Editorial Note: This article was written in 1973. It was a key article in developing the theoretical base of the newly emerging politics of working-class autonomy. This translation is taken from a forthcoming volume to be published by Red Notes: Selected Writings of Sergio Bologna. For further details, write to Red Notes, BP15, 2a St Paul's Road, London N1.

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Part 1

At the beginning of 1855, in a series of articles in the Neuer Oder Zeitung (11, 12, 20 and 25 January and in successive articles in the following months) Marx confronted the problem of cyclical crises and questions related to the British banking reforms of 1844. Already there were signs of the coming world recession of 1856-58 and it was urgent to set about analysing its causes. Marx's unpublished notes on Geldwesen, Kreditwesen, Krisen ("Essence of Money, Credit and Crisis") also date from the same period - November 1854 to January 1855. The relation between the money form and general crisis must thus have been clear to him before the direct experience of the crisis of 1857. Even so, it seems historically legitimate to locate in this experience a decisive turning point in Marx, relating the early stages of his project for Capital to the need for building the base for an international revolutionary working-class party. It seems likely that this convergence of his theoretical and practical work would not have been so solidly achieved had it not been for the close scrutiny and stage-by-stage observation that he devoted to the monetary crisis of 1857. I have taken this as my starting point for a reading of the articles which Marx was writing about the crisis,
articles which appeared in the New York Daily Tribune between June 1856 and December 1858.

The fact that this part of Marx's journalistic activity has received scant attention from commentators is partly due to his own attitude to it. He lost no opportunity to express his contempt for the newspaper: "Yesterday I read again the NYDT (weekly). The paper is full of 'electoral subtleties' and will be for months. We will only be able to get seriously involved again with the NYDT when this shit of the presidential election is over." Exasperated by a reduction in his fees - his only source of fixed income at the time - he again wrote to Engels on 23 January 1857: "To grind bones and pound them into soup like paupers in workhouses, that is what our political work is reduced to when condemned to work for such a concern. I am also aware that I am an ass to have contributed so much to these young gentlemen for their money, not only recently, but over the past few years."

To Lassalle he wrote (12 November 1858) of having written enough articles to fill two large volumes "de omnibus rebus et quibusdam aliis" ("on everything under the sun, and more besides"). Was this then simply occasional hack-work, imposed on him and outside any development of his interests? Alienated wage work imposed by hunger? Certainly it was that; his wife Jenny
was explicit: "Karl is working day and night: during the day to provide our daily bread and at night to finish his Economics" (to Conrad Schramm, 8 December 1857). "I am not master of my time but rather its servant. I have only the night left for myself." "I am forced to fritter away my days earning a living. Only the nights remain free for real work" p Marx wrote on two separate occasions to Lassalle.

And yet in the last of these two letters - that of 21 December 1857 - he makes an important observation. "The present commercial crisis has impelled me to set to work seriously on my outlines of political economy." The truth of this admission can easily be tested by comparing the material gathered for the NYDT articles and Marx's opinions as expressed there, with the text of the Grundrisse. This proves that there was not in fact a dividing line between his day-work and his night-work, a fact which is already rich in implications. But I am not intending a literary reconstruction of the sources for the Grundrisse and Capital: my central purpose is to show the political and theoretical centrality - albeit conditioned by its journalistic form - of Marx's analysis of the monetary crisis of 1857. I should say that this hypothesis is by no means original. Rosdolsky, with his
usual perspicacity, has argued a similar position: "From the summer of 1852 until the autumn of 1856, Marx's work on the Critique of Political Economy was interrupted by his professional work as a journalist. This did not of course mean that the research which he engaged in for this purpose had no significance for his work in political economy. On the contrary; Marx had to make himself familiar with practical details, since many of his reports deal with 'noteworthy economic events in England and on the Continent'. Although these lay 'strictly speaking outside the sphere of political economy', they did prove useful to him later. We need only refer to his numerous articles on economic conditions, on questions of trade policy, on the English working-class movement and strikes." Rosdolsky continues: "Characteristically, it was the outbreak of the economic crisis of 1857 which was responsible for both the immediate decision to write the Rough Draft, and the feverish hurry with which this was done. (The entire work, almost 50 proof sheets, was completed in nine months, between July 1857 and March 1858)." Hence "it would be worthwhile," he concludes, "to compare closely the historical-economic themes treated by Marx in his New York Daily Tribune articles with those in Capital."
The political anger and frustration that Marx expressed in this period of his life was channelled into a renewed period of active militancy and organisational objectives, for which Capital was to provide both the programme and the theoretical basis. However much he cast himself in the role of a poor piece-rate worker exploited by that "donkey" Dana (editor of the NYDT), there is a basic continuity between these articles and his earlier writings on the laws governing the behaviour of the working class in the 1848 revolution (The Class Struggles in France). Throughout this period we find him constantly writing to his friend Engels in Manchester, obsessively seeking reports on how the crisis was being experienced and understood in the cotton districts and in entrepreneurial and commercial circles; this is already the Marx of the first volume of Capital.

But there is more than simply a continuity in these writings. The relation between crisis and the money form, which is the central theme, provides the key to a re-interpretation of political institutions from the standpoint of monetary organisation, and of the laws of value seen from the viewpoint of a stage of capitalist development now in its maturity. The crisis overthrew the structure of the new banques d'affaires and upset the political stability of the Bonapartist regime in France.
It thus condemned to failure the project of capitalist restructuration embarked on by Napoleon III, and simultaneously opened up a new terrain of confrontation for the working class, indicating the new dimensions of organisation for the seizure of power. At the same time, Marx's battle against the "socialist doctrinaires" is now pitched at a new level: his polemic is not so much directed against the "labourist" tendencies - the socialisation of work through "association" propagandised by Louis Blanc -- as against the utopian illusions of the Proudhonites regarding the relation between money and commodities - the socialist belief that exploitation could be eliminated by the abolition of money. Bonaparte is seen in Marx's polemic alongside the Péreire brothers and the utopia of work-time chits preached by the Saint-Simonian Gray. This is the historical bloc against which Marx now directs the full weight of his critique; he watches as its disintegration in the general crisis opens the way for a new revolutionary class offensive. This was the "new historical form" of capital which had emerged from the revolutionary crisis of 1848 - a historical bloc based directly on the world market as a homogeneous entity and on the new level of productive forces which this implied. Crisis was both its precondition and its result.
Much of this is of course anticipated in the earlier articles on The Class Struggles in France. For instance he had already highlighted the importance of banking, both in the July monarchy and the new Bonapartist regime: "After the July revolution, when the Liberal banker Laffitte led his godfather the Duke of Orleans in triumph to the Hôtel de Ville, he let fall the words: 'From now on the bankers will rule'. Laffitte had betrayed the secret of the revolution. It was not the French bourgeoisie that ruled under Louis Philippe, but a fraction of it: bankers, stock-exchange kings, railway kings, owners of coal and iron works and forests, a part of the landed proprietors that rallied round them - the so-called finance aristocracy... The real industrial bourgeoisie formed part of the official opposition, that is it was represented only as a minority in the Chambers." By 1850, the circle closes: "The new finance minister was Fould. Fould as finance minister signifies the official surrender of French national wealth to the Bourse, the management of the state's property by the Bourse. With the nomination of Fould, the finance aristocracy announced its restoration in the Moniteur."

Here the limitation of Marx's early historical judgement is evident: in it a "Manchesterian" formulation of the problem remains and informs the whole class analysis.
On the one hand, he portrays an advanced, reforming and progressive industrialist fraction which is productivist; on the other a financial sector which is parasitic, backward and conservative. In these earlier texts, Marx is still trapped in this schematic opposition: on the one hand the law of value, on the other capital as interest. Finance and banking are still seen as symbols of the ancien régime. Indeed, he proceeds to define the "finance aristocracy" as: "the resurrection of the lumpen-proletariat at the top of bourgeois society". A world balanced between industrialists and workers, landowners and peasants, a lumpenbourgeoisie and a lumpenproletariat.

From this symmetrical and rigid schema one element was missing - the material constituency of socialism, the social base within which the utopian ideologies were proliferating, namely the petty bourgeoisie. Marx battled against the "doctrinaires" Louis Blanc and Proudhon, but while he was willing to admit that the "labourist" slogans, however mystified, nonetheless represented a (distorted) demand for real power, he considered the utopian schemes for the reorganisation of credit as mere doctrinaire impositions, and as such a long way from any real demands of the working class. "But behind the 'right to work' stands the power over capital; behind the power
over capital, the appropriation of the means of production, their subjection to the associated working class and therefore the abolition of wage labour, as well as of capital and of their mutual relations. Behind the 'right to work' stood the June insurrection."

"And if private credit rests on confidence that bourgeois production in the entire scope of its relations, that is the bourgeois order, will not be touched, will remain inviolate, what effect must a revolution have had which questioned the basis of bourgeois production, the economic slavery of the proletariat, and set up against the Bourse the sphinx of the Luxembourg? The uprising of the proletariat is the abolition of bourgeois credit; for it is the abolition of bourgeois production and its order."

In 1856 Marx had to return to these questions that he had examined in The Class Struggles in France. It would be logical to expect his emphasis to be directed against that part of Proudhonist socialist doctrine that preached the right to work, the social organisation of production and workers' self-management of the factories. In other words to expect his emphasis to be on analysis of the theory of value, the factory and immediate relations of production. But no - the Grundrisse opens with the Chapter on Money - with the critique, moreover, of a distinctly mediocre author, Darimon, who had written
numerous prefaces to Proudhon's works full of unctuous praise for his master. What had happened to cause this about-turn? It is true that on 31 January 1849 Proudhon had presented himself before a Paris lawyer, Dassaignes, to register the statutes of his Banque du Peuple; this institution was intended to be the realisation of his ideas on free credit, the means for the emancipation of the workers and their transformation from wage labour into associated labour within the framework of a single cooperative organisation of society. But this was only a marginal episode in the revolution; its practical importance was not much greater than the novelist Eugene Sue's notion of a Banque de l'Honneur, which would lend money to workers on the security of their word of honour!

Throughout 1848 and 1849, Proudhon, preceded by his faithful herald Darimon, continued preaching his idea of free credit; there was even a direct polemic with Bastiat on this issue, to which Marx refers extensively in the Grundrisse. However the banking utopias were of secondary practical and ideological significance within the proletariat, compared to the influence of the slogan of the "right to work". It was, after all, the masses thrown out of work by the closure of the Atéliers Nationaux (the pseudo-welfare public works scheme set
up by the provisional government to satisfy the demand for the "right to work") that had launched the June insurrection. Certainly no barricade was ever erected to defend the abortive utopian banking schemes! Yet it is precisely this aspect of socialist doctrine that Marx chooses to highlight in the Grundrisse.

Had he not said that the "finance aristocracy" represented only one fraction of the bourgeoisie, the one that did not express the movement of capital as a process but only circulating capital productive of interest? Yet in 1856 the institutional organisation of the money form - the banking system - becomes the point of departure for Marx's analysis of the entire bourgeoisie, of aggregate social capital. What had happened to cause this shift? This is the question that I shall seek to answer from a reading of Marx's articles for the NYDT.

Certainly, when one reads these articles separately one has the impression that Marx's treatment of the financial nature, the monetary terrain and the speculative origins of the crisis of 1857 is such as to justify an interpretation of his conception of crisis as "pathogenic". But this would be a superficial impression, an interpretation that gives us a distorted view of Marx as a radical bourgeois. On the other hand, one can find innumerable quotations from his correspondence with Engels, to the effect that the
"monetary panic" is a precursor of the "industrial crash". The crisis has to expose for all to see the new terrain of working-class initiative, the internationalist dimensions of the communist programme. And yet - and this is striking - Marx pays very little attention to working-class behaviours, within the crisis. Engels provides him with a diligent account of the short-time working in the cotton industry and the textile industry in general, but Marx concentrates his attention entirely on the money-form and the world market. And at a certain point the relationship between the world market and the crisis becomes so essential as to appear as the end-point of one of the numerous summaries in Capital - the schematic summary in the famous "Introduction" of 1857. These understandings spurred the urgency to resume political and organisational work, and to develop organisational links. Marx goes to sound out Lassalle and the possibilities of publishing "Towards a Critique of Political Economy" in Germany; this was not the easiest route, but it was the solution that best matched "party" considerations. It would have been easier to publish in London - given that England was accustomed to debates in the area of economic science - but he would not necessarily have been able to rely on the relationship with the working-class associations after the devastation of the Chartist movement at the hands of Urquhart et al.
Better to rely on Lassalle and his relations with the working-class associations. So on the one hand Marx was not devoting much attention to the crisis in the cotton districts, but on the other he was making it a priority to set up a formal relationship with the organisational project in Germany, even though organisational projects that start from a re-unification of emigrants do not generally hold great promise of success. The point on which we find everything focused is once again France - the country in which the workers had dared to launch an insurrection against the radical bourgeoisie, the France of June 1848, which in the meantime had become the France of imperial socialism, of monetary Proudhonism, the France of the Crédit Mobilier.

Is it possible to see in Marx's writings for the NYDT a fragment of the organisational work which he was to undertake in parallel with the writing of Capital? Is it also possible to see in Marx's political journalism an advance in relation to his earlier "historical" works?

In such a framework, Marx's continual collaboration with the newspaper that he so despised can be understood not only as part of his refusal to allow himself to be turned into a "money-making machine", as he once wrote to Wedermayer, but also as a determination to maintain a political link - however slender and mystified -
with the United States. It was against the background created by the world market that the forthcoming project of communist organisation would concretely have to measure itself.

"Military and Finance": these were the topics that Marx was expected to write about as correspondent for the NYDT. Exploiting Engels's interest in military history, Marx managed to get a long series on India and China accepted. These articles have long interested those who have sought textual references for Marx's "theories of imperialism". It is surprising, though the reasons are not hard to decipher, that these articles on the "colonial issue" have been extracted and commented upon by scholars as if they represent a separate argument, internally homogeneous and quite distinct from the general body of writing on the world crisis. It would be more correct to see the articles as the parts of a whole, an integrated discourse. Marx takes the contradictions provoked in the world market by imperialist adventures and sets them alongside signs of coming revolution in the metropolitan countries. Events in India or China are primarily interpreted in the light of the progress of working class revolution in Europe.

In this group of articles, Engels's collaboration often plays a role on a par with that of Marx. If we examine the
correspondence of this period, we find that Engels also contributed to a considerable extent in the drafting of the articles on the international crisis. More than once his judgements are reproduced verbatim.

In a letter of 14 April 1856, Engels predicted with certainty the "catastrophic" nature of the coming crisis: "This time the CRASH will be quite unprecedented; all the ingredients are there: intensity, universal scope, and the involvement of all propertied and ruling social elements."

In the same letter we find Engels attempting to find the right connection between the abnormalities of speculation and the normality of the productive process: a relation of precarious stability which then plunges into crisis - a crisis which begins in one sector, the railways, which he identifies as the source of instability which sets in train the general process of overproduction. He ends with observations on the competition between Britain and the European continent: "it is in this enormous leap forward of industry on the Continent that the most viable embryo of English revolution lies."

The proliferation in Europe of financial institutions of the Crédit Mobilier type is already seen by Engels as the main vector of speculation on a world scale. But Marx's penetrating analysis of the French Crédit Mobilier bank (his first article on this theme appeared in the Chartist
People's Paper, 7 June 1856, and was republished in the NYDT on 21 June) was far richer and more articulated. He goes straight to the point: "The Crédit Mobilier thus presents itself as one of the most curious economical phenomena of our epoch, wanting a thorough sifting..." It is "the greatest representative of Imperial Socialism in France". Analysis of the Crédit's operational mechanisms enabled Marx to "compute the chances of the French empire" and to "understand the symptoms of the general convulsion of society manifesting themselves throughout Europe". Marx studies the statutes of the Crédit in order to specify its characteristics. Set up as a means of promoting industry and public services, the Crédit Mobilier had ended up acquiring a large part of the shares in various major French companies, and had issued in their place a joint share, one common title, of its own. Thus it had, on the one hand, become the owner of a large part of French industry, and on the other it had functioned as an element promoting a centralisation and levelling of the capitalist market. Since, like other monopolies in France, the Crédit depended on a privilege granted by the emperor, this effectively meant that it was Bonaparte's creature, enabling him to exercise control over the whole of French industry. But precisely this very close interdependence between the Crédit and the regime meant that the political fortunes of the latter
were tied to the economic fortunes of the former - in other words, that the stability of Napoleon's regime rested on the sands of speculation. And the Crédit, for its part, was "the slave of the treasury and the despot of commercial credit".

In the second article, published on 24 June 1856, Marx again addresses the close relationship between the regime and the bank. He examines the mobilisation of savings and the way they were sucked in through the Crédit subsidiaries, and sees this as one of the principal elements in mobilising otherwise unused resources and bringing them under the controlling hand of the regime. This regime, Marx notes, came to power "to save the bourgeoisie and 'material order' from the Red anarchy", but also to "save the working people from the middle-class despotism concentrated in the National Assembly". But how was one to reconcile these "contradictory pretences"? How was this "knotty point to be untwined"? The answer is simple: "All the varied past experience of Bonaparte pointed to the one great resource that had carried him over the most difficult economical situations - Credit. And there happened to be in France the school of Saint Simon, which in the beginning and in its decay deluded itself with the dream that all the antagonism of classes must disappear before
the creation of universal wealth by some new-fangled scheme of public credit. And Saint-Simonism in this form had not yet died out at the epoch of the coup d'état. There was Michel Chevalier, the economist of the Journal des Débats; there was Proudhon, who tried to disguise the worst position of the Saint-Simonist doctrine under the appearance of eccentric originality; and there were two Portuguese Jews, practically connected with stockjobbing with the Rothschilds who had sat at the feet of the Pére Enfantin, and who with their practical experience were able to sniff stockjobbing behind Socialism and Law behind Saint Simon. These men - Emile and Issac Péreire - are the founders of the Crédit Mobilier, and the initiators of Bonaparte Socialism."

Implicit in this account is the sense that there has been a change in the mechanisms of extraction of surplus value. The Bonapartist regime could no longer count on direct control over labour power in the factory. A working class that had made the revolutionary challenge in 1848 would no longer permit itself to be exploited beyond certain limits, or to be paid below certain limits. The Bonapartist regime needed an ideology of collective participation in the benefits of development in order to co-opt the working class to its overall project. Hence it was no longer the Proudhon of the Philosophie de la Misère, but
the Proudhon of the polemic with Bastiat, the advocate of "Free Credit", who was now so pivotal to the ideological needs of the regime. The two-sidedness of Proudhonist doctrine perfectly corresponded to the dual and contradictory nature of the regime itself: it acted as the neutralising agent of the Bonapartist social bloc. Crédit Gratuit meant a social mobilisation of capital, the overcoming of competition between capitals, levelling of interest rates, unification of money prices, in short the creation of the collective capitalist. But it also signified the collective possibility of becoming producer-entrepreneurs, the spontaneous multiplication of the factory system, the encouragement of self-help, savings and collective enrichment. Proudhonist doctrine not only justified the Péreire brothers and the Central Bank, but simultaneously coopted the working class and petty bourgeoisie to the project of development through participation in growth, thereby frustrating revolutionary organisation. Marx had already criticised Proudhon's "rhetorical formula" of "constituted value" in The Poverty of Philosophy; this reduced the capital-labour relation to an exchange of commodities understood as exchange-values, relegating class antagonism to the sphere of simple circulation. Now it was of paramount importance to attack the specifically monetary aspects of the socialist utopia, even in their most "melodramatic"
forms; the existence of the Crédit Mobilier gave them a new and more dangerously mystifying significance. Hence we find that, at the beginning of the Grundrisse, the Chapter on Money opens with the critique of Alfred Darimon's De la Réforme des Banques (large passages of this critique are, as we shall see, summaries of Marx's articles for the NYDT) and even of John Gray's outlandish scheme of "labour money" or "time chits". Gray is no longer regarded as the maniac who thought that simply representing the "value of labour" in symbolic money would do away with the disproportion between value and price, between labour and its product. He is now seen as the apostle of the Bank of France, the standard-bearer of Bonapartist socialism. Marx's critique has broadened from a critique of socialist theories of value to that of socialist monetary utopias; from Ricardian capitalism to the Bonapartist bourgeoisie; from workers' resistance against the law of value to the centralised control over relative surplus value.

The critical importance of this shift lies in the fact that Marx was now confronting the Bonapartist regime as the first complete form of the modern state, the government of social capital. He was facing the first realisation of a modern monetary system, the centralised government of liquidity. The shift is paralleled by the political direction
of his critique: from the analysis of the state and crisis to the examination of the new basis of the revolutionary party. Seen in this light, the analysis of the crisis has the same importance in practical terms as the analysis of money had in the theoretical scheme at the start of the Grundrisse. The third article on the Crédit Mobilier, that of 11 July 1856, goes further into the links between money and crisis.

What is seen to be failing is the banking system as a prop for the regime's political stability: "The approaching crash in Bonapartist finance continues to announce itself in a variety of ways." The fever of speculation has by now spread even to the proletariat, encouraged by the ideology of the Saint-Simonians. Stock-exchange speculation has become the basis of industrial development - or rather, industrial activity becomes a pretext for speculation. The operations of the Crédit are now subjected to a more stringent analysis; references in the earlier articles left obscure, such as the mutual relations between the Bonapartist state, the Paris Bourse and the Crédit Mobilier are now explained in detail. The directors of the Crédit maintain that they have found the formula to extend to the maximum the bank's investments and reduce its risks to a minimum. Marx seeks to verify this assertion while divesting it of the
"flowery language of Saint-Simonianism". The method is simply to underwrite shares in large quantities, speculate on them, pocket the appreciation, and then sell them as quickly as possible. How is this possible? Since the Crédit is backed by government privileges and hence has an assurance of sufficient capital and credit, each new industrial initiative launched finds immediately - i.e. at its first issue - a premium in the Stock Exchange; then it distributes to its shareholders, at a nominal value, a number of shares proportionate to those that they owned in the company. The profit which is thus guaranteed to the shareholders is reflected in the first instance on the shares of the Crédit, while their high rating guarantees a greater value to the next batch to be issued. In this way the Crédit obtains command over a large amount of loanable capital. Apart from the bonus which it receives from being able to sell shares at above their face value, the effects on capital are the exact opposite of the characteristic function of commercial banks. These latter temporarily free up fixed capital via their discounts, loans and emission of notes, whereas the Crédit fixes actually floating capital. "A mill-owner who would sink in buildings and machinery part of his capital out of proportion with the part reserved for the payment of wages and the purchase of raw material, would very soon find his mill stopped. The same holds good with a
nation. Almost every commercial crisis in modern times has been connected with a derangement in the due proportion between floating and fixed capital. What, then, must be the result of the working of an institution like the Crédit Mobilier, the direct purpose of which is to fix as much as possible of the loanable capital of the country in railways, canals, mines, docks, steamships, forges, and other industrial undertakings, without any regard to the productive capacities of the country?"

This passage may be compared to the splendid excursus on crisis in the Grundrisse. It would seem to confirm the hypothesis of those who, like H. Grossman, consider disproportionality to be the central pivot of the Marxist theory of crisis. Before we go on to examine the articles dealing specifically with the monetary and commercial crisis of 1857, a few general points on this question would not be out of place. Marx considers several kinds of disproportion as the source of crisis: that between monetary liquidity and real wealth, due essentially to the nature of the institution of credit; that between the sector producing means of production and that producing means of consumption in the framework of the schemas of reproduction; that between variable and fixed capital within the framework of the growing organic composition of capital which determines the tendency of
the rate of profit to fall; and finally that between necessary labour and surplus labour. All these are different articulations of the same contradictory process, but by privileging one rather than the other we end up with an interpretation of the theory that may be of greater or lesser political significance. To put it schematically: if we place the emphasis on any of the first three types, there is a danger of falling into the all too common pathogenic kind of interpretation, which sees crisis as a result of errors on the part of the capitalist class - failures of calculation, inability to plan the economy on the part of capital. It follows that crisis can be "solved" by the introduction of external correctives, by the mobilisation of those famous "counter-tendencies", above all by the action of an overall subjective will, externally imposed - that of the state - to which is assigned the capacity to re-establish equilibrium from time to time. From Marx as the theoretician of disharmony to Marx the planner of equilibrium, the utopia of harmonicism, as seen in socialist planning (in Soviet Marxism, for example).

From this standpoint, which has, one needs hardly add, been that of Marxist orthodoxy and still largely remains so today, any incidence that the action of the working
class might have on the crisis disappears. The capitalist class is instead divided into "healthy" or "progressive" and "parasitic" or "sick" elements: the "Puritan" entrepreneur is distinguished from his speculative or absenteeist "Jewish" counterpart. The capitalist system both develops and squanders social wealth: periods of crisis are seen as moments in which the "ugly face" of disproportionality and waste prevails over the healthy side. The agency of crisis, the sole responsibility for crisis, thus rests with capitalism. By privileging one or several of these disproportions, in other words, we arrive at explanations which may be partial, not to mention incorrect.

Instead of explanations based on functional proportionality between sectors of capital, it would seem more fruitful politically to stress the disproportion between necessary and surplus labour, because in that case we enter a terrain of capital-labour as an antagonistic relation, in which the working class can be seen as one of the active poles. Hence it becomes possible to grasp the working-class determination of the crisis and crisis, as in Marx, becomes the privileged terrain of a new strategic basis for revolutionary organisation. Marx's theoretical attention to the 1857 crisis was prompted by the urgency of setting up a new
type of organisational project. This was what Marx was looking for within general crisis - historical possibilities for insurrection. Crisis was not seen as a catastrophic millennium but as historic opportunity, an "opening" suggestive of a new society, albeit not sufficient in itself to destroy the old order and usher in the new. Marx's theoretical examination of the crisis of 1857 goes hand in hand with the urgency of setting up organisational projects. Besides, development and crisis are indissolubly linked because they are unified in the same institutions of the system. Without a disproportionate expansion of money supply and credit there could be no expansion of industrial capacity; without a disproportionate growth in the organic composition of capital there could be no increase in the mass of profit; without a disproportionate growth of the sphere of exchange, no world market; without a disproportionate increase of surplus labour no control over necessary labour. The causes of crisis are the causes of development; they are intrinsically necessary to capitalist development.

Without the social mobilisation of capital via the Crédit Mobilier type of investment bank, the Bonapartist system could not have hoped to accomplish its goal of industrial expansion. But the laws of survival of institutions such as these geared to mobilising national
resources, also produce stagnation and crisis. Hence capital cannot be divided into "healthy" and "sick" elements; development and stagnation exist in symbiosis within the same institutional forms. The Crédit had a revolutionary rather than regressive impact on French capitalism: but the rhythm with which it multiplied wealth in investment shares was not matched by the reduction of necessary labour. Speculative accumulation does not meet with the same resistances that surplus labour encounters in the factory: the money-form depends on productive relations and vice-versa.

Speculative degeneration is a phenomenon that Marx regarded as an accelerator in the timing of crisis, but not as essential to the explanation of crisis. Once again, reference to the Grundrisse is important. It is the selfsame historic necessity of capitalism to enlarge the factory system and to subordinate an ever-increasing mass of labour power to the wage relation, which produces a "crisis of costs". It is that same historic necessity of capital to reduce necessary labour which creates a "crisis of demand". And it is the selfsame increase in labour productivity in order to offset the rigidity of necessary labour, which results in the "crisis of overproduction".
In the introduction to an anthology of his essays on the history of nineteenth-century French banking, published in 1970, Bertrand Gille recognises that the principal gap is that regarding the history of the Crédit Mobilier - due to a lack of available material in the French national archives (basically restricted to the annual reports which Marx himself used). However, well before systematic research of banking archives was begun, all historians assigned to the Crédit Mobilier a kind of emblematic role in the economic development of France: both as a factor mobilising resources or - vice-versa - inducing Bonapartist "stagnation". In this sense, Marx's basic judgement has been confirmed by later historiography: the dual role of Bonaparte and the two-sided nature of the Crédit. But this historical interpretation also has an ideological orientation: the historiography of French credit institutions has been largely influenced by the doctrines of the Saint-Simonian school. Leaving aside for the present the question as to whether Saint-Simon should or should not be considered a "founder of socialism" (a question raised by Marxist scholars of the 1920's), the writings of Enfantin, or better still Lafitte, give impressive evidence of the theoretical maturity of the Saint-Simonian bankers, the "technicians", as they dealt with problems of industrial development at the time. Lafitte's projects for the establishment of an
investment bank, Enfantin's arguments for the need to centralise resources, their experiments in specialising the Caisses (savings banks) in terms of specific industrial sectors, their conception that banks, by concentrating information, can exercise a regulating and programming function in relation to the economy, and the importance they assign to technological innovation, all this represented a lucid anticipation of what was to become the institutional framework of modern capitalist development. Their projects certainly represented a level of awareness on the part of the emerging industrial bourgeoisie which was vastly superior to that expressed by "pure theoreticians" of political economy in France, by Say or Bastiat, for example. While the latter theorised a "harmonious" vision of the economy, a perfect equilibrium between production and consumption and hence the impossibility of any general crisis of overproduction, the banking "technicians", the Saint-Simonian doctrinaires, showed a clear perception that industrial "take-off" in France needed particular incentives, new kinds of instruments of intervention. They clearly sensed that the French revolution had left an extremely conservative legacy in terms of the economy, that a large proportion of capital remained immobilised, particularly in the rural sector (in the savings of the rural petty bourgeoisie) and in investments in property
speculation on the part of the nobility. It was no accident that the first banking experiments of Lafitte and Enfantin were credit institutions based on mortgage.

These experiments were a failure. In his journal Producteur Enfantin was to repeat to the point of obsession that credit signified above all trust, confidence in the future, while mortgage as a form of guarantee on debt is the classic expression of an untrusting investment psychology and thus of a practice of immobilism. It is also in this journal that we can follow the first steps in the career of the Péreire brothers. On 6 September 1830 in the Journal du Commerce they published an article arguing for an association able to lend capital to industry and commerce, recognised by law and with state participation in the initial capital outlay. The Comptoirs d'Escompte in the years following 1848, backed by initial capital participation by the state and municipalities, more or less followed this model. But the first bank which fully operated on the scheme of the Crédit Mobilier was the Société Générale de Belgique founded by the Count of Méens.

The objectives of this new type of Péreire-style investment bank were to alter the traditional attitudes of the French saver, the small rentier who preferred to invest his money in state bonds at fixed interest rates.
The aim was to mobilise agricultural savings and orient them towards industry. The programmatic declarations of this new type of banking already explicitly indicate its role as a stimulus and as a means of transforming the French bourgeoisie. The historians of the Annales school in France - Morazé in the first instance - have stressed this particular relationship between the new type of banking and the petty-bourgeois legacy of the revolution of 1789. The petty-bourgeoisie, whose immobilism represented the main obstacle to any real economic "take-off", was mobilised into a dynamic and innovatory role and was involved in the process of industrial revolution by the new investment banks. David Landes, who of all historians has best characterised this difference between the old and new type of banking, has, however, contrasted the success of investment banks in Germany and what he sees as their relative failure in France, partly due to the obstinate resistance of the small rentier, but even more to the dominance of the family firm in French industry. Attachment to small scale enterprise, reluctance to borrow on the capital market, conservative attitudes to new machinery, a mistrust of money-lenders, a concern only for the rate of profit, these were the characteristics of the French entrepreneur which the Napoleonic period, instead of diminishing, actually reinforced. The predominance of
family structures thus meant that the role of corporate enterprise in France remained limited, consolidating preexisting firms rather than creating new ones.

According to Landes, the large number of French patents which were developed abroad is indicative of this reluctant attitude to technological innovation. In a situation of this kind, where "new men" had no chance to carve a way for themselves, where "company secrets" were jealously guarded to the point where loans from abroad were preferred in order to maintain secrecy on accounts and new projects, the prospects for a credit institution like the Crédit Mobilier would have been limited, precisely because of a lack of investment opportunities. Landes argues that this attitude also explains the tendency to rely on state backing and guarantees: "half intrigue-ridden and half-thief", the state stood as bureaucratic supervisor, tutor and father over an industrial class that was basically immature. The French business world was in turn blocked socially by the nobility who controlled public administration and used their power to shackle the business classes; hence the proliferation of state monopolies, privileges, concessions etc. The picture of stagnation could not be more total. The function of the Crédit Mobilier in this context as a
factor promoting and liberating resources could only be very limited.

Does this picture accord with the few statistics that are available to us? In his major work Landes provides statistics on the development of the textile industry. From 1852 to 1861, the number of spindles in Britain increased from 18 to 31 million; in the USA from 5 million to 11 million; in Germany from 900,000 to 2,235,000; in France from 4,500,000 to 5,500,000, a percentage increase lower than any of the other countries listed. But the indices for iron and steel are more significant, given that this period saw sectors with a high organic composition - ie. heavy industry - gradually supplanting the labour-intensive textiles sector spread out over the countryside.

More dramatic changes, however, were affecting the physiognomy of Paris. Haussmann, Prefect of the Seine, was taking in hand the great military-urbanistic project which was to eliminate the old districts of the centre; the rabbit-warren of small streets and alleys so propitious to urban guerrilla warfare was to be replaced by the grands boulevards. The workers were expelled from the centre to the periphery, separated and divided from the body of le peuple. Contemporaries, in particular Proudhon himself, bitterly lamented this violent cutting off of the
working class from shopkeepers, small tradesmen and artisans. "The People, the Collective Man", as Darimon called it, was physically divided, by the regime itself, by capitalist development, into a working class and a petty bourgeoisie. Yet the unitary composition of these classes remained and has reasserted itself at moments of political tension and insurrectionary movements almost up to the present day. This separation operated in fact to render the hegemony of the workers over the "people" more achievable, and contributed to the more rapid decline of Proudhonism. However, when dealing with political class composition, we should not allow ourselves to fall into schematic models.

In his detailed description of the repression by the Bonapartist regime after the coup d'état, Edouard Dolléans lists: 1,850 journeymen, 1,107 shoemakers, 888 carpenters, 733 builders, 688 tailors, 642 weavers, 457 ironsmiths, 428 locksmiths, 415 bakers, 251 stonemasons, 252 hairdressers, 224 spinners, 238 tanners, and so on in decreasing order - but also 5,423 agricultural workers. Were these perhaps agricultural workers expelled from the countryside, migrant proletarians without work? Was the quota of the industrial reserve army in the class composition that provided the core of the June insurrection already as large as this would suggest? The
agricultural crisis of 1847 was not far off, but the coming of the Second Empire accelerated the depopulation of the countryside, especially from areas where domestic industry was concentrated. The process of urbanisation developed very rapidly and new industrial areas appeared, in particular those linked to the coal-iron cycle, ie Lorraine and the North (Pas-de-Calais). The conversion from vegetable to mineral fuels was slow in France, considering that the country had an ancient iron-working tradition and was well placed in relation to other capitalist countries. The reasons for this, according to Landes, lay in lack of suitable coal and the fact that coal deposits were far from the ore, with high transport costs. Moreover much of the industry "was in the hands of small, technically ignorant furnacemasters, bound by resources and habit to uneconomic locations and protected from the incursions of more efficient producers by prohibitive tariffs, costly transport and a tacit general avoidance of price competition." In this sector - and the same applies to others - the real leap forward of French industry took place after 1857, spurred by the "salutary" effects of the crisis.

When we consider Kuczynski's overall verdict, the period 1848-70 is seen as a period of "transition" for French capitalism: the passage from extensive to intensive
exploitation of labour power, from manufacture to laying the basis for large-scale industry, with a gradual increase in the organic composition of capital. The railway network was considerably extended - from 3,083km in 1850 to 5,611km in 1855 - but France's share of world exports stagnated - in fact it was less in 1870 than it had been in 1850. This was a period of transition, of restructuration, certainly, not of boom; a period, above all if we consider the indices for the six years prior to the 1857 crisis, marked by difficulties in setting the process of accelerated accumulation into motion. Kuczynski's judgement, albeit from a different standpoint, is analogous to that of quantitative economic historians like Marczewski.

Marczewski's findings have been examined by several writers, including Markhovitch, who examined the series of statistical data for the whole period 1789-1964. They tend to confirm his finding that in France there were neither periods of rapid advance nor of depression, but a very gradual, linear evolution. Stability and controlled expansion were the typical features of French development, in contrast to other cases like Germany or Italy. Even the crisis of 1857, while it put a brake on the "take-off" of coal and iron, cut cotton consumption and sharply increased wholesale prices, causing a financial
panic, nonetheless had no catastrophic consequence. Indeed it favoured a certain process of restructuration and restoration of equilibrium, contributing to the subsequent advance of the economy. Summarising these findings, Levy-Leboyer states in Annales: "In France we find no prolonged period of industrial acceleration (except in construction). The maximum points of expansion follow politico-military accidents and in part merely compensate for them." He subdivides the history of the French economy into three main periods: expansion (1815-40), stagnation (1840-1905) and reconstruction (1907-14).

Taking the second period, we find an initial phase, more or less coinciding with the Second Empire, of higher than average growth for the period as a whole (2.87% annual rate, excluding construction) and a second phase of clear recession, starting around 1867, which opens the long phase of genuine stagnation. Levy-Leboyer also notes the relatively mild impact of the 1857 crisis on France, compared to that in the USA or Britain, as regards volume of production - but this is also due to more sustained rates of growth in these other countries. The real decline, relatively speaking, begins with France's defeat in 1870, exacerbated by the impact of the agricultural depression. Without the propulsive role of
industry (which constituted one quarter of global production in 1810-40, and one third in 1850-80), the state of the French economy in other sectors would look even more depressed than it appears from the statistical data. Leboyer's conclusions are very similar to those of Marczewski: "The take-off - understood as a brief transitional period which enables the economy to detach itself from its agricultural traditions - is not found in France, because industrialisation was founded on two opposing structures: at first on the traditional agricultural markets, unified by the railways, and subsequently, as from 1880, on the markets in the cities to which the population of the countryside had transferred itself."

More recently, on the basis of a series of indices constructed according to new criteria, François Crouzet was able to state: "As a reaction to certain conceptions which have been fashionable in the post-War period, which claim that the French economy was performing poorly, and even stagnating, in the nineteenth century, a number of historians have recently been examining a more optimistic thesis [...] The slow growth of French industry is due above all to the slow transformation and growth of the traditional sectors such as textiles, and not to any lack of dynamism of the largely newer industries, such as mining, metallurgy or chemicals." One of
Crouzet's indices is particularly interesting for us: taking a group of key growth industries, he finds the most rapid spurt of the nineteenth century in the period 1850-57. "It would seem that French industry underwent its most rapid phase of growth in the mid-nineteenth century, and that while this phase centres on the authoritarian period of the Empire, it actually begins towards the end of the July Monarchy."

Apart from this, the picture of regularity, continuity and slow evolution is confirmed. Hence "the most serious obstacles... were linked to exogenous factors, such as the 1848 revolution and the war of 1870." Exogenous factors! The whole vacuity of quantitative historiography is summed up in this phrase. However, in all its innocence, it does convey an important fact: even within dry statistical series it is possible to identify the essentially "political" nature of the outlook and behaviour of the French proletariat. If only the "wage" is endogenous, if only labour power as a dependent variable is "endogenous", then obviously a working class that makes an insurrectionary bid for power must appear as an exogenous, underground phenomenon. But apart from this we could make a whole series of observations on the basis of the graphs which the quantitative historians provide: above all evidence of an extremely
rigorous control over economic development, in careful
doses, and an emphasis on stability as the prime
imperative of government.

Thus we have a traditional presence of the State, plus the
social inheritance of the bourgeois revolution of 1789
and a prudent opportunism on the part of France's
bourgeoisie, all of which tends to promote stagnation.
And what about the mass behaviours of the working
class?

Despite the shortage of available statistics, Kuczynski has
tried to follow the progress of wage levels and working-
class living standards. His indices of the real wage in
France show the following: taking 1900 as 100, the index
of the real wage is 64 for the cycle 1833-39, 59 for 1840-
51, 55 for 1852-58 and 66 for 1859-62. The early phase of
the Second Empire thus shows a sharp worsening of
workers' living standards - the years of hunger. Although
money wages rose, the cost of living rose much faster.
Given the large proportion of women and children still
present in the industrial workforce (35%), the system of
very harsh fines which was widespread, and payment in
kind, the overall impression is one of poor diet and great
poverty. Dolléans, whose data on strikes show a higher
incidence in normal years and a drop in periods of crisis,
also emphasises the exceptional increase in the cost of
living. He cites a Paris print compositor who attended the London Exhibition as part of the French workers' delegation in 1863, and who stated that over the past ten years 1851-61, his wages had risen by 9-10%, but his rent had gone up by 50%.

But the heavy hand of the regime made itself felt not only in economic terms but also in the repression of workers' associations, the dissolution of secret societies and craft unions, and the introduction of controls over labour mobility - above all the institution of obligatory work passes (livrets) for both domestic and factory workers. But control over mobility also operated on a more spontaneous basis - for instance the existence of small copper coin (monnaie de billon) which circulated widely in the period 1850-60 as a working-class means of payment (only at the end of the century were drastic measures taken to remove it from circulation). It created enormous hardship for working-class families, since shopkeepers often refused to accept this devalued copper coin as payment for goods. As in Italy from 1973, the chronic lack of small change and coin led to an effective increase in prices, especially on articles of working-class consumption. In addition, the wage packet was generally made up of copper (or bronze) coin, posing an immediate problem for the worker of the
convertibility of the wage. This exasperating situation gave rise to a whole series of collateral phenomena: the forging of false coin with poor alloy, speculation on the differing prices of coin between departments, and above all the smuggling of foreign coin into the country - especially prevalent in border areas and giving rise to further speculation. Hence, besides the problem of inflation, this monetary situation placed serious limits on labour mobility: the difficulties involved in converting the money form in which their wage packet was paid tied the proletariat to the network of local community ties, especially in relation to shopkeepers, landlords and the providers of basic services. The refusal to accept certain forms of money might begin spontaneously in a particular locality, and then would extend to whole departments. What is striking is that this situation could exist in the France of the Péreire brothers, the great theoreticians of credit, the inventors of modern banking and monetary policy!

Considering the situation of the French proletariat one cannot help noticing with astonishment Marx's lack of attention to French working-class conditions and to the day-to-day existence of the proletariat in this period. It is as if the problem of organisation were not connected in any way with the mass behaviours of the proletariat,
with the autonomous and spontaneous reactions of the working class; as if the theory of money should not also include the reality of the money which the proletariat has to live on from day to day. These inequalities, after all, provided the best exemplification of the egalitarian mystification of the reduction of all commodities to their monetary equivalent.

To summarise: Reservations apart, we can say that the Péreire brothers' bank contributed to a revolution within the French capitalist system, and that the years in question saw the basis of heavy industry being laid, with a unification of the national market via the construction of canals and a comprehensive rail network. This delicate phase of transition for French capitalism was carried through by the exercise of a violent pressure on the working class, coupled with refined techniques of ideological cooptation in order to prevent an equally violent backlash. It is striking that this was accomplished without notable changes in class composition (apart from the physical reorganisation of Paris and the more rapid disappearance of domestic industry), and it would be worth studying the political process which enabled the movements of the class as a whole to be divided, controlled and paralysed. On the other hand, the repression of the material needs of the class, the denial
of any improvement in living conditions, destroyed any economistic or reformist illusions, despite the preaching of the utopians. Gradualist intermediate objectives were not the order of the day. Insurrection, a bid for power, violence and a spirit of proletarian revenge - these became the minimum programme of the French proletariat, even if these manifestations of autonomy were to take a while surfacing.

The Crédit Mobilier, as we know, was established as an explicit move on the part of the regime to counter the dominant influence of the big private banks and the Orleanist nobility. We read in Gille that the statutes of the new Crédit Mobilier had raised considerable apprehension in ministry circles - in the Finance, Commerce and Public Works ministries especially. There were fears of the the kind of privileges being accorded to the founders, and doubts were expressed over the fact that the bank was allowed to issue shares up to five times the amount of its capital; and there was already a sense of the kind of speculative activities that it might engage in.

Behind this division of opinion lay two different conceptions of economic policy, which more or less corresponded to the present-day opposition in capitalist countries between treasury ministries and central banks.
According to Péreire it was the shortage of liquidity that brought about the collapse of Louis Philippe's finances. But this view was not shared by other powerful interests. The Minister of Internal Affairs, replying on 24 October 1852 to notes from the other ministers, underlined the need for a credit institution to relaunch investment, and added: "At a time when industrial shares are multiplying and circulation is becoming more sustained, in which share prices are bound to fluctuate, this company can regularise and sustain their rate, preventing in this case those crises which are so prolific and disastrous." But the most impressive document was the note which the greatest of the private bankers, James de Rothschild, sent to Napoleon on the very day government authorisation was given to the Crédit (15 November 1852). In his view, the future directors of the Crédit "would throw into circulation, with the backing and authorisation of the government, a considerable quantity of credit bonds dependent on changeable and uncertain guarantees." If the issue of shares were also taken into account, the result would be a flood of paper money "which at times of crisis will drag public wealth to the edge of an abyss". There should be no illusion that the basic capital and portfolio of stocks would be maintained to cover its liabilities: this would mean a severe blow in times of crisis and pure speculation in times of
prosperity. Deprived of deposits or reserves, the Crédit would "either go to ruin or will take recourse to the dangerous expedient of imposing confidence by forced currency measures, which never remove disasters but only lessen their effects". Moreover, "a prey to their own caprices and interests, the irresponsible directors of this bank will come to control all the enterprises... manipulating share values, exalting one firm, humiliating another, they will impose their own conditions on all. Because of the number of shares in their possession they will be able to dictate laws over the market, laws without control or competition... The bank will penetrate the managing boards of railways, mines and canals, appointing its own agents, and controlling these bodies with people of its choosing. It will bring into its hands and under its authority the greater part of public wealth. More than a danger, this would be a calamity, eliminating all competition, destroying all individual powers... The prosperity of the country will be made to depend on the will, ability, inexperience or interests of a small number of men who will be involved in their investment stock only indirectly, and will not have to carry the burden of responsibility for the mistakes they commit." But the greatest dangers, he concluded, were those which threatened the public finances, the regime itself. In issuing Treasury bonds the state would find itself
up against a single competitor in the market, the Crédit: state loans would be faced by a single buyer. This would aggravate the effects of crisis still further. And there was always the chance that the Crédit would fall into the hands of those hostile to the regime.

The lucidity and foresight of this judgement is remarkable and was borne out by subsequent events. It is also strikingly similar to Marx's own views in the NYDT articles. Marx may well have been aware of Rothschild's public campaign against the Péreire brothers in the international press at the time when he was writing his own articles.

The epic character of the conflict between Rothschild and the Péreires has left its traces on all later historiography. From Sée to Dupont-Ferrier, the contrast between the old and new type of bank has become a common theme among historians. Landes was the first to put forward a different interpretation: he argued that the thesis of a conscious conflict between two banking systems was inexact and that their functions were complementary (private merchant banks dealing with short-term commercial credit, the joint-stock investment bank with long-term fixed capital loans). It is true that in the first board of directors of the Crédit we find key protagonists of the old school of banking. Rothschild
himself associated in common ventures with the Péreires after the 1857 crisis. Nevertheless, it was the associationist ideology of the Péreires that forced the pace, that obliged the old banks to undertake new ventures that otherwise they would not have dared embark on, and to experiment with new techniques. In a sense their ideology gave them more power and influence than their capital. Even Landes has to admit that they were the real protagonists of the banking revolution of the mid-century.

At the first board meeting of the Crédit, Isaac Péreire spoke of "putting into circulation a new agent, a new p om sory money which will become the bearer of its everyday interest and which will allow the smallest of savings and the largest of capitals to bear fruit." In other words, to fill the vacuum next to ordinary bank notes, to create a "valore omnium" with an interest accruing on a day by day basis, and with rent coming out of simple circulation - these were the ambitious plans of the two Péreire brothers, whose powers of imagination and inventiveness went well beyond their actual possibilities of realisation.

Their "valore omnium" was never to be convertible, though some of the bonds of the Crédit, while remaining shares, did circulate as portable money or bank notes.
The Crédit shares represented, rather, a utopian symbol of the average rate of interest, of the tendential law of capitalism. "In general, when we become involved in a particular sector of industry, we want to promote its development, not by means of competition, but by association and fusion, by the more economical use of resources, not by their opposition and mutual destruction," Péreire told the Board in 1855. What we have here is not a utopia, but a concrete practice which gave a decisive direction to the process of capitalist concentration and which thus expressed a tendential law of capitalism. Even the devotees of the old-style banking were obliged to adapt to the moving times: in 1857 the syndicate which later gave rise to the Société Générale was formed to counteract the Crédit, under the patronage of Rothschild. The new sectors of high organic composition, with heavy industry in pride of place, made a process of fusion and concentration indispensable. In this context the expansive capacity of the bank, its ability to extend its operations beyond French frontiers, especially to newly developing countries that were poor in resources (Italy for example), depended on the principle of association. Another idée force of the Péreires was the creation of a world capital market, a single unified monetary zone: "One of the most important results we should aim for is the possibility of
creating credit shares, the interest on which would be met in all the major markets of Europe on the basis of fixed rates to be established between the currencies of all the states." The ultimate aim was an international super-money which could substitute for banknotes, commercial notes and letters of credit. "It is not gold but the force of association that is the real financial power of France in the world," was another of Péreire's maxims. This monetary objective, to replace money with credit money, showed an anticipation of capitalist tendencies which is remarkable. It represented a measured response of capital to the working-class challenge of 1848, a mature theorisation of a fully socialised capital based on the world market.

That the Bonapartist regime had to carry out this leap, and thereby disappoint the hopes of its theoretical originators, is not surprising. At the end of 1855, the government prohibited the Crédit Mobilier from launching a long-term loan by the issue of bonded notes. On 9 March 1856 a decree prohibited the issue of all new shares to the public. The activities of the Crédit were paralysed and the way was open for Rothschild's counter-attack. On 21 July 1856, the Péreires wrote to the Emperor of their bitter predicament: "The jealousies that unbridled competition have aroused against us and
against the Crédit Mobilier have paralysed everything... There is a concerted campaign of attacks, lies and calumnies, not only against the Crédit Mobilier but against all the enterprises that it has promoted since its foundation."

We do not know Bonaparte's reply, but the fact that the regime conceded openings to the Rothschilds and to British capital (especially in new railway concessions) certainly does not suggest any attempt to curtail the structural transformation the Péreires had theorised and promoted. It was more a matter of running it in a way that could involve the whole financial world and the top banks, in other words all sections of the capitalist class, in a common enterprise extending beyond personal rivalries. The fruits of this were soon to become apparent: the period up to 1866 saw one of the most sustained cycles of development in particular key sectors, prior to the depression which led to the collapse of the Empire, the war of 1870 and the Commune.

But quite apart from their anticipatory role, the Péreires and the Crédit were in line with one of the key choices of the regime from the very start: that regarding monopolies. On this question there were endless battles and polemics against the imperial record, its interventionism in the economy, and its suffocation of
free enterprise: this was to be the favoured ground of the radical bourgeois tradition which was to last so long in France. From this viewpoint, the relation between the new investment banks and the regime was more specific than a mere convergence or a simple acceleration of objective tendencies of capitalism. The oligarchic and monopolistic tendencies towards concentration, separation of ownership and control etc, were given an irreversible push. State power and economic power became closely linked: they were identified as such by the working class, so that the question of the relation between the class movement and insurrection became more immediate and direct. The final verdict on the Crédit was to be given by Marx in Capital Volume Three:

"If the credit system appears as the principal lever of overproduction and excessive speculation in commerce, this is simply because the reproduction process, which is elastic by nature, is now forced to its utmost limit; and this is because a great part of the social capital is applied by those who are not its owners, and who therefore proceed quite unlike owners who, when they function themselves, anxiously weigh the limits of their private capital. This only goes to show how the valorisation of capital founded on the antithetical character of capitalist production permits actual free development only up to a
certain point, which is constantly broken through by the credit system. The credit system hence accelerates the material development of the productive forces and the creation of the world market, which it is the historical task of the capitalist mode of production to bring to a certain level of development, as material foundations for the new form of production. At the same time, credit accelerates the violent outbreaks of this contradiction - crises - and with these the elements of dissolution of the old mode of production.

"The credit system has a dual character immanent in it: on the one hand it develops the motive of capitalist production, enrichment by the exploitation of others' labour, into the purest and most colossal system of gambling and swindling, and restricts ever more the already small number of the exploiters of social wealth; on the other however it constitutes the form of transition towards a new mode of production. It is this dual character that gives the principal spokesmen for credit, from Law through to Isaac Péreire, their nicely mixed character of swindler and prophet." (Capital Vol. III, pp 572-3)

On 26 September 1856, Marx wrote to Engels: "This time, by the by, the thing has assumed European dimensions such as have never been seen before, and I
don't suppose we'll be able to spend much longer here merely as spectators. The very fact that I've at last got round to setting up house again and sending for my books seems to me to prove that the 'mobilisation' of our persons is at hand".

The "two-man party" (as they were described by Engels's biographer, Mayer) was preparing to move into action. Marx's attention in this letter is focussed on the price of money, the market in precious metals and their reciprocal relation. "What do you think of the aspect of the money market? There is no doubt that the increases in the discount rate on the Continent are partly associated with the appreciation of silver against gold due to the Californian and Australian gold and hence bullion dealers everywhere where gold and silver are the legal STANDARD are withdrawing the latter from the banks. But whatever the reason for the increases in the discount rate, these are at least precipitating the downfall of the vast speculative transactions and, more specifically, of the grand pawningshop at Paris. I don't believe that the great monetary crisis will outlast the winter of 1857."

The important development in the course of the later articles for the NYDT is the focus on the European ramifications of the fact that Paris was operating as a
centre of speculation, and especially the effect on Britain. Marx takes up a favourite theme of his - the illusion whereby the English capitalist class considered themselves to be outside the "unsound" speculation on the Continent. John Bull is a dreamer if that's what he thinks, because he forgets that a good part of his capital - of English capital - is invested in Parisian commercial circles. The difference, if anything, is this: whereas the French speculation takes the refined forms of Saint-Simonianism, the English variety returns to the primitive form of fraud.

Marx now widens the field of his vision. It is no longer the French aspect of speculation that occupies the stage, but its relationship to the rest of the capitalist world; the object of inquiry becomes the internal nerve-system and the interconnections of the world market. In the view of the "two-man party", the prospects become increasingly optimistic: it is not only that the Bonapartist link is about to break, but that the whole chain of the European post-1848 restoration is shaking under the impact of the crisis. In his next letter, Engels enthusiastically adopts an apocalyptic view of events: "This time there'll be a dies irae such as has never been seen before: the whole of Europe's industry in ruins, all markets over-stocked (already nothing more is being shipped to India), all the
propertied classes in the soup, complete bankruptcy of the bourgeoisie, war and profligacy to the nth degree. I, too, believe that it will all come to pass in 1857, and when I heard that you were again buying furniture, I promptly declared the thing to be a dead certainty and offered to take bets on it."

A few days later the NYDT (9 October 1856) published an article by Marx developing the indications contained in the letter to Engels quoted above. He cites concrete examples of English-style speculation, namely the fraudulent activities of the Royal British Bank, with their juridical consequences, and he makes a link between French speculation and English over-production: "The present race of French speculators stand in the same relation to the English speculators of the above-mentioned epochs as the French Deists of the Eighteenth to the English Deists of the Seventeenth century. The one furnished the materials, while the other produced the generalising form which enabled Deism to be propagated over the whole civilised world of the eighteenth century. The British are prone to congratulate themselves upon the removal of the focus of speculation from their free and sober island to the muddled and despot-ridden Continent; but then they forget the intense anxiety with which they watch the monthly statement of the Bank of
England; they forget that it is English capital to a great extent which supplied the great arteries of the European Crédit Mobilier with the heavenly moisture; they forget that the 'sound' over-trading and over-production in England is the direct offspring of the 'unsound' speculation they denounce on the Continent, as much as their liberal policy of 1854 and 1856 is the offspring of the coup d'état of Bonaparte."

Although he only seems to touch on it, here Marx puts his finger squarely on the central problem: the problem of the relationships between money as a particular commodity and money as capital. In socialist sociology this is expressed in the distinction between the "finance" sphere - seemingly detached from the world of "work", and a degenerate manifestation within the economy - and the sphere of "production", which is characterised by an equal exchange of values, and by the fair laws of the market. Overproduction, as a temporary disturbance of the proportions of the market, may be permitted to exist, within the framework of the laws of value. It is "healthy", whereas speculation is "unhealthy". As he pursues his interest in the problems of the money market, Marx not only seeks to uncover the connections between the world of finance and the world of production - between the bank and the factory, we could
say - but he particularly seeks to remind the socialist mystifiers that both are markets of commodities, and that from this point of view they do not move within two differing systems of laws, but within the same system dominated by the capitalist law of exchange. In the second instance, he reminds them that that self-same money which, in the finance sphere, appears as a particular commodity and gives rise to the sector producing interest - is capital, is surplus value extorted in the factory and then invested in operations which make it possible to command the labour of others. More precisely, it is capital which is produced in English factories and then invested in French credit institutions. Therefore overproduction is the false name which is given to overexploitation, and speculation is the false name which hides the devaluation of labour. But these conceptual advances were to be better explored one year later, when the "First Outline" was under way.

Here Marx was still concentrating on the problem of the money market as a "particular market". Although he was examining all its points of contact with the market in general, he was concerned to highlight the fact that there exist very particular mechanisms, which are absolutely different to those which regulate the relations between production and consumption, and that within
the finance sphere they bring about upheavals whose effect may be general. Something which may be produced outside the actual political framework which governs the relations of exploitation - like the discovery of gold in California and Australia, for example. Something which is outside the direct area of industrial relations, of the levels of the intensity of labour in France or in England - but which, because of the connection which links precious metals to money and the money-commodity to the money form, creates an upheaval in the economic equilibria and the political systems. What is important in these articles is precisely the determination of the monetary system as a separate sphere, as a construction of laws and of autonomous techniques.

The next article, which is on the monetary crisis in Europe, is of enormous interest. It was published in the 15 October edition of the NYDT. Marx returns to a theme which he had developed on the occasion of the anniversary celebrations of the founding of the Chartist newspaper The People's Paper. He looks at the wealth of strategic indications which were coming from capitalist restructuring and counterposes them to the political poverty of the conspiratorial organisations. This is the thesis of the "revolution from above" which goes way beyond the theoretical imaginings of the working class.
The institutions of the new power of capital are "the instruments of a revolution in property greater than any contemplated by the revolutionists of 1848" ... "Now (on the contrary) a social revolution is generally understood, even before the political revolution is proclaimed; and a social revolution brought about by no underground plots of the secret societies among the working classes, but by the public contrivances of the Crédits Mobiliers of the ruling classes."

This is the first time that Marx touches explicitly on problems of organisation and problems of the party. The revolution from above, the transformation in the mechanisms of extraction of surplus value, is highlighted in "the mania of getting rich without the pains of producing". The historical significance of monetary speculation resides precisely in the fact that it avoids a direct relationship with the working class; it resides in the depreciation of labour. But precisely this poses a series of major problems for revolutionary organisation. It is precisely at this point that the temptation to conspiracy and minoritarian secret societies becomes strongest. If he has to choose between monetary panic and the proclamations of Mazzini, Marx plumps for the former. He conducts a bitter and angry polemic with the conspiratorial groups: "They know nothing of the
economical life of people, they know nothing of the real conditions of historical movement, and when the new revolution shall break out they will have a better right than Pilate to wash their hands and protest that they are innocent of bloodshed."

So, not only do we find no reference here to the needs of the masses, but also no contribution to the revolutionary process. In Marx's observations here, and in the fierce irony of his invective against Mazzini, we have a clear sensation that the party of the future revolution is still all to be built, has still to find itself a programme, has still to establish its correct distance from the new mechanisms of surplus value. Is it coincidental that Marx was to repeat these concepts, a touch euphorically, to the representatives of the Chartist movement? Was it an accident if on that occasion he put his money on revolution from above, thereby denying, implicitly, that the given structure of the English working-class movement provided a positive alternative to the conspiratorial groups? Was it an accident if the problem of terroristic minorities came to his mind at precisely the moment at which he was analysing the manner in which the heightened cutting-up of the money market had devalued labour? Was it accidental that his pessimism applied equally to Chartist trade unionism and to
Mazzinian terrorism? No, it was no accident: revolution from above, depreciation of labour, and a critique of the secret societies - these are three sides of the triangle which provided the perspective which led to Capital.

However, of all the more or less professional revolutionaries who were moving round Europe at the time, Mazzini, in Marx's eyes, was the only one with any coherence - precisely because "he is a fanatic" - the only one who had not transformed himself into a "knight of industry". But the coherence of fanaticism was not sufficient to resolve the problems of how to build the party, the problems of power. Marx was not criticising the "clandestinity" of the secret societies, nor their detachment from the masses; he was commenting on their total inadequacy in the face of the new structures of accumulation. So, for him, it was more instructive to analyses those structures, to follow the revolution from above, to follow the Ariadne's thread of money. The Chartists had no real grip on these levels, and the carbonari didn't even suspect their existence.

But when Felice Orsini made his attempt on the life of Bonaparte, Marx was not to treat him as a Robin Hood. Although he had made a devastating judgement of the organisation to which Orsini belonged, Marx was to follow with passion and anxiety the possibility that the
attempt might lead to mass upheavals, and the Italian terrorist became the focus of some of his most fiery articles in the NYDT. His critique of the organisational model of the secret societies had rendered him neither blind nor deaf. His interest in the subsequent course of Orsini's trial was full and sincere, and his expectations of insurrectional movements provoked by the assassination attempt was to be so strong as to make him commit errors of evaluation.

Translated by Ed Emery and John Merrington
Between the end of October and the start of December 1856, Marx wrote four articles in the New York Daily Tribune devoted to the world crisis. In the first, on 27 October, we find ourselves in the midst of a financial panic; once again the crisis was due to a "disproportion between the disposable capital and the vastness of the industrial, commercial and speculative enterprises"; it was not due to a scarcity of the circulating medium, to a crisis of money as a means of payment, but to a crisis in the relation between money and capital, between rates of accumulation and the system of exchange. The raising of interest rates did nothing to stop the outflow of gold; the fact that the capital markets of the various countries were closely connected stood in the way of measures aimed at isolating the crisis; the crisis was general. "The present crisis in Europe is complicated by the fact that a drain of bullion - the common harbinger of commercial disasters - is interwoven with a depreciation of gold."

Marx analyses the international monetary system with extreme precision, examining the standards of value present in the various countries (for example, those in which gold was the standard, those where silver was the standard, and those where bimetallism existed) and the
ways in which the workings of these standards, far from making crises less communicable, actually multiplied their effects. Between 1848 and 1855, £105 million in gold flowed onto the market, as a result of the development of goldfields in California, Australia, and Russia. Having taken into account that a large part of this was used for international payments, for the replenishment of bank reserves, and for articles of luxury, it was reckoned that this left £53 million, of which only part was used to replace silver in America and in France. In reality the outflows of silver from France and England were much higher, and this was explained by the strong preference of Italian and Levantine traders for silver, as well as by an accumulation of silver reserves by the Arabs. But even this is only a partial explanation. The basic reason was to be sought in trade relations with China and India. "Since the beginning of the seventeenth century, Asia, and especially China and India, have never ceased to exercise an important influence on the bullion markets of Europe and America," as Marx notes in his next article, on 1 November. Prior to the discoveries of gold in California, the flow of metal coming from America was balanced by payments to Asia, but the crisis in the opium trade with India, due to the Chinese rebellion, had produced an impressive drive towards hoarding, which, following on the discovery of gold in California, was
principally in silver. At that point India too wanted to be paid in silver, which provoked an outflow of silver from Europe, and at the same time its price rose in relation to gold. This was the framework within which the European commercial crisis developed. It was precisely for this reason that "this Chinese revolution is destined to exercise a far greater influence upon Europe than all the Russian wars, Italian manifestos and secret societies of that Continent."

As I noted above, the whole analysis of the imperialist wars in Persia, India and China - the other main topic of the articles for the NYDT - was related back to the crisis in Europe, to revolution in the metropolis. What constituted the interlocking fabric of capitalist relations between America, Asia and Europe was the monetary system; it not only represented the surface appearance of underlying production relations, but was also the basic unifying factor of the system. Far from being a fetish, the monetary system was an extremely concrete and rigid fact of life. Its unity integrated countries with very different levels of capitalist development, and thus the system's sensitivity to the shock waves of crises was far greater. The rates of expansion of the monetary system were faster than those of the spread of the factory system. As a result, the pace of capitalism was
accelerated. The monetary system was the world market in its concrete materiality. Without the monetary system it would have been unthinkable for the Chinese insurrection to have had such immediate knock-on effects in the English factories. Seen within the perspective of the revolution from above, the monetary system is the vector, the communicating medium of proletarian internationalism.

Thus the group of articles on financial crisis and the group on colonial undertakings no longer appear as separate entities, but as complementary. Imperialism is the false name under which the concept of world market is hidden. Anti-colonial insurrections aggravate the crisis and further undermine the stability of the capitalist system. Marx's low opinion of the European conspiratorial groups derives from their inability to have any effect at the real levels, on the effective mechanisms of the world market, on the power of capitalism. Marx had already concluded his preceding article with a forecast that there would be a government crisis in France in the near future as a result of the financial crisis. It was precisely the days of uncertainty following Orsini's attentat that led him to understand that, given the inadequacy of the conspiratorial groups, the mere spontaneity of the masses, even in a situation already
rendered precarious by the crisis, was not sufficient to produce subversive results. The power of the regime, the power of capital, despite the individualist subjectivism of the conspirators, was too strong, stable and militarily organised to be able to be shaken by a simple movement of popular indignation. The spontaneity of the Parisian masses needed a party that was equally organised, and, more particularly, furnished with a theory which understood fundamentally that "revolution from above" which the new capitalist institutions were bringing about. Only one thing was certain: "Not only France, but all Europe, is fully convinced that the fate of what is called the Bonapartist dynasty, as well as the present state of European society, is suspended on the issue of the commercial crisis (of which Paris seems now to be witnessing the beginning)."

In the third of this group of articles, published in the NYDT on 22 November 1856, Marx thus returns doggedly to his analysis of the French crisis. "The stringent measures taken by the Bank of France, with a view to prevent, or at least to delay, the suspension of cash payments, have begun to tell severely on the industrial and commercial classes. Indeed, there is now raging a regular war between the bona fide commerce and industry, the speculative joint-stock companies already at
work, and the newly-hatched schemes about to be established, all of them struggling to carry off the floating capital of the country. The inevitable result of such a struggle must be the rise of interest, the fall of profits in all departments of industry and the depreciation of all sorts of securities, even if there existed no Bank of France, nor any drain of bullion. That, apart from all foreign influences, this pressure on the disposable capital of France must go on increasing, a glance at the development of the French railway system sufficiently demonstrates.

Was it the case that in this ruthless competition to acquire capital Marx had perhaps perceived one of the basic reasons for the conflict between the Rothschilds and the Péreires, without actually saying as much? Adopting an opposite viewpoint to that of his earlier articles, Marx analyses the destructive function of the Crédit Mobilier. Not only, in this very difficult conjuncture, was the Crédit going to enormous lengths to open new initiatives abroad (with, we might add, the consensus of the Rothschilds) but what was becoming increasingly apparent was "its tendency to fix capital, not to mobilise it. What it mobilises is only the titles of property. The shares of the companies started by it are, indeed, of a purely floating nature, but the capital which
they represent is sunk. The whole mystery of the Crédit Mobilier is to allure capital into industrial enterprises, where it is sunk, in order to speculate on the sale of the shares created to represent that capital."

Here, in a nutshell, is a whole vision of the excess of immobile capital, of excess of investment, of which speculation is the form but not the substance, and to this vision we should add the view which Marx was to develop in the Grundrisse and in Towards a Critique, regarding the function of money within crises. Within general crises, money is no longer required as a means of payment or as a measure; it is required as a materialisation of abstract wealth, in its material substance as a precious metal. This return to hoarding, this re-emergence of economic primitivism, highlights brusquely the contradictory nature of the system founded on exchange values. What appears is precisely a halt to circulation, the disappearance of fluid capital, the temporary disappearance of money as an agent of exchange. Fixed capital, the immobile part of capital, then presents itself as a synonym of crisis, of paralysis and of disaggregation of the process. In fact capital no longer appears as a process, because the moments of which that process are composed are violently isolated from each other and separated. The stages of
development in which the organic composition of capital increases, in which capital becomes disproportionately "fixed", are the periods that are forerunners of crisis, of paralysis of the process, of a halt to circulation. Contrary to the name which it carried, the Crédit Mobilier was the greatest source of capital "fixation", of increase in the organic composition of capital; this, therefore - and not speculation - was its decisive function in relation to crisis; speculation is only the form in which the split between the process of production and circulation presents itself.

However, Marx does not stop here; the list of the forms in which crisis presents itself needs to be fleshed out, because these forms condition the phenomena of popular reaction to the crisis. The textile industries in Lyons and the South of France were being put on short time, or even closing, as a result of the rising prices of raw materials: "The consequences are increased suffering and discontent among the workers - especially at Lyons and in the south of France - where a degree of exasperation prevails, only to be compared with that which attended the crisis of 1847.

Here one should also add the very bad harvest, as a result of floods, which obliged France, a traditional exporter of grain, to import. However, the root cause of the crisis was the backwardness of French agriculture,
which was now overburdened with taxation, and was also suffering shortages of labour-power: "What the Crédit Mobilier offered to the middle and higher classes, the Imperial subscription loans did for the peasantry." These moneys tossed into the maw of speculation capital which could have served to bring about improvements in the agricultural sector. Bonaparte now no longer appeared as the candidate of the peasantry in the eyes of the masses of the French countryside.

The article ends with a series of observations on popular discontent in Paris over the shortage of housing, increased prices, the crisis of small traders, etc.

On 6 December, the final article of the four pieces on crisis appeared: "...indeed, the chronic character assumed by the existing financial crisis only forebodes for it a more violent and destructive end. The longer the crisis lasts, the worse the ultimate reckoning. Europe is now like a man on the verge of bankruptcy, forced to continue at once all the enterprises which have ruined him, and all the desperate expedients by which he hopes to put off and to prevent the last dread crash."

The suggestions by both the English and the Bonapartist official press, claiming that the most acute phase of the crisis was now over, were seen by Marx as pure
government propaganda, as false information designed to check the panic: the company which was building the big central railway line through France was obliged to sack 500 white collar workers and 15,000 labourers on the Mulhouse section; there were an enormous number of bankruptcies in France: "It is evident that the French differ in this respect from the Roman Empire - since the one feared death from the advance of the barbarians while the other fears it from the retreat of the stockjobbers."

The "chronic" character of the crisis had been the subject of observations by Engels in a letter to Marx on 17 November 1856. In particular he highlighted the importance of the fixing of floating capitals. And he concluded: "Never again, perhaps, will the revolution find such a fine tabula rasa as now. All socialist dodges exhausted, the compulsory employment of labour anticipated and exploded six years since, no opportunity for new experiments or slogans." We find this same optimism, together with an identical assessment of the political situation and an identical evaluation of tendencies, in Marx's articles for the NYDT.

These articles brought to a close a year which had been very difficult, but also extremely important in Marx's life. A few days before Christmas he again wrote to Engels:
"You would oblige me greatly if you could send me the money before the week is out... If I'm late with the first payment to my landlord, I shall be entirely discrédité."

His everyday problems were still unresolved, but he had re-found the overall meaning of his practice as a militant and of his anger as a theoretician. In the lost 1851 manuscript of Das vollendete Geldsystem, Marx had written:

"What every single individual possesses in money is a generic possibility of exchange, through which he can establish, at his pleasure and in his full rights, his participation in social products. Each individual possesses social power in his pocket in the form of a thing. Rob the thing of this social power and you must give it to persons to exercise over persons. Thus, without money, there is no possibility of industrial development. The links must be organised on a political basis, or a religious basis, etc, until the point when the power of money becomes the nexus rerum et hominum."

Money thus becomes the incarnation of the capitalist mode of production, and embodies a break with bourgeois social structures based on tradition, caste, religion, clan and feuds between conflicting interests. And for as long as conflictual elements such as these continue to have the upper hand (in other words for as
long as capitalist society is weighed down by superstructural elements of pre-capitalist society, or of a capitalist society which is not yet fully developed - in short, for as long as the unity of the bourgeoisie is not yet fully realised), there is no possibility of a transition to large-scale industry. Money represents a universal terrain within which all subjects are reduced to subjects of exchange, and is also the terrain in which the unity of the bourgeois class and its total availability for the historic mission of capital is grounded. However, all this clashed with Proudhon's idea that even within a society that was regulated by exchange values, "right" could be established. As production relations could be established on an alternative basis once certain rights had been sanctioned. Money, for Marx, is the abolition of "right" as a social norm. By destroying all political ties and by making them secondary and accessory, money has a power which no right, no positive norm, can touch. This unifying function of money is the theme that Marx takes up again in 1856, when he examines the role of the financial bourgeoisie under the Bonaparte regime; no longer the conflicts of the various fractions and factions of the bourgeoisie, as in The Class Struggle in France etc, but the unity of the bourgeois class around money and the elimination of all artificial party subdivisions on the part of Napoleon's despotism. Marx sheds no tears for
the abolition of rights of association; the French parties of the pre-Bonapartist epoch were not, for him, emblematic of capital's democracy, but represented rather the web of divisions founded on tradition. Only the United States represent for Marx a fully developed society, the democracy of which he speaks in the Grundrisse, particularly in the pages devoted to Cary. "In money relations, in the system of developed exchange - and this appearance corrupts democracy - the links of personal dependence, differences of blood, of education etc, are in effect blown aside, swept away... and individuals seem to enter into a free and independent reciprocal contact."

However, highlighting this aspect in 1856 would have been mere apologetics for capital (albeit with the weapons of the critique of political economy), a mere description of the given level of things, if, at the same time as his identification of the new industrial society, Marx had not defined capital as everlasting contradiction and as crisis - and thus as a limitation on itself, and an obstacle to the very roots of its existence. When it comes to specific details too, Marx's point of reference is his critique of socialism: as we know, he was interested in precious metals, because, as he was to say in the Grundrisse, "The study of precious metals as subjects of
the money relations, as incarnations of the latter, is therefore by no means a matter lying outside the realm of political economy, as Proudhon believes."

We now arrive at 1857, the crucial year in which the theoretical programme of revolutionary workers was finally to take shape. Certainly the crisis of that year was not, for Marx, purely a terrain for experimenting with hypotheses; he lived it in the conviction of an imminent and generalised resurgence of the revolutionary process. In 1848 it had been The Communist Manifesto; in 1857 the Grundrisse. But since things turned out differently and this expectation was promptly undermined, nowadays we tend to read these materials as preparatory soundings for a more systematic work in the future.

The year opens with a letter to Engels, on 10 January 1857: "Proudhon is in the process of bringing out an 'economic bible' in Paris. Destrueum et aedificabo. The first part, or so he says, was set forth in the Philosophie de la misère. The second he is about to 'reveal'. I have seen a recent piece by one of Proudhon's disciples: De la Réforme des banques by Alfred Darimon, 1856."

Destrueum et aedificabo - I shall destroy in order to rebuild. But in the event there would be little to destroy.
What Marx refers to here as an "economic bible" was none other than the pamphlet The Manual of a Stock Exchange Speculator which Proudhon published in order to document, with all his polemical qualities as a moralist, the bad habits of the world of French finance. A pamphlet, precisely, and a success within its own terms, although its lack of theoretical ambitions made it an unsuitable target for a reconstructional critique. In the event, Marx found it more logical to set his sights on the modest Darimon. However, the fact that Proudhon laid such emphasis on the evils of speculation led Marx, in the articles on crisis which we shall be examining, to frame them as a critique of the critics of speculation - in other words he aimed to show that speculation was a superficial, marginal and formal aspect, compared to the real mechanisms of crisis. It also led him to compete with Proudhon in providing technical explanations of Stock Exchange matters, and of the world of finance in general.

In the introduction to the third edition of his pamphlet in December 1856 (the first two had been published anonymously), Proudhon had written that speculation represented the fourth among the general principles of wealth - after labour, capital and trade; it "creates from nothing", it "is the essential faculty of economy"; it "makes laws", while labour, capital and trade "carry
them out”. “Politics,” Proudhon adds, "is a variety of speculation, and as such a variety of production." But while speculation has this power of inventiveness, it is at the same time also a gamble and a search for the "easy life"; as such it "is the art of getting rich without work, without capital, without trade, and without genius, the secret of appropriating to oneself public funds or private funds without giving anything equivalent in exchange; it is the cancer of production, the plague of society and of states." The Stock Exchange is portrayed as the temple of speculation: "It comes before education, the academy, the theatre, political assemblies, congress, before the army, before justice and the church... It is there that our modern reformers are going to have to go in order to instruct themselves, and to learn their trade as revolutionaries..." This was not simply a question of literary emphasis; Proudhon was here mistaking the form for the substance, even if his analysis of Stock Exchange techniques and of the modus operandi of the financial principles (particularly the Bank of France and the Crédit Mobilier) was pursued with technical skill and penetrating lucidity.

The year that had just begun brought with it the usual difficulties, but now Marx's problems were even more acute. On 20 January 1857 he wrote to Engels: "Dear
Engels, I am thoroughly down on my luck. For approximately three weeks now, Dana is sending me the daily Tribune, obviously with the intention of only showing me that they no longer print anything of mine. The Tribune, in exceedingly poor and insipid leaders, is moreover adopting a view almost diametrically opposed to all that I write [...] So I am completely stuck in the sand, in a house on which I have used my small amounts of money and wherein it is impossible to piss through from day to day, as in Dean Street, without prospects and with a growing family. I absolutely don't know where to begin, and am in fact in a more desperate situation than I was five years ago. I believed I had already swallowed the quintessence of shit. Mais non. Moreover, the worst of it is that the crisis is not temporary. I don't know how I can disentangle myself from it." This bitter letter arrived "like a bolt from the blue" for Engels. The main problem was Marx's relations with the NYDT. It looked as if they were wanting to force Marx to take the initiative of breaking off relations. Engels advised caution, and at the same time sent him five pounds. ("I only wish you had told me about the business a fortnight earlier. For my Christmas present my old man gave me the money to buy a horse, and, as there was a good one going, I bought it last week.") In his reply, on 23 January 1857, Marx writes: "The Tribune probably imagines that,
now they have turned me out, I shall resign myself to abandoning the American camp altogether. The prospect of their 'military' and 'financial' monopoly going over to another paper is hardly likely to please them. Accordingly I have today sent them a 'financial' piece [...] I shall postpone any outright rupture until I find out whether I can fix anything up elsewhere in New York. If I cannot, and the Tribune, for its part, does not change its attitude, then the break will have to be made, of course. But in a sordid contest like this I believe that it is important to gain time."

On more than one occasion in his letters during these months Marx formulates the suspicion that the behaviour of the editors of the New York Daily Tribune was influenced by the hand of the Russian embassy in Washington, and that Russian agents had directly contributed to his being forced out. However these suspicions, instead of leading him to give up, drove him to persevere. Finally, in a letter of 24 March 1857, he announces that he has arrived at an agreement with the Tribune: he will be paid for one article per week, whether or not it is published; he might send a second article at his own risk, but would be paid for it only in the event of publication: "Thus they are in effect cutting me down by one half. However, I shall agree to it, and must agree to
it. Also, if things in England take the course I think they will, it won't be long before my income reaches its former level again."

What were the new facts of the English political scene? Prime Minister Palmerston was preparing to carry out a Bonaparte-style operation; in practice, a coalition cabinet within which his personal dictatorship would be assured.

Marx's attention shifts from France to England, and this was not solely because of the similarity in the political conditions of the two countries - the gradual undermining of parliamentary representation and the party system, and the shift from a period of transition to the phase of heavy industry, of the unified and centralised despotism of capitalism. His shift of focus was particularly due to the fact that the English situation allowed him to view the crisis from a different perspective, from within a different system of productive forces. The fact that Palmerston's government no longer enjoyed a majority in Parliament, and the decision to hold elections, gave Marx a chance to examine the possibilities of a working-class response which might produce revolutionary results.

On more than one occasion in his letters to Engels he had stated that the big difference with the crisis of 1847-48
would be that England would also be drawn into the revolutionary upheaval, that the English would "no longer be able to stand at the window", that the "balanced English production" would itself be hit by a crisis of overproduction. The closeness of his relationship with Engels becomes crucial; what Marx wants to follow in precise detail is the development of the crisis in the cotton districts, of which Manchester was the capital, in the heart of the great capitalist factory. And it is with a theoretician's eagerness and curiosity that he follows the battle between the candidates supporting Palmerston and those of the old free trade league for the abolition of grain tariffs. In appearance it was a struggle between, on the one hand, the entrepreneurial class which had initiated the industrial lift-off and which had been instrumental in the historical break with the agrarian bourgeoisie, and, on the other, the government of social capital, the forces representing the despotism of big industry. The defeat of the old free-traders precisely in the cotton districts which had been their stronghold was certainly not seen by Marx as a return to reaction; rather, he saw it as a confirmation of the leap forward that had been achieved by capital as a whole. Once again, the capitalism which he confronts in the year in which he writes the Grundrisse is not that of free-trade competition, of the Ricardian bourgeoisie and of the
value of labour, but capital as an all-embracing social entity, as synthesis and governing of its own internal contradictions - the capital of relative surplus value, of big machinery, of urban ghettos and of stagnation. Engels' letters on the electoral defeat of the likes of Cobden are enthusiastic:

"This time 'Philistia' was tremendously divided. The vast majority of the bourgeoisie, a small majority of the lower-middle class, against Bright and Gibson. Quakers and Catholics for Bright to a man; the Greeks likewise; the established Germans against him. A drunken anti-Bright man shouted: 'We won't have home policy, we want foreign policy.' What the rationale of the local elections more or less amounts to is: To hell with all questions of reform and class matters. After all, we philistines form the majority of voters, and that's that. The clamour against the aristocracy etc is tedious and produces no tangible result... We've got Free Trade and as much bourgeois social reform as we require. We're flourishing like mad, especially since Pam reduced war income tax. So let's all foregather on territory where we are all equal, and let's be Englishmen, John Bull, under the leadership of the Truly British Minister Pam. Such is the present mood of the majority of philistines."
Marx pursues the same arguments in his three articles on the English situation, published on 9, 25 and 31 March in the NYDT.

Palmerston's interventionist policy in China, in Persia, and with the Naples expedition, was carrying the country to disaster. The consumption of tea, sugar and other foodstuffs had dropped dramatically, while the consumption of alcohol had increased over the recent period and thousands of the unemployed were seeking refuge in the hospices. The big bourgeoisie and the aristocracy, weighed down by the war tax on income, were leaving the battle against taxes to be conducted by the petty bourgeoisie, which was particularly badly affected by the increase in prices. Spurred by a vote of no confidence in the government's policies in China, Palmerston dissolved Parliament and called elections. He was counting on the direct support of the big opium and tea merchants, but his electoral tactic was to follow Napoleon's model in building a political consensus with himself as the figurehead. In his article of 17 April 1857, Marx gives an exemplary interpretation of the conduct of the election. First, who were the contending parties? Palmerston, the diplomatic viscount, "the trumpet of national glory... concentrates in his person all the usurpations of the British oligarchy... he deriving his
strength from the decay of parties." Bright and Cobden, the parvenu demagogues, "the organ of industrial interests, representing all the vitality of the British middle classes... they owing their strength to the class struggle". The problem, thus, is to analyse the relationship between the industrial bourgeoisie and those who, at first sight, would have been its proper representatives. Why was it that they didn't vote for them, why was it that they preferred to throw themselves into the arms of an old Tory? Because what emerges - within the industrial bourgeoisie - is above all a fear of the workers; the defeat of Bright and Cobden functioned as an exorcism of the Jacobin spectre. The elections therefore expressed a class content, precisely in what had been left unstated. However, they had not defeated the working class; in fact, according to Marx, they had eliminated the main obstruction which stood in the way of the construction of a new working-class political party, or rather of a new revolutionary movement.

This judgement by Marx, apparently so paradoxical, has to be related back to the relations between the movement for parliamentary reform - in which the old leaders of the League had been active - and the last remaining exponents of the declining chartist movement.
Both in Glasgow and in Leeds, both in the working-class areas of Scotland and in the old textile centres, the alliance between the old radicals and the old Chartists had been under way now for some time. Their common interests included universal suffrage, parliamentary reform, the revision of the Poor Laws, the abolition of the death penalty, and also solidarity with the Italian and Polish independence movements. Thus the times of the clashes between O'Connor and Cobden were long distant; bourgeois radicals had extended their hegemony over what remained of the political movement of the British workers. This may have been entirely insufficient to guarantee them a working-class representativity, but it was sufficient to frighten the bourgeoisie. Marx's judgement has to be read within the framework of his long-standing polemic on the absence of a party for the English working class: the elimination of Bright and Cobden and their Chartist allies removed any possible misunderstanding, any further possible mortgage on the development of the political movement of the English workers. It was not a question only of a proposed programme, a reformist line, to be fought against, but rather of an institutional alternative. How was one to explain the vote of no confidence which had brought down the Palmerston government and forced it to call new elections? It was due to the rebellion of the old
parties - of which Cobden had made himself a spokesman - for the fact that Parliament had been shut out of all the major decisions on foreign policy (intervention in Persia and in China) taken by Palmerston. Thus if there was a positive side to Palmerston's victory it was the defeat of the representativeness of the old political system, which had expressed divisions internal to the bourgeoisie which now no longer existed, partly because the interests of rentiers and industrialists were no longer in conflict, but more particularly because the big financial bourgeoisie, integrated with the old oligarchies, had unified the command of the social stratum which could lay claim to the work of others. This is why, in his article of 6 April, Marx went to some lengths to draw a parallel, at times forced, between Pam and Bonaparte ("One saved France from a social crisis; the other wants to save England from a continental crisis.")

Marx's success in eliciting the class content from an election in which the principal issues being discussed were foreign policy and constitutional guarantees, eases the transition to two subsequent articles which were to appear as appendices to Engels' The Condition of the Working Class in England.
If one reads Kuczinsky, Landes and Hobsbawm, it seems to me that there is a remarkable homogeneity in the judgements which historians have given regarding the class composition of Britain at that time. Leaving aside the constant complaint that it is hard to find reliable or at least significant general data prior to 1860 (on employment levels, wages, contracts, intensity of work etc) the class situation appears to be characterised by a fairly precise composition: "The immense mass of semi-proletarians, the poor with occasional jobs, hired irregularly, homeworkers or helpers in small workshops, the world of poverty which comes out of the pages of Mayhew in London Labour and the London Poor in the period 1850-60... was for practical reasons beyond the reach of the trade unions."

It was within this proletarian context that the big factories of the industrial districts functioned, and within them we find once again a working-class composition that is very similar to that of the mass worker, particularly in the textile sector, where female employment levels tend to rise progressively (according to Kuczinsky from 635,000 in 1851 to 726,000 in 1871), or in the clothing sector (from 491,000 to 594,000 in 1871). Or in the new sectors, characterised by unskilled and general manual labour, such as rail transport, steel,
or in others where the enormous increase in production and the absence of mechanisation to replace human labour carried employment to incredible levels, as among the coal miners, who, by the end of the century, would number more than a million. But in the "artisanal" sectors too, in a sense by long-standing tradition, there were situations and behaviours which were characteristic of the mass worker. In particular that of labour mobility from zones of crisis to zones of development. The spread, within the craft unions, of the travel chit and the migration indemnity, (which, as Hobsbawm notes in his essay, suggest a generalised practice and a mobility of labour far greater than one might suppose from looking at the statistics) went hand in hand with a greater awareness of the precariousness of work: "The experience of the decade 1840-50 brought about an important change: the spread of unemployment benefits. The reasons were clearly of non-financial origin, inasmuch as the cost of the migration indemnity per person was not high, and was generally paid by means of local collections and private hospitality rather than via established payments." This innovation, and others, "constitute a recognition of the industrial cycle; they mark an important phase in the education of the working class; it was the recognition of the fact that the capitalist economy was not something which could be avoided, but
which had to be confronted with the understanding of the specific laws of its movement."

"Above" these worker-proletarian strata stood the "labour aristocracy", which, as has been noted, had an extremely strong bargaining power and exercised a particular hegemony over the construction of the trade union movement, although precisely in this period of transition it was in a clear minority. On the other hand, at the other extreme of working-class stratification, we still find a very large number of children (according to Kuczinsky as much as 10% of the industrial workforce) working in sectors such as textiles which were characterised for the most part by small-to-medium-sized companies.

This is the period of transition from the "textile age" to the age dominated by coal and steel. In 1856 the Bessemer process was discovered, followed a few years later by the Siemens-Martin process. The new industrial regions and the new British factory-cities begin to grow up around the steel sector (Middlesborough); the percentage of factory workers in relation to the rest of the active population is higher in Scotland than in England. Clearly this leads to a big increase in the more skilled jobs, and to increased levels of skill, but there is also a relatively greater increase in the number of
unskilled workers. In some sectors, in shipbuilding, for example, the transition from wooden hulls to metal hulls brings a massive destruction of artisanal trades. The other big phenomenon of the reduction of artisanal skills is found in the decline of domestic industry.

The crisis of 1857 took unemployment to the highest levels of the decade 1850-60, reaching almost 12% by 1858.

It is obvious why this state of dis-aggregation of the class led bourgeois historiography to call this Britain's "Golden Age". Following a classic Leninist schema, Kuczinsky maintains that the massive export of capital was the most significant fact in the strengthening of the bourgeoisie and the exploitation of the working class. At the same time, between 1849 and 1858, English overseas trade increased by 66%. Palmerston's policy of colonial intervention would be a logical corollary of this expansive force of British capital. But what is the motor of this development? Landes correctly identifies it in the "finance revolution", in other words in the incredible expansion of credit and in particular of that favouring the setting-up of new industrial companies. The growth of credit, and thus the increased circulation of paper money first, and then fiduciary money, is thus not linked to the rate of accumulation of metal reserves by the Bank of
England, in the wake of the imports of Californian and Australian gold; reserves rose from £8.3 million sterling in October 1847 to £21.8 million in the third quarter of 1852.

The fact that interest rates remained low for the whole decade resulted not from the policies of the commercial banks, but from the interest rates set by the central bank ("and when the central banks were ready to take paper, everyone was ready to take paper"). The volume of credit and the mass of money in circulation was extended; what counted now was not so much the price of money as its availability. Therefore, going against the Ricardian theories which had inspired the Peel Act of 1844, the policy pursued by the command staff of British capital was that of allowing an unlimited speculation and appropriation of the labour of others, both at home and abroad. "Trade and industrial development of this period (1840-80) is to a large extent marked by three large credit booms: 1852-7, 1861-6, 1869-73." However the consequences were disastrous at the level of inflation, leading to a depreciation of wages and thereby worsening the conditions of crisis and poverty of the proletariat and further locking them into conditions of precarious industrial labour. Finally, the growing demand for credit drove interest rates upwards, and the weaker
employers, the more fragile companies, began to wobble. Then, when monetary panic led to a run on gold and a withdrawing of savings, this triggered a collapse of many commercial speculators. But the spread of credit, the diffusion of operations which at one time were the privilege of an inner elite, ended up creating - as in France - a propensity to investment which even led to forms of working-class shareholding, to the setting-up of cooperatives and limited companies which developed a major role in certain sectors (for example, the "Oldham limited companies" in the textile sector).

The dangers of an economic co-optation of certain sections of the working class, the increasing tendency shown by the Chartists to dedicate themselves to cooperative enterprises, the spread of the ideology of profit within the petty bourgeoisie and the privileged working-cass strata, posed an immediate problem for Marx's battle for communism. Kuczinsky notes, correctly, that in 1851 Marx and Engels were counting on a crisis in the short term, and that by 1856-57 they were already becoming more cautious. Their objective was to organise an assault on the economic illusions of the proletariat, be they the bankers' utopias or the utopias of co-operatives.

As in Capital, the source which Marx uses to examine the condition of the working class and its level of exploitation
is the reports of the Factory Inspectors. The statistics were relatively up-to-date, dating from October 1856. Shortly prior to its dissolution, the British parliament had passed two laws with a reformist flavour: the first concerned protection in the event of industrial accidents due to machinery; the second set up arbitration bodies to deal with conflicts between employers and workers - particularly as regards the application of safety regulations. But the inspectors themselves noted that the first law only protected workers in relation to their own machines, not workers who were transferred temporarily to other machines (and thus, not being familiar with them, were more liable to have accidents). Working-class mobility, which was already an instrument of exploitation, enjoyed none of the protections accorded by the bourgeois state. Further, the inspectors also noted that, for the proposed membership of the arbitration tribunals, the second law recommended engineers and machine-makers - in other words the textile employers' best suppliers. What Marx found particularly interesting in the factory inspectors' reports was the systems of intensification of exploitation, of extraction of absolute surplus value. These consisted essentially of extending the working day of young workers, women and children - by allowing work to be started before six in the morning and continued beyond
six in the evening, and taking away five minutes at the start and end of lunch breaks. While the relationship between installed motive power and working-class employment levels remained constant, the relation between the number of machines and employment levels increased enormously. Not only were there now more machines per worker, but there was also a greater overall velocity of machinery. The results were alarming in terms of accidents at work: in the six months from April to October 1856, the number of industrial accidents registered by the Factory Inspectors in the Lancashire textile industry was "about ten times the number lost by the British Navy during its glorious Canton massacre," as Marx notes.

The inspectors also noted the variety of systems which textile employers were setting up in order to escape inspections, including providing their factories with multiple exit doors so that workers could be evacuated in a hurry if the inspector happened to turn up at the wrong moment, or suddenly turning the gas off, leaving the inspector poking around in the dark among machines that were unfamiliar to him, or sending "scouts" to railway stations and coach stations, in order to warn when an inspector was about to arrive. The article concludes: "The antagonism between the mill lords and
the operatives is rapidly approaching the point of actual social war", and "the industrial slavedrivers of Lancashire need a foreign policy capable of distracting attention from the problems of domestic policy." The term "surplus labour" had been used by the inspectors themselves, as Marx notes punctiliously. What interests us is not so much the re-descent from the heavens of money into the hell of the factory - which Marx performs with these two articles - but the fact that the theme of the intensification of exploitation is directly related to crisis and becomes part and parcel of his analysis of the crisis. From over-production to surplus labour. One recalls immediately the section on crisis in the Grundrisse, in which he speaks of the intrinsic necessity of the accumulation mechanism in reducing the amount of necessary labour and of increasing the amount of surplus labour - posing this necessity as the real origin of the crisis. Each employer sees only other employers' workers as consumers, not his own; each sees his own workforce as a mass from which to extract a maximum of surplus labour. Mechanisms of surplus value and mechanisms of crisis are thus indivisibly related.

In his second article, of 28 April 1857, Marx quotes from the Factory Inspectors' comments on a series of statistical tables developed from a questionnaire
distributed to textile industry employers who were using steam or water-power as their power source. They note the average increase in the number of factories in the period 1838-1850, and the period from 1850 to 1856, particularly in the silk industry, which sees an increase of 66% compared with 14.2% in cotton. On the other hand there is total stagnation in the wool sector. This indicates more the process of concentration that was taking place in the cotton sector than anything else. What is interesting, however, is the data on regional differentiation of growth, where one sees on the one hand a strengthening of the traditional regions of Lancashire and Yorkshire, where the big factories are being set up, and the weakening of a whole series of textile counties in the South (Wiltshire, Dorset, Somerset, Gloucestershire) where, in addition to an absolute decline in the number of factories, there is a stagnation in the process of concentration. Polar attractions can thus be observed both in terms of capital and at the territorial level. Finally, his statistics on employment levels are interesting. The percentage of child labour (children below the age of 13) shows a continuous increase from 1838 onwards, and reaches 6.6% in 1856, while that of young workers between the ages of 13 and 18 actually fell slightly. Employment levels of women (aged 13 and upwards) increased: from 55.2% in 1838 to
57% in 1856. Adult male levels (18 years and upwards) fell from 26.5% of the workforce in 1850 to 25.8% in 1856.

The insistence with which Marx underlines the importance of child labour and women's labour, his very decision to embark on an isolated analysis of the textile sector -- leaving aside the fact that he was prompted by the availability of statistical material - confirms the hypothesis that the model of the big factory which he seeks to take on is that in which there is the maximum wage compression, in which the wage really is a minimum subsistence level, in which "slavery" is the determining element. It is no accident that he ends his article by noting that 1844 saw the passing of the law which permitted the employment of children of eight years and over, whereas the previous legislation had forbidden children below the age of nine from working in factories.

But the descent into the hell of the factory was short-lived. Already on 23 April 1857 he is writing to Engels that he had heard from an old Stock Exchange buff that a crisis of such severity had not been seen for forty years. He adds: "I haven't yet got round to it, but some time I really must investigate the relation between the rate of exchange and bullion. The role played by money as such
in determining the bank rate and the money market is something striking and quite antagonistic to all laws of political economy. Worthy of note are the two newly published volumes of Tooke's History of Prices. A pity the old man's head-on collision with the 'currency principle' chaps should lead him to give such a one-sided turn to all his disquisitions."

He is referring to the final two volumes of Thomas Tooke's History of Prices, to be precise those covering the period 1848 to 1856, which were written in collaboration with his pupil William Newmarch. By Marx's own admission, they are a crucial work as regards the transcendence of the Ricardian theory of money; seen in the context of Marx's intellectual biography, they are probably the decisive work which proved on the one hand the falsity of Ricardo's theory, and on the other hand the incongruousness of the measures taken by the English state with the Peel Act in 1844 - precisely in the application of that theory. In fact, in Towards a Critique of Political Economy he was to say: "Prices are thus not high or low because more or less money is circulating, but more or less money circulates because prices are high or low. This is one of the most important laws of economics, whose detailed demonstration on the basis
of the history of prices constitutes perhaps the only merit of post-Ricardian English economics."

Here the circle really does close, and the links of the chain are welded together. The data produced by Tooke demonstrated amply that a whole series of laws inherent to Ricardian theory had been disproved by economic reality. Together with the Reports on the Bank Acts, in other words the reports of the Parliamentary Commission of Inquiry into the crisis of 1857-58, which we find amply represented in the materials gathered by Engels for Book III of Capital, the history of prices offered raw material for finally making an explicit criticism of Ricardo. The final preparatory work for the writing of the Grundrisse (and then Towards a Critique of Political Economy) was thus completed. Marx reads the two final volumes of Tooke in April; the Parliamentary Commission begins its activities in July; the writing of the Grundrisse begins in November. However, in addition to this historical material, the crisis itself provided a wealth of insights.

The articles in the Economist, particularly those of its editor James Wilson - a man very close to the "banking school", later to become a member of the commission of inquiry into the banking laws (which heard submissions from Lord Overstone, the force behind the Peel Act, and
from Tooke, Newmarch and others) - aimed to show how the relationship between the drain of gold, exchange rate mechanisms and variations in the interest rate were entirely at odds with the laws expressed by Ricardo, and the absolute unsuitability of the monetary instruments which the British state had installed in order to govern liquidity, in other words to control the economic process and prevent crises.

These criticisms of Ricardo were a demonstration of capital's inability to govern the crisis; given that they suggest an element of weakness of the state, they thus supply Marx with powerful arguments for his critique of the capitalist state. The introduction to a discussion of the state which we saw so clearly expressed in the articles on the Crédit Mobilier is here enriched and consolidated. Naturally the discussion goes far beyond the unsuitability of the government's technical instruments. While Marx strips bare the tautologies in Ricardo, this does not imply that he accepts the positions of the "banking school", where "there is an undifferentiated confusion of the differences between the means of circulation as money, as money capital in general, and as capital productive of interest." They do, however, represent an advance in bourgeois science, a greater critical awareness of monetary conditions, and
are thus a prelude to the creation of more refined technical instruments in order to govern the monetary process and eliminate the more destructive aspects of crisis. Thus we can say that in this instance too 1857 constitutes a leap forward in the science and political power of the bourgeoisie.

In what follows we have the fundamental points of Ricardian theory as Marx outlines them, and the substance of the Banking Law of 1844 (which was completed with the law on Scottish banking in the subsequent year). "According to Ricardo the value of metallic money is determined by the labour-time incorporated in it, but only as long as the quantity of money stands in correct relationship to the amount and price of commodities to be exchanged. If the quantity of money rises above this ratio, its value falls and commodity-prices rise; if it falls below the correct ratio, its value rises and commodity prices fall - assuming all other conditions equal. In the first case, the country in which this excess gold exists will export the gold whose value had depreciated and import commodities; in the second case, gold will flow to those countries in which it is assessed above its value, while the under-assessed commodities flow from these countries to other markets, where they command normal prices. [...] Although bank-
notes are convertible, and therefore their real value corresponds to their nominal value, the aggregate currency consisting of metal and of convertible notes may appreciate or depreciate in accordance with its aggregate quantity, for reasons already stated, rising above or falling below the level determined by the exchange-value of circulating commodities and the metallic value of gold..."

On the basis of these premises, whereby only gold and banknotes constituted money, the banking laws of 1844-5 imposed on the issuing house, the Bank of England, an obligation to maintain metallic reserves which were not to fall below a given percentage of the amount of banknotes in circulation. The relation between the amount of gold and banknotes in circulation and the amount of gold reserves was fixed by a legislative standard which represented a quantitative margin within which control of monetary liquidity would be possible. The 1844 Bank Act divided the Bank of England into an issue department and a banking department, of which the former was specifically enabled as regards control over liquidity, and the latter was empowered to deal with relations with other banks - where, however, the problem then re-presented itself. The bank thus came to have two distinct functions. However, while on the one
hand a corrective was introduced to the rigid ratio laid down by the law and the government was prepared to let things be guided by the exigencies of credit (it is worth noting that the above-mentioned statistics cited by Landes demonstrate how despite the Peel Act, the mass of money in circulation and the gold reserve never once observed the proportions required by law), on the other, a series of contradictions arose precisely with the principles of this law, which Marx was to highlight in the preparatory materials for Book III of Capital.

If we read these materials closely, together with the preceding pages of Towards a Critique of Political Economy, we see that the first point on which Marx engages Ricardo is precisely in the determination of gold as a world money and thus as a means of international payments. Tooke's researches had shown clearly how the outflow of gold had not in fact caused substantial variations in the prices of commodities, precisely because the gold exported functioned as a means of international payment inasmuch as it was gold, money as raw material. What was affected by the outflow of gold was thus variations in the price of money, in other words the rate of interest, and not the prices of commodities. It had an effect on exchange rates and thus proved false
Ricardo's assumption that money had the same value in all countries.

Marx describes the instigators of the banking laws of 1844-5 as "meteorologists of economics". A large part of the contradictions into which they had fallen could only be clarified by confronting the problem of credit: "Their shameful fiasco, both theoretical and practical, after experiments at the highest national level, can be illustrated only in the theory of credit." Marx thus accepts, as the first step in his critique of Ricardo and Lord Overstone, the position of the "banking school", whereby not only money and banknotes were to be considered as currency, but also the use of banking deposits, shares and cheques. For which reason, since money as a means of circulation is essentially credit money, it was impossible to think of regulating its mass with legislative provisions. Did this laissez faire extremism represent a step forward or a step back in relation to Lord Overstone's centralising tendencies? Marx's interventions in the New York Daily Tribune tend to demonstrate that while the vision of money that characterised the "banking school" was historically more progressive than the Ricardian view, nonetheless it was wrong to think that it represented a rejection of the centralisation of capital's political command. And it was
precisely the organisation of credit that created this command, no longer as equilibrium but as a forcing of the process, no longer according to the idyllic image of things somehow finding their own level, but according to the fierce process of changes in the organic composition of capital. Ricardian theory expressed a requirement for stability, whereas that of Tooke, Péreire and Wilson expressed a necessity of breaking with the past. Something quite other than laissez faire, therefore, as seemed to have been expressed in the thesis that a control of liquidity was impossible to bring about! That thesis expressed, rather, a need to break the barriers of equilibrium - of the old equilibrium. The onward march of exploitation had to trample Ricardo underfoot and leave him behind. The confrontation with the "banking school" and with all the problems of credit money was to be taken up again at a higher level. What was at stake, at the political level, was hegemony over the process of crisis. Either the science of capital would have to be successful in forging instruments in order to manoeuvre crisis and where necessary to determine it (i.e. longer to eliminate it), or the working class movement would succeed in transforming it into an opportunity for subversive organisation.
The critique of the theories of Tooke and Fullerton on credit money hinged essentially on the confusion between circulation and capital or, rather, on the confused distinction between money as a means of circulation and money as capital. According to Marx, money is a means of circulation, is money in the proper sense, when it functions as expenditure of revenue. It is capital when it is exchanged for means of production and labour power. But in both cases it functions as a means of acquisition and as a means of payment: in other words, it is an agent of circulation. Thus it is erroneous to see circulation as distinct from capital. If anything, the distinction is between the money form of revenue and the money form of capital. But whereas what counts in the first case is the contracts of buying and selling, in the second case - where capitalists and workers confront each other face to face -- it is not the contract of acquisition that counts, but the fact that the acquisition is completed by means of money, which here appears as monetary capital waiting to be transformed into productive capital (whereas in the first case it is waiting to be transformed into commodity). A society in which the money form of revenue operates can be any mercantile society; a society in which the money form of capital operates can only be capitalist society, in other words a society where already given social relations exist,
where the person who buys labour power must already own means of production. The problem is to know whether it is possible to apply the same laws of circulation to all these functions of money. Now, where money presents itself as an expenditure of revenue, its velocity of circulation is determined by consumption; where it presents itself as money capital it is determined by the rhythm of the process of reproduction; where it presents itself as transfer of capital -- in other words from capitalist to capitalist -- it is determined by credit. Each of these spheres is determined by variables which are not proper to the other spheres. The various determinations of money are articulated in different institutional compartments, each of which has its own organisation. The contemporaneous functioning of this plurality of mechanisms is what brings about crisis. But this entering-into-contradiction of autonomous spheres is only one aspect of the problem. The fundamental difference between vulgar economists and Marx on this count lies in the view of the cycle as a variable which has a powerful conditioning effect on the state of circulation.

On the problem of liquidity Marx had already written a first article for the New York Daily Tribune in 1853 (24 September): "Peel's Bank Act of 1844 proceeds on the assumption that the metallic circulation is the normal
one; that the amount of the currency regulates prices; that in the case of a purely metallic circulation, the currency would expand, with a favourable exchange and with an influx of bullion, while it would be concentrated by an adverse exchange and a drain of bullion; that a circulation of bank notes has exactly to initiate the metallic circulation; that accordingly there had to be a degree of correspondence between the variations in the amount of bullion in the vaults of the Bank of England and the variations in the quantities of its notes circulating among the public; that the issue of notes must be expanded with a favourable and contracted with an unfavourable exchange; lastly that the Bank of England had control over the amount of its notes in circulation."

But also on the basis of purely metallic circulation, the sum of the means of circulation is not able to determine prices, just as it would not be in a position to determine the extent of trade and industrial transactions; but prices do determine the amount of money in circulation. Unfavourable exchange rates and a drain of bullion would not diminish even a purely metallic circulation because they do not influence the amount of currency in circulation, but the amount of currency held in reserve in the form of deposits. On the other hand, a favourable exchange and an influx of bullion would increase not the
currency payment in circulation, but the currency deposited in banks or hoarded by private individuals. Since the Peel Act starts from a false conception of metallic circulation, naturally it arrives at a false imitation of it by paper circulation. "The very idea that a bank of issue has a control over the amount of its outstanding notes, is utterly preposterous." A bank issuing convertible notes or advancing notes generally has neither the power of augmenting the natural level of circulation nor the power to cripple it by one single note. A bank may certainly issue notes to any amount its customers will accept; but, if not wanted for circulation, the notes will be returned to it in the form of deposits, or in exchange for metal itself. On the other hand, if a bank intends forcibly to contract its issues, its deposits would be withdrawn to the amount needed for filling up the vacuum created in the circulation. "Thus a bank has no power whatever over the quantity of circulation, whatever may be its power for the abuse of other people's capital." He returned to the same theme in an article in the Neue Oder Zeitung of 22 May 1855, where he extends to the banking problems what he had said in a preceding article concerning production: "The crisis is permanent; the government is only temporary."
On 21 November 1857, at the height of the crisis, Marx resumed in the New York Daily Tribune the debate that he had begun four years previously. Now his technical instruments of analysis were far more refined, and the wealth of material which the crisis had brought into the open enabled him to deepen his analysis.

However, before re-reading this group of articles from November-December 1857, I shall look at four articles published between June and September. Once again the protagonist is the Crédit Mobilier as capital productive of interest. Marx demonstrates the social form and the private nature of its operations. We find ourselves here at the height of the financial crisis and a fairly harsh polemic is under way between the Crédit Mobilier and the Bank of France. Péreire had offered to buy the public debt held by the Bank of France, and he had presented this offer as an act of patriotic self-abnegation. In actual fact, if the bank had thrown these shares onto the open market it would have lowered the value of the railway shares owned by the Crédit. So here we have a patriotic operation unmasked as private interest. Péreire, furthermore, had been forbidden to issue six hundred million francs-worth of "trump cards", just as two years previously he had been banned from issuing two hundred millions-worth of fiduciary money: "The Crédit
calls this issue augmenting its capital, where the common people were more likely to call it augmenting its debts." The Crédit boasts of having replaced private industry with industrial joint-stock companies. But the fact that it had invested forty million francs in state funds in 1856 (of the sixty million francs which form the capital of the company) and the fact that it had used the sums provided to it by credit to concede "continuations' in rentes and railway shares on the settling days of the Stock Exchange", that it had speculated on the capital gains, demonstrates once again that the Crédit had turned over a good part of the national capital "from productive industry to unproductive gambling".

Does this highlighting of the Crédit's non-productive and speculative characteristics, contrasting with the revolutionary and innovative view given in the first group of articles in 1858, perhaps show the influence of Proudhon's Manual? In the pages that he dedicates to the Péreire bank, Proudhon, who was more concerned with problems of value than with the political function of the institution, had shown how the Crédit, with a capital of sixty million francs, had issued bonds to the tune of six hundred million francs, guaranteed by an equal sum employed in subscriptions of public bills (treasury bonds, etc) or of company shares. But since shares are subjected
to depreciation, they would not provide effective guarantees. Unlike the circulating banks which discount commercial effects of a given value and are guarantees of a transaction - Proudhon concluded - the Crédit Mobilier is not in a position to supply guarantees of value, and thus it "cheats" its clients. Proudhon did not draw the conclusions which Marx had indicated - that the Crédit, by virtue precisely of that structure, was an institution which could prosper only in times of boom, and which would collapse in times of monetary panic. He had not drawn them because he lacked an overall perception of the cycle. His vision of the speculative nature of the Crédit Mobilier was therefore static and moralistic, and to the extent that it influenced Marx, it was in the sense of making possible a further deepening of his analysis.

His analysis at this point was entirely focused on the relationship between money and credit, and therefore on the relations between the Bank of France and the Crédit Mobilier, to which he dedicates the third of the articles in question, the one published in the New York Daily Tribune on 20 June 1857. The director of the Bank of France, the Conte d'Argout, had resigned, having been in charge since the times of Louis Philippe (which meant that he had lasted through the revolution of 1848 and
the Bonapartist coup d'état. His period of office had been identified with a gradual strengthening of the Bank of France's monopoly as the sole issuing house. If he resigned it meant that the regime's days were numbered; the reason given for his resignation was the new law regulating the Bank of France, which renewed its privilege for a limited period of time and made large concessions to the "bankocracy" - suggesting that the regime no longer had the power to control it, but still needed it.

The conflict between monetary "schools" here becomes openly a conflict of power between private interest and a central command capable of representing it and mediating its interests with those of the social base that supports the regime. It is a crisis in the process of the socialisation of capital, it is a crisis of the state. As he was to say in an article for the New York Daily Tribune, 27 July 1857, it was the symptom of an imminent revolution: "...revolutions must receive their tickets of admission to the official stage from the ruling classes themselves." ... "The name under which a revolution is ushered in is never that borne on the banner on the day of triumph." "The British commercial revulsion seems to have worn throughout its immense development the three distinct forms of a pressure on the money and produce markets
of London and Liverpool, a bank panic in Scotland, and an industrial breakdown in the manufacturing districts." This was the start of the article which appeared in the New York Daily Tribune on 30 November 1857. The theoretical problem was how recompose the unity of the process of crisis, probing behind forms and appearances in order to discover the laws of capital's movement. The long analysis which Marx had made of the 1844 Peel Act in his preceding article obviously led into an analysis of the relationship between the world of commodities and money.

He had written in the Grundrisse: "Since the total sum of prices to be realised in circulation changes with the prices of the commodities and with the quantity of them thrown into circulation; and since, on the other side, the velocity of the medium of circulation is determined by circumstances independent of itself, it follows from this that the quantity of media of circulation must be capable of changing, or expanding and contracting - contraction and expansion of circulation." Here we have immediately a refutation of the possibility of a rigid control of liquidity, the uselessness of fixing rigidly percentage relations between gold and bank notes, and here we also see a prefiguration of modern "monetary manoeuvres", in other words, the necessity for capital to ride out
cyclical movements by alternately tightening and slackening controls on the expansion of liquidity. The Peel Act had therefore introduced new contradictions while attempting to eliminate others; in fact it had rather aggravated and accentuated contradictions in periods of crisis. Working-class theory in this instance lays bare the fragility of the science of capital. But this is only one aspect. The more important point was to establish correct relationships within the process of production and the process of circulation, the creation and realisation of value, the world of commodities and the world of money. By means of the determination of price, the world of circulation re-finds its subordinateness in relation to that of production. Thus the proper determination of crisis is not an excess of circulating money, but overproduction. However, since the movement of capital passes through phases which are posed as independent, as if each is detached from the one which precedes it, and since the division of labour requires a productive capital, a commercial capital, and a capital for the trading of money (as separate moments of industrial capital), the crisis shows itself in three different guises: in the trading capital of Liverpool, in the centres of the money trade in Scotland and London, and in the productive heartlands of Manchester. Three different figures of one single disproportion which present
themselves as three different moments of one single process; but this does not suffice. The different forms which the crisis assumes correspond to the different determinations of money and of the relationship between commodity and money. "Now, in this function, as pure medium of circulation, the specific role of money consists only of this circulation, which it brings about owing to the fact that its quantity, its amount, was fixed beforehand. The number of times in which it is itself contained in the commodities as a unit is determined beforehand by their prices, and as a medium of circulation it appears merely as a multiple of this predetermined unit. [...] Money as medium of circulation is only medium of circulation. The only attribute which is essential to it in order to serve in this capacity is the attribute of quantity, of amount, in which it circulates." However this determination, in which money is entirely bound by commodities, in which money figures as an equivalent, and in which it therefore undergoes the contractions and expansions of the production of commodities, enters into contradiction with other determinations of money - that in which it is one commodity among others, similarly subject to the law of supply and demand, or that in which money, as a world means of circulation, counts only for its material existence, like gold and silver, and is thus subjected to
the fortunes of international payments. The analysis of overproduction, of variations in interest rates, of the price of money, of the trade balance and the factors which determine it, are equally key for uncovering the different forms in which the crisis runs through the various determinations of money and its varying relationship with the commodity. The centralisation of capitalist command over the cycle may appear as an archaic constraint, as an institutional violence against society, but Marx identifies its logic in the unity of capital's process. Bonaparte's dictatorship - and Palmerston's too - thus become functional to the workings of capital, but at the same time they are a contradiction, a useless obstacle to the movement of capital. Thus, too, with the Peel Act. In the end the government suspended it: "The effect of the suspension must be one of comparative relief, as we have previously shown. It does away with an artificial stringency, which the Act adds to the natural stringency of the money market in times of commercial revulsion." The article continues: "In the vain hope of checking the rush of current which was sweeping all away, in the progress of the present crisis the Bank has five times raised its interest rate. On the 8th ult. the rate was advanced to 6 per cent, on the 12th to 7, on the 22nd to 8, on the 5th inst. to 9, and on the 9th to 10. The rapidity of this
movement offers a remarkable contrast to that which attended the crisis of 1847." A detailed comparative analysis with the preceding decades leads Marx to discover that, while for a long period interest rates had followed fluctuations of trade in a regular manner, being high in periods of crisis and low in periods of prosperity, in the three most recent years considered by him, despite the fact that there had been an abrupt rise, production and exchange had increased regularly. According to Marx this was made possible by the sudden availability of Californian and Australian gold and their transformation into reserve funds at the Bank of England. However, more importantly, this would demonstrate that the symptoms of crisis had been manifested more than two years previously, and that the crisis had only been artificially postponed and thereby rendered more serious. Now, the pressure on the money market and the simultaneous influx of American commodities had provoked a disastrous collapse of prices; but the Bank of England could have handled the difficulties were it not for the fact that simultaneously a monetary panic had broken out in Scotland. In order to assist banks of Scotland and Ireland, which were grounded principally in the savings of rural populations, the Bank of England transferred huge sums of sterling. But the English banknotes were rejected - the Scots wanted gold,
thereby demonstrating the opposite of what the supporters of the Peel Act had maintained: the owners of banknotes were in the same situation as deposit-holders. But the situation is equally dramatic in the field of production. ... "The truth is that the English have largely participated in speculations abroad, both on the Continent of Europe and in America, while at home their surplus capital has been mainly invested in factories, so that, more than ever before, the present convulsion bears the character of an industrial crisis and therefore strikes at the very roots of the national prosperity."

Finally the crisis touches real power, the real base of capitalist domination. But what appeared in theory to be the very roots of crisis - the fact that money had become independent of commodities, as had exchange in relation to production, and money-as-a-commodity in relation to the world of commodities, and means of payment from money, etc - turn out in fact to be further barriers preventing the processes of crisis from going to the heart of the relations of production, from rendering them really explicit, from transforming them into a basis for the subversion of the status quo. Theory as a simple rending of the veil which conceals the links between processes which have apparently become independent of each other is not yet sufficient, in itself, to provide
subversion with the legs on which it might walk. Theory is not yet the party. Needless to say. But this is not the main point I am making here, for the moment. The problem is more the limits which the antagonistic movement of living labour is able to pose in relation to capital, the extent to which the working-class is capable of driving the system into crisis simply by means of its movements in the factories. This problematic appears to be a thousand miles distant from Marx in 1857. But perhaps this is not in fact the case: "In a general crisis of overproduction, the contradiction is not between the different kinds of productive capital, but between industrial and loanable capital - between capital as directly involved in the production process and capital as money existing (relatively) outside of it."

Put baldly, this simple phrase would suffice to refute any notion that Marx theorised crisis as being due to a disproportion between the production-goods sector and the consumer-goods sector. The point is quite clear, the contradiction is between the production of surplus value and realisation via the mechanism of circulation, between power relations in the factory and capital's need to conceal them, enlarging enormously the sphere of circulation, creating a contrived system of circulation of capital. A headlong flight of capital which "forgets" the
slow pace, the daily struggle for the extortion of surplus labour. "The whole dispute as to whether overproduction is possible and necessary in capitalist production revolves around the point whether the process of the realisation of capital within production directly posits its realisation in circulation; whether its realisation posited in the production process is its real realisation. Or, putting it another way, it is question matter of knowing whether the blocking of surplus labour in the factory - in the real form in which it occurs, as a temporary blockage - is sufficient to arrest the process of realisation as a whole, or, vice versa, if the blockage of circulation due to speculative excesses, to capitalist "disorder", is sufficient to prevent the process of production; whether the working class's ability to organise against surplus labour - a rigidity of necessary labour - is in itself sufficient to bring about crisis in the system, or whether, on the other hand, the contradictions between commodity and money are sufficient to bring about crisis in the relationship, as a real factory relationship. Loan capital, or more in general, the process of realisation of capital, thus presents itself here as an attempt to smash the law of value, and, in this regard - precisely in the pages cited above - Marx underlines forcefully how "Ricardo and with him the whole school has never understood the reality of modern crises," precisely inasmuch as these crises derive not
from a disfunctioning of the law of value but from the failed capitalist attempt to break it and to suppress it. So, if we start at the other end of things, the working-class refusal of work confirms the law of value in antagonistic terms and enters into contradiction with capitalist attempts to conceal it, to "forget it". It is capital "recalled to its concept" which enters into crisis. And it responds by imposing new relations on the law of value, and a new organic composition on itself. But the shift to these new equilibria - and this is the conclusion of the section on crisis in the Grundrisse cited above - the victory of capital over its own contradictions, are admissable within a perspective in which the refusal of work was seen as a temporary moment of the working-class struggle, and in which the reduction of surplus labour - in the absolute terms of the length of the working day - was viewed as a slow, centuries-long process. But today, when the working-class struggle against direct exploitation has become a permanent, on-going phenomenon and proceeds at a far faster pace, is it possible and sufficient to continue seeing crisis only as "the symptom" of a "new level of productive forces"? And on the other hand is it possible to regard this long march against direct exploitation as in itself sufficient to bring about a crisis of power without running into the Ricardian error by which
the process of production is the process of real realisation?

The materials which Marx used for the writing of these two articles are to be found, somewhat enhanced, in the chapters of the third book of Capital where he deals with the relation between the average rate of profit and the rate of interest. This provides further proof that what Marx was looking for was the laws of the real relationship between factory exploitation and capitalist command over money. Of the two elements, contrary to appearances, he considers the former to be variable and the latter constant - the former being subject to competition between capitals and to class antagonism, and the latter rigidly controlled and governed. Although the rate of interest was a quota of the rate of profit, although it was, in other words, naturally subordinated to profit, "in every country the average rate of interest appears for a rather long period as a constant magnitude, because the general rate of profit (...) changes only after a very long period." "Custom, the juridical tradition etc, intervene precisely as much as competition itself in the determination of the rate of average interest, to the extent to which it exists not only as an average figure, but as a real magnitude." "The rate of interest reaches its maximum level during crises, when
in order to pay it is necessary to take out a loan, whatever it may cost."

In denying the existence of a natural rate of interest, and in attributing the rate of interest to capitalist subjective command, to its historical decisions (or at least to the historically-given level of the allocation between productive capital and interest-producing capital Marx reaffirms the entirely political nature of monetary mechanisms. Only crisis succeeds in bringing the average rate close to the market rate of interest; then "the market" opposes itself to the capitalist as a hostile force.

But the difference between productive capital and loan capital lies above all in the following: in productive capital the share between surplus value and profit is determined qualitatively - is the result of a social relation, of a situation of political power; whereas in loan capital the apportioning is purely quantitative, is an administrative act of capitalist command itself, a dictatorship of capital over itself. The first effect of crises is to abolish this specific form of dictatorship, as is proven by the suspension of the Bank Act: money once again becomes a particular commodity, its price again becomes a market price, and its very function, as a general commodity, over and above all commodities, as the "God of commodities", is challenged. Marx repeats
several times that the money form of the exchange relation is endangered during crises; he observes more than once that during crises there is a return to barter, to the exchange of commodities for commodities, of surplus value for surplus value without the mediation of money. But an exchange of surplus value against surplus value can as well mean an equilibrium of rates of exploitation, as it can mean a disproportion between rates of exploitation that are different, between different levels of working-class struggle.

"Still the very recurrence of crises despite all the warnings of the past, in regular intervals, forbids the idea of seeking their final causes in the recklessness of single individuals. [...] If speculation towards the close of a given commercial period appears as the immediate forerunner of the crash, it should not be forgotten that speculation itself is a result and an accident instead of the final cause and the substance. [...] The political economists who pretend to explain the regular spasms of industry and commerce by speculation resemble the now-extinct school of natural philosophers who considered fever as the true cause of all maladies." Are we mistaken if we seem to see the Proudhon of the Manual of a Stock Exchange Speculator as the target of Marx's allusive polemic? Certainly Proudhon here stands
for a whole vast field of moral apologists of the system who saw speculation as a pathological phenomenon growing on the healthy body of the market. It is a polemic which Marx had been conducting for some time, dating back to his first articles on the crisis, and it is perhaps worth quoting, because this time (15 December 1857) it is expressed rather vehemently. But the main point lies elsewhere. Marx shows how, in England, the first reactions to the American crisis expressed themselves in the form of monetary panic, accompanied by a general depression of the commodity market. He goes on to announce triumphantly that "the industrial crisis now stands at the top and the monetary difficulty at the bottom." The true "focus of conflagration" is no longer London, but Manchester. Overproduction, a cut in working hours and mass sackings. Here the contradiction becomes the fundamental one, between necessary labour and surplus labour. In an industrial country like England, "the fluctuations on the money market are far from indicating either the intensity or the extent of a commercial crisis." But when one examines this contradiction, there is only one background against which it can adequately be measured - that of the world market. The contradiction between money as a world means of circulation, as a means of international payments, and money as an agent of circulation (where,
in the former instance its material existence is everything, and in the latter it is indifferent), this is the contradiction which lies at the root of the disproportion arising from the problems of the British balance of payments and the problems of industrial development. When Manchester laughs, London cries, and vice versa; industrial capital and loan capital are in opposition to each other. The two opposing positions are expressed, in theoretical terms, in the two schools, the "monetary" and the "banking" schools, with Colonel Torrens and Lord Overstone on the one hand and Tooke and Fullarton on the other. In his article, Marx fires a well-aimed salvo at Tooke: "Hence, even Mr Tooke, the writer of the History of Prices, well as he handles the phenomena of the London money and colonial markets, has proved unable not only to delineate, but even to comprehend the contractions in the heart of English production." The raising and lowering of interest rates have the precise aim of re-establishing the central bank's gold reserves, in order to meet balance of payments obligations, and more particularly to fulfil obligations to other banks. But, according to Marx, the true element for an understanding of the industrial crisis is trade relations: "The study of the English trade reports affords the only reliable clue to the mystery of the present convulsion in that country." What is important is the exchange of
goods, to be read as an exchange of surplus values, as an act of exchange of different levels of exploitation, between magnitudes of relative power. The world market may be defined in real terms as a relationship between surplus values, as a confrontation between capitalist groups, between national bourgeoisies whose capacity to trade is defined by the extent to which they are capable of exploiting, of extorting surplus value; any diminution of their relative power, any refusal of workers to allow themselves to be exploited beyond certain limits, weakens the competitive strength of the capitalist group in question. And money itself, as a world means of circulation, as a given quantity of gold and silver, as solely this concrete materiality, becomes inadequate to express that quality of relationship; it "enters into crisis with its own concept".

In the Grundrisse Marx was to develop only the capitalist side of this discourse, only the extensive effect which the exchange between surplus values produces, only the "civilising power" of capital.

In the final article of 1857, published in the New York Daily Tribune on 22 December, Marx shifts his gaze to Europe. "The centre of the convulsion" is now Hamburg, where the most interesting phenomenon is the attempts recently set in motion by the city's Senate, in other
words with the collectivity, to deal with the collapse of credit. The state of Hamburg was undertaking to give advances on "goods of a permanent description", to the tune of fifty and even sixty-six percent. But the system failed in the extent to which prices fell, and the state, in order to keep its promises, was obliged to pay at the prices applying prior to the outbreak of the commercial panic, and to realise the value of bills of exchange which represented nothing more than bankrupts. Thus the money of the community was being used to reimburse the losses of private individuals: "This kind of communism, where the mutuality is all on the one side, seems rather attractive to the European capitalists." But his most important conclusion is the following: "The Hamburg collapse is a conclusive answer to those imaginative minds which presume the present crisis to have originated in prices artificially enhanced by a paper currency." Hamburg, in fact, boasted a purely metallic circulation (silver), but this fact did not prevent it from becoming a major focus of monetary panic, and since the beginning of the trade crises, Hamburg became "their favourite arena". The increased demand for silver on this market once again threatened the stability of the British gold reserves, where fresh outflows of metal were being recorded. Prices were also falling on the London market,
and at the same time the price of grain was also falling as a result of the sudden influx of cereals from France.

In his first articles dealing with the Crédit Mobilier, the Bank of England, Napoleon III and Palmerston, Marx had stressed exclusively the centralised character of capitalist command; now, however, in analysing the real movements of the world market, he stresses the competition between capitals. The domestic political instability which the crisis triggers forces the national bourgeoisies, the various regimes of Europe, into increasingly savage competition and conflict, and instead of healing the crisis conditions in the countries concerned, this only makes them worse. From this point onwards, all the independent moments of the process of realisation of world capital become equally focuses of crisis which feed off each other. But Marx's analysis stops here. The year 1857 closes with the "industrial crash", finally arrived at after a long and merry journey via "monetary panic". From money to capital, or, if you like, from money as means of circulation to money as capital, from money as agent of rotation to money as ownership of the labour of others. Having reached this point, having identified the myriad internal threads and having successfully tied them up, Marx in a certain sense stops. The task was to embark on a reconstruction that began
not from the movements of capital but from the movement of the working class, but it found itself suddenly on the edge of an abyss, in terms of practice. The two-man "theoretical party" of Marx and Engels is infinitely weak. Being right does not mean having won. From the skies of theory Marx is now obliged to descend to the level of party politics, and the terrain that he finds there is immediately hostile: his theoretical adversaries, who were easy enough to eliminate in print, were still dominant within "the movement". The transition from the "theoretical party" to the "real party" involved huge costs, in the form of compromises which were to set back the level of the struggle by years. But all this is familiar terrain in the history of the origins of the First International and the mass socialist parties. The question that concerns us is rather different. We find ourselves wondering whether Marx's lack of attention to working-class behaviours and the fact of his very long isolation from the real movement, from the spontaneous behaviours of the working class, from the modifications in the class composition, from the everyday sufferings and struggles of the proletariat, had not in turn weakened the theoretical project. Was it perhaps this that led Marx, in the final pages of the Grundrisse, to cherish notions of a "future society", or led him to see within the working class a demand for total power,
immediately, in a born-again insurrection, in what would turn out to be an "assault on the heavens" like that of the Commune, which, as Marx himself pointed out in The Civil War in France, had stopped at the gates of that earthly god, the god of all commodities - at the doors of the gold chamber of the Bank of France.

The historiography of working-class autonomy, the reconstruction of the proletariat's creativity of invention and its subversive behaviours - that whole substantive level which Marx had consciously omitted - therefore becomes crucially important - as important as "the movement" is in relation to "the vanguard". Not as a co-optation but as an act of subversion, an attempt to re-read those same mechanisms which Marx described when he took as his starting point not the initiatives and errors of capital, but the resistance of living labour. Torrens, in his time one of the foremost economists in the area of political management of the system, was already stressing that: "The great practical problem of economic science is to balance production so that supply and demand are in equal relation." However he added that "the only limits to the increase of effective demand will be those set upon the increase of production by the scarcity of fertile land, or by a rate of wages which is so high as to deprive the capitalist of the minimum rate of
profit necessary to induce him to continue his anticipations."

Where Marx speaks in the Grundrisse of the disproportion between necessary labour and surplus labour, in part he expresses a similar view of crises to that which Torrens, one of the supporters of the Peel Act, had expressed in 1821. However, in Marx the analysis of the disproportions which are produced within capitalist crises is viewed within a perspective of the re-establishment of equilibrium, of establishing the new level of productive forces that capital would use as the base for its next phase of development. It was a function, in other words, of his analysis of the world market, of the fact that unequal surplus values could not be exchanged for long without putting into crisis the system's very foundations, and that thus the history of capital revealed a tendency to equalise surplus values, to establish a uniform level of exploitation.

However, while this is true, the opposite is also true. Phenomena of mass resistance to exploitation - mass rigidity of necessary labour - prolonged over long historical periods, tend to multiply and spread to the whole mass of existing living labour. In order to block this spread, capital is obliged to break the unity of the world market, to establish precise frontiers within which
certain monetary conventions are valid and beyond which they are no longer valid. But the immanent tendency to break these unnatural limits and to recompose the exchange of surplus values within a unified framework poses again the problem of how to spread and diffuse the highest levels of resistance of living labour.

The history of the working class since Marx teaches us that it moves on a double terrain - that of the assault on the heavens of the state, and that of the ongoing struggle around the definition of necessary labour.

*Translated by Ed Emery*