality in the reproduction of the labourers of large-scale industry became specifically apparent through the political defeat of the working-class. Through crisis, the national state advanced on that which appeared as the equal rights of its citizens, imposing the individual capacity to pay for as their new expression. The reversion towards the separation in the reproduction of the different fragments of the national working-class took shape through privatisation¹⁴ and the reduction of public expenditure in health, education, unemployment, etc. If capital accumulation appeared thus far as being subjected to the 'intervention' of the so-called 'welfare state', its general political representation now appears as naturally inhering in the 'neo-liberal state' that worships 'the market'. Now the labourers have to reproduce their labour-power on the basis of a wage that individually corresponds to their specific productive subjectivity.

European and American social capital has introduced the differentiation in the conditions of reproduction and exploitation of the working-class even when its members are determined as equal citizens of the same national state. Nevertheless, it has needed to go further in deteriorating those conditions concerning the labourers of degraded productive subjectivity that it requires in the countries where the developed subjectivity prevails. To attain such a differentiation, it has needed to transplant inside the national ambit the separation between the two types of labourers on the basis of their different national citizenship.

In Europe, this differentiated integration has developed through the gradual formation of a new national ambit of accumulation - and hence of a new national state - that starts by integrating formerly autonomous national ambits in a supranational organisation. The European Union includes national working-classes bearing different histories with respect to their productive subjectivity. Under the political form of an extended equality among their citizens, some countries of the union supply relatively cheap labour-power to the capital located in others. At the same time, the relative dissolution of each national unity allows an exacerbated regional and local differentiation in the internal reproduction of labour-power. In the USA, the immediate co-operation of national labour-powers bearing different productive histories has taken shape through free-trade agreements that run over the geographically common borders: the NAFTA.

Above these particular forms, immigration is the consummate path for differentiated national integration. Immigration reproduces national boundaries as a difference of citizenship within the working-class that capital exploits within a country. Capital moves what is a latent surplus-population in its original country, to the country where it needs it as a labour-power bearing a degraded subjectivity that complements the local one, mainly reproduced to bear an expanded subjectivity. Far from acting as an egalitarian factor among the conditions to reproduce one and the other labour-power inside the same country,

¹⁴ Concurrently determined by capital centralisation beyond national spaces.

citizenship rises here as a justification for inequality. The miserable conditions in which the immigrants reproduce their labour-power politically appear as not being the concern of the receiving national state. They are not its citizens. Capital extremes the differentiation by resorting to the two-faced policies of massive illegal immigration. At the same time, racism, xenophobia, religion, etc. develop into the necessary concrete forms taken by the differentiated reproduction of both productive subjectivities within the same country.¹⁵

These transformations did not fit at all the capital absolutely centralised as a property of the working-class within the USSR. This capital could not detach fragments of itself to valorise them in another country without violently colliding with the appearance - necessary for its general valorisation - of being the supersession itself of the appropriation of surplus-value. Even domestically, this appearance would have been destroyed by the accelerated expulsion to surplus-population that such a detachment would have meant to the soviet working-class. Essentially, this type of national process of capital accumulation is restricted in its expansion beyond its borders to international trade, regardless if on a free basis or through direct coercion. Likewise, this capital cannot accumulate itself by deepening the differences within the working-class that owns it, violently pushing a part of it into disqualification and pauperism, while at the same time it increases the mass of use values received by the other part. The concentration of capital as a collective property inside the USSR had shown to be such a powerful modality to enhance the national process of capital accumulation as to place it second in the world scale. Still, now its turn arrived to crudely show its own limitations vis à vis the world character of the powers of the capitalist mode of production. It thus went down into a violent process of capital decentralisation and national fragmentation.

As this happened in the classic countries and the USSR, the reproduction of labour-power followed the opposite path in Japan. Accumulation exhausted the latent surplus-population. And the more labour-power becomes the product of accumulation itself, the more the conditions for the reproduction of the individual labourers are ruled by the attributes that correspond to their productive subjectivity as organs of the collective labourer of large-scale industry. The reproduction of the expanded productive subjectivity could no longer be based on the conditions that corresponded to the reproduction of the degraded one. At the same time, the national unity of the process of accumulation imposed the extensive and intensive expansion of the former subjectivity. The conditions for its reproduction became the ones that those corresponding to the degraded subjectivity tended to follow. The Japanese working-class advanced in its political and trade union struggle to improve the sale of its labour-power. See the Appendix.

New sources of latent labouring surplus-population

The automation of machinery and its robotised assembly are processes in constant progress. Consequently, they go on simplifying the labours performed as appendages of machinery and in modern manufacture. Simplified labours can be performed by further unskilled, therefore cheaper, labour-power. At the same time, the increased labour productivity and intensity achieved through them constantly cheapens the commodities produced in the automated plants compared with the similar ones produced by the labourers' handicraft skill. What once was a labour-power cheap enough to counteract the low productivity and intensity it rendered loses this attribute vis-à-vis the once and again increased productivity and intensity of the labour performed by a labour-power that formerly

¹⁵ Apparel industry synthesises this differentiation (Blumenberg and Ong 1994).

was too expensive. From both sides, accumulation imposes the constant relative cheapening of the labour-power bearing degraded productive subjectivity.

As soon as Japanese labour-power became relatively more expensive, capital started searching for a renewed national source of latent surplus-population that it could transform into an industrial army bearing a degraded productive subjectivity. Again, it found the specific history of the East Asian former peasantry to be particularly appropriate. By the late 1960s, the simplest labour processes started to move from Japan to Taiwan, South Korea, Hong Kong and Singapore. Again, apparel and footwear marched ahead.

International fragmentation of productive subjectivity and differentiation in the capacity to accumulate

To internationally relocate production, capital needs to move itself bearing a certain concentration. It must reach in its new location the scale required to compete by producing for the world market. Thus, the accelerated expansion of production had presupposed an accelerated accumulation and individual concentration of capital in Japan. Given this accelerated nature, plus that of being a national process of accumulation that confronted the classic ones on the world market, the unity of individual capitals as the aliquot parts of national social capital became visible with specific immediateness. That is, the Japanese state acted in a particularly visible manner as the direct agent of the accumulation of individual capitals. In turn, the same necessity to accelerate accumulation imposed an immediate unity between industrial and bank capital. Hence, the concrete forms taken by the accelerated accumulation in its unity as a national process became completely apparent in the Japanese case.

When the production based on cheap simple labour expanded to other East Asian countries, the concrete forms of accelerated accumulation shed new light on their specific contents. These contents became the basis on which each national process of accumulation has developed its own specificity. To begin with, in Taiwan, the expansion of production has been characterised by the proliferation of small capitals.¹⁶ The question that must be addressed is why, being about producing cheap commodities in large-scale for the world market, did capital fragment itself into individual units whose restricted scales normally mean higher costs?

Accumulation rules itself by determining individual industrial capitals as aliquot parts of social capital through the formation of the general rate of profit. Only industrial capitals bearing the scale needed to put in action the productivity of labour that determines the value of commodities actively participate in that formation. Industrial capitals that fall behind in the process of concentration are unable to go on autonomously operating as such. They are forced to become capitals lent for an interest. Nevertheless, they can delay this shift. The general rate of profit no longer rules their valorisation in an immediate way, but through the - normally lower - interest rate. Therefore, they can remain active as small industrial capitals insofar as the lower concrete rate of profit that immediately rules their valorisation counterbalances the higher costs caused by their smaller scale. The selling price thus determined cannot exceed the price of production, but the opposite relation is possible. In this case, on selling at the price of production, small capitals would appropriate an extraordinary profit placed above their specific normal rate. Yet, small capitals cannot avoid competing over the extraordinary profit, making it flow to the normal capitals that relate to them in circulation.

¹⁶ Fields 1998.

In turn, normal capitals cannot compete with each other directly for the extraordinary profit they are thus receiving. They would not only lose it, but mutually destroy their capacity to valorise at the general rate of profit. Hence, the extraordinary profit in question becomes a constantly reproduced inflow for the normal capitals that appropriate it through the concrete circumstances of circulation. For instance, this is the specific relation established between a capital concentrated in the normal scale needed to design a certain commodity and to impose its social necessity through advertising, and the bunch of small capitals that produce it. That is the true content of what political economy inverts by presenting the market-forms as the cause of the different concrete capacities to accumulate.

The cheapening of labour-power is the key to the international fragmentation of the working-class' productive subjectivity. However, for the highly concentrated capitals, it comes together with the extraordinary profit that the direct exploitation of the labourers bearing a degraded subjectivity by the small capitals, frees for them. Besides, because they stand on the edge, small capitalists are particularly appropriate to exercise the merciless exploitation of those labourers. Normal, ie. sufficiently concentrated, capitals reserve for themselves the pretty face of 'human relations'. This is a condition to extract surplus-value from the part of the working-class whose productive subjectivity concerns the conscious control on the natural forces. But what about direct production taking place under miserable conditions, that include physical abuse on children, as the source for 'pretty face' capitals' extraordinary profits? 'That' is not 'their business'.

Still, not all productions based on a degraded productive subjectivity can be competitively performed by small capitals. In large-scale industry proper, the simplification of labour presupposes highly concentrated constant capitals to which massive collective labourers are attached. This happens in the car, heavy-machinery, shipbuilding, steel, etc. industries. Hence, to internationally move these productions in search of a renewed source of cheap labour-power, a concentrated movement of capital has to take place. In this sense, the original centralisation of capital in steel industry and, moreover, of bank capital as national state property is the starting point for the specificity of South Korean accumulation.¹⁷ Small capitals are present too. Yet, capitals concentrated in a scale aimed at competing in the global formation of the general rate of profit prevail.

As we have already seen, the relative cheapness of the expanded productive subjectivity in Japan did not suffice to massively move the complex labour devoted to basic research there. As the simplest labour moved to the continent, the international fragmentation of productive subjectivity cut complex labour in a specific way again. It reached technological research itself. To a certain extent, this part of the labour process did not go beyond Japan.¹⁸ Basically, it is the simple labour applied to production in a restricted sense that moved to the new countries.

When that fragmentation runs between independent individual capitals, it delimits a second difference concerning the concrete capacities of accumulation. Each time a technical innovation rises the productivity of labour, the individual capitals that lead its use appropriate an extraordinary profit. Still, this extraordinary profit disappears as the new technique is generalised. Now, the more the capacity to control the natural forces develops into the general basis of production in large-scale industry, the more the production of this development itself becomes a special branch of social production. The products of this branch bear a peculiarity: that of giving access to an extraordinary profit for the capitals that consume them. This circumstance entitles the capitals of the special branch in question to a share in that profit. Of course, this share vanishes as the new technique becomes generalised. Then, the capitals that consume the innovation have to wait until they exhaust the useful life of the fixed capital

¹⁷ Pilat 1994.

¹⁸ Smith 1997.

where the innovation is embodied, to renew their chance. Oppositely, the capitals whose product consists in the technical innovation itself renew the source of extraordinary profit with every renewal of their production process. The development of the productive subjectivity aimed at controlling the natural forces thus turns into a regular source of extraordinary profits for the individual capitals specialised in it. When sellers and buyers of innovations are systematically separated by an international border, a continuous flow of extraordinary surplus-value from the consuming country to the producer one occurs. Thus, the attempt to produce its own scientific and technological development becomes an immediate condition for the expansion of the national process of capital accumulation in the former. Yet, to achieve that development, the corresponding productive subjectivity must be developed within the country first. And this development normally means a relatively more expensive national labour-power, thus undermining the basis on which the national process of accumulation immediately stands.¹⁹

Worse still, the prices of the commodities exported owing to the cheapness of the national labour-power present a particular tendency to fall. They become cheaper, similarly to any other, as the productivity of labour increases. But they become cheaper, too, because this increased productivity is put in action by a labour-power that is constantly cheapened through the incorporation of new latent surplus-population. This incorporation reaches Thailand, Malaysia, the Philippines and Indonesia since the late 1970s. This time, electronic components themselves integrated the vanguard. Furthermore, the incorporation of Bangladesh, Sri Lanka, etc followed in the late 1980s. Nevertheless, the conditions of accumulation in the region were truly revolutionised as Chinese latent surplus-population started to function as a cheap source of simple labour to produce for the world market. This incorporation characterised the 1990s.

Chinese latent labouring surplus-population appears as an inexhaustible source of labour-power apt to function as an appendage of machinery and in modern manufacture. The cheapness of this labour-power even contrasts with its primitive cost in other Asian countries. (See the Appendix). This cheapness, together with Chinese labour discipline, have a historical specificity that reinforces the regional one. In China, the process that transformed the peasantry into a latent labouring surplus-population was, at the same time, the process that reconstituted the former centralised national unity of the organisation of social production. This unity is now established through a tendency to the absolute centralisation of capital within the nation, under the necessary concrete political form pointed out with respect to the USSR.

Chinese national social capital thus acquires the specific power given by the ideological identification of the workers with its accumulation. Moreover, any resistance they could oppose to the extraction of surplus-value they are submitted to appears inverted, here, as an attack to the socialist organisation of production. Hence, it appears as a treason to the historical interests themselves of the working-class. The national state charges against the workers' resistance with all the strength it gets from this appearance.²⁰

The expansion that national accumulation is thus potentially able to reach, cannot wait for the mere expanded reproduction of existing capital. It demands a massive inflow of foreign capital. At first, the same political form taken by the national process of capital accumulation limited this inflow to foreign credit conceded to state firms. Yet, when the march itself of accumulation dissolved the apparent incompatibility between its national political form and its true content, capital started to flow as foreign direct investment.

¹⁹ Yun 1997.

²⁰ Reiitsu 1982, p. 241.

Towards general overproduction by means of the international fragmentation of productive subjectivity

Let us place ourselves in the early 1990s. The international division of labour is no longer simply based on the supply of raw materials to the classic countries, by countries where natural conditions allow a higher productivity of labour. Its contemporary specificity lies in the international fragmentation of productive subjectivity in large-scale industry. Some countries concentrate the exploitation of the labour-power bearing an expanded productive subjectivity. Others mainly concentrate the exploitation of labour-power bearing a degraded productive subjectivity. Finally, a third type of country essentially functions as reservoir of the labouring population that capital has deprived of all productive subjectivity, thus turning it into a consolidated surplus-population. Apparently, the 'globalisation' of production runs over national boundaries. Actually, it stands on their reinforced existence as the basis to cheapen labour-power.

Let us consider the aggregate evolution of West Germany, France, Italy, UK, USA, Japan, South Korea and Taiwan, between 1973 and 1992.²¹ These economies synthesise the key to the transformation in the global exploitation of the working-class based on the international fragmentation of productive subjectivity. Gross domestic product at constant prices (that roughly reflects the evolution of material production) rose 68 percent, and total working hours 15 percent. The difference between both rates makes evident the increase in productivity, both concerning production and circulation labour. In turn, average annual hours worked per labourer fell 7 percent. Hence, the total number of employed labourers rose 24 percent. To hell with the disappearance of the working-class! The increase in the number of workers, plus the relative development of productive subjectivity and the exhaustion of agrarian origin as a source to cheapen labour-power, made the mass of real wages (strictly, the real direct plus indirect labour costs) rise 55 percent.

Let us assume that all labour-power at capital's disposal would have been that reproduced in the European and American conditions. To achieve the same increase in production, the number of jobs would have increased 47 percent, and the mass of real wages 65 percent. And notice that we are disregarding the fact that the reproduction of the labour-power in question has not escaped being deteriorated by the actual presence of the differentiation. Thanks to the international fragmentation of productive subjectivity, capital has appropriated a greater proportion of the material product of labour and turned more of the labouring population into a surplus one.

A part of the increased product covered the increase in the technical composition of capital: the mass of means of production and circulation to be advanced per working hour increased 88 percent. Yet, since this increase essentially corresponded to the expansion of fixed capital, an increase of 39 percent in annual gross investment sufficed to cover it. In brief, while production has increased 68 percent, the cost of labour-power has gone from representing 72 percent to representing 67 percent of it. In turn, the part demanded to replace and expand the means of production and circulation has fallen from 25 percent to 21 percent. However much the individual consumption of the capitalist class could have increased, the transformation suffered by the conditions of accumulation has advanced in a defined direction: general overproduction.²²

This advance towards overproduction has not been an immediate expression of the law of the tendency of the rate of profit to fall. In the USA, the concrete annual rate of profit of

²¹ The sources are included in the Appendix.

²² It is not about underconsumption. In capitalism, everyone consumes what one's general social relation - capital accumulation - rules one should consume; albeit this certainly means zero consumption for the consolidated labouring surplus-population.

social capital rose sharply after its fall during the 1930s, reaching a post-war peak in the mid-1960s, fed by the relatively undifferentiated reproduction of labour-power and the increased productivity achieved through it. Yet, as the value of labour-power started to be determined through the fragmentation of its reproduction according to each productive subjectivity, the capital whose technical attributes and location were associated to the former undifferentiated conditions started to become redundant. Then, the indifference in the reproduction of productive subjectivity started to appear as the cause of the fall of the rate of profit. Yet, it was just the concrete manifestation of the moral depreciation of the capital that corresponded to the former conditions.

Capital started to face general overproduction in the only way it knows: by fleeing directly into it. Credit is the tool for this. Selling on credit to an insolvent buyer creates the appearance that the capital materialised in the overproduced commodities has completed its circuit of valorisation. This appearance allows the renewal of that circuit in a scale expanded beyond the reach of the effectively realised surplus-value, by buying on credit too. As soon as credit reaches maturity, it acquires an independent life. The process of deferring overt general overproduction by expanding it now includes the renewal of mature credits, while interests accrue to unpaid capital. The 68 percent increase in production from 1973 to 1992 has been sustained by a 156 percent real increase in public indebtedness plus private indebtedness with the financial system. From 1992 to 2000, the product increased 26 percent more, at the expense of a 48 percent increase in indebtedness.

The apparently autonomous expansion of credit has a natural offspring, speculation. Credit titles start to function as fictitious capital. Fictitious capital is unable to valorise by itself. Still, here, its profits are fed by the constant flow of part of the unrealisable surplus-value, that constantly enlarge its base. In turn, fictitious capital inflated by speculation turns into industrial capital, thus fuelling overproduction. As capital advanced in the classic countries by exploiting the increase in productivity through automation, and the cheapening of labour-power through the latter's international and domestic differentiation, while at the same time it resorted to the expansion of credit, the rate of profit started to rise (See the Appendix). Yet, the more capital expands production to appropriate the thus increased rate of profit, the faster it advances towards general overproduction.

While the US and the EU entered a decade of expansion, in East Asia overproduction started to be evident despite the continuous expansion of credit. Japanese accumulation had practically exhausted the source of its specific strength (See the Appendix). It delayed an acute crisis of general overproduction, but overproduction goes on reproducing itself with the strength evinced by a continued general stagnation. South Korea, Taiwan, Singapore and Hong-Kong started the decade as the main substitutes for Japan on the world market, based on their relatively cheap labour-power. Still, when China imposed the extreme relative cheapness of its labour-power, overproduction became evident in the former countries.

The overproduction of industrial capital engenders fictitious capital. Or, in other words, unrestrained speculation is but the autonomous way in which the development of general overproduction of industrial capital rules itself. Now the time arrives for the true determination to appear inverted. It starts to seem that the excess of fictitious capital obstructs the accumulation of industrial capital. Still, the true fact is that the mere reproduction of the apparent valorisation of fictitious capital needs to be fed by an increasing flow of surplus-value, while it has gone beyond the capacity of industrial capital to support it with its unrealisable surplus-value. Thus, it seems that the insufficiency of the rate of profit detonates the crisis of fictitious capital. In turn, the latter depresses the capacity to pay and consume. It thus appears as engendering general overproduction by itself, albeit it does but to show that accumulation is approaching the necessity to re-establish its material unity through a general crisis. Now, overproduction does not come down to the existence of capital under obsolete

material forms, either for their technology or for their location with respect to the international differentiation of labour-power. Simply, too much capital bearing the modern conditions of production has been produced. The time has arrived for the rate of profit to fall in the classic countries themselves.

Working-class internationalism

The automation of machinery and the robotisation of assembling are two genuine expressions of the historically-specific powers of labour under the rule of capital. They imply a substantial leap forward in the development of the productive forces of society under the material form inherent in the specific historical role of the capitalist mode of production; namely, through the transformation of labour into a process of collectively developing the conscious control on the natural forces to make these forces act on the objects to transform them. Still, as an alienated product of social labour, this leap forward turns against its own producer, the working-class. Standing on it, capital acts against its historical tendency towards reproducing the labourers of large-scale industry under universal conditions. It does so by internationally fragmenting the corresponding collective labourers, so as to link the different productive subjectivities of its specialised organs to the different historical conditions in which each national labour-power is reproduced.

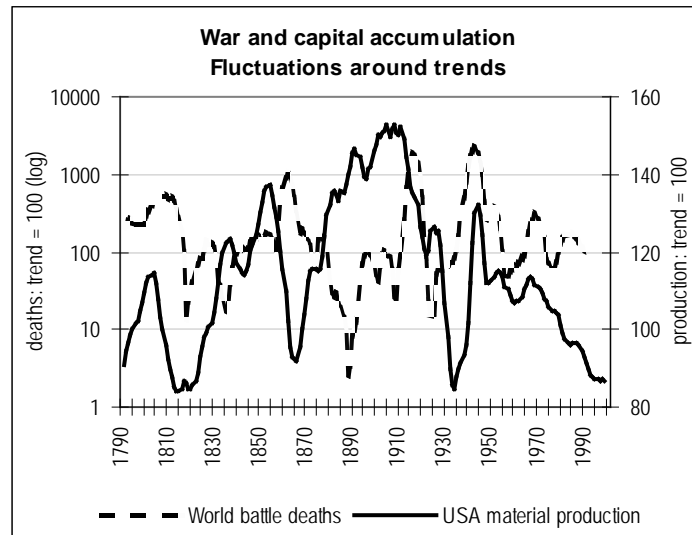
On this basis, capital reproduces the labour-power whose productive subjectivity it degrades by spending just that which is required according to its specific attributes, thus cheapening it. By so doing, capital increases the rate of surplus-value. However, this increase does not result from developing labour productivity and, hence, the productive forces of society. Worse still, the cheaper labour-power becomes, the bigger the gap that the productivity of labour has to overcome before the machinery that supports it could be put in production. Therefore, the cheapening in question procrastinates the development of social productive forces. Moreover, the resulting lower mechanisation is far from counterbalancing the cheapening of labour-power with an increased demand for it. On the contrary, since the lengthening of the working-day is key to that cheapening, this process entails lower employment. A larger consolidated labouring surplus-population is yet another of its disastrous results.

Through the national form taken by its accumulation, capital divides the working-class into fragments that confront each other as citizens of different national states. This division is the specific political form through which capital differentiates the reproduction of labour-power according to the specific productive subjectivity it requires from it. Moreover, capital profits from the exacerbated international competition it imposes between the national fragments of the working-class through that differentiation. A specific task is thus imposed on working-class internationalism.

It is about forcing the reproduction of labour-power on a common universal basis, whichever its productive subjectivity. Capital cannot avoid reproducing the part bearing the developed one by paying it for its value. Therefore, an universal basis means that this would tend to be the general one. The consequent expensiveness of labour-power bearing degraded productive subjectivity would force capital to accelerate technical development. Hence, capital would be forced to cease avoiding its specific historical role in the development of the material productive forces of society.

The struggle of the working-class for the universality in the reproduction of labour-power has a necessary general political form: that of imposing a global undifferentiated citizenship. Therefore, it is not just about reinforcing international solidarity, but it is

essentially about directly advancing towards the constitution of a world state.²³ The political action of the working-class needs to be, as ever, at the vanguard of the abolition of national boundaries. Yet, the general crisis of overproduction, increasingly required by capital to restore its material unity, will violently worsen the conditions of exploitation of every portion of the working-class. Historically, this has acted against working-class international unity. We cannot overlook the fact that capital has relied on generalised war as a key path to finally unleash, and afterwards also to overcome, its general crisis of overproduction:



Source: Iñigo Carrera, Juan, "Crisis, ciclos y tendencia de la acumulación de capital", CICP, Buenos Aires, 2002.

Furthermore, today, the perspective points to capital violently freeing itself from any burden that the consolidated excess of labouring surplus-population - globally distributed through the international fragmentation of productive subjectivity and expanded by the crisis of overproduction - could mean to its accumulation. The concrete forms of internationalist action towards an unmediated global working-class is the core question underlying any political action able to express 'the interests of the proletariat as a whole'.

²³ Hardt and Negri (2000) claim for a global citizenship brought down to the free international mobility of labour-power. This implies to believe that the national form of capital accumulation - hence national states - could be abolished by abolishing the immigration laws in which that national form itself takes concrete shape. And all this in the name of ethics, ie. of the alienated consciousness who sees itself as an abstractly free one. Contrary to such an idealist fantasy, world citizenship can only arise from the concentration of capital in scales and conditions that go beyond the scope of any national space, thus imposing the necessity of the world state as its general political representative.

Appendix

Table 1

	UK**				USA							Japan				South Korea				China			
	AH/W	GDP/H	LC/H	YE	AH/W	GDP/H	LC/H	GC	YE	RP	AH/W	GDP/H	LC/H	YE	AH/W	GDP/H	LC/H	YE	AH/W	GDP/H	LC/H	YE	
1700	3000	1,03	0,66																				
1780	3600	1,07	0,71																				
1820	3800	1,12	0,92	2	3600	0,87	0,51																
1870	2984	2,61	1,71	4	2964	1,80	1,50				2945	0,46											
1890	2807	3,46	2,25	5	2789	2,52	2,18				2770	0,69											
1913	2624	4,40	2,54	7	2605	4,01	3,21		8		2588	1,03											
1929	2286	5,54	3,48	8	2342	5,86	4,42		8	8,3	2364	1,78											
1938	2267	6,02	3,88		2062	6,67	5,28		9	5,3	2391	2,19											
1950	1958	7,86	5,28		1909	11,33	8,42		9	10,7	2166	2,03	3,26*	2200	1,28								
1960	1913	9,69	7,04	10	1830	14,66	11,41		11	9,4	2138	3,82	3,96*	10				3					2
1973	1688	15,92	11,81	9	1764	20,23	15,89	0,31	12	10,2	2042	11,15	8,70	11	2683	3,22	0,94	5					3
1987	1557	22,39	14,22	10	1683	24,16	17,01	0,35	13	8,8	2020	16,46	11,10	11	2705	6,68	2,64	8	2462	1,98	0,20		5
1997	1530	26,32	16,25		1684	27,59	17,29	0,40	13	9,5	1790	22,50	13,98		2436	12,91	6,51		2329	4,00	0,28		
1999	1530	26,95	17,52		1683	28,66	18,12	0,41		10,2	1741	22,93	14,34		2497	13,54	6,51	9	2285	4,68	0,34		

** 1700/80 includes the whole of Ireland.

* Overestimated by the backward projection.

Notation

AH/W: Annual hours per worker.

GDP/H: Gross domestic product per hour worked, in 1990 Geary-Khamis PPP US dollars.

LC/H: Direct and indirect labour cost per hour worked, in 1990 Geary-Khamis PPP US dollars.

GC: Gini coefficient for individual earnings of full-time male workers.

YE: Mean years of formal education of employed population.

RP: Concrete annual rate of profit of social capital (excluding housing).

Table 2

	Total employment (thousands)		Annual hours per employee		GDP (millions of 1990 Geary-Khamis PPP US dollars)			Hourly labour cost (1990 Geary-Khamis PPP US dollars)		Constant capital advanced per worker (1990 Geary-Khamis PPP US dollars)		Gross investment over GDP %		Public debt + private debt with the financial sector over GDP %		
	1973	1992	1973	1992	1973	1992	2000	1973	1992	1973	1992	1973	1992	1973	1992	2000
France	21434	22557	1771	1542	674,4	1030,4	1199,4	11,29	18,83	25839	44942	27,2	19,7	49,0	126,9	148,7
Germany (ex FGR)	27160	29141	1804	1563	815,1	1254,8	1414,3	15,76	27,35	40606	49327	25,3	23,0	82,5	121,6	185,1
Italy	20448	24257	1612	1490	570,2	939,7	1068,7	11,67	20,85	23149	40521	30,3	24,1	122,7	167,2	190,3
United Kingdom	25076	25465	1688	1520	674,1	910,4	1146,0	11,81	15,05	16094	27005	21,9	15,3	86,1	148,1	183,1
USA	86838	119164	1764	1672	3519,2	5510,4	7331,0	15,89	17,34	29655	43182	20,2	15,2	116,9	158,4	179,1
Japan	52590	64360	2042	1876	1197,2	2415,2	2826,5	8,70	12,56	16519	49532	38,1	30,8	142,6	245,6	292,7
South Korea	11140	18376	2683	2478	96,4	436,4	686,8	0,94	4,91	6467	26355	25,6	37,3	53,4	111,0	144,8
Taiwan	5327	8632	2672	2357	56,6	238,8	396,9	"	"	8237	36841	24,6	23,1			

Sources

General: Maddison, Angus 1995, *Monitoring the World Economy 1820-1992*, Paris: OCDE. Maddison, Angus 1991, *Dynamic Forces in Capitalist Development*, Oxford: Oxford University Press. Nehru, Vikram, and Ashok Dhareshwar 1993. 'A New Database on Physical Capital Stock: Sources, Methodology and Results'. *Rivista de Analisis Economico* 8 (1): 37-59. US Bureau of Labor Statistics 2001 *International Comparisons of Hourly Compensation Costs for Production Workers in Manufacturing, 1975-2000*. World Bank, *2000 World Development Indicators*. International Monetary Fund, *International Statistical Yearbook*.

UK: Marx, Karl 1965 [1867] *Capital*, Moscow: Progress Publishers. Mitchell, Brian 1962, *Abstract of British Historical Statistics*, Glasgow: Cambridge University Press. Office for National Statistics, *Labour Force Survey*. Matthews, R., C. Feinstein y J. Odling-Swee 1982, *British Economic Growth 1856-1973*, Stanford: Stanford University Press.

USA: Bureau of Economic Analysis, *National Income and Product Accounts. Historical Statistics, Colonial Times to 1970*, Snyder, Thomas (ed) 1993, *120 Years of American Education: A Statistical Portrait*, NCES.

Japan: Ministry of Labour, *Labour Force Survey*.

South Korea: Ministry of Labour, *Monthly report on labour statistics*.

China: *China Statistical Information Network*.

References

- Blumenberg, Evelyn and Paul Ong 1994, 'Labor Squeeze and Ethnic/Racial Recomposition in the U.S. Apparel Industry', in Edna Bonachich, Lucie Cheng, Norma Chinchilla, Nora Hamilton and Paul Ong (eds) *Global Production - The Apparel Industry in the Pacific Rim*, Philadelphia: Temple University Press.
- Fields, Karl 1998, 'Is Small Beautiful? The Political Economy of Taiwan's Small-Scale Industry', in Eun Mee Kim (ed) *The Four Asian Tigers*, Academic Press.
- Fröbel, Folker, Jurgen Heinrichs and Otto Kreye 1980, *The new international division of labour: Structural unemployment in industrialised countries and industrialisation in developing countries*, London: Cambridge University Press.
- Gereffi, Gary 1998, 'Commodity Chains and Regional Division of Labor in East-Asia', in Eun Mee Kim (ed) *The Four Asian Tigers*, Academic Press.
- Hardt, Michael and Antonio Negri 2000, *Empire*, Cambridge: Harvard University Press.
- Hirsch, Joachim 1991, 'Fordism and Post-Fordism: The Present Social Crisis and its Consequences', in Werner Bonefeld and John Holloway (eds) *Post-Fordism & Social From: A Marxist Debate on the Post-Fordist State*, London: Macmillan.
- Holloway, John 1991, 'The Great Bear: Post-Fordism and Class Struggle' in Werner Bonefeld and John Holloway (eds) *Post-Fordism & Social From: A Marxist Debate on the Post-Fordist State*, London: Macmillan.
- Iñigo, Juan 2000a 'Crisis y perspectivas del capitalismo argentino', *Realidad Económica*, 171: 52-75.
- Iñigo, Juan 2000b *The historical reason of existence of the capitalist mode of production and the determination of the working-class as a revolutionary subject*, Buenos Aires: CICP, presented to the First Electronic Congress on the Updating of Das Kapital, <http://www.aper.net/ceplad/daskapital>.
- Jang-Sup Shin 1996, *The Economics of the Latecomers*, London: Routledge.
- Jenkins, Rhys 1984 'Divisions over the international division of labour', *Capital & Class*, 22: 28-57.
- Marx, Karl 1965 [1867] *Capital*, Vol. I, Moscow: Progress Publishers.
- Marx, Karl 1973 [1857-58] *Grundrisse*, Harmondsworth: Penguin Books.
- Okimoto, D. and G. Saxonhouse 1987, 'Technology and the Future of the Economy' in K. Yamamura and Y. Yasuba (eds) *The Political Economy of Japan*, Vol. 1, Stanford: Stanford University Press.
- Pilat, Dirk 1994, *The Economics of Rapid Growth*, Cambridge: Edward Elgar.
- Reiitsu, Kojima 1982, 'Accumulation, Technology and China's Economic Development', in Mark Selden and Victor Lippit (eds) *The Transition to Socialism in China*, New York: Shapire.
- Smith, David 1997, 'Technology, Commodity Chains and Global Inequality: The South Korean Case in the 1990s', *Review of International Political Economy*, 4 (4): 734-762.
- World Bank 1993, *The East Asian miracle: economic growth and public policy*, New York: Oxford University Press.
- Yun, A. H. 1997, 'Industrial Restructuring and the Reconstitution of Class Relations in Singapore', *Capital & Class*, 62: 79-120.