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**Wage-Labour Nexus, Social Spending and *Régulation* over the Long Period:
From Support to Conflict**

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Abstract:

Studying the wage-labour nexus over the long period Régulationnists show its own ability to an extreme stretch: the production of surplus and its levy were initially developed independently of the living conditions of workers and then gradually incorporate the standards of consumption and production. The historical plasticity of the wage-labour nexus has allowed its adaptation to the demands of accumulation. One of the terms of this historical extension is to have integrated social spending.

Using previous quantitative analysis, the paper show the structuring nature of social expenditure for growth using the way in which such expenditure is funded in the long term. In France, social expenditure (education, health and pensions for elderly) has increased periodically since the beginning of the nineteenth century, forming a component of the end of the long phases of depression. This common feature enables us to show how social expenditure becomes a structural component of growth. The study of the funding of social spending (between the state, the household and the businesses) shows the way in which this component became established as time went by: less than a question of redistribution, social expenditure involves recognition of its increasingly productive character.

The integration of social spending in economic growth is the cause of an abundant debate for or against the welfare state whose peaks correspond to the critical episodes of economic conditions. Our purpose is different: through our historical analysis of social spending, for now limited to the French case, this paper attempts to understand how the development of these expenses acts on the mode of regulation.

*On this point, the wage-labour nexus including social spending is most often studied as a distributive question. The paper introduces new quantitative elements about the two dimensions of wage-labour nexus: the distribution but also capital accumulation (1). Doing so, we intend to show that social spending includes the wage-labour nexus in which they develop a specific operation. This paper aims to explain the current impasse in their contribution as the result of indeterminacy they settle into the dynamics of wage-labour nexus and the *régulation* mode cannot arbitrate. This paper proposes to interpret this in terms of *régulation* conflict (2).*

JEL classification : J32, B52, N33, N34

The wage-earning class has developed dramatically because the wage-labour nexus has constantly adapted itself to social conflicts and to the constraints imposed by accumulation. (Boyer 2002a: 74)

The wage-earning class is the product of a successful graft: that of labour onto merchandise (Dockès and Rosier 1998). With the wage-labour nexus (WLN) (Aglietta 2000), the Régulation approach (Boyer 1990; Jessop and Sum 2006) offers a historical reading of it.¹ The Régulationists insist on the time frame of the institutional conditions through which the wage-earning class reproduces itself while contributing to accumulation. Thus, through its successive competitive and monopolistic forms (Boyer 2002a), the WLN has demonstrated its vast capacity for extension: the production and levying of surplus, which first developed independently of wage-earners' living conditions, gradually came to integrate consumption and production norms. The historical malleability of the WLN thus explains its adaptation to the demands of accumulation. One of the forms of the historical expansion of the WLN is its integration of social spending. These expenditures, both public and private, are directed towards the support and qualitative development of the population. Paradoxically, they have given rise to what is now a very intensive socialisation of the workforce, a long-term increase in productivity and consequently, support for the very accumulation they limit.

The abundant debates on the state, which have typically reached a peak during critical moments in the economic situation, constitute one way of addressing this paradox theoretically. Such debates have grown more subtle, however. On the one hand, social spending is still considered a cost to be reduced but it is accessible to economic policies aimed at 'investing in social matters' (Delors and Dollé 2011). On the other hand, an instrumental vision of the state, through social protection for example, cannot describe the social state, which is politically based on democracy and economically based on the socialisation of the product (Ramaux 2012). Every economic analysis of social spending must therefore recognise that the state is an irrevocable actor in such a problematic. Over the long term, however, it is not possible to remain within the strict framework of the state.

Indeed, the state is the institutional form representing the political codification of social relations. Historically situated, this codification temporarily stabilises social rivalries which are constantly revived by the working of private accumulation. In the present systemic crisis, the codifications of social spending and WLN come into tension. If a new social codification remains a desirable prospect, its impossibility at present is in part understandable. Social spending is viewed in terms of opposing categories, as a burden or an opportunity for growth. It is limited to the role of a by-product of that growth. But these categories ultimately share the same limitations because neither tries to consider how their development explains growth. One way of eliminating this indeterminacy is thus to analyse them over the long term.

¹ . The French term *régulation* as used here does not refer to politico-legal 'regulation' in the English sense but rather, the 'regularisation' or 'normalisation' of economic activities through economic and extra-economic mechanisms (Jessop 1997: 288; Jessop and Sum 2006: 4). Following the English translation of R. Boyer and Y. Saillard's overview, *Régulation Theory: The state of the art* (Boyer and Saillard 2002b), we have left *régulation* untranslated here.

In this context, the aim of the present article is to understand how, on the basis of the WLN, social spending becomes part of the accumulation regime. To this end, we show that it is integrated into the WLN in order to preserve the objectives and mechanisms of accumulation throughout their successive redefinitions. But we also show that it develops contradictions within accumulation which the adaptations of the WLN are less and less able to surmount. This dialectic manifests itself through two historical relationships between social spending and accumulation. This means that in the closure of the mode of *régulation*, the WLN regularly increases social spending in order to meet the renewed objectives of accumulation. In the process, at present, it transforms the terms of that accumulation.

In order to demonstrate this process, we introduce new quantitative material on social spending in the French case, which allows us to address it in terms of the two opposing dimensions of the WLN: conflict and capital accumulation. We would propose to show that social spending is integrated into the WLN and that it develops a specific way of functioning there (1). We then explain the present blockage of its contribution as the result of an indeterminacy it introduces within the dynamics of the WLN and which the mode of *régulation* cannot arbitrate. We then attempt to interpret this situation in terms of a conflict of *régulation* (2).

I. The historical development of social spending and the wage-labour nexus

Standard economic approaches analyse social expenditures as burdens on growth which are justified by collective gains in terms of welfare or equity. In periods of economic difficulties, social development is viewed as a burden to be reduced (Razin and Sadka 2005). Non-standard approaches, in their various forms, foreground other considerations. One of their undeniably common features, however, is to envision social spending over the long term. They thus seek to determine the cause of its dynamics and the way it fits into the economic system. Régulationist studies, which analyse it in terms of the WLN, propose two different explanations which are of unequal weight. The predominant one concerns redistribution and the other, accumulation.

1. Conflict and redistribution, arguments for a single treatment of social spending

In heterodox approaches, a first group of studies analysing social spending focuses on redistribution and the ongoing social critique of it. It calls for reconsidering the conflict as a *modus operandi* linking the forces present in the WLN. Insofar as the literature tends to be dominated by the analysis of each category of social spending in itself or in relation to growth, the contribution of these studies is essential: they provide a theoretical approach for a single treatment of this spending in terms of conflict.

- Social spending: zero cost and the dynamics of the political voice (Lindert 2004)

In the industrialised countries, long-term quantitative approaches bring out the cumulative nature of social spending and its low sensitivity to setbacks in the economic situation. On the basis of this observation, Lindert sets out to explain the historical expansion of social systems from the 1880s on. In *Growing Public*, he shows that social spending has zero cost for growth: over the long term, the costs of social transfers and the gains they permit are

equivalent. Indeed, as costly as this spending may be for growth, it permits labour productivity gains (education, health, housing, etc.) and provides social support for workers excluded from the production system (retirement pensions, unemployment compensation). Lindert calls this dynamic equilibrium the ‘free lunch puzzle’. His findings thus undercut the conceptualisation of social spending as a burden on growth.

Furthermore, if it social spending has incontestably shown the greatest rise in the countries where wealth has increased the most, wealth alone cannot explain its growth. In fact, its development results from greater political participation. The dynamics of social spending is thus to be explained by the ‘political voice’: a powerful voice underlies a high level of redistribution. Here, Lindert also introduces a ‘Robin Hood Paradox’ whereby ‘redistribution from rich to poor is least present when and where it seems most needed’ (Lindert 2004, I: 19). These two explanations are brought together theoretically in other studies through the Régulationist concept of the WLN.

- **The wage-labour nexus and institutionalised compromise** (André 2002)

In their study of the development of the state since 1870, Delorme and André seek the determinants of the rise in public spending. One of these, they maintain, is social, insofar as the social domain is responsible for the legitimisation, and to a lesser extent, the co-ordination of state activity. Thus, education and protection against risks which have come to be identified as social, because of industrialisation and the growth of the wage-earning class, play a major role. Delorme and André do not simply analyse each category of public spending separately; on the contrary, they justify the joint treatment of social insurance and education by the way these collective services intervene in the economy on a long-term basis through the elaboration of institutionalised compromises.

The institutionalised compromise originates in a situation of conflict between socioeconomic groups. In the case of France, education was an arena of conflict between the republican state and the church, while social protection opposed workers in the process of organising themselves and those who employed them. Since none of the forces concerned were able to prevail, compromise offered a way out of the conflict, with regards to education in the 19th century and social protection in the 20th. Compromise calls for the establishment of forms of organisation creating rules, rights and obligations for the parties involved. Putting an end to the conflict thus proceeds from the institutionalisation of a framework which reflects the demands of the different groups and the current balance of power. Over the long term, individual and collective behaviours will comply with these institutional frameworks, which thus acquire the character of objective, particularly robust givens.

Institutionalised compromise provides an explanation for the increase in public spending by showing that ending the conflict entails making the demands of each group compatible within a shared framework, thus giving actors long-term prospects for developing plans and strategies. Economically, this institutionalisation is based on a modification of redistribution. Through public spending, the institutionalised compromise therefore expresses the dynamic cost of the local agreements – always historically situated – arrived at by the opposing forces involved. The institutionalised compromise justifies the social expenditures undertaken in its functioning as regularities of the WLN.

- Indirect wage income: autonomy and new contradictions (Saillard 2002)

Since the Second World War, social spending has, in part, taken the form of an indirect wage income. If this stems from the institutionalised compromise over protection against social risks, its form and functioning are specific. It involves an institutional wage compensation fixed outside the company finalising a portion of its product, independent of the conditions in which it was obtained and related instead to the employment situation. With indirect wage income, the general reproduction of the labour force is achieved through two methods which are independent of one another: on the one hand, this reproduction remains tied to production time; it is ensured by individual consumption spending. But on the other, it is now linked to demography over the long term and is achieved through collective consumption benefiting from a circuit of socialised financing.

‘If the needs covered by socialised financing are tied to the development of the wage-earning class and contribute to the socialisation of general production conditions, they also have a dynamics which is largely autonomous’ (Saillard 2002: 154). The contribution of this autonomy is a stabilisation of the wage income. But it also gives rise to new contradictions, namely the breaking of the link between the sale of labour power and the wage income which, while permitting the stabilisation of demand, complicates work-incentive strategies, not to mention the destabilising effect of the increase in social budgets.

The notion of the institutionalised compromise as a process permitting the stabilisation of the social conflict proper to the WLN is expanded by the analysis of indirect wage income. One of the key elements is the demonstration of its autonomy, which allows collective consumption to give rise to ongoing institutionalised financing and a specific production of collective services. The failure of their commodification in order to regularise their growth (Billaudot and Granou and Baron 1979; Lorenzi and Pastré and Tolédano 1980) does not, however, permit indirect wage income to be articulated with the accumulation regime. The origin of the financing continues to arise from a redistribution dynamics. The way in which production is connected to collective consumption based on the indirect wage income is not specified and the question of the ‘production’ of a labour force qualitatively related to accumulation needs is not addressed.

The analysis of the dynamics of social spending through redistribution foregrounds the following gains:

- Social spending stems from the conflict proper to the WLN;
- The conflict is resolved through the establishment of an institutionalised compromise which stabilises a framework of rules, rights and thus potential actions and endows it with a body of resources. These resources, in the form of social spending, modify income distribution. The social field is unified by the social spending allocated to the functioning of the institutionalised compromise;
- This compromise may take the form of deferred wages as compensation for work, even if it is not limited to this.

These analyses bear on one of the determinants of the WLN, conflict and redistribution. Another group of studies attempts to analyse the role of social spending relative to the second determinant, the dynamics of accumulation.

2. Conflict and accumulation: indeterminacies of the development of the WLN

The increase in social spending is neither continuous nor proportionate to growth. Nor is it random. This has been demonstrated, in the French case, by a study of the main categories of social spending over the long term (1850-2008).

- A rise in social spending organised by the long-term context of the accumulation regime (Michel and Vallade 2007, 2010)

In 2008, social expenditures represented 43 % of the French GDP; those for education, health and old-age provision, reconstituted quantitatively over the long term, represented 32 %. The evolution of these expenditures is marked by two salient features. First, the different categories of social spending fluctuate in an identical way, with the same phases of accelerated and reduced growth. Only the extent of the fluctuations differentiates them. Second, what is noteworthy about them is their fluctuations in relation to the GDP. From the mid-19th century to 1945, their growth is countercyclical. Each of their expansion phases corresponds to the long depression phases of the GDP in 1873-1890 and 1928-1929. In theory, the justification for their expansion must therefore be sought in the causes of the barriers to growth. After 1945, their fluctuations become procyclical, which signifies, beyond the sector-based contributions of each of these expenditures, their joint action within the mode of *régulation*. The lessons obtained from the institutionalised compromise are thus reinforced. These expenditures in fact constitute various solutions for social problems. However, the reversal of the direction of their fluctuations relative to the GDP after the Second World War also indicates a lasting change in accumulation. Consequently, the explanation of the structuring of social spending must be sought in the two determinants of the WLN, conflict and accumulation.

To that end, we use the single treatment of social expenditures proposed by Delorme and André, but in order to allow for the influence of accumulation as well, we consider them as an active whole structuring the WLN and its transformation. We call this whole 'human development' (HD).² The basic assumption is that its historical progression explains the shift from counter- to procyclicality in relation to the general economic situation. This evolution indicates an organisation of this spending in a specific social form within the WLN, along with wages and according to specific forms of financing. Through its organisation, this spending would then contribute to the dualisation of the WLN between wages on one hand and HD expenditures on the other.

- A dualisation of the WLN?

Régulationist studies provide arguments in favour of this dualisation. A closer reading, however, brings out certain limits which our approach seeks to overcome in part. Two distinct periods emerge from this research (Michel 1999a; Michel and Vallade 2007).

² . This concept is introduced through a long-term quantitative analysis of social spending (Michel and Vallade 2007) and developed through that of their financing sources (Michel and Vallade 2010). It is discussed in relation to Sen's approach to human development (Carpentier and Michel 2010).

Table 1. Social Spending and Wage-Labour Nexus

<p>Phase 1: Mid 1970s - Early 1990s Social spending and organisation of the WLN: first signs of duality</p>
<p>1 - Competitive WLN: from the 19th century to the Great Depression (1928-middle 1940s) The buying and selling of labour power are determined by the fluctuating conditions of extensive accumulation, with employment level and wage rate functioning as adjustment variables. Wages, the unstable expression of the conditions of the reproduction of labour power, constitute a cost to be unrelentingly combatted (Boyer 1979) → no collective consumption</p> <p>2 - Monopolistic WLN: spreading since the end of WWII The factors involved in the reproduction of labour power are integrated into the circuit of capital. This form of WLN depends on the spread of a reproduction of labour power based on a norm of the broadest possible private commodity consumption and on collective consumption based on deferred wages (healthcare and retirement pensions) (Aglietta 2000; Boyer 1979) → the division of consumption creates a duality in the WLN</p> <p>Dynamics = <i>régulation</i> of collective consumption: - Failure of its commodification (Billaudot op.cit. 1979 ; Lorenzi op. cit. 1980); - Collective consumption, extended to education, leads to differentiating individuals. Normalisation by the state ensures social cohesion within a political process (André 2002; Aglietta and Brender 1984). - In a critical phase, the spending attributed to the deferred wage contributes to decreasing the profitability of capital and as such, constitutes an obstacle to capital accumulation (Mazier and Baslé and Vidal 1999).</p>
<p>Contributions</p>
<p>1. Collective consumption is integrated into the circuit of capital and participates in the extension or blockage of accumulation. 2. Collective consumption obeys a political <i>régulation</i>.</p>
<p>Phase 2: 1990s - present Social spending and reorganisation of the WLN: Duality of the WLN and exhaustion of its adaptive capacity?</p>
<p>New research related to the crisis, the spread of flexibility and job insecurity.</p>
<p>1. WLN and uncertainty: the role of 3 factors – <i>Financialisation</i> orchestrates a permanent destabilisation of the WLN in order to generate profits. In this general trend, the WLN would cease to be the main institutional form of demand closure (Aglietta 1998; Aglietta and Rebérioux 2005; Montagne 2006). - <i>The end of low-cost access to natural resources</i> destabilises the Fordist wage compromise (Lipietz 1998). The end of environmental revenue redefines the distribution of productivity gains ; – In the <i>knowledge-based economy</i>, agents' individual strategies are scaled up (Petit 2003), production is more complex and the profitability of productive investments becomes uncertain (Colletis and Paulré 2008). → the WLN is more unstable and more individualised</p> <p>2. An adaptable WLN? - Wage instability generates a new institutionalisation of the WLN aimed at reconciling flexibility with security (Aglietta 1999, Boyer 2001, 2006); - Increased international competition leads to a reduction of collective protection but also implies that the companies find new ways of mobilising workers. Corporate Social Responsibility (CSR) brings out the ambivalence of this situation: on the one hand, a clear need for wage-earners' initiatives (Bodet and Lamarche 2007), and on the other, a hypothetical success in obtaining workers' intervention in the WLN (Postel and Rousseau and Sobel 2006); - Knowledge-intensive work would give rise to a cognitive worker and allow the WLN to assume a central role (Colletis and Dieuaide 2008)</p>
<p>Contributions</p>
<p>3. Structural destabilisation of WLN support for accumulation 4. Transformation of labour: individualisation, more knowledge-intensive work, need for wage-earners' initiatives</p>

From an economic standpoint, the Régulationist concept of ‘human development’ clearly echoes identifications of the collective consumption which developed with the wage-earning class (Grevet 1976; Aglietta 2000). It provides for the needs of the labour force, whose satisfaction is not directly necessary for production but still conditions the apparent productivity of labour. It develops alongside the direct compensation of labour, the wage income, and in institutionalised forms which are neither determined nor regularised by the market. However, the question of expanding the WLN through social spending outside the work relationship, through the ‘production’ of the quality of the population and social life, is not taken into consideration. For this reason, we feel that these analyses call for further development. To that end, we propose a study of the financing of social spending which is aimed at specifying the way the dual aspect of the WLN has been historically constituted.

- **The two historical models of human development financing** (Michel and Vallade 2010)

The shift from a countercyclical evolution of human development to a procyclical one after the Second World War is brought out for aggregated social spending. As things stand, however, nothing allows us to explain this reversal. In order to do so, it is necessary to understand how it fits into the accumulation regime. This entails studying the financers of human development, namely the state (through public spending), the households and the companies.³

Model 1: Human development through assistance (1850-1938)

Throughout this period, the financers’ efforts were convergent and predominantly countercyclical. Thus, between 1850 and 1870, in a growth phase, the three financers behaved in the same way. With very slight variations, generally downwards, their contributions fluctuated over very short phases and in identical proportions. From 1867 on, the approach of the Long Depression of 1873-1896 generated a first, albeit slight difference in behaviours: household expenditures began to accelerate, followed by public spending. This acceleration was to be confirmed during the depression phase itself and came to include a modest contribution from the companies. However, neither the households nor the companies managed to sustain their countercyclical effort during the crisis. The greatest effort, and the most lasting as well, was made through public spending. Thus, the bulk of human development at that time resulted from assistance. On the other hand, as of the 1880s, the companies’ contribution once again fluctuated upwards, like public spending. In an economic context which was still adverse, the companies saw assuming human development expenditures as an acceptable condition for putting an end to the Long Depression. Their countercyclical effort at the end of the depression would continue until the beginning of the 20th century. In this overall context of return to growth, the households and the state, in line with the general model, stabilised their contributions.

The particular financial behaviour of the companies basically concerned old-age provision and, to a lesser extent, healthcare.⁴ This procyclical increase indicates a transformation in the

³ . Michel and Vallade (2010), p. 94 for the results by financers and pp. 108-112 for the composition of the series.

⁴ . Care for the elderly was based on the companies’ participation in free medical insurance. In 1899 they initiated the very first healthcare expenditures aimed at preventing accidents at work.

way the companies used human development. The pure and simple ousting of elderly workers no longer sufficed to renew the labour force mobilised in the new growth phase. In order to do so, in a conflictual social context, the companies accepted to cover the costs of retirement pensions and thus validated the integration of expenditures for human development into the functioning of the WLN. At that point, the assistance-based human development prevailing until then was combined with a new form.

The companies' decade-long procyclical effort placed their contribution on the same level as that of the households: the socialisation of human development led to a permanent change in the ranking of its financers. This situation is confirmed by the progression of human development during the Great Depression.

Model 2: Human development endogenous to the productive system (since 1945)

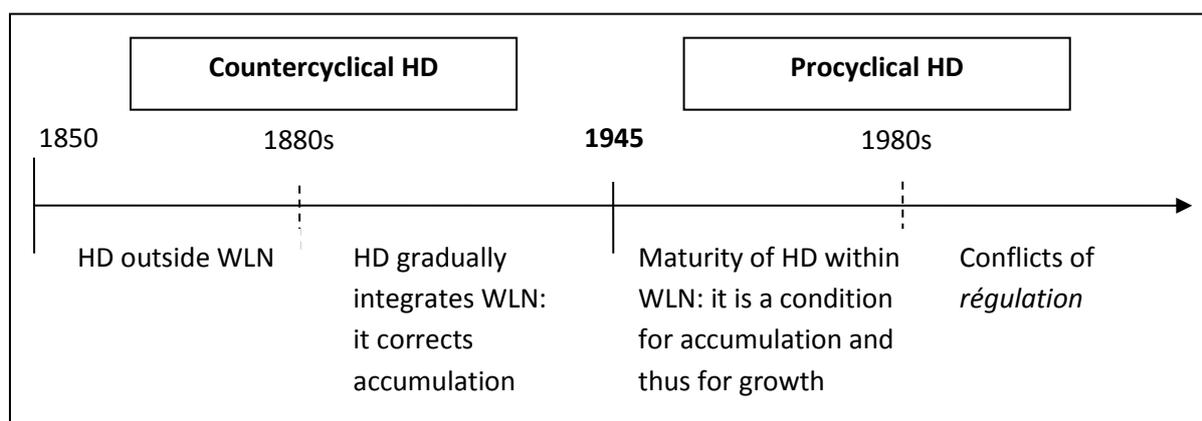
After 1945, the financers' contributions were all procyclical. The endogenisation of human development resulted first of all from its financing by the companies. More fundamentally, it then emerged from the transformation of the function fulfilled by these expenditures: the improvement of the quality of the labour force, at work and outside of it, had become a structural condition for growth. Indeed, these expenditures, which had been countercyclical in the depression phases before 1945, or in other words, structural corrections, became the driving forces of a renewed WLN, with a portion of the results structurally allocated to financing the quality of labour and social life, alongside wage income.

Assigning these expenditures to the state is not false but it masks the dynamics involved. Indeed, if human development was historically introduced with public funds, it did not develop in this form. The pace and scope of the public contribution was to be determined by the dynamics of the WLN and in particular, company-financed human development. The state would also intervene to extend the compromises stemming from company experiences to all the producers by activating other institutional forms, especially those of competition. In this respect, the law allowed the gradual integration of company-financed human development into all areas of social spending: old-age provision in the 19th century, healthcare in the 20th century and training at the turn of the 21st century.

During the present structural crisis, human development was not initially challenged and even received significant financial support, notably from the companies. But as of the mid 1980s, its advancement was slowed down. Most often, this limitation has been interpreted as a temporary situation likely to be remedied by financial transfers: the households would be able to invest more in the financing of their healthcare or old-age provision while the state could refocus on care for the most disadvantaged. In today's terms, these 'solutions' resemble a revival of the assistance model. But the level of human development reached shows that there was no real mechanism of substitution of one financer for another. Thus, since the mid-1990s, the parallel downwards fluctuations in human development financing reflect the questioning of the system itself.

The enduring problems of accumulation are what have thus come to weigh on its financing. But as human development has become a supposed condition for growth and thus for accumulation, it also gives rise to a conflict of *régulation*. The latter expresses the impossibility of adapting the WLN to a human development which has become an engine for growth.

Diagram 1. Two Models of Human Development



The conflict arises from the fact that attempts to deactivate this growth engine reveal its 'centrality' within the WLN and the accumulation regime. At the same time, with the deepening of the crisis and the needs it reveals, this centrality calls for increased HD spending as well as a transformation of its organisation.

II. Human development and conflict of *régulation*

Conflict implies rivalry between groups. In the case of social conflict, the objective is to obtain a different distribution of wealth, whether this is material or symbolic. It thus modifies the balance of power between groups. In Régulationist analyses, conflict takes two opposite forms but both associate it with the dynamic behaviour of the economic system.

The first concerns the conflict opposing social groups whose antagonistic interests constitute the backbone of social relations (Marx and Engels 1846). Consequently, the social bond is a principle of transformation (Aglietta 2000: 13). For the Régulationists, in an economy driven by accumulation, conflict signals the emergence of contradictions within the mode of *régulation* which the institutional forms can no longer contain. In general, these institutional forms, which retrace the codification of fundamental social relations, cease to act as a support for the accumulation regime and the mode of *régulation* thus reaches its limits. In our case, it is the WLN which no longer supports the accumulation regime and its more or less profound adaptation is part of the historical dynamics generating a new mode of *régulation*.

The second approach analyses conflict as a creative force insofar as it makes socialisation an adaptive process (Simmel 1903; Lazes 2012).⁵ As a result, conflict contributes to maintaining social cohesion, conceived as a necessarily transitory state because every society needs harmony and dissonance, association and competition. In the Régulationist approaches, institutionalised compromises (Delorme and André 1983) bring out the way conflict produces norms, which give rise in turn to regularities within the economic system. In the present study, the content of the WLN is analysed on the basis of institutionalised compromises. We

⁵ . Lazes envisions the way that, with the rise of the wage-earning class, the authoritarian nature of conflict resolution was to give way to institutionalised compromise within institutional forms.

consider that human development represents a component of the institutionalised compromise specific to the WLN and that its contribution to the latter's unity has now been exhausted. An analysis in terms of the conflict of *régulation* is therefore aimed at showing how the advancement of human development within the WLN contributes to the accumulation crisis but also suggests possible ways out through a reorganisation of the WLN and thus of accumulation. *The régulation* process is intrinsically unfinished. Conflict is thus an integral part of the transition between two modes of *régulation*: it describes contradictory potentialities and as such, cannot pretend to any predictive capacity.

The two Régulationist models of conflict are addressed in the following ways:

- The transformative nature of conflict:

Here, social spending is increased through a socialisation of the surplus which escapes capital. This socialisation articulates an increase in the quality of labour and social life obtained in exchange for increased productivity (Petit 2005) with the spread of technologies allowing the long-term restoration of a virtuous profitability. Accumulation is thus revived by expanding the WLN to include a social form which is contradictory, in the sense that it lies at the origin of a levy not normalised by the market (prices and competition).

- The normative nature of conflict as reflected in stabilising compromises

HD was historically constructed through negotiation, as a settlement of social conflicts (Sirot 2002) or a model of society (Conseil National de la Résistance 1944): it constitutes an institutionalised compromise developed in a set of rights tied to the WLN. As the Régulationists showed very early on, attempts at normalising its growth through the market have failed. The extension of HD in its historical, non-market form of organisation thus presumes a consolidation of its democratic aspect.

With the difficulties of accumulation in the context of the present structural crisis, the permanent search for profits and the resulting reconsideration of all the institutionalised compromises have led to a decreasing share of wages in the distribution of value added (Cotis 2009), market colonisation (Vercellone 2007) of social expenditures, financing transferred onto financial growth, minimal support for new technologies because of the low level of investment. The procedures for HD containment reveal its structural dimension and give rise to the conflict of *régulation*. This conflict assumes three dimensions.

First dimension: Dualisation of the WLN and growing autonomy of HD

Various Régulationist studies have allowed us to show that the WLN is characterised by an economic duality combining market determination, through wage income, and non-market determination, through HD. This component of the WLN always results from the conditions of capital (Michel and Vallade 2007: 18). Thus, recovery from long periods of depression has been achieved at once by massive devalorisations of capital (Boccaro 1988-1989) allowing the financing of fundamental innovations and by expenditures for the labour force (Fontvieille 1992) in the form of increased purchasing power of wages or social spending. From the time of the Long Depression, when social spending became a component of the WLN, company financing has brought it a fraction of the value added acquired in the production cycle.

Economically, this levy has been made possible by the increase in the productivity of labour and capital permitted by social spending, initially in order to emerge from depression phases and later to stimulate economic growth. Historically, social spending has organised the

response to social needs, but also productive ones in the context of the crisis recovery measures specific to each depression phase.

Thus, through the dualisation of the WLN, social spending has regularly helped to increase the quality of living labour and re-establishing an efficient WLN. By becoming part of the solution permitting an exit from the crisis, the rise in social spending during the depression phase simultaneously constitutes a constraint which the mode of *régulation* establishes as a structural given within the new accumulation regime.

The successive processes for exiting the structural crisis have thus irreversibly introduced HD into the economic system. In order to qualify this irreversibility, we have sought to determine whether the increase in social spending gives rise to attempts at 'self-adjustment', which would indicate a rationality proper to HD – namely the start of an autonomous organisation process as a social form. Two elements, albeit partial, support this thesis.

- The ordered development of the three HD components

Seeking an order in the development of the three components of HD serves to illustrate the possible form of organisation proper to this second element of the WLN (Michel and Vallade 2007, Graph 5). It turns out that social spending increases in a fairly specific order. Early efforts devoted to the care of the elderly, which go back to 1885, may be understood as an attempt to exclude older workers. Raising the quality of living labour implies lowering the age of the available workforce and a concomitant, albeit very modest improvement of healthcare. In a way, this amounts to a 'primitive' devalorisation seeking to eliminate factors weighing on the effectiveness of the WLN. The devalorisation which emerged in the Great Depression relied more on the quality of labour, first through healthcare and then education. The rise of the whole of these social expenditures after the Second World War can no longer be explained in terms of the devalorisation of capital, however. Consequently, it is possible to advance the hypothesis of a mode of operation specific to this social spending, and mainly of a qualitative nature. Improving the population's health, for example, increases the value of educational spending.

- The 'ordered' increase of training time over the life cycle (Michel 2002)

This cumulative increase became more independent of the needs of capital with the Long Depression, and the countercyclical impetus of increased educational spending was to affect the length of schooling long afterwards. The countercyclical financial impetus of the Great Depression even had transyclical effects: the coherent extension of the length of training, at the outset for initial training and more recently employment related, gradually came to include training which was not directly aimed at productive activity (Vallade 2002).

Since 1945, the procyclical nature of these different attempts at self-adjustment doubtless indicates the maturity of HD and by extension, its organisation as a specific social form. This raises the question of whether we are not witnessing the rise of principles of *régulation* proper to HD: even if its advances reflect the conditions of capital, they develop as a component of the WLN which does not obey the same *régulation* principles.

This process occurs in a context where the dominant mode of *régulation* exerts pressures against this spending, permanently and in a completely decentralised way. In classical terms, any reduction (or slowing down) of HD spending supports the short-term profitability of the capital invested. This would seem to be the case, for example, as of the 1990s, when its increase, coupled with that of wages, made an unprecedented contribution to reversing the

distribution of value added between wages and profits as it had been initiated in the 1980s (Michel and Vallade 2007, Graph 13).

However, the present convergence of time frames between the two components of the WLN does not exhaust the subject. Indeed, the simultaneous attempts to commodify these less-than-optimal forms (Aglietta 2000 for the indirect wage; Margirier 1994 and Michel 1999b for the training market) or attempts at rationalising the public social levies they engender permits neither to reduce them nor to give rise to a *régulation* of HD efficiently coordinated with the overall mode of *régulation*. This failure of direct commodification obviously does not exclude the market's colonisation of these expenditures. But the latter takes place through a restriction of access rights which limits the economic contribution of HD spending and thus its potential contribution to the effectiveness of the WLN.

The lack of a *régulation* of HD spending thus impedes the adjustment of an effective way of functioning which would be specific to it within the WLN. It also thwarts the working of the overall mode of *regulation*, which also comes up against this indeterminacy because of the role assumed by HD within the economic system.

This dimension of the conflict of *régulation* is doubtless accentuated by the fact that within the present structural crisis, the dual nature of the WLN, because of its very maturity, also reveals new social needs to be met and which are most likely determinant for increasing this effectiveness. Here, we might think of work (training, information sharing within work groups, etc.) but also the quality of social life outside of work (cultural activities, community organisations, social production of retirees, etc.). The conflict of *régulation* is thus accentuated by the existence of unsatisfied social needs, whether these are production related or not.

Second dimension: Human development and hybridisation of productive capital

During the long phase of depression underway, as in the earlier ones (Freeman and Louça 2001), intense research activity and technological development are underway. These concern the productive applications of information and knowledge (Foray 2004). But no long-term depression can be reduced to technological determinism (Amable 2002). The technical system within a renewed accumulation regime is only consolidated when all the institutional forms are effectively coordinated within the mode of *régulation*. In the present structural crisis, innovations in the information field visibly do not open the way to structural devalorisations which would permit stabilising the economic structure and launching a new cycle of virtuous capital accumulation. But in line with the theses of cognitive capitalism (Colletis and Paulré 2008), we believe that these innovations underlie a profound transition in the mode of accumulation and thus in the way society reproduces itself.

In our view, the question of the productive system and accumulation can be linked to HD spending. While agreeing with Lindert (2004) that increased social spending entails zero cost for growth because of the productivity gains it permits, we would note nonetheless that this cost is positive for capital. This is expressed in two ways:

First, in the depression phase, the structural devalorisations of capital, which allow the rise in social spending to be financed, constitute net losses in terms of profit for an accumulation which has been achieved but will not, or hardly, be remunerated in the end. Admittedly, this

aspect is periodic and structural but it conditions the crisis recovery process through the modification of the accumulation regime.

Second, in a more continuous way, but one which is just as structural, HD spending as a 'solution' to the imbalance of the production relationship and the loss of efficiency in accumulation makes productive capital dependent on these expenditures. From this standpoint, the historical advances in HD would generate a hybridisation of productive capital. Here, the conflict of *régulation* arises when the maturity of HD drastically changes the growth regime: there can be no productivity gains without increased HD spending but the growth of the latter limits the field of profitability while changing its criteria.

Studies on cognitive capitalism insist on uncertainty as a characteristic of a knowledge-intensive economic system. Two arguments are advanced: the instability of the economy inherent to the use of knowledge in a system which thus becomes more complex (Paulré 2008) and the nature of knowledge as a public good, which hinders its private appropriation (Moulier Boutang 2011). The main focus of this uncertainty is probably the profitability of productive investments, which allows the defenders of such an approach to develop an effective explanation of financial growth as the product of a problem in the real economy (Colletis 2008). As a complementary hypothesis, we would ask whether uncertainty does not also reflect the way the knowledge mobilised in the productive system uses – and is required to produce – the quality of the labour it needs.

In fact, this knowledge does not increase efficiency by saving labour but rather, by improving its quality. By placing more intelligence, more skills, in labour, living and past, it enables efficient production. The information component of labour permits high, increasing productivity but above all, it opens the way to a model for productivity growth which systematically economises on all the material components of the production relationship (Lojkine 1992; Boccara 2006). And this information component of labour would presumably call for a high level of HD.

The structuring of HD would modify all the components of the WLN. Regular advances in HD would lead to a double hybridisation of capital, whereby it would now be dependent on HD while benefitting from the increased efficiency brought about by the latter. If the rationale of HD is to raise the quality of the labour force, this can only be achieved by transforming its value through the allocation of a share of value added which increases more rapidly than that of profits.

The conflict of *régulation* would thus focus on a potentially new form of productivity growth tied to the advance in HD, which capital would hinder because of the decrease in its probable levy on economic performance. Dialectically, this conflict would illustrate a possible expansion of the role of the WLN in the overall reproduction of the economy. In this respect, we agree with the cognitive capitalism hypothesis of a new centrality for the WLN (Colletis and Dieuaide 2008). But this WLN would also be revitalised by a new redistribution of HD expenditures and especially by new features in relation to work (Supiot 1999).

Third dimension: Human development and the promotion of transferrable individual rights independent of the employment situation in which they have been acquired

We have shown that HD expenditures have historically been based on the functioning of the WLN and in particular, the coverage of the social needs the latter regularly brought about.

Over the long term, the stabilised organisational forms of these expenditures have gone through several stages.

- They initially appeared to be external to the productive system and therefore without reference to the employment situation. Historically, their first forms were thus public (HD assistance).
- They have subsequently continued to develop along this line (such as education) but also through the WLN itself, which they have integrated. The employment situation thus explains the socialised wage or access to vocational training. As a consequence, their management assumes mixed forms: in addition to the public form, there is a joint form linked to the employment relationship but not directly determined by it. This latter form gives the individual his or her own rights, to be collectively managed. It comes to replace the public form which, no longer dominant, now ensures the spread and continuity of negotiated rights to all the individuals concerned (Castel 2003).⁶ The joint form, which gives rise to institutional learning processes, is based on a first and admittedly incomplete attempt at democratic management of the WLN through institutions upholding these rights (Friot 1998). This joint form has integrated the political voice (Lindert 2004) or the struggle (Lordon 2008) as a dynamic element of the WLN.

In the present management of social spending, these joint forms offer opportunities and raise questions. Among the problems posed, the need to improve its effectiveness in terms of the service provided relative to the expenditure is clearly universal. The question of whether these forms are developing, stabilising or regressing must be addressed. But what seems more pertinent today is the search for new articulations and new equilibria with the forms of HD specific to the WLN.

From this standpoint, the WLN is undergoing a new institutionalisation, organised through fragmented, partial rights, competences acquired by individuals within the labour force (e.g., the Individual Training Right). The transferability of HD acquired in the form of individual rights in the course of one work contract to another period of working life has become a recurring economic question. It comes up in the context of transitional markets (Gazier and Schmid 2002), the single contract (Cahuc and Kramarz 2004) and thus the employment standard and career safeguards (Conseil d'analyse stratégique 2007), not to mention a redefinition of working life which would equate employment and training in the acquisition of earnings over the professional life cycle for career advancement (Boccarda 2002).

At present, the HD forms specific to the production relationship are marked either by the functioning of the market – in the sense that they are conceived as ‘capital’ enriching individual allocations put to good use on the occasion of wage-earners’ labour-market mobility (Méhaut 2006) –, or by the functioning of the public form with the enactment of centralised norms and little individual differentiation. However, they introduce a bias into the WLN in the form, for example, of rights or remunerations which are individual but deferred and thus constituted over the individual’s professional life cycle without any direct relation to employment. The existence of these rights, even in primitive, fragmentary forms, results from a conscious *régulation* of the WLN through the choices left open to each individual to build his or her career path within a more unstable productive system.

⁶ . ‘Public form’ is to be taken in the sense of principles of action for institutional forms (Boyer 1990).

This institutionalisation is doubtless rooted in a cross-cutting reality stemming from labour itself. Improving its quality through HD spending entails the productive necessity of information- and knowledge-sharing and pooling, all of which no longer permit acting on working time as a principle for maximising the use of labour power (Vercellone 2008). On the contrary, they call for new forms of organising work, its time and its content through a coupling (to be stabilised) of the promotion of the individual through an expanded HD and the promotion of work collectives controlling production and its management. The potential figure of the cognitive worker echoes the same concern (Colletis 2008).

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* *

This study has attempted to explain how HD was historically constituted as an original social form within the WLN which, owing to this integration, has undergone a dualisation. Within capitalism, it sets up a non-market functioning of the WLN which the market has not been able to organise. The maturity which HD has acquired in the present depression phase is reflected in a conflict of *régulation*.

The description of this conflict constitutes an ongoing effort, still underway, to grasp the dynamic contradictions at work. Its occurrences designate sites of confrontation and thus, at the same time, possible sites of construction. As such, the conflict of *régulation* is representative of any number of contradictory potentialities for exiting the crisis. But on this point, it is important to note that theory cannot anticipate the evolution of social practice. In fact, nothing indicates that the sites of the conflict of *régulation* related to HD are the focus of the social struggles. An analysis refusing all determinism is not necessarily impoverished, or devoid of tools. Thus, we can consider with Lordon (2008) that the ‘work of subjectivities’ must be taken into account so as to be immediately coupled with a ‘theory of action’.

HD is part of the WLN, from the individual characteristics of the workers to the forms of work organisation to the overall form of its economic integration. Its economic originality, and therefore its contradictory potential, stem from the fact that it promotes the individual by questioning the norms of accumulation.

Here, we have already mentioned the contradiction HD introduces into economic profitability: incentives for increased HD spending are a guarantee of greater effectiveness for the WLN in terms of the profitability of capital. In a context of crisis, it could, as such, help to boost accumulation. But at the same time, this increased spending involves the promotion of social forms emerging from the WLN but which the latter is unable to organise. Indeed, the rationale of the WLN, which consists of organising the levies carried out for HD in order to boost accumulation, can no longer restore a favourable relationship to the latter: the growth of HD utilises value added on a scale which increases more rapidly than profits. The rationale of the WLN, aimed at reducing the levies necessary for accumulation, would therefore be faced with a limit.

The second aspect concerns DH as a ‘frontier’ of the WLN. Its still-primitive organisation, in the form of a system of transferrable individual rights, reflects a new stage in the socialisation of the product but also a ‘propagation’ of HD forms of organisation to wages and productive capital alike. The rupture, albeit partial, of the hierarchical link simultaneously implies that of

the link between the conditions of capital accumulation and the reproduction of the labour force.

The final aspect relates HD to economic democracy, an issue which economists have amply treated (Aglietta and Rebérioux 2005; Coutrot 2005; Amable and Palombarini 2005; Fleurbaey 2005; Colletis and Paulré 200; Lordon 2009). Historically, HD has been organised according to norms which involve democracy in the development of rights as institutionalised compromises or in the management of the collection of funds and the spending connected to the rights. This 'joint' democracy, based on the distribution of wealth, could most likely be improved. But in the present crisis, HD doubtless opens up the possibility of a more comprehensive democracy in economic terms. Indeed, its capacity for autonomous promotion conditions the accumulation of capital. Thus, the productive skills tied to both individual and collective HD seemingly permit the attainment of higher forms of efficiency, but by modifying the criteria for the profitability of capital. HD and the forms of co-operation it develops therefore potentially enter into competition with capital and the requirements of accumulation in order to define procedures for the production and allocation of wealth.

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