Inquiry in Question

In Four Volumes

III

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At the close of 1799 Goethe persuaded August Wilhelm Schlegel that Die Christenheit oder Europa did not fit in the frame of the Athenaeum. At the beginning, then, of the new century, Novalis formed a new idea of the proper frame for his essay - as opening a series of öffentliche Reden that he would publish together with it - open letters, addresses.

.. an Buonaparte, an die Fürsten, ans europäische Volk, für die Poesie, gegen die - alte - Moral, an das neue Jahrhundert (1)

.. to Bonaparte, to Princes, to the People of Europe, for poetry, against - previus - morality, to the New Century.

Characteristically Novalis presents us with a 'romantic' figure in an extreme or limiting form, and which remains only a project while yet prefiguring more specific instances of his general principle which do find a working application. Thus Fichte and Schleiermacher at Berlin, the Schlegels at Vienna and Geneva, do indeed frame their parts in a new german order emerging after Novalis' death - they frame some particular component of the new order in which that very part of framing is itself one element. Fichte frames the new intellectual order of Prussia as instituted in the University of Berlin; Schleiermacher frames the new Prussian religious order. Friedrich Schlegel, becoming a catholic after the Battle of Jena, was responsible for Austria's proclamation against Napo-
leon in 1809. His brother, in association with Napoleon's devoted antagonist Madame de Stael from 1804 until her death (1817) was meanwhile framing his part in the new literary order as framing that order.

After the Battle of Jena these various parts were paralleled in Stein's systematic reform of the political, legal and economic order of Prussia and Scharnhorst's systematic reorganisation of the army, as by Metternich's part in the policy of Austria.

The definition of all these parts after the Battle of Jena when, with the defeat of Prussia and dissolution of the nominal unity of Germany under Austria in a Holy Roman Empire, and the imposition of the Continental System, Napoleon was at the height of his power (and his powers), may be taken to mark a transitional configuration between the opening of the century and the general conservative reaction that set in with the final overthrow of the napoleonic Empire by a combined and reorganised Britain, Prussia and Austria in 1814-15. This reaction in turn marks a transitional point between the order of 1800 and the revolutions and reforms of 1830.

That convulsion of 1830, then, may be considered as a prefiguration of the more radical European crisis of the mid-century, beginning in 1848, the Year of Revolutions. That outward breakdown of the European political order is reflected in the logical order of Reflection by the figure of the inscription of this order in the 'physical' order of a natural or 'material' Economy of Kosmos, in which the political order of the State is itself inscribed. And it is the development of this naturalistic account of society - as various forms of 'socialism' in France, Germany and England after 1830 - which provides the 'theoretical' frame for these revolutions, this Revolution, of mid-century. I take this configuration of Reflection and its Context at the middle of the century as the turning-point about which the first half of this part is articulated - and again I will characterise the revolutionary configuration in terms of a German figure of inscription of the logical order in a radical Economy of Nature.
The German Confederation formed in 1815 as successor to the Holy Roman Empire had been the instrument of reaction until 1848. Overthrown in that year it was replaced by a representative assembly, but the (mutually antagonistic) forces of reaction in Prussia and Austria combined in 1850 to crush the republican aims of the assembly and restore the Confederation and Diet, which from that point was merely the frame of their contest for control of 'Germany', which by 1866 led to a prusso-austrian war and the dissolution of the Confederation, replaced in northern Germany by a more integrated North German Confederation, its parliamentary constitution framed by Bismarck in a unitary economy (Zollverein) and policy; by 1868 nearly all of Germany belonged to the Zollverein, but the policy of the southern states remained independent.

In France the revolution of 1830 led to a monarchy dominated by the middle classes which, as the Third Estate, had initially effected the revolution of 1789. The socialist revolution of 1848 led, as in Germany, to the introduction of republican forms quickly set aside - here by Louis-Napoleon's seizure of power in 1851, and the nominal re-establishment of the Empire, dominated in effect by a group of capitalists around the new Emperor. Growing political and economic disorder led Napoleon III to find a pretext for war with Prussia. The idea or plan was far distant from the real forces at work in Europe - the imperial french army led by Napoleon III in person was thoroughly ineffective, and the french attack, rather than dividing northern and southern german states was itself the stimulus to their final union under Prussia. The french emperor was himself surrounded with his vast army at Sedan. At Paris a Republic was declared. The King of Prussia was recognised as German Emperor. Paris was taken and an punitive peace imposed at Versailles. Paris then disavowed the treaty, but the independent Commune was brutally crushed, leaving France a heavily indebted and disorganised Republic, and Germany a prussian Empire organised by Bismarck. Austria was left without any part in Germany, and with powerful republican forces at work in the hungarian and slavic dependencies inherited from the old Holy Roman Empire. England or Britain meanwhile had remained detached from this interplay of european forces, intervening only at the middle of the century in the Crimea, when Russia threatened to annex european Turkey, the 'sick man of Europe',
and thus (as in Afghanistan further east) to threaten the relations of Europe with British India.

Britain, with her vast colonial empire—most notably with the control of India through the 'East India Company' after the Napoleonic wars—dominated the economic relations of Europe and the World 'outside'—notably with America and India. London was the centre of that World Economy. Around the middle of the nineteenth century British shipping carried out almost half of all sea trade—importing from America and colonies raw fibre and food, and exporting northern textiles, and iron, steel and metal goods and machinery from the Midlands. Textiles amounted to half of exports (and, half of the world textile market), and Lancashire cotton to about two-thirds of these textile exports. The British population (less than half now being involved in agriculture) was comparable, at about thirty millions, with those of America, France or Germany. The population of British India was comparable with that of America and Europe together, while that of the other British colonies amounted only to about half that of Britain.

Continental Europe was convulsed by republican risings around the middle of the century—this was paralleled in Britain by 'chartist' agitation, developed after the middle-class Reform of 1832, and focussed in Manchester and the 'Manchester School' of political economy. With the repeal of the Corn Laws and the introduction of the free-trade principles of the 'Manchester School', which the latter represented as corresponding to the interest of the urban labouring class, the chartism of 1848 no longer constituted any threat to the established order. The Prince Consort set about planning the Great International Exhibition of Trades and Manufactures, held in 1851 in a 'Crystal Palace', a sort of colossal show-window on the British market, with the Prince at the centre of this 'nation of shopkeepers'.

In many respects this Great Exhibition marks an epoch in the application of the British 'industrial revolution' to the World Economy which parallels the epochal political revolutions of the
mid-century. In the Britain of Reform and Industrial Revolution the constitutional frame of 1689-1714 allowed more or less continuous practical adaptation within a more or less stable physical isolation from Europe secured by a navy which was the military counterpart of the great merchant fleet. Thus the British revolution of about 1770-1830 in mechanisation of industry accommodated in a continuous development both the conservative reaction which throughout Europe followed upon the Napoleonic wars, and the success against the reactionary party of the philosophical radicals (with the democratic 'Birmingham School', the legacy of Priestley and his associates prominent among them) in 1830-2.

In America, during the European wars which marked the transition from eighteenth to nineteenth century, a group which parallels the English Radicals were dominant in the framing of the Union from the Constitutional Convention of 1787 to the enunciation of the 'Monroe Doctrine' (of the independence of American affairs from those of Europe) in 1816. The period of 1830-1850 in America saw the integration in the Union of German and Irish immigrants, along with the industrialisation of the north-east, and expansion in the cotton-growing south, as in the west - this last most notably in the Californian 'gold-rush' of 1848-9. These divergent developments led to the fragmentation of the Union after the middle of the century, and to Civil War, followed by a new integration completed around the end of the century, and incorporating immigration from southern and eastern Europe. American raw materials, most particularly southern cotton, had been an important factor in the development of British economic dominance at the middle of the century (the Civil War leading to a European economic crisis through the interruption of cotton exports). Whitney's invention of the cotton-gin in 1793 had been a major component in the British Industrial Revolution, making available a greatly increased supply of the raw material of the dominant cotton industry. By the end of the century American raw materials and American industry had been integrated in a home economy, and that in turn integrated with external trade - with Europe as with China and Japan, forcibly opened up to trade around the middle of the century, the nominal treaties then exacted by Europe and America being given full effect from the seventies on.
The new configuration of international relations around the close of the nineteenth century is reflected in the first transatlantic 'wireless' communication of 1901, as by the introduction of the steam-turbine in large marine engines about the same time. These developments in the conveyance of materials, 'products', people and information between Old World and New are in turn paralleled by internal developments in the 'technology' of the various societies.

Transatlantic 'wireless' telegraphy (embodying Marconi's extension (1897) of Hertz' application (1887) of Maxwell's theory (1864-73) of an electromagnetic 'field') follows the transatlantic cable telegraphy of around 1870 - about the time of the transition in transatlantic shipping from the dominance of wind-power to that of steam. This period (about 1870-1900) also saw the development, in the eighties, of electrically- and petrol-powered transport - Daimler's internal combustion engine dates from the same year as Hertz' transmission and reception of 'radio waves', and electrical railways or 'trams' follow the introduction of the 'dynamo', converting mechanical into electrical energy, in 1867-70. This period is also characterised by the development, chiefly in Germany, of a synthetic chemical industry, following upon the elucidation of the structure of 'organic' or carbon compounds; chemistry had been applied to agricultural production from about the middle of the century. The middle of the century also saw the introduction of public telegraph services - the communication of a mechanical signal from one end of a metal wire to the other by an electrical current - an application of Volta's discovery in 1800 of the chemical generation of a continuous electrical current. The dynamo of 1867-70 was an application of Faraday's discovery in 1831 of the 'induction' of an electric current in a wire moving in a magnetic field (the magnetic field in the dynamo itself being produced by part of the current it induces).

Thus the development of an international 'industrial' economy over the course of the century involves various successive phases of parallel applications of 'scientific' discoveries, often involving some considerable interval of time between enunciation of the 'scientific' principle, and its industrial application. The industrial economy in its turn frames one side of the cultural configuration...
in which 'scientific research' is carried on.

'Scientific research': in an interpolation of 1827 in the Introduction to the (second edition of the) Encyclopaedia of the Philosophical Sciences, Hegel complains that 'Philosophy' has come, in England, to mean 'natural science' in its practical application to everyday affairs:


The name Philosophy still has among the English, in general, this [empirical] sense. Newton maintains his reputation as the greatest philosopher; it goes so far that in the price-lists of instrument-makers, those instruments that do not come under the special heading magnetic, electrical, apparatus - the thermometer, barometer, and so on, are called philosophical instruments. Surely no construction of wood, iron, and so on, but rather thought alone, should be called the instrument of Philosophy (note: Thus the Journal edited by Thomson has the title Annals of Philosophy or Magazine of Chemistry, Mineralogy, Mechanics, Natural History, Agriculture and Arts - One can see for oneself from this what constitutes that which is

1: Enzyklopädie, Einleitung, 17 (Lasson (1930) V,39); cf also the Introduction to the Lectures on the History of Philosophy, II.ii.1.
here called philosophical. - Among the advertisements for new-
ly published books I recently found in an English newspaper the
following: The Art of Preserving the Hair, on Philosophical Prin-
ciples, neatly printed in post 8., price 7 sh. - By philosophical
principles of hair preservation are probably meant chemical, physio-
logical and the like).

(Hegel then goes on to notice the use of 'philosophical' in con-
nection with the political economy of the Radicals).

...One might draw a parallel between the 'philosophical' revolution
of 1770-1830 in Germany (from Kant's Inaugural Dissertation to the close
of Hegel's own teaching at Berlin) and the British revolution in the
application of 'philosophy' to mechanical production. In 1769 Kant read
Hume's discussion of causality; Watt entered his first patent for a
steam 'engine' designed according to the ('philosophical') principle of
a maximum efficiency of conversion of the chemical energy of fossil fuel,
through the thermal energy liberated in its combustion, into the mechan-
ical energy of (circular) motion. Arkwright that year took out a patent
for his spinning-frame, and set up his first 'mill', driven by horses;
in 1771 he installed his spinning-machinery in a water-driven mill. Har-
greaves took out his patent for the spinning 'jenny' in 1770, and Watt
that year constructed his first engine. In 1771 the Bridgewater canal,
connecting Manchester with the sea, was completed.

Watt patented further improvements to his 'steam-engine' in
1781-4; in the latter year the conversion of cast-iron to soft wrought-
iron by 'puddling' and rolling was discovered. The following year, 1785,
Arkwright's patents were thrown open; Cartwright produced his first power-
loom; Watt's engine was first applied to textile machinery. In 1793 Whit-
ney's saw-gin vastly increased the American supply of raw cotton, and
around the turn of the century the various components of a mechanisation
of the cotton-industry were combined in Lancashire.

In 1800 Trevithick lodged his patent for the application of
Watt's engine to land traction, and his first 'traction-engine' was
built the following year. In 1801-2 Symington built the first success-
ful 'steam-boat'. In 1815 Stephenson began his work on traction over
low-friction rail-ways that led to his winning the prize for the design
of the 'engines' for the Liverpool and Manchester Railway opened in 1830
- the first 'rail-way' in general public use, linking Manchester, the
industrial centre of the country, with the port through which raw indi-
and American cotton was imported, finished yarn and textiles exported. With the introduction (also 1830) of an improved self-acting 'mule' for spinning, an improved spinning-frame, as well as the air-'blast' furnace in iron-making, the 'industrial revolution' beginning around 1770, and turning about the integration of mechanised production around a central 'engine' or motive force in a mill or 'manufactory' around the turn of the century, together with the parallel mechanisation of the transport of materials to and from the 'factory', might be said to complete its primary phase.

This phase - or cycle or 'revolution' - might be understood in terms of the reduction of complex operations to the elementary circular movement of Watt's engines - this 'element' of the new 'industrial' economy itself being produced by the conversion of the chemical energy contained in carbon (usually coal) into heat by oxidation, and this heat into motion by the expansion of steam in a cylinder transmitted by a piston to a revolving wheel. This circular motion is itself the elementary component (then) in the mechanical operations involved in its very production: the mining of the coal, its transportation to the steam-engine; the mining of the ore which, together with coke, provides the iron of the engine itself and of all the machinery involved in all these operations, and so on.

Benjamin Thompson, born in Massachusetts in 1753, took the part of England in the American wars, and at their close entered the service of the Elector of Bavaria, where he applied himself to the reform of agriculture, breeding, nutrition, the use of fuel, the army and the economy. It was he who, in 1798, correlated the mechanical energy produced by horses in the operation of boring cannon (at the foundry he had established) with the heat produced by the operation (this in the course of investigations into the most efficient means of using the mechanical energy to bore cannon). Announcing the results of his experiments in the Transactions of the Royal Society (to which he had been elected while in England from 1775 to 1782) he suggested that the correlation of mechanical energy and heat could be understood in no way other than an elementary motion as underlying both. He had already conducted researches into the efficiency of various designs of hearths, and the different amounts of fuel required to cook different foods; in 1796 he provided for prizes to be awarded by the Royal Society and the American Academy of Arts and Sciences at Philadelphia for researches on heat and light.
His Bavarian career closed in 1799 when, with Austrian armies on one side and French on the other, the Elector had fled, leaving Thompson — now Count Rumford — in charge of state and army. That year he established in London a Royal Institution for the facilitating of mechanical inventions, granted its charter in 1800. The work of the new institute involved the public diffusion of scientific principles, provision for their application in research or experimentation, and for the application of these principles and the results of research to practical affairs. In 1804 Rumford married Lavoisier's widow, and shortly thereafter settled near Paris, where he died in 1814.

Rumford's activity around the turn of the century, then, corresponds to a focal expression of the principles at work in the 'revolution' or 'industrialisation' of 1770-1830: the primary question to which he addressed himself in his theoretical research was the relation between chemical, thermal, and mechanical energy — the theoretical reflection of the elementary component of the 'industrial revolution'. By his endowments of scientific prizes in 1796 he did something to organise the 'economy' of research around this elementary correlation; by his establishment of the Royal Institution he framed the part of theory and its application in the mechanisation of the British society of which this Institution was one component.

The British 'revolution' of about 1770-1830, then, as itself one component of the European transformation over this period, framed, within the 'practical' articulation of British culture or society, various component transitions (of which Rumford's activity at the turn of the century might be regarded as fairly representative). The material 'economy' of the culture is articulated relative to the elementary transformation of chemical energy into physical power in Watt's engines. This material economy is complemented by a parallel reform of the political articulation of the society, according to the 'utilitarian' principles of the 'philosophical radicals'. And at the close of the period, James Mill, at the head of philosophical Reform, has integrated the logical order of a psychological 'economy' of experience in the Radical's primary frame of Society, and so closed the
gap between Scottish 'common sense' dominant in the universities, and the "radical" inscription of the philosopher in the political and economic frame of a 'society', a social order, 'outside' the University, 'outside' the academic domain of a Reflection instituted in the social order as an order of abstraction from it. Mill himself studied at the University of Edinburgh, under Reid's pupil Stewart, towards the close of the eighteenth century. His Analysis of the Human Mind appeared in 1829, the year of Sir William Hamilton's publication (in the Edinburgh Review: the rival of the Radicals' Westminster Review) of an outline of his intended synthesis of Scottish, French, and German schools. The following year is taken by James Mill's son, John Stuart Mill, as the turning-point in that 'crisis in his mental history' (to take the title of the chapter of the Autobiography dealing with the years around 1830) from which the dominant British philosophy of mid-century was to emerge. The 'crisis' was the reaction precipitated in the younger Mill's twenty-first year (the winter of 1826-7) by his father's systematic education of his son from the age of three 'on philosophical principles' as induction into the part, the 'habit', of 'analysis'. The adolescent finally reacts to his inscription in his father's analytic scheme, in the at first incoherent assertion of a 'feeling' that by 1830 is crystallising into the part of assertion of self-assertion (which first appears precisely as feeling) as the irreducible complement from which the systematic questioning of radical 'analysis' has been inhumanly abstracted:

My education, I thought, had failed to create these [sympathetic] feelings in sufficient strength to resist the dissolving influence of analysis, while the whole course of my intellectual cultivation had made precocious and premature analysis the inveterate habit of my mind. (1)

The first step in the unfolding of the at first inarticulate 'crisis' had been made through the reading of Wordsworth, and the association with the young 'coleridgeans' in 1828. By 1830 - the year of the July Revolution, Lord Grey's government, and the establishment through the beginning of an association with Harriet Taylor of an enduring emotional focus - John Stuart Mill could begin to assert himself in the new frame of question (analysis) and assertion which now

1: Autobiography, pp 138-9 (1973)
began to take form as a **System of Logic**.

My new position in response to my old political creed, now became perfectly definite. (1)

The *Logic*, then, began to be put on paper in the early part of 1830; in 1831 there appeared the newspaper articles on 'The Spirit of the Age' which incorporated elements of German romanticism and French socialism in the recognition of the nineteenth century as a systematic reaction to the eighteenth — reflecting the son's increasingly systematic consolidation of his own position as a focal nineteenth-century reaction against the eighteenth-century 'analysis' transmitted through his father and the Radicals. John Stuart Mill's inscription of 'analysis' as one dimension of a more 'radical' poetic in which it is complemented by 'feeling' is in its turn reflected around this time in Carlyle's parallel transposition of the Romantic 'poetics' of History into British terms.

In the younger Mill's articulation of Experience, after the crisis of around 1830, in an economy of Induction — in an economy of the 'framing' of actuality — the parallel radical and common-sense schools of about 1770–1830 are brought into relation with the applied 'science' or 'natural philosophy' which, as we saw, turns in that period about the application of the mechanical scheme of the 'physical' order to chemistry and the intermediate (physico-chemical) phenomena of Heat and Light whose investigation Rumford had tried to (materially) encourage. By mid-century (1848) Mill had arrived (in the *Principles of Political Economy*) at a figure of inscription of the **social** frame in his logically articulated World of Experience. One might further trace, from the beginnings of his *Logic* in 1830 to his annotated edition of his father's *Analysis* (1869) a transition through the logical frame in which Society was inscribed at mid-century, to the inscription of this 'logic' itself in the social frame of activity as primary. We will shortly see how the transitional configuration of 1848 mirrors parallel developments on the continent.

— What, though, first of all, of continental parallels of the British reflection of the first thirty years of the century, bringing full-circle those French and German 'revolutions' which are the analogues of British developments dominated, over the latter half of the period from about 1770 to 1830, by an 'industrial' revolution?
The period from 1800 to 1830 in Germany corresponds almost exactly to the framing of a new Prussia and, within it, of the hegelian logic which determines its own place in that new prussian order, and the place of the new order in a hegelian Kosmos. For Hegel had in 1800, at the age of thirty, marked his transition from the 'ideal of youth' to a 'system', and had moved to Jena, and in 1830 there appeared anonymously - Feuerbach's *Thoughts regarding Death and Immortality* which divided Hegel's school into what would become the 'right hegelians' holding academic posts and the 'left hegelians' who criticised from outside both the hegelianism of the academies and the social order which it upheld and which upheld it.

In 1801 appeared Hegel's first publications, in 1830 his final version of an 'Encyclopaedia of the Philosophical Sciences'. In 1831 Hegel was carried away in the same cholera epidemic as the director of the prussian military academy from 1816, Clausewitz, the biographer of Schamhorst, his predecessor. One might draw a parallel between the part of Clausewitz at the military academy, articulating the new military order of Prussia, and that of Hegel at the University of Berlin articulating the new intellectual order, as I have already suggested a parallel between Scharnhorst's reorganisation of the army after Jena, and Fichte's reorganisation of the intellectual institution. The posthumous publication of the lectures of Hegel and Clausewitz at Berlin began in 1832.

More generally, we can simply suggest the interplay between the new prussian order, and the framing of its logic by Hegel and his academic successors down to the middle of the century. Here we find once again the figure of a School which, like the Lyceum, identifies its part in a Kosmos it logically articulates, as the reflection of this Kosmos in the intermediate order of the State. Once again we may most simply characterise this 'cosmology', so to speak, in terms of an elementary figure of 'thesis' or 'position', and by the logical determination in the School of the 'dramatic' order of this initial 'position' or positing. Once again we may find in the logical determination of the relations of logical and physical orders of elementary 'position' a closed circuit in which the reflection of the School is framed, and the inscription of which
in the dramatic order, taken as more radical, corresponds to the primary figure of the criticism in which the next step of Reflection is framed.

This logical circuit - a logical determination of the relations of logical and physical sides of Reflection, posited in Schelling’s transitional scheme (1800-1) of the duality of Transcendental Philosophy and Speculative Physics - may be found in Hegel’s first publications, after his arrival in Jena in 1800: his Habilitationschrift and the twelve theses defended publicly on the 27 August 1801, the Differenzschrift (his part in the controversy excited by Fichte’s criticism of Schelling’s new position— the preface dated July 1801), and the articles in the ‘Journal of Critical Philosophy’ (1802-3) which he now founded with Schelling (who already edited a complementary ‘Journal of Speculative Physics’). In the dissertation, De Orbitis Planetarum, Hegel attempts a logical deduction of the articulation of the solar system. The astronomer Bode had discovered a mathematical progression corresponding roughly to the distances of the planets from the Sun, but there was no planet corresponding to the term in the progression between those for Mars and Jupiter. Hegel explained in Jena that astronomers must progress from such merely empirical coordinations to the transcendental viewpoint from which one saw that there could be only seven planets, in their actual arrangement, and so none between Mars and Jupiter (1), while the astronomer Piazzi at Palermo was identifying a (‘new’) planet, ‘Ceres’, just where Bode’s Law had indicated. Gauss’ calculation of the ‘elements’ (resolved components) of the new planet’s motion suddenly lifted him from provincial obscurity (his Disquisitiones Arithmeticae, returned by the Institut, still unpublished) to ‘the first rank of theoretical astronomers’ (2), and marked his transition from the pure mathematics of the Disquisitions to the applications that were to occupy him for the rest of his life. Helmholtz would later trace the central questions of mid-century ‘scientific’ culture back to an inaugural divergence of Hegel’s logic and (Gauss’) physics (3).

On the basis of his dissertation Hegel was appointed to a teaching post at the university, under Schelling. The latter left for Würzburg in 1803, having closed the System expounded in the Journal of Speculative Physics, in a mystical or theological circuit within which logical and physical orders were discovered as two complementary aspects or components of a finitude whose very negation of infinite

1: De Orbitis Planetarum, §III. 2: Ball, p.449 3: cf. his 1862 address to the University of Heidelberg, Über das Verhältnis der Naturwissenschaften zur Gesamtheit der Wissenschaften.
Identity was itself to be inscribed in that identity: in the primary frame of symbol theological infinity itself determines the relation between itself and finitude 'outside', just as the logical order is analogously constituted (so to speak) in the logical determination of the relation of that logical order to a physical order 'outside'.

Hegel remained at Jena as professor until the university was closed after the battle which decided the conflict of France and Prussia. By that time (if we are to believe Hegel's account of the completion of the Phenomenology on the eve of the battle) Hegel had marked his distance from the closed circuit of Schelling's romantic theology, and inscribed the poetics of the symbol in the logical order of reflection, in terms of an elementary thesis or position analogous to that which frames the poetics of Aristotle's Kosmos. Schelling, after 1809, would insist that the logical order of such a reflection or theory should rather itself be inscribed in the mystery of the Christian story.

What is, then, the elementary 'position' of the Phenomenology of Spirit (1807)?

In the preface to that 'phenomenology', presented as 'System of Science: Part I - Phenomenology of Spirit' on the original title-page, Hegel asks about the initial position of reflection, the starting 'point' of philosophy. The starting-point, he writes, is the discovery that even to ask that question is to already find oneself involved in the figure of position, thesis.

What is, then, the minimal figure of such 'positing'? Simply the logical or psychological identification of the logical order of reflection as one pole of an opposition of 'inner' logical order and 'outer' physical order - the logical order of reflection finding itself at work in a physical context.
.. 'In' a physical context,. Can we then 'posit' this 'context', this 'Nature', as the radical or primary frame in which the logical order is then inscribed by a sort of circular 'abstraction' from some physical difference or polarity to a logical distinction of logical and physical orders which it may be taken to 'mark'?

- No: for in this 'positing' of Nature in which position is then to be inscribed in terms of some elementary polarity (as in the speculative physics of Goethe and Schelling), we find that this 'Nature' is already somehow distinguished as a pole 'outside' some equally — or more — radical logical order of 'in' and 'out'. This pole of 'Nature' in-itself corresponds indeed to the pure potentiality of position — to its spatio-temporal frame of coordination, discovered in Kant's 'transcendental Aesthetic' — but, as in the aristotelian figure, the actuality of what we posit as 'Nature' is not any fixed pole, not any epicurean actuality of Matter in which Reflection can as it were 'abdicate', but the essential movement, transposition, in which we find what is formally 'outside' the logical order 'at work'. Nature as the 'Element' of Reflection, in relation to which Reflection first identifies itself in the movement of its abstraction and distinction from that Nature as its primary context, can only formally be defined as an 'other', an 'outside' of Reflection. The identity of this formal opposite of Reflection — the actuality, Wirklichkeit — working, ᾠναγική — of this radical spatio-temporal order of pure possibility or potentiality of position — lies precisely in a movement which cannot be fixed in any definite identity or 'position' — in the unlimited or indefinite transition from any local and temporary identification to another.

Das reine Selbsterkennen im absoluten Anderssein, dieser Aether als solcher, ist der Grund und Roden der Wissenschaft oder das Wissen im allgemeinen. Der Anfang der Philosophie behält die Voraussetzung oder Forderung dass das Bewusstsein sich in diesem Elemente befinde. Aber dieses Element erhält seine Vollendung und Durchsichtigkeit selbst nur durch die Bewegung seines Werdens. (1)

1: Phenomenology, Preface, 299: 'Element der Wissens'
Pure self-knowledge in absolute Otherness — this Aether as such, is the ground and foundation of Science — Knowing-in-general. The starting-point of Philosophy amounts to the realisation or discovery that consciousness finds itself in this Element. But this Element has its very completeness and transparency only in the movement of its coming-to-be.

Thus we begin with (or in) the simple form of Position — which is involved in any 'beginning' — and at once find that this is itself involved in (or involves) a wider configuration. — A 'play' of figures, as it were, in which our own 'part' itself, now, is transposed from the initial part of positing some starting-point, some primary frame in which that part might itself be inscribed and defined. We begin, so to say, by marking this starting-point, only to find what we thought to mark as 'Nature', 'World', or whatever, distinguishing itself from the formal definition in Reflection of its 'context', its Element. We mark or remark this movement of self-distinction, then, as 'Nature', and find that we are ourselves already radically involved in it, through the transposition of our initial 'part' from that of simple formal 'position' to that of discovering ourselves 'at work', in the movement or activity of Reflection.

Thus begins the Drama of Philosophy — the dramatisation of actuality, the movement of our self-discovery at work in this enigmatic 'nature. Here is the first step in a sort of cosmic hide-and-seek in which we start by thinking to find ourselves, only to discover that in this reflection on the 'start' we are already somewhere else. Slowly we take one step after another, at each point recognising ourselves distinguishing ourselves from what we thought to recognise in the previous step. And the last step reaches a fixed point — Plotinus' 'Home' — which is the very Identity of distinction, of that actuality which is constantly at work throughout the whole course of the game, now finding itself as the movement of seeking itself. The last step, then, involves the step out of the inscription of the logical order of Reflection and Distinction in a formal 'other' side, 'Nature', 'World', to the fixed point which distinguishes itself precisely as 'outside' any such inscription, and so 'outside' the movement implicit in Nature.
'Outside': but that physical image of the relation of the logical order of psychical actuality, distinction at last distinguishing itself from its image in any physical difference of an 'in' side and 'out' side, is just what this self-distinction now distinguishes itself from in this very image. It distinguishes itself from the physical image of a 'God' 'outside' the physical order of Nature, World — and this final and radical self-distinction of Distinction expresses itself in the World.

'Drama': for this last step of Reason distinguishing itself from the last image of 'outside' the physical order of inside-and-outside closes the dramatic dynamic of appearance or image — 'phenomenon' — and the working or actuality 'behind' it opened by our initial identification of the part of Reflection or Reason in the initial position or positing of a World, a frame of positing-in-general. The Drama closes with the self-distinction of Reflection or Reason 'rather) as what had as it were opened the Drama in its initial identification with some particular or definite part 'in' the World. The World as a whole, then, now appears as a Drama, which closes in the recognition by the characters — you and me and Hegel and the others — that they are actors. Hegel's part, then, is to announce, after the battle of Jena, this staggering discovery to the others on the Stage of World—history.

A 'Universal Poetic': the coincidence of the aristotelian poetic of my or your reason distinguishing itself from an imaginary identification with a character in a tragedy of two or three hours played out on the restricted stage of a Greek amphitheatre, with the aristotelian Kosmos framed in Form distinguishing itself from indefinite matter as what distinguishes otherwise indefinite matter as 'this' and 'that'. In Aristotle's Kosmos these poetic and 'theological' frames were mirrored in the intermediate order of the Community, the State. In Hegel's dramatisation of the World the poetic order of Art and the theological order of Religion are found to be two sides — complementary abstractions — from that 'philosophical' order in which the School determines the place of its discursive account of Kosmos in Kosmos as the reflection of the rational art—
iculation of that Kosmos in the State as primary frame of activity, including the activity of discursive thought, art, and religion.

The frame of the Drama of World-History, then, as the radical frame of activity - of 'acting' - of which the closed finite frame of the theatrical action or performance, and the complement of this in an equally definite 'story' or religious mystery are limiting images, begins with the elementary circuit of Culture distinguishing itself from Nature - that circuit traced in the interface of Heaven and Earth on the surface of this our 'planet' - and proceeds through various images of this 'Culture' as mirror of Heaven and Earth (as of religion and art) towards a universal Culture which recognises itself as framing actuality, rather than seeing itself (as in the 'middle' ages) in a theologically framed Kosmos or (as in Romanticism) in some radically open 'play' of frames.

This universal Culture which is the close of the Drama of World-History, the End of History in the sense of its finality, must embody, as one component, the logical order of the determination of this Culture as the mirror of discursive thought and Kosmos - and this, necessarily, materially instituted in that Culture in the form of a School which, in the aristotelian figure, effects the 'induction' of the actors thrown at birth onto the stage of the World, into active and self-conscious participation in the cosmic scheme.

In the Phenomenology Hegel is himself working from the actual articulation of Reflection in World-History towards the standpoint of 'Absolute Knowledge' as the fixed point 'outside' any particular historical frame of Reflection, relative to which the movement of Reflection through various images or prefigurations of this close may be articulated. From that point of view - that 'broad high standpoint of the History of Mankind' identified in Schelling's celebrated Fragment - the cultural frame of the movement of Reflection towards the self-recognition of Reason in this movement may be (and by Hegel is) organised as the spatiotemporal interaction of various historical cultures, beginning with the abstract 'space' of Culture simply as such, common to those vari-
ious historical images or embodiments and moving, as the Drama of World-History, towards the convergence and integration of components developed in various scenes and phases of the movement (various times and places) in a universal Culture embodied, incarnate, in a particular state in which the recognition of the figure of State as mirror of Kosmos and the Philosophy which is the embodiment in the state of that recognition first 'takes place', opens up, becomes, in that configuration, open as a possibility, a question addressing the reader of Hegel's book in the actual situation of its close - the Battle of Jena (according, at least, to Hegel's dramatisation of the world-historical closing, conclusion, of the Phenomenology). The configuration of this opening up of a truly philosophical vision at the same time marks the last step before the whole configuration closes in the outward actualisation of the End of History in the order of a State which also opens up as a possibility with this final self-recognition of Philosophy. As in earlier subordinate phases of World-History, in earlier 'cultures', the Owl of Minerva is preparing to take its flight only towards the close, as the shades of night gather (1). The recognition of the place of the recognition of World-History as a philosophical Drama in that Drama opens, marks, announces, the Last Act.

In this Last Act as announced by the Phenomenology, the various components, dimensions, registers, of the Action, are still somewhat confused: notably there is a systematic confusion between the 'dramatisation' of the writer's or reader's identification with the part of Reflection in various phases of the Drama of World-History, and the dramatic earlier progress of World-History now re-enacted as it were through this identification. What - that is - is the scene of Phenomenology?

The scene of Fichte's parallel addresses of 1807 was clear enough; the play of forces at Berlin after Jena. The logical order of that discourse inscribed itself in that play as framing the question, the possibility, of a new prussian order arising in, from, that play. - An order of which this fichtean logic or logical order distinguishing itself in, from, the play of forces it framed was an image, a prefiguration... an order of which this logic would itself be one
By the time of his death in 1814 Fichte was Rector of the new University of Berlin, instituting this 'logic' as one component of the new order that was to triumph at Waterloo. Hegel, now a head-master in southern Germany, was articulating his dramatic logic or Dialectic of identification (or identity) relative to an initial formal 'position' or positing, identification, abstracted from the earlier ambiguous interplay of formal and historical sides of the Phenomenology.

The Science of Logic, whose first half had appeared in 1812-3, was concluded in 1816, and Hegel, with this new logical frame of the Universal Poetic, proceeded to a university (Heidelberg) where this Logic was complemented by a philosophy of Nature, and these two 'sides', formal and material as it were, integrated in the Culture that marks (as a closed circuit in Nature) the close of the Philosophy of Nature, and the entry into the Philosophy of Spirit: into a circuit that closes in the configuration of the limiting question of the part of the initial formal act of 'logical' positing, which frames Philosophy, in the cultural order of its context. A limiting question which frames, closes, Hegel's text from an 'outside' in which he and his students find themselves in the individual situations which are never quite inscribed 'in' the System. Hegel's first course at Heidelberg thus closes with an inscription of the lectures he has given (on the History of Philosophy) in their cultural context:

Ich wünsche, dass diese Geschichte der Philosophie eine Aufforderung für Sie enthalten möge, den Geist der Zeit...zu ergreifen...

It is my desire that this History of Philosophy should contain for you a summons to grasp the Spirit of the Time...

Through a common participation in the logical frame of Reflection 'in' the lectures, Hegel and his students have partaken of the figure of community as mirror of natural Kosmos and logical instance of identification of this mirroring, of a 'spiritual' community in which the particular cultural context of this communion is determined as an image:

..vergnüglich ist es mir gewesen, in diesem geistigen Zusammenleben mit Ihnen gestanden zu haben..
It has been a source of pleasure to me to have been associated with you in this spiritual community.

Opening the course for the first time in 1816 Hegel had framed a certain duality between the identification of the prussian state as context of this identification of the 'ideal' State, and the determination of that prussian state as a particular image of the ideal:

Der preussische Staat ist es dann näher, der auf Intelligenz gebaut ist. (1)

To speak more plainly, the prussian state is a state constituted on principles of intelligence.

...and in the closing section of his last course of lectures at Berlin, in the winter of 1830-1, Frederick the Great would be identified as:

..der Erste unter den Regenten..der das Allgemeine im Staate festhielt, und das Besondere, wenn es dem Staatszwecke entgegen war, nicht weiter gelten liess. Sein unsterbliches Werk ist ein einheimisches Gesetzbuch, das Landrecht. (2)

the first sovereign who kept the general interest of the State steadily in view, ceasing to pay any respect to particular interests when they stood in the way of the common good. His immortal work is a domestic code - the prussian municipal law.

The circuit by which the initial formal 'position' or positing of the Logic is traced through Nature and the 'human' cultural being to its place in the ideal State appearing as a possibility in the actual Prussia in which this possibility is presented - albeit abstracted from the limiting question of the duality of the empirical embedding of this circuit in the prussian institution of Reflection in the University of Berlin to which Hegel moved in 1818, and the theoretical determination of this empirical figure as characteristic of the world-historical possibility of a universal Culture - this circle, presenting as open, as possibility, that circuit already discovered in the part of an aristotelian account of the Economy of Kosmos in that Economy.

1: Heidelberge Antrittsrede, fn. 2: Philosophie der Geschichte, p551
frames that *Enzyklopädie* which Friedrich Schlegel had proposed as a new frame of the Sciences – of Philosophy doubling the 'poetic' embodiment of a Universal Poetic in the closed circuit of the ideal Romantic Novel.

The move from Heidelberg to Berlin in 1818 thus mirrors 'outwardly' – in the configuration of inscription of the ideal identification of State as mirror of Kosmos and philosopher (or Philosophy) in the actual prussian state – the closed circuit of an Encyclopaedia which closes in the determination of its part (the part of systematic or encyclopaedic Philosophy) in its cultural context, in the Last Act of History. ...Not indeed the simple self-enclosure of an encyclopaedic aristotelianism which inscribed its own self-determination within the institution of Education in the aristotelian State: the hegelian circuit rather inscribes itself in the figure of the dramatic question posed by the inscription of its logical circuit in a poetic actuality, where its determination of Nature (and in it the formal frame of universal History) as a formal 'outside' is doubled by the empirical inscription of this determination within the material conditions of its historical enunciation. Yet Hegel does close his encyclopaedic System of the Berlin years with the formal determination of this inscription of formal determination within its historical context as a world-historical question whose articulation may be fully determined as the universal frame of 'any possible' History. The complementary or dual articulation of irreducible historical contingency in which the Universal, these universals of 'any' History, of History simply as 'History', is (are) worked out, itself simply drops out, cancels out, in its huge complexity, to appear as the mere image of the dual universality, organised as it were on the other side, the incalculable 'out' side of the mirror of Reflection, as about a single irreducible point marking this 'out', this other side, this otherness.

Logic, then, the radical figure of abstraction from this duality in a simple initial positing or position, frames Encyclopaedia. The duality appears within the circuit of the System as the reflection of logical universality 'outside' itself as Nature; Culture frames the poetics of this conversion of logical and physical in a third circuit which closes (in the third division of the Philosophy of Spirit which reflects within that cultural mirroring its part in the System as a whole) in the logical poetics of the State (which frames, that is, the third and last division of the third and last part of Encyclopaedia).
Just as Culture articulates 'logical' and 'physical' orders as two converse dimensions, first posed in abstraction from this poetics, so within the domain of that mediating Culture the poetics of identification which is Philosophy or Dialectic appears as that radical dramatic order of actuality, of that acting which is articulated as History, from which the poetics of Art and Religion (the first two sections of the third part of the third division) are seen in their turn to be complementary abstractions, converse posings, identifications.

Hegel used the *Enzyklopädie* published at Heidelberg as the frame of his Berlin lectures. In 1821 he published separately his framing of the State as the Philosophy of Law (Recht): at once one component of the Encyclopaedia (the transition from the second to the third division of the third part) and, from a complementary perspective, the framing, in the State, of the institution in which the ternary divisions of Encyclopaedia framed his teaching...and this teaching about institutions, in particular.

Thus in the Preface to this 'Philosophy of Law' Hegel situates this philosophical activity in the actual context of the prussian state. But...

[Doch ist es Zeit, dieses Vorwort zu schliessen; als Vorwort kam es ohnehin nur zu, äusserlich und subjektiv von dem Standpunkt der Schrift, der es vorangeschickt ist, zu sprechen..(1)]

As a preface it is its place to speak only externally and subjectively of the standpoint of the work it introduces.

The 'Introduction' proper stands ambiguously between preface and work, though - is it like the Preface 'outside' the work, or does it rather mark the transition to an 'internal' determination of this relation of 'inside' and 'outside'?..

Die Philosophie bildet einen Kreis: sie hat ein Erstes, Unmittelbares, da sie überhaupt anfangen muss, ein nicht Erwiesenes, das

1: Preface (Berlin, 25 June 1820), closing paragraph
kein Resultat ist. Aber womit die Philosophie anfängt, ist unmittelbar relativ, indem es an einem andern Endpunkt als Resultat erscheinen muss. Sie ist eine Folge, die nicht in der Luft hängt, nicht ein unmittelbar Anfangendes, sondern sie ist sich rundend.(1)

Philosophy forms a circle. It has, since it must somehow make a beginning, a primary, directly given matter, which is not proved and is not a result. But this starting-point is simply relative, since from another point of view it appears as a result. Philosophy is a consequence, which does not hang in the air or from a directly new beginning, but is self-enclosed.

Will the Philosophy of Law then 'close' with an 'internal' determination of the starting-point, inscribe it in, and so close, the circle? Will we discover Hegel's starting point framed within the State within the institution of Education? Will the book close with a detached god-like view of this man G.W.F. Hegel himself as he identifies the locus of its identification within the scheme he frames? Might we suppose such a closed circuit prefigured by the discussion of Education at III.i.3 as we pass into the introduction to III.ii...

Dies ist der Standpunkt, der die Bildung als immanentes Moment des Absoluten und ihren unendlichen Wert erweist. (2)

This is the standpoint that shows education as an inherent moment of the Absolute, and its infinite value.

...Will the Philosophy of Law close in a determination of the part in a society of the instituted philosophy of education, as the discussion of institutions at III.i closes with the institution of Education? For the whole discussion is framed by the educational institution set up by Fichte at Berlin.

But no: instead of a discussion of the University we find at the close a discussion of the Universal, instead of this philosophy there instituted the formal 'Last Result' of the History of Philosophy. Instead of finding Hegel himself we find...the Police!

1: Introduction, Zusatz to §2 2: close of introduction to III.ii
What then if we proceed to the closed circuit of Encyclopaedia as a whole, rather than stopping as it were at the duality of 'internal' and 'external' aspects at the entrance to the third division of the third part, rather than working in the formal closure corresponding to that mirroring of the triple division of the whole within one of its parts?

...What if we proceed from this mirroring embodied in the dual aspect of the Philosophy of Law on to the further divisions of the third division of the third part... onto the lectures on the Philosophy of Art, of Religion... of Philosophy itself?

'Philosophy of Philosophy': rather, lectures on the Philosophy of History and the History of Philosophy, corresponding to the pervasive or systematic duality of the 'two sides' of the whole System at just that point (the third section of the third division of the third part) where its own 'logic' is framed in the System itself - in this constituting the System precisely as circuit, 'encyclopaedia': as the circuit which to enter amounts precisely to \( \texttt{IrKvbü O} \).

'Philosophy is not yet circular enough' complained Friedrich Schlegel at the turn of the century. The 'close' of Hegel's System might be taken as its directing question to the end (to that arbitrary death from the cholera epidemic of 1831). And in the duality of a Philosophy of History which frames the History of Philosophy which frames that Philosophy of History; in the ternary complex of the third section of the third division of the third part of the System, we may find this question, this directing openness which doubles the figure of closure, of inscription of the locus of its framing in the System it frames, in a limiting form...a form we might articulate in relation to the prefaces, introductions, and closes, conclusions, of the Lectures on the Philosophy of History, and the Lectures on the History of Philosophy, from their opening in 1816 to their close in the winter of 1830-1.

I have already cited the opening address of 1816, and its echo in the last course of 1830-1 - the Heidelberg preface to the History of Philosophy and the 1830 \textit{Zusatz} to the last section of the Philo-
sophy of History (to IV.iii.3: The German World: The Modern World: Enlightenmen and Revolution). More generally we here meet again with the configuration of Reason and History already discovered in the Phenomenology of 1807 and prefigured in the critical transition of 1800: the close of History, its 'end', is presented as a question (as 'open', opened up) by the configuration of a reflection, a Philosophy, which identifies History as its dramatic frame (this itself constituting the closed circuit in which Philosophy is formally articulated as Enzyklopädie, and identifies this self-determination as the closing figure of the History of Philosophy). We saw in the Phenomenology a duality between the inscription of the closing figure of Philosophy in the closing configuration of History (as 'dramatic' inscription of the Phenomenology in its context), and a complementary self-determination of Reason within the formal configuration of historical universals articulated in relation to an initial 'alienation' of Reason from itself in a natural identification. The Philosophy of History closes with the recognition of the end of the eighteenth century as the transition into a new period, opening in what becomes open in the closing configuration of Philosophy. Conversely the closing section of the lectures on the History of Philosophy opens ('Neueste Deutsche Philosophie'):

In Deutschland ist dies Prinzip [sc 'die Revolution zu welcher der Geist in der letzteren Zeit..fortgeschritten ist'] als Gedanke, Geist, Begriff, in Frankreich in die Wirklichkeit hinausgestürmt. Was in Deutschland von Wirklichkeit hervorgetreten, erscheint als eine Gewaltsamkeit äusserer Umstände und Reaktion dagegen. (1)

In Germany this principle [sc 'the Revolution to which Spirit has in most recent times..advanced'] has burst forth as Thought, Spirit, Notion; in France in the form of Actuality. In Germany what there is of Actuality comes to us as a force of external circumstances, and as a reaction against these.

and closes ('Resultat'):

Sein Resultat ist der Begriff, den er von sich erfasst: die Geschichte der Philosophie die klare Einsicht, dass der Geist dies gewollt in seiner Geschichte. Diese Arbeit der Menschengeistes im inneren Denken ist mit allen Stufen der Wirklichkeit parallel.

1: III.iii, introductory section

In der Einheit den Gegensatz, und in dem Gegensatz die Einheit zu wissen, dies ist das absolute Wissen; und die Wissenschaft ist dies, diese Einheit in ihrer ganzen Entwicklung durch sich selbst zu wissen.

Dies ist nunmehr das Bedürfnis der allgemeinen Zeit und der Philosophie. Es ist eine neue Epoche in der Welt entsprungen. (1)

The conclusion of the history of Philosophy is the conception of itself, and the clear perception of this as the end of Spirit throughout its history. This inner work of the human spirit in Thought is parallel to all the developments of Actuality in its various dimensions. No Philosophy stands outside its own time.

The history of Philosophy is the innermost core of World-History; but this radical significance of historical figures of Thought is itself a recognition that does not figure within that history. Such conceptions are the most direct, simple revelation of the World-Spirit: its concrete tangible face, History.

To know opposition in unity, and unity in opposition, this is Absolute Knowledge; and Science is this: to know such unity in its whole development, by means of itself.

And this is the demand made by all Time, as of Philosophy. A new age has come forth in the World.

The introductory section of the Introduction to the lectures - the introduction to the Introduction - had opened:

Über das Interesse dieser Geschichte können der Betrachtung vielerlei Seiten beigehen. Wenn wir es in seinem Mittelpunkt erfassen wollen, so haben wir ihn in dem wesentlichen Zusammen-

1: III.iii.8 (1970-1 ed, pp 456,460)
The significance of this history may be approached from many sides. If we would fix its central point, we must look for it in the essential interdependence of what is apparently past, and the present stage reached by Philosophy.

...and had closed:

Most particularly, the most significant point in the account will correspond to the relation of the history of Philosophy to the science of Philosophy itself; ie, that it doesn't simply present the outward, accidental side of the data which are its contents, but as content - what we see as having come forth historically - the history of philosophy itself belongs to the science of Philosophy, is itself scientific, and thus itself becomes, in principle, that very science of Philosophy.

...The History of Philosophy closes in the recognition of the framing of the locus of framing History in that History or Story of the World - the inscription of the Philosophy of History in the History it frames - is Philosophy. Is the true frame of a universal History, and is (in this closed circuit of inscription of locus of framing in frame) the limiting or closing figure of Philosophy, prefigured in the various transitional figurations of Philosophy as identified in philosophical History.

'A new epoch has arisen in the World....It is my desire that this History of Philosophy should contain for you a summons

1: Introduction, ab init. (Michelet's recension of 1833) 2: Aufsatz
to grasp the Spirit of the Time'. In this dramatic (or rhetorical) inscription of the closed circuit of the System (closed precisely with the inscription of its systematic framing as one component in the World-Drama or World-Story it frames) in its 'historical' context - in this systematic inscription of the encyclopaedic circuit of 1830 (the second and last revision by Hegel of the published frame of his System as the *Enzyklopädie*) in the cultural order of nineteenth-century Germany - we may find a close of that development from the initial announcement of System in 1800 (itself one figure in a Romantic Play of Figures by which I have tried to mark the opening of a new century in Germany), through the Logic of 1812-16 (and Waterloo...), to a configuration 'outwardly', 'subjectively', contingently, marked by Hegel's apparently accidental departure from the scene of the World-Drama in 1831.

A 'close'...or is that 'summons' which closes the History of Philosophy a mere closing formality? - A formal close of the lecture-series by Professor Hegel...which is at the same time a framing of the System as a whole in a formal marking of the question posed ('subjectively', in the auditor) by the limiting residual duality of History of Philosophy and Philosophy of History: the residual duality of the Close of Philosophy (and the System) in the recognition of its 'part' in History (as framing its World), and the Close or closing configuration of History marked by and open in (as complementary question) this Close of Philosophy. A question marked 'in' History, then, precisely by Hegel's inscription of the close of his system of lectures 'in' the 'subjective' or outward mode in which his audience experiences the closing configuration as open, as question, summons.

In this limiting duality of the formal determination of the inscription of System in Context as question, summons, focussed formally in that 'subjectivity' or relativity which the System marks as 'outside' its circuit - a 'grasp' of and engagement in the Close of History as something open to the audience (with the close of System and lectures), by which the 'ideal' Begriff which frames the system by grasping itself in a movement of abstraction has its 'Eingreifen in das Leben der Menschen': that Eingreifen which had summoned Hegel from his Frankfurt *Ideal des Jünglingsalters*, from that abstraction, to Jena in 1800...in this limiting duality or question, then, we may see a reflection of the initial configuration of 'System' in 1800...and in that reflection, over the circuit of thirty years, of the opening
'summons' posed by the first engagement in the figure of System, of a 'close' of Philosophy, and the closing rhetorical question of 1830-1, we may articulate the first thirty years of nineteenth-century German Reflection as a circuit, a period, within the wider 'revolution' opened up in the year of Hegel's birth by Kant's Inaugural Dissertation.

Further, we may then see Hegel's closing summons, that formal inscription of the formal circuit of the System in its formally determined 'outside', as one 'side', framed in a retrospective History, of a configuration of 1830 from which there opens up, over the 'thirties and 'forties, a divergence between complementary 'theological' and atheological (or 'anthropological') versions of inscription of the hegelian 'question' and its logic in the auditor's framings of their 'parts' in the Close of History. - A divergence between 'theological' and 'poetic' versions of the inscription of the logical circuit traced over the first thirty years of the century by Hegel, in a more radical dramatic configuration of which it was now seen as one side, one order or dimension, abstracted from that duality of Philosophy and History (logical and dramatic; logical and 'theological' or 'poetic', anthropological) which frames the close of the System as a question: abstraction from the doubling of closed universality in a subjective economy 'outside' it, focussed in individual subjectivity, and whose formal 'universals' the system articulates without however prescribing the contingent modality of their 'outward' instantiation.

It is the publication in 1830 of Feuerbach's Gedanken Uber Tod und Unsterblichkeit which marks, 'historically', the opening of this divergence between two main lines of response to Hegel's summons, in the controversy which led to Feuerbach's dismissal from his teaching-post at Erlangen. A divergence, then, articulated in complementary inscriptions of Hegel's logical frame in those theological or 'poetic' frames, figurations, which Hegel himself had identified as abstractions from a more radical Philosophy. - A divergence, then, which echoes the complementary stoic and epicurean inscriptions of Aristotle's logic in the dramatic order it thought to frame in terms of an initial 'position' or positing. Hegel's inscription of the close of Philosophy in the twilight of History is transfigured by Feuerbach into a new dawn, and the opening of a Philosophie der Zukunft: a future 'open' in the radical indeterminacy or freedom of
Man asserting himself in the natural play of an *Inter-esse* from which the formal poles of 'positing' (formal Subject and Object of Philosophy) are abstracted, as self-assertion. But Feuerbach's inscription of hegelian abstraction in a more radical 'natural' situation, and the heretical inscription of the theological order of 'academic' hegelianism in a natural economy of stories, (associated with the move from Erlangen to Berlin and journalism) is itself still formal (and the conflict with the 'old' academic hegelians still framed, in the journals, academically, abstracted from Feuerbach's particular situation in the prussian culture of Berlin). It was precisely through the criticism of the residual formalism or abstraction of the 'young hegelian' versions of inscription of hegelian logic in a primary poetics of Nature that the most radical mid-century figure of inscription of hegelian logic in the cultural economy of its enunciation was to be reached by Marx over the 'forties. We may perhaps take his transition out of an abstraction culturally instituted in the University, through the Dissertation *Uber Demokrit und Epikur* of 1840-1, as marking a turning-point in that inscription of the closed circuit of the hegelian System in a radically *dramatic* (or 'practical') order, which, in the Dissertation, is expressly articulated on the analogy of the epicurean inscription of Aristotle's abstraction in a dramatic figure derived from the 'naïve' materialism of Democritus, which classical greek philosophy had thought to supersede. This *configuration* (as a whole) drawn from an earlier phase of Philosophy which the hegelian circuit or system had in its turn thought to comprehend and supersede, itself provides a model for the supercession of the hegelian 'close' of Philosophy: just as, in the model, Democritus provides Epicurus with a dramatic configuration of Reflection, in which the aristotelian circuit or close is inscribed. In this configuration of analogy (that play of figure, precisely, from which Aristotle's logical poetics had thought to abstract), Marx' own part corresponds to a missing term, the 'analogue' in relation to Hegel of Epicurus' relation to Aristotle, a term marking, then, what is *open* in the configuration of inscription of hegelian (and young hegelian) logic in the dramatic order of its enunciation and institution in Germany. It marks then a 'summons' from the closed circuit of an academic debate into the wider play of forces in which the abstraction instituted in the University blindly follows the
(oedipal) part of Inquiry. Marx' summons to his revolutionary part of framing that play or economy, and so framing the question of our parts: framing our part as a question as a summons to the part of Revolution.
The Last Act in the drama of World-History begins, then, with the recognition that the actors find themselves in a Drama of World-History. Outwardly the transition from the previous epoch to this new phase is marked by a revolution in the European order, in the 'physical' or outward frame of European activity, of the Action. This 'French' revolution, though, is recognised in Germany as simply the other side of a revolution in Reflection, focussed east of the Rhine. Hegel's part is to announce the new phase, this announcement itself being in part constitutive of what it announces. This part, then, parallels those, after Jena, of Fichte, Schleiermacher, the Schlegels, Stein, Scharnhorst, and others. But in one way Hegel's part is central, for in the framing of a new Prussian and German order of which each of these 'parts' are complementary components, it falls to Hegel, over the first thirty years of the new century, to assert the logical component of this order as the reflection in the new order of its configuration in Nature, in a physical economy of Kosmos.

This assertion comes full-circle by 1830, in the framing at the University of Berlin of the place of the framing of Kosmos in that Kosmos which it frames: in the familiar figure the School frames encyclopaedic knowledge in the circuit by which it inscribes itself in the 'outward' correlate of that Encyclopaedia. And this circuit turns, as it were, upon the inscription in that outward order of the cultural frame, the State, in which the circuit is physically or outwardly 'instituted'.

Now in the cultural frame of a 'World-History' in which this constitution of an hegelian 'School' in Germany is one element, we may organise a 'new phase' announced in that School, in relation to that Hegelian transition from 1800 to 1830, by considering the correlation of that Hegelian figure with a European context which appears 'in' the logical circuit of the School as one component of that circuit.

That is to say, we may now inscribe the Hegelian inscription of context in text as a sort of elementary 'position'
which may be taken to open a dramatic development analogous to
that opened in the hegelian texts themselves by various figures
of 'position' or 'positing'. We may move into a wider dramatic
order that that framed in a 'hegelian' logical determination of
the relations of logical text and european (or terrestrial) con-
text, by inscribing this hegelian circuit itself in a correlative
context, just as the initial 'position' of the Phenomenology was
inscribed in a Nature which distinguished itself from the formal
pole of preliminary - or rather, liminary - position.

Taking, then, the simple figure of a logical 'circuit'
elaborated by Hegel from 1800 to 1830 as initial position or 'coor-
dinate', we may proceed to articulate something corresponding to
the new period in World-History framed by Hegel in that circuit,
in a sort of cultural frame, in space and time, where the various
elements - the other 'coordinates' - of this frame are defined in
relation to that initial point or 'position'. - That is to say, we
may take this hegelian 'circuit', in Germany and from 1800 to 1830,
as a sort of opening episode whose various components then articu-
late a story or history, just as, say, the opening scene of a play
might be taken to frame an unfolding or interplay of the figures
first brought into relation in that scene, which closes through a
sort of reintegration of that play or interplay in the final scene.

- Or perhaps a 'musical' analogy would be closer: we might
take the figure of the hegelian inscription of its encyclopaedic de-
finition in a Kosmos thus defined as a composer might take an open-
ing theme, and unfold a composition from that theme. - A composition
whose 'circuit' is as it were prefigured in the liminary circuit of
the opening theme, and which itself closes in an integration of the
components of the opening theme which mirrors in the time of the
composition, and its harmonic 'space' the initial scheme. (Indeed
we might easily enough draw such an analogy out of a parallel between
hegelian Dialectic and the contemporary opening of a new phase in
'music' in the strict sense of an aural 'poetic' abstracted from
narrative).

Back then to 1800: What are the figures there 'in play'
from which this hegelian circuit abstracts, as the instituted log-
ical order of a new Prussia?
First of all there is the physical order of geographic-al 'boundaries' or 'frontiers' of various different groups - a physical order which enters in a fundamental way into the articulation of activity within the various 'nations' constituted by these boundaries. - Activity of which Reflection and Philosophy is one component.

We earlier saw how a 'logical' integration of the 'policy' of a group, a unitary framing in such a group of its activity as a whole, involves as one element the definition of the group - the self-constitution of those people as a group, indeed - in terms of a physical boundary, a 'land', country. We may inquire just how, in a given group, the logical order of integration of activity incorporates the activity of defining the group in terms of 'its' land. As is obvious in the extreme case of the Jews, for example, this definition is not just the simple matter of the organisation of activity within a given physical frame - we might better say that Jewish activity in the Great Diaspora is organised rather in terms of being outside such a frame.

Of course one cannot identify any 'national' group, framed by a law which organises activity within - or at least in relation to some 'land', with the ideal hegelian State whose integrated policy or activity would involve the political analogue of a logical determination of the relation of logical and physical orders - of Culture, then, and Nature 'outside'. One cannot properly identify the articulation of the Britain, France, Prussia or America of Hegel's day with some unitary frame of activity abstracted from the interplay of different framings of activity, in which this very unitary ideal is simply one component. One cannot - then - define in the case of each 'nation' or nationality some national unity coming as it were from 'above', in which the logical order of Reflection in that nation might be, in its turn, logically inscribed according to its part in a perfectly integrated national collective activity. Again, this logical 'poetic' of the state, in which the logical order of a 'national' Reflection defines its part within some supposed integrated national constitution, is itself only one component in the interplay.
of competing and conflicting framings of action in some geographic or linguistic community. – One element in the cultural 'economy' of different frames of action which is essentially open – in which the framing of this economy as subordinate to a 'political' determination of the relations of integrated policy and what that policy leaves 'open', is itself in turn but one element – however powerful – in that economy.

We cannot simply, then, attempt to define the cultural context of Hegel's 'position', by assuming some unitary logical poetic of 'prussian', 'british' and 'french' cultures, each with analogous 'logical' orders of Reflection somehow instituted as primary components of the cultures in which they reflect differently some common Kosmos. We can, indeed, find in 'Prussia' the figure of a unitary culture instituted in the university – in the hegelian figure of Philosophy framing its part as the logical component of a State which Philosophy in its turn inscribes in a logical Kosmos. But we can also find, after 1830, an hegelian 'left' (to follow Strauss' analogy with the french parliament) which finds itself outside this institution, and yet philosophising.

How is it that the hegelian scheme of the part of its logical definition in the logical poetics of the State should have a part, and through this a force, in the prussian State, which it does not have in Britain or France?

We have just seen that this is not because of some logically integrated and unitary 'prussian' culture abstracted from certain physical boundaries patrolled by the prussian army. Rather must we say that that figure of the integrated State is focussed (as it were) in the wider cultural economy of Europe (and, indeed, 'World') within those boundaries, where it constitutes one primary component in the organisation of activity within those boundaries – entering as it were 'physically' into the play of forces in that 'land'. Entering as one component into a dramatic order in which the very figure of 'abstraction' from the physical side of the Drama is itself one ambiguous component in that order – one component, indeed, just like the figure of a 'physical side' itself.
What, though, is the character of this insistence on the essentially open 'interplay' of figures and corresponding forces? Must not this insistence or assertion of the interplay then be somehow inscribed, itself, in the play that it asserts?

"Yes: it is just this 'interplay' of the various components of 'European' Culture at the turn of the nineteenth century which I suggested be taken as opening a new phase of Reflection, with the question of how to frame that interplay. In - physically 'in' - Germany - within the physical circuit corresponding roughly to the framing of activity in a 'German' language - this 'interplay' is framed by Hegel in terms of an initial 'positing' of Nature - a Nature 'in' which this initial position is (then) itself inscribed. This 'hegelian' characterisation of the interplay of figures or forces may itself (then) be characterised by its part in the physical frame of 'Germany'. Indeed the characteristically 'German' character of the initial positing of Nature as a formal pole 'outside' Reflection is subsequently taken (by Marx and Engels) to define the logical circuit - the characteristic abstraction from the real interplay of forces - of a 'German Ideology'. And this characterisation, in its turn, is again dominated by the 'German' figure of inscription of the logical order of Reflection and definition in an 'outward' economy taken as primary frame. The assertion of the primacy of the physical frame of social activity - of that activity of which this very assertion is itself asserted to be one component - is itself inscribed in that material 'economy' of European society, Culture. The hegelian positing of an abstract 'Nature' is thus itself inscribed in a more radical 'dialectic' in which this abstraction is found to be one figure at work, in play, in a 'German' culture which is then - in the abstract hegelian scheme - inscribed in an abstract Nature. Just as the initial 'position' of Nature as primary frame of position is inscribed, in the hegelian dialectic, in the dynamic, the movement, which distinguishes itself from the static formal pole of 'Nature' as first 'posited', so now this abstract starting-point of that dialectic is now inscribed in an interplay of figures and forces framed in the physical order of national boundaries - or rather in the material or natural economy of Culture in which the logical order first abstracts to the bounding of some physical domain as 'property'.
Now the assertion of this social Nature as primary frame involves the recognition of this assertion itself, inscribing itself in that social frame, as first of all activity, as action. Here Marx' transition from the academic logic of the university through Epicurus' figure of the inscription of the logical order of its assertion in a radical Nature discovers itself in the figure of Action, from which the academic 'thesis' has abstracted. And that abstraction is itself to be framed in that primary abstraction of property, appropriation, in which is constituted the social order of which the university is simply one component — indeed, the passive 'reflection'.

Hegel's Dialectic is thus itself inscribed in a more radical dramatic frame, just as that dialectic had itself amounted to the inscription of the various 'positions' of earlier Reflection in an abstract 'movement', in which World-History was formally articulated.

'In' France — in the physical area, roughly, in which activity is framed and discussed in 'french' — the characterisation of the 'interplay' of figures or forces in the revolutionary period, over the period of the elaboration 'in' Germany of Hegel's System of that remarkable 'appropriation' of all earlier Reflection parallels that in Germany. In the interplay which marks the opening of the century, and which is outwardly marked by the Revolution, one may find at work the earlier correlation of the French boundary, land, and a 'logical' articulation of French 'policy' — of the framing of French activity — in terms of an inscription (inside that boundary) of the relation of activity on either side of the boundary as one component of the French policy organised at Paris. This 'French' characterisation of the revolutionary interplay of forces is itself one component (then) in the play. That attempt to subordinate the European convulsion to the logical articulation of a policy determined at Paris is one force at work in the convulsion. And one component of that French policy and its centralisation from 1800 in the rule of Napoleon, is the educational policy, the inscription of Reflection, and the poetics of induction of the young into the frame of French activity, as one
part of that activity.

I have already briefly considered the part of British reflection both within the 'physical' economy of industrialisation over the period 1800-1830, and as (with the Radicals) reflection upon the policy associated with that economy. As also reflecting the established social order in the 'common sense' of the academies. In Britain, as in America, reflection upon the interplay of forces (in which reflection is itself recognised as one element) is at once framed in the physical economy of 'nations' as one component of national activity - and at the same time enters into the coordination of European and American activity as a whole - a coordination in which the organising force of national boundaries enters as a subordinate component.

That is to say: the logical order of national policy is framed on the one hand in the economy of the 'boundary', while, on the other hand, that economy is framed by policy; and reflection, on the one hand one component in the economy of activity, and framed by an educational policy which is in its turn dominated by that economy, on the other hand articulates policy, and through it that economy.

Furthermore, we may distinguish the parts of an 'abstract' reflection framed in a logic generally embodied or instituted in the University, and of the 'applied' logic embodied in the progressive mechanical or industrial articulation of the various European and American nations, and instituted in the Paris Polytechnique, in the Royal Institutions of London, Manchester and elsewhere, in Gauss' Observatory at Göttingen, in Liebig's laboratory at Gießen, and so on.

Thus we may identify, in the 'interlay' at the opening of the century, first a limiting 'physical' order of Nature, next the articulation within this of the physical economy of activity, then the 'cultural' frame of human interaction, then the logical order of this activity, and finally the abstract logical 'space' of the whole which mirrors the limiting physical frame in the central cultural frame of action. The 'interlay' amounts to the
complex 'economy' of mutual inscription and re-inscription of one order within another. The 'action', covering two centuries, which opens with the question posed by this inter-lay, may be 'outwardly' framed in the simple 'space' articulated by national boundaries, and in a time articulated by circuits or 'phases' of reflection in these various 'places' which are inscribed in the limiting circuit of two hundred 'years', rather as the articulation of national boundaries is inscribed in a common surface of 'Earth', and its circuit (to speak with the astronomers) about a 'Sun'.

Complementing this 'outward' spatiotemporal frame is the figure of the 'school', corresponding to the simple figure of a logical poetic of actuality, in which that logical order of reflection is itself identified as one component. We have just seen how in the first phase of this Third Part such a poetic is materially instituted or embodied in Prussia as the University of Berlin, and how Hegel's encyclopaedic framing of actuality there involves an 'ideal' characterisation of the part of Philosophy instituted in the State — in the State which is a mirror of this logical order of reflection on one side, in the physical order of Cosmos on the other.

We saw how this logical poetic of the State itself constituted one component in a new and systematic articulation of Russian policy — an integration of policy within the figure of an initial abstraction, in the interplay of German forces, of a unitary activity framed by the Russian border. That 'logical' articulation of Russian policy is an analogue in the cultural economy of Europe of Hegel's initial inscription — or self-recognition of the logical order of Reason in the physical order and economy of Nature.

Are we then to say, with 'arx, that Hegel's logic is determined by its part in the educational policy of the new Russia, and that this policy is in turn determined by the inscription of Russian policy in the dynamic of appropriation?

Or are we perhaps, now, to see in 'arx' framing of the logical order in his initial act of asserting the inscription of
the logical order of assertion in physical nature, a recurrence of the 'german' figure of a self-inscription of the logical order in its physical converse - A recurrence which now circumscribes and incorporates, aufhebt, 'dialectically', the preceding instance of the same figure of german reflection.

"Right we then proceed a step further, and see in the conflict of an idealist and materialist 'version' of a common dialectic, an interplay of what are simply different figures of assertion, different frames of action in some still deeper and more radical economy or interplay? Might we then see in Nietzsche's inscription of the assertion, the framing, of such an economy in the economy it asserts, some more... powerful... conception, framing, assertion, part? - Then is not that, then, still framed in the constant figure of a logical inscription of the logical order in a more radical economy - in a persistently german Reflection? Can we not articulate a nineteenth-century 'german' reflection in that constant figure, in successive phases beginning with the elaboration of a hegelian 'system', passing through the split in the hegelian 'school', and through Marx' and Engel's inscription of their assertion of the material dialectic of history in that history, in the Year of Revolutions, to a final phase which opens with Nietzsche's inscription of the opening logical order of greek reflection in the poetics of tragedy? Marx and Nietzsche wrote as it were in exile - but might one not describe Marx in London, and Nietzsche in Italy as rather 'out-side' Germany than 'in-side' England or Italy? Is their position outside Germany not itself one component in a german order of boundaries, which happens to be dominant on that side of the boundary we call Germany (and they, wir, nennen 'Deutschland')?"
socialism': might these perhaps be identified as two 'sides' of a common figure of german Culture - an 'in' side and an 'out' side? - Might one not, then, see a later instance of the same figure of inside and outside, towards the middle of the following century: 'national' socialism in Germany (with its definition of the 'german spirit') and the 'Frankfurt School' in exile at New York?

- What then is involved in the figure of Nietzsche's marking the german reflection towards the end of the nineteenth century from 'outside'? In the 'eighties he was framing earlier Reflection in a play or economy ( of figuration, force - with 'figure' a force and 'force' a figure) in which the ('logical') order of his assertion of this general Economy inscribes itself as one component. In the last years of the century - one might say - the figure of 'Nietzsche', having asserted itself as persona, 'mask', is itself lost in the play it had asserted: no more any fixed instance of 'I' - of 'Friedrich Nietzsche'. - And in this, then, incorporated, bodily, in the german order, as 'mad' Friedrich Nietzsche, who has 'lost his mind'.

The inscription of this position 'outside' the internal order of german Culture in the german frame towards the close of the century parallels the rise of dominant 'neokantianism' in the german universities - a rise focussed at the university of Marburg around the time of Nietzsche's earliest texts produced at Basel. - A rise associated with Lange's historical account of the rise of the materialism of the mid-century (History of Materialism, 1866; revised 1870), and his move from Switzerland to a chair at Marburg in 1872. At the end of the century the parallel 'institution' of these two developments - each of them beginning on the southern border of the newly integrated Germany - in Germany, is reflected in the institution of an interplay of these two sides - Reason and Madness as it were - in the australian interface of prussian Germany and catholic Italy - at Freud's Vienna.

Might we then take this 'german' configuration of Reflection at the turn of the twentieth century as symmetrically closing a development of european reflection opened in the revolutionary beginning of the century by german 'romanticism'? Might we see the
viennese 'dramatisation' of the interplay of two 'sides' of nineteenth-century German Reflection as one component in the focussing of the disintegration of the nineteenth-century European order as a whole at Vienna - in a fragmentation of European culture outwardly reflected in the fragmentation of the Austrian dominance of Central Europe dating from the time of Metternich, and prefigured in the revolution and Slavic secessionism of mid-century, and the victory of Prussia in the final contest of 1866?

Nietzsche 'lost his mind' in his inscription of the assertion of a radical interplay of forces in that play; Lange's successors at Marburg and elsewhere inscribed Reality in a primary 'kantian' self-distinction of 'I' from the mechanical 'potentiality' of such forces, such a chaotic play. Freud dramatises the interplay of these complementary inscriptions of 'I' in Matter (with its mechanism) and Matter in the rational distinction of self-conscious 'I' and unconscious Matter.

But this freudian dramatisation of Reason and Madness does not itself constitute a turn-of-the-century focus of Reflection, so much as one component of that transition from the Reflection of the nineteenth to that of the twentieth century. For this inscription of the 'psychical' or 'psychological' frame of self-distinction of 'I' in the 'applied' art or poetics of Medicine constitutes only one of six correlative and parallel figures of inscription of the logical order of Reflection in the 'apoetic' of its application.

Thus just as the psychical or psychological order of Reflection is inscribed at Vienna in the 'applied psychology' of Medicine, so is the formal or 'logical' articulation of that psychological order inscribed in the 'applied logic' of Mathematics. The analogous articulation of the 'physical' order of nineteenth-century reflection is at the same time inscribed in the poetic order of 'application' - corresponding to a 'chemical' (or perhaps, indeed, 'alchemical') order of mirroring of physical macrocosm and its elements in human microcosm.
About the same time - over the turn of the century - ontology is inscribed in the 'phenomenological' order of application, poetics in a 'musical' order from which the old poles of representation, are found to be limiting abstractions (just as the old poles of the 'physical' order, Space-and-Time and material 'point' and continuity, are found to be similar abstractions from a more radical 'dramatic' or poetic order of application).

- And, finally, the abstractions of an earlier theology are inscribed in a more radical 'working' of Religion.

The intellectual revolution effected in the transition from one century to the next - which as a whole, then, closes a figure of nineteenth-century Reflection opened by 'romanticism' - is itself reflected in (and reflects) a 'second industrial revolution': at the turn of the century Germany overtakes Britain as the leading European industrial power, and America overtakes both Germany and Britain. In the new configuration of a second wave of industrialisation the Steam of 1770-1830 is displaced by the Electricity of about 1870-1930, as the focus around which is organised another technological transformation of the frame of 'western' activity.

'Western': the 'second industrial revolution' in Europe and America is associated with a new phase of 'colonisation' of the World 'outside', completing the integration of industrial West and colonial South and East, at last, in a World-Order with its complementary interplays of the western policies and economies which together dominate colonial suppliers of raw materials and colonial markets for western production. In this wider frame Germany now comes into conflict with Britain in Europe and in Southern Africa, following the European 'scramble' for, and partition of that continent from 1884-5, when Germany established her first 'colonies' - this just as Prussia had come into conflict with Austria for dominance in Germany, over the mid-nineteenth century.
The intellectual revolution around the turn of this twentieth century in which I write these words, in the context of an extension of the interplay of 'western' polities and economies to a World of which this 'West' is as it were one 'side', may be taken to mark a turning-point in the transition from the revolutionary beginnings of the nineteenth century to the close of the 'twentieth century', of the second millenium around whose end the wider tradition of Reflection itself, beginning with the pythagorean mystery, comes, so to say, full-circle. - A full circle within which the circuit of Reflection in nineteenth and twentieth centuries of this our 'Era' is itself inscribed as one of three primary components - just as the transitions from opening to close of that nineteenth, and this twentieth, century themselves constitute two primary components of the third phase of Reflection which they together present.

Outwardly the transition from second to third phase - that is, from eighteenth to nineteenth century - was articulated in a transition from 1770 to 1830 - this component of the wider transition from 1650 to 1900, or 1250 to 2000, being taken as representative of the various wider and narrower figures of transition from which it is abstracted. The figuration of that transition or 'revolution' - romantic, french, industrial and so on - is paralleled by the figuration of the 'second industrial revolution' from about 1870 to 1930 - concluding, say, with the collapse of the World Market or Economy, focussed in the Wall Street Crash at the close of 1929. In the second half of this Third Part we will find a configuration of a transition 'out' of the Reflection of two-and-a-half millenia, this turning, so it seems, around the close of the twentieth century. In particular, we will see, I hope, a parallel between the nineteen-eighties in which I write, as transition from about 1970 to 2000, and the eighteen-eighties. And just as those eighteen-eighties 'mirror' in time the second decade of the nineteenth century, within the general figure of transition from nineteenth to twentieth century, so in the Conclusion of this book this writing will inscribe itself in a figure of transition from twentieth to twenty-first century, from second to third millenium. Before that, we will find in the second half of this Third Part a mirroring of these nineteen-eighties in the second decade of this twentieth century, which
parallels (mirrors, indeed) the mirroring or structural analogy of first and last phases of the nineteenth century.

The frame (as it were) of this 'mirroring' in a common temporal order, of successive figures and phases of Reflection, is to be found in the articulation of the Group in whose activity this Reflection is one component — corresponding to the 'theoretical' articulation of this Group's actuality within the closed circuit of the logical order, more or less 'abstracted' from the Drama or Action in which it plays its part. I have identified the opening of the phase of Reflection to be considered in this Third Part with the interplay of various orders of figure or force or dramatic component which marks the passage from eighteenth to nineteenth century in Europe — in northern Europe, more particularly. I have briefly considered various successive identifications of this order of 'interplay' — beginning with that of Hegel over the period 1800-1830. In each of these identifications, earlier positions, earlier assertions of this interplay, are inscribed within a professedly more radical order of play, in which the very assertion of this more radical order is identified as one component, framing, in general, an order of action which it thus exemplifies.

I have taken as primary spatial frame — as 'scene' — of the Drama or Action, the interface of Europe and World — 'in' side and 'out' side Europe; and I have already suggested in passing that one might take as a focus of the transition from the Reflection of the nineteenth to that of the twentieth century, that focus of the interplay of European figures 'outside' Europe, which is America — where at the close of the nineteenth century William James (for example, in his epochal Californian lecture of 1898) asserts the inscription of Reflection in the more radical frame of Action, from which the formal polarity of psychological Subject, physical Object, and their mirroring in a formal Truth, have been abstracted.

This figure of 'pragmatism' might be taken, then, as a reflection 'outside' Europe (at the focus outside Europe of European culture) of the correlation of those various components of the intellectual revolution already noticed in Europe. Within
the Old World I have attempted a preliminary co-relation of primary orders of Reflection with the complementary outward configuration of the European 'geography' in which Reflection is organised in various 'schools'. I thought to find a relation between dominant 'logical', 'poetic' and 'physical' framings of Reflection, and the dominant organisation of activity within the physical boundaries of France, Britain, and Germany. I noticed, in the case of reflection expressed in the language of Germany - 'in' German - in the German language which frames activity and interaction within the frontiers of that confederation - a possible complementarity of a dominant logical order instituted in the schools - the universities - of Germany, and a corresponding German criticism of this dominant order among Germans 'outside' those frontiers. I also noticed a complementarity within the German schools, over the first half of the nineteenth century, between the 'logic' of studies dominated by university philosophy, and the 'applied logic' dominant in Gauss' school at Göttingen, Liebig's school at Giessen, and other 'scientific' institutions.

I noted that one cannot simply identify some 'logical' order with some equally definite 'political' order in particular countries - that this co-relation of a certain 'logic' and a certain policy was at most one element in a wider interplay of forces both within and across national boundaries. That this co-relation, or this figure of co-relation, indeed, appears most notably only as an 'ideal' framing of the part of Reflection in a logically articulated poetics of the State, in an early nineteenth-century Prussia which is in many respects distant from such 'logical' policy, and in which the embodiment of that ideal in the University of Berlin constitutes a misrepresentation of the Prussian order, with its own - equally misrepresented - part in that order.

Thus the 'German' school of Göttingen in the old state of Hanover dates from the foundation of a university there in 1734-7 at the instance of George II of England (and Hanover) and the founding of a 'Royal Society' there in 1750, and from the intercourse with England (and latterly America) deriving from the association of the two kingdoms after 1714. 'Physically' that intercourse is dominated by the part of Hanover in the affairs of surrounding Germany - yet this figure itself might sometimes
be, in its turn, subordinated to the policy of England, and to the 'logical' order of British reflection which enters as one component into that policy. What is primary is simply the open interplay of various orders of force and figuration: the figure of a correspondence between two such orders - say, logical and physical - in a particular configuration, may indeed 'frame' such an interplay... but such a framing or definition of the play of figures is itself then lost in a wider configuration of which it may in its turn be inscribed as one component.

Such a succession of 'framings' of the interplay which opens this Third Part, where one assertion or definition of the play in which that assertion is itself identified as one component, is inscribed in some more radical framing, has already been identified in nineteenth-century Germany. - But what, then, to anticipate the close of the second half of this Third Part, is the character, and what the force, of that 'framing' of successive framings of the opening interplay and its development (in which these successive framings play their - ambiguous - parts)?

We will see, at the close of this Part, how the inscription of Reflection in an interplay of 'figures', in which the figure of this 'inscription' is itself a component, presents us with the figure of question: the question of our part in an interplay in which this book is one element - one, and indeed indefinitely many elements, corresponding to the different ways that it may be framed.

We will find that, corresponding to what is marked in these words as an 'interplay', is a radical 'opening' or openness in the configuration of our writing and reading. The 'interplay' of elements in this configuration is not simply mechanical and deterministic - except insofar as it is framed in these figures of mechanism and definition. The configuration is as it were open to the figure of Drama, in which this framing of the situation as 'dramatic' is itself inscribed.
Thus the figure of the inscription of this characterization of this book from 'outside', as one component in a dramatic configuration which is identified 'in' the book, is at once a last step in the successive framings of a radical 'interplay' of figures since the revolutionary opening of the nineteenth century - of successive framings which both frame earlier framings of the interplay, and frame their own part in the interplay they identify - and a component in a millenial transition into Kosmos as Drama.

Such Drama mirrors the 'Universal Poetic' of 1800, and within the frame of this mirroring, which turns about the initial framing of theory as Action, as a component of Action, in the interplay of European figures in America at the turn of the twentieth century, the inscription of the writing of this book in the interplay which it frames, mirrors Hegel's logical frame of 1812-16, in which the Universal Poetic of 1800 was articulated in the Encyclopaedia of 1830 - in which that logical frame of the Encyclopaedia is identified as one component.

It remains now to trace the parallel interplay of the various orders of European Reflection in the organisation of nineteenth century schools in France, Germany and Britain, up to the point, at the turn of the century, where the parallel European inscriptions of the primary orders of theory in their corresponding orders of 'application' are reflected in the American figure of inscription of Reflection in a more radical order - so it seems - of Action.

I have indicated the 'elements' of the nineteenth-century 'action' now to be traced: temporal phases corresponding roughly to a division 1800-1830-1850-1870-1900, each of these 'points' in time marking a 'focal' configuration of Reflection and Context, each transition between these foci constituting a subordinate component of the 'circuit' or transition 1800-1900; a spatial division into complementary 'national' orders of Reflection, each articulated within the 'national' language which frames activity (roughly) within some physical boundary - of France, Britain, 'Germany'. - Then within each of these physically distinguished component orders of
nineteenth-century European reflection, the inscription of the figure of the 'school' within the poetics of a more or less integrated national policy, as its 'logical' component—and, paralleling this, the institution of 'technical' schooling in the 'applied' theory of 'Science' (in the restricted sense of the term dominant outside Germany). I further identified an order of reflection which, rather than being instituted in a national school as the logical component of national policy, critically inscribes actual policy (and its educational component) in a more 'radical' framing of activity, in which the very assertion of that 'radical' frame or poetics (and the inscription in it from 'outside' of the actual frame of the nation-state) is identified as primary figure of the 'logical' order of reflection and assertion.

I will now try to show how these elements are related, how they enter into play, within France between Napoleon's coup d'état at the close of 1799, and the July Revolution of 1830. I have already considered parallel components of European reflection over this period in Britain and Germany. I will then pass to the configuration of European reflection at mid-century, framed in a general figure of the logical inscription of the logical order in the physical, whether the mathematical or social frame of this inscription be taken as primary. I will then consider how this mid-century configuration constitutes a turning-point or focus of the transition from the revolutionary configuration which opens the century to the closing configuration. The latter configuration will then be taken as a turning-point in a wider development from the European order of 1800-1830 to the World-Order of 1970-2000, in which last we will finally discover our opening question of the 'two sides' of this very book and inquiry, but now, as it were, from 'outside'.
Upon Napoleon's **Conseil d'Etat** of 18th Brumaire, Laplace was appointed minister of the Interior, only to be transferred to the Senate six weeks later.

A mathematician of the first rank, Laplace was quick to show himself a less than mediocre administrator; from his first work we saw that we had made a mistake. Laplace didn't grasp any question under its true aspect: he sought subtleties everywhere, had only provisional ideas, and ended by carrying the spirit of infinitesimals into government.

— So wrote Napoleon of Laplace's attempt to articulate the ordering of the State within the unitary mathematical scheme of the stellar **cosmos** which he had formally presented to the First Consul. Having dismissed the too analytic Laplace from the direction of the internal policy of France at the close of the eighteenth century, Napoleon soon dissolved the **Classe des Sciences Morales et Politiques** at the Institut reorganized by the revolutionary government (and where the Classe des Sciences was dominated by Lagrange and Laplace).

There was no place in Napoleon's policy for the Ideologues' critical discussion of Society from a radical point of view of an economy of the World articulated on the base of elementary sensation, any more than there was a place for the inscription of policy in the applied logic of the Classe des Sciences, represented by Laplace's articulation of the physical cosmos on the base of Lagrange's analytical mechanics, with its elementary 'action' organised in a unitary cosmic economy of least action.
Father did Napoleon organise the 'applied' sciences as a primary component in his integrated policy—itself framed 'dramatically' in relation to an elementary interplay of European forces. The Institut was reorganised. Cabanis and Destutt de Tracy, who had dominated the Classe des Sciences 'orales et Politiques' rather as Lagrange and Laplace had dominated the Classe des Sciences, retired to the village of Auteuil at the western boundary of Paris, where the reflections of the Institut were carried on in private by a small group. In private—and in abstraction from the political order in which, over the last years of the eighteenth century, the Ideologues of the Institut had embodied the dominant logical order.

At Auteuil the small group around Cabanis and Destutt de Tracy were soon joined by Rumford and Lavoisier's widow—then by Maine de Biran who, over the following years, passed from the sensationalist economy of 1800 to the framing of this revolutionary scheme in the characteristically 'French' figure of a primary actuality of the psychical order of self-assertion distinguishing itself from—and this in—that 'economy' of condillacian 'ideas'.

Meanwhile, the mathematics of Lagrange and Laplace framed the institution of the 'technical' (or 'poly-technical') or 'scientific' order of the nation in the central school of engineering, the Polytechnique, where Lagrange was professor of mathematics, and whence came the school of French mathematicians that dominated the 'applied theory' of Europe over the first thirty years of the century. At the same time—over this same period—the Polytechnique framed the Saint-Simonian 'socialism' which projected a rational reconstruction of society framed in the inscription of policy in the natural economy of the applied sciences. Before Waterloo Saint-Simon endeavoured to frame in abstraction the scientific economy in which the new order was to be articulated; after 1815 he turned to the project of implementing that new order in the scientific scheme then instituted at the Polytechnique. After the revolution of 1830 the school split into two factions, and then became further fragmented after a couple of years by the death of the leader of one faction from a fit of apo-
plexy in a heated exchange with his rival 'Father' Enfantin, who was himself shortly thereafter imprisoned for professing that free sexual economy of Society against which the rival faction of Hazard emphatically dissented.

Lagrange had succeeded in 1788 in integrating the mechanical principles developed since the publication of the Principia a hundred years before (notably by D'Alembert and Euler) within the primary correlation of Space, Time and Matter first enunciated by Archimedes in terms of the elementary mechanical 'symmetry' of the Balance. Within this elementary figure—enunciated by Lagrange as the 'Principle of Virtual Velocities', Mechanics was articulated as an analogue of euclidean geometry in the four dimensions of Space and Time. The correlation of 'virtual velocity' of one end of a balance—of the 'momentum' of one arm—with the distance of that end from the fixed centre of a virtual or imagined movement or displacement of the system, which we saw first in Archimedes' discussion of the principle of the Lever—of its 'equilibrium'—is extended by Lagrange to the consideration of the equilibrium of any mechanical configuration which can be defined by the values of a finite number of variable quantities analogous to the 'position' of the arms of the simple balance ('generalised coordinates'). The elementary mechanical 'symmetry' of Space-and-Time first seen in the symmetry of two equal arms of a balanced uniform rod, is extended to the correlation of these 'generalised coordinates' with their associated 'generalised momenta'. The articulation of this elementary symmetry through the 'Principle of Least Action' proposed by Maupertuis (head of Leibniz' Berlin Academy) in 1751, amounts to the principle that a mechanical 'disymmetry' in any system be accounted for by the inscription of that system as a component of a wider symmetrical and 'closed' system. For the Principle of Least Action is derived by Lagrange from the equilibrium of a 'symmetrical' system, in which any imaginary or 'virtual' displacement involves an increase in the total momentum of the system, just as a displacement of Archimedes' balanced rod requires some external impulse, however small.
The first two volumes of the *Mécanique céleste*, presented by his Minister of the Interior to Napoleon at the close of 1799, embody the extension of Lagrange's principle from the elementary dynamics of a Newtonian point-particle to the 'System of the World', the closed system of all such 'particles', requiring none of those external impulses from 'outside' which Newton had thought necessary from time to time (to preserve the order or stability of the system), and ascribed to divine intervention - to the hypothèse of which Laplace informed the First Consul that 'il n'avait pas besoin'.

This mathematical economy of the solar system may be taken as one 'side' of the mathematical focus of 'applied science' in Paris at 1800. - As the 'physical' correlation of point-atom or 'element' of physical cosmos, and the closed system of all such 'infinitesimal' elements (this correlation framed in the 'nebular hypothesis' of an initial uniform distribution of these 'elements' or material points through a symmetrical sphere, disrupted by the radical disymmetry of an initial rotation of that sphere - as in the cosmic 'hypothesis' of Parmenides - and of Kant in 1755) - meanwhile Lagrange was lecturing at the Polytechnique on the principles of 'analysis' - of correlation of finite system and supposed infinitesimal element - involved in Laplace's construction, and so opening the nineteenth-century inquiry into the 'logic' of mathematics, which was to close with the recognition that this 'logic' might itself have to be inscribed in the mathematical order, rather than the reverse.

- So much then, for the Polytechnic 'School' as at once institution of applied theory 'in' the state and (notably after 1815) frame of inscription of the social frame of activity in a wider natural economy, mathematically articulated by Lagrange and Laplace. One might draw a parallel between Lagrange and Laplace at the centre of Paris and the group at Auteuil at the boundary of the city: these parallel schools converge, indeed, towards the configuration of 1830, when Auguste Comte, a pupil at the Polytech-
unique from 1514 until his expulsion (following his part in a student rebellion) in 1816, began to set forth his proposal of a systematic reform of society, framed in a wider scientific economy of cosmos (Cours de Philosophie Positive, 1830-42).

On the other hand, the philosophy of Tuteuil and that of Sorbonne and École Normale converge over this period in the persons of Boyer-Collard and his assistant, Cousin. The former, from 1811 professor at the re-established University, became in 1815 Minister of Education, and representative of the département of the Marne; Cousin, finishing his studies at the École Normale, was that year appointed assistant to Boyer-Collard at the Sorbonne. In 1828 Boyer-Collard became President of the Chamber of Representatives, and it was he who, in March 1830 presented to Charles X the programme of reform, whose rejection led to the Revolution of July. The 'logic' of the Sorbonne professor and leader of the lower house of the parliament was itself framed in the primary practical order of policy: the 'common sense' principles informing the reaction of Reid's 'Scottish school' against Hume's Economy of Experience were invoked by Boyer-Collard against the analogous Economy of Sense propounded by the Idéologues around the turn of the century.

Boyer-Collard's assistant, Cousin, was dismissed by the reactionary government of Charles X following the death of Louis XVIII in 1821, and was arrested ('probably at the instance of that government') during his second visit to Germany (1824-5). He was reinstated at the École Normale and Sorbonne through pressure from the liberal party in 1827, and after the revolution of 1830 became the focus of the educational establishment, and as such a major figure in French political activity. In 1834 he became Director of the École Normale; through his reports on Education in Germany and Holland, and his work in the Department of Education (becoming Minister under his friend Guizot - himself Professor of History from 1827 - in 1840) he directed the reorganisation of French educational policy, and indirectly influenced educational reform in other countries.
Reflection under the 'bourgeois monarchy' of 1830-48 might be organised about the dominant and complementary figures of Cousin at the centre of the establishment and Comte 'outside', unable to obtain a teaching post at the Polytechnique, and acting as coach and examiner for its entrance examination - until eventually dismissed from even that peripheral part in national education in 1842 (to be subsequently supported by a group of friends in France and England). 'Positivism' and 'Eclecticism' at mid-century might be traced down to the figures of Poincare and Bergson towards the close of the century - these two, like Comte and Cousin before them, representatives of complementary 'mathematical' and 'logical' (or 'scientific' and 'philosophical') currents or schools earlier embodied or instituted in Polytechnique and Ecole Normale.

Cousin's 'eclectic' programme, framed in the interplay of the British, German, and French schools of around the turn of the century - this notably in the historical Introduction to Philosophy which constituted his first course of lectures upon his re-instatement in 1827 - is paralleled not only by Comte's systematic scheme of 1830, but also by the new 'poetic' programme announced by Hugo in the long preface to his 'romantic' drama Cromwell (1827). The July Revolution which brought Cousin to the centre of French reflection in 1830 is paralleled not only by Comte's proposed revolution in the Sciences, but also by the theatrical revolution reflected in the riots at the first production of Hugo's Hernani that year. In Cousin's logic, as in Hugo's poetic, an interplay of British, German, and French figures frames a new philosophy or a new drama - a new 'dramatisation' of Philosophy, one might say, in Cousin's History, and a 'philosophical' theatre in Hugo's Romantisme.

In the interplay of French, German, and British figures, Cousin articulates a characteristically French dramatisation of Reflection: the individual self-recognition of Descartes and Maine de Biran is inscribed as the 'psychological' component of a poetic in which an impersonal Reason distinguishes itself in and from the interplay of figures. This figure may be taken as a central 'French' expression of a wider European configuration of about 1830, in which a common interplay of French, German, and British (predominantly Scottish) reflection is identified in different ways in parallel ways.
in Germany, France, and Britain. It is to this wider configuration that we now pass, having already briefly noticed the parallel developments in Britain and Germany from about the beginning of the century until around 1830.
At the beginning of the account of the third Part, I took Hegel's framing, over the years 1820-1830, of the revolutionary 'interplay' of European figures and forces at the opening of the century, as a sort of initial 'coordinate', in relation to which the narrative of parallel British, French, German and American reflection over the nineteenth and twentieth centuries might be more or less symmetrically articulated. I have briefly noted British and French parallels of Hegel's logical determination of the place of the logical order of Reflection or Philosophy in the State as primary 'epistemic' frame of activity. I now propose to pass from these initial parallels and coordinations of the various national orders of pure and 'applied' theory and their related contexts, over the first thirty years of the nineteenth century of our 'Era', to the consideration of an Euroean configuration of Reflection around the middle of the century. This configuration will first be defined in terms of a transition from the configuration of about 1830 to that of about 1870 (say, to that whose outward context is dominated by the Franco-Prussian War and the unification of Germany under Prussia). This figure of transition will then be extended to the analogous structure of transition from opening to close of the century, of which the transition from 1830-1870 is a subordinate component.

With the identification of Cousin's part in the French educational establishment after the July Revolution of 1830, the configuration of 1830 appears as parallel British, French, and German framings of the interplay of British, French and German figures. Cousin's characteristic 'logical' framing of this interplay in an Euroean drama of self-recognition of impersonal Reason parallels Hegel's inscription of his Reflection in the frame of the State as primary frame of self-distinction of the logical order of Reason in a radical economy of potentiality - of Nature. Meanwhile,
a primary invariant frame of activity, of which the passive subject-object relation of sensation is recognised as only one component: the figure of this 'Unconditioned', like 'Seme's and Kant's 'Idea', integrates the economy of action, but remains unknown in principle, its working articulated in the radical frame of Analogy, by analogy with our unquestionable assertion of our finite selves as instances of assertion.

Just as Hamilton's part in Britain parallels that of his friend Cousin in Paris, so does Mill's parallel that of his friend and regular correspondent Comte. In each case we find one figure at the focus of instituted reflection, asserting as it were the logic of that position and institution, and one 'outside' the University, framing his part in the assertion of the primacy of 'applied' theory; in each case the formal frame of 1830 becomes by mid-century identified as one component of a primary social order of activity (which social frame has itself, in the interim, been inscribed and articulated within an outward cosmos which reflects the formal frame of the initial analysis). One characteristic difference between British and French analogues is presented by the consideration that Cousin's counterpart in the British University holds the chair at the northern capital, Edinburgh, which dominates (still) British philosophy. At Oxford, meanwhile, we find in the controversy over the relations of Catholic dogmatism and Protestant rationalism (beginning over the years 1827–33, and dominating reflection at Oxford over the period 1830–1870) a closer analogy with the split of Hegel's school into Right and Left. At Cambridge the part of Whewell reflects that of Hamilton in a sort of interplay of the Scottish and English academic traditions. We might find a parallel between Hamilton and Newman who in the year of publication of Hamilton's Discussions gave his Dublin lecture on The Idea of a University: Newman reasserts the old ideal of the University as framing the access to a 'part' in the World - to any part - framed in a 'liberal' education deriving from the medieval Faculty of Arts. By about 1870, though, the opposing faction at Oxford had succeeded in instigating a University Reform which led
to the division of the curriculum and to the introduction of 'scientific' faculties. Maxwell became in 1870 Professor of Experimental Physics and head of the Cavendish Laboratory. At the same time University and Church were finally separated, and, within the Church, that mid-century crisis focussed at Oxford in an 'Oxford Movement', had been resolved. After the celebrated clash of Huxley and the Bishop of Oxford in 1860, the main danger to the Church began to be perceived as that presented by the Science of the past, not by the ideal poetic of any Catholic Church of the past; by the Science of the future, not by the Faith of the past.

The Oxford Movement, beginning in Pusey's reaction to a rationalistic German theology which he saw as the natural outcome of the protestant inscription of the instituted church in some more radical 'poetic' parallels, then, the 'theological question' which first divides Hegel's school after 1830. In England the split of formal orthodoxy and everyday life, reflected in the rise of 'nonconformism', presented itself at Oxford as the question of reasserting the practical English via media between the two poles of Latin dogmatism and its systematic theology, and the German tradition deriving from the Reformation. In Germany, on the other hand, the inscription of the closed circuit of the Hegelian system in a more radical economy opens a new phase of German 'criticism'.

By 1830 Hegel had defined the part of his reflection in a Prussian order that prefigured the world-state - the logical integration of activity in which the logical activity of defining this ideal poetic or frame identifies itself as one component. Teuberbach's anonymous Thoughts of 1830 open up the split between a 'theological' version of Hegel's system, framed in the logical circle of this self-identification of the logical order of a closed frame of activity, and a 'critical' version, inscribed in an
onen economy of human interaction and community. By 1840 the gap has widened to the point where the social frame of the 'theological' version of the system itself is brought into question, by the group around Puge's journal.

As the gap thus widens, Puge is forced to move first outside Prussia (to Saxony), then to Paris — where (at this focus of 'socialism' before 1848) the original Deutsche Jahrbücher have 'now outside Germany' been broadened in scope to Deutsch-Französisch. By 1848 Puge's collaborator Marx has published in London a programme, not simply of German or Franco-German reform, but of universal revolution, framed in the primary economy of the simple interface of culture and Nature — of the activity, working, in which Man asserts himself by transforming Nature — and this, most radically, in the revolutionary inscription of his assertion of the primacy of this natural frame of Society in the dynamics of Nature and Society thus asserted.

I have already suggested that this radical 'internationalism' of the Communist 'manifesto is itself in some sense 'German' — marking as it were 'outside' the physical boundary of Germany one pole of a German reflection framed in the inscription of the logical order of reflection in some more radical economy. Thus we find Comte's analogous criticism of the State and programme of social reform presented in France, where the Republic of 1849 begins the nominal 'implementation of Louis Blanc's 'nationalisation' of work in 'social workshops' as one side of a 'mixed economy' that will gradually supersede the private sector. Indeed the Republic of 1848 and the Empire of 1852 in France effect only an internal reorganisation of French policy, in this parallelling the continuous reform begun in 1830-2 in Britain, whereas in the Germany of mid-century it is the very German 'nation which is again in question: as the German framing of the question of the social order in a radical economy of European forces as primary — whereas in France the logical articulation of policy, in Britain the practical working of the various components of British society, take first place.
Thus at mid-century we have parallel 'polarisations' of reflection in Britain, France and Germany... or rather, since one pole of the German configuration is outside Germany, parallel British, French, and German polarisations. In each case we find a 'logical' poetic of the social order instituted in the University, and a 'scientific' critique, outside the University, which inscribes the social frame of activity in the practical order of what I have called 'applied theory'. - A practical order which finds (characteristically) its most systematic formulation in France, in Comte's framing of 'positive science' within the mathematical scheme of an 'applied logic'.

Apart from these complementary 'philosophical' and 'scientific' schemes, there is in each country - in each tradition - by mid-century an implication of the logical order of theory in the technical component of each national 'economy' of activity. - A 'technical' component whose increasingly 'international' character both reflects and in part effects the integration of European (and indeed American) activity within an increasingly prominent international economy of activity. The Great Exhibition of 1851 in London reflects (and, again, to some extent effects) this increasing integration, just as the mid-century turning-point in international integration is at once reflected and partly effected by the European revolutionary movement focussed in Germany.

In France the 'technical' school established in the revolutionary period to train the scientists and engineers of the Republic, and transformed by Napoleon into a department of the military organisation of the State produced an early programme of 'socialist' reform amounting to the articulation of the State within the systematic frame of applied theory, of 'Science' in the restricted sense. By the middle of the century, when similar 'technical' schools had been established in Germany, the direct link between the technical education and 'socialist' reform embodied (say) in Comte's Association Polytechnique in 1830, was broken. Thus we find, for example, in Germany at mid-century a 'scientific' rejection of the dominant 'right-hegelianism' of the University, coming from the technical
schools (most particularly the medical schools) in Germany, which is quite separate from the social critique stemming from the earlier defection of the left hegelians, and focussed after 1848 in exile groups outside Germany.

Thus Marx’ inscription of his assertion of a radical economy of activity in that economy as the principle of a political and economic ‘revolution’ in the social order is paralleled in the technical institutes — notably by Helmholtz, Director of the Physiological Institute at Königsberg — by a relatively ‘abstract’ assertion of the inscription of the logical order (‘abstracted’, though, from that very act of assertion) in a radical physical economy of ‘cosmos’. Might we not see in the Communist Party ‘Manifesto, and in Helmholtz’ 1847 paper On the Conservation of Force, parallel rejections of the logical circle of the hegelian system — the latter a rejection of a Naturphilosophie which begins in a logical determination of the complementary logical and physical orders of our activity (framed, then, in this logical figure of formal assertion, thesis, position), the former of a ‘poetic’ of the ‘state framed in the logical circuit of recognition of the logical order of its definition in the ideal State?

‘Conservation of Force’: here the logical order of distinction of Actual and Potential is inscribed in a primary physical economy of ‘potential’, through the mirroring of these two orders in the figure of a ‘closed system’. A ‘closed system’ in which no ‘force’ enters from or leaves to an ‘outside’, a ‘closed system’ whose limiting instances are the point-mass and physical Universe of newtonian mechanics (whereas the primary frame of Marx’ analysis is the intermediate circuit of human society in which these limits are mirrored — from which indeed they are ‘symptomatic’ ideological abstractions).

A ‘closed system’: we saw how Lagrange correlated a symmetry of a mechanical system, a departure from the dynamical equilibrium which is the analogue of Archimedes’ static balance, with a disturbing ‘force’ which required us to consider the un-
balance'd system as part of a wider system - and how this leads to the integration of physical systems in a universal Economy of Least Action. Laplace, for example, had integrated the component planetary notions of the 'solar system' in just such an Economy, requiring no further intervention from any 'outside' cause (such as Newton's clock-maker God).

While Lagrange had been reducing newtonian mechanics to a 'four-dimensional geometry', Lavoisier had been inscribing chemical interaction in a physical frame through the fundamental principle of Conservation of Mass (or Matter) in chemical reactions. Lagrange's systematic mechanics appeared in 1788, Lavoisier's analytical chemistry the following year. Around the turn of the century it was recognised that the 'elements' in chemical interactions always combined and dissociated in constant proportions expressed relative to a combining mass of 'hydrogen' taken as unity, in simple ratios of integers. In 1808 John Dalton of Manchester proposed that chemical interaction be understood as the combination and dissociation of 'atoms' of elements, according to definite principles of mechanical conjunction of primary simple atoms of hydrogen, of which other 'elements' were stable associations, and of which the combinations of these 'elements' in various compounds (such as 'hydrogen' and 'oxygen' - two 'atoms' of the first with one of the second - in 'water') were more or less unstable associations.

In 1800 Volta produced 'electricity' from a chemical system, and this electricity was used almost immediately in England to decompose water into hydrogen and oxygen. Chemical action in general produced or required heat, electric 'current' in its turn produced heat - which heat Rumford in 1798-9 had conjectured to be a sort of invisible internal motion of the minute particles of a material, which could be produced in a more or less regular manner by mechanical friction, twice as much friction 'say two hours with a blunt cannon-borer rather than one' producing roughly twice as much heat 'twice the rise in temperature in an insulated system'.

In 1831 Faraday at the Royal Institution showed that a changing electric current in a conductor produced an 'artificial'
magnetism in the region of the conductor, and that the changing magnetism in the region of one such conductor produced or 'induced' an electric current in another adjacent conductor. Thus was explained the correlation of electricity, magnetism, and motion already noticed by Oersted and Ampère. Ohm had in 1827 applied Fourier's analysis of the flow of heat in a 'conductor' to the 'flow' of an electric 'current' in a wire or other electrical conductor, and Faraday proceeded to establish by experiment a systematic electrodynamics.

At about the same time (1830-3) Lyell extended Laplace's mechanical analysis of the solar 'system' to an account of the configuration of the surface of one of its components - this 'Earth' - in terms of the interplay of physical and chemical principles - again abstracting from any 'divine' intervention 'from outside'. Around 1840-2 Liebig was describing the complex organic functions of animals and plants on 'or in' this surface in terms of chemical systems and subsystems - notably in terms of carbon and nitrogen 'cycles' in the organic system as a whole. In 1842 Mayer proposed a systematic 'correlation' of all these different chemical, electrical, mechanical and vital orders, and by 1847 Helmholtz had extended the mechanical principle of the 'closed system' and the Economy of its integration to a general physical Economy of these various different but correlated orders. The mechanical frame of Lagrange and Laplace was to be considered primary, and the various other orders of phenomena inscribed as subsystems within it - relatively closed systems of transformations in which mechanical 'force' (corresponding to what was soon to be called 'Energy', rather than newtonian impulsive force) was as it were stored in the chemical, electrical or other energy 'bound' in the various types of system, and constituting different varieties of 'potential' force or energy.

Helmholtz' abstract argument was paralleled in Manchester by the systematic quantitative correlations of the various 'forces' carried out in the 'forties by Joule, and the enunciation of the conservation in all physical processes of a quantity corresponding to Laplace's gravitational 'potential' 'the work that could be done, for example in 'rochimedes' lever or pulley; by a certain weight fall-
ling a certain distance — so many 'foot-counds', together with William Thomson's abstract consideration of the articulation of such processes in terms of 'cycles' of transformation (in which the symmetry of the system must always increase, the corresponding capacity to do work decrease) in 1848, constitute the basis of a new science of 'thermodynamics' — of the general 'Economy' of Nature.

Over the following decade Thomson and Maxwell in England, and Rankine, Boltzmann and Clausius in Germany, extended this initial presentation of thermodynamic principles to the statistical analysis of the 'economy' of a macroscopic system of minute particles in terms of a set of 'coordinates' of the system abstracted from the incalculably complex mechanical interaction of individual components, analyzing the principles of correlation of a set of measurements or determinations abstracted from an incalculably complex or not-fully-determined system established by Laplace and Gauss in the first phase of nineteenth-century 'Science'.

Clausius' 'Kinetic Theory' of Gases appeared in 1857; over the following two years Wallace and Darwin in England presented an account of the development of organic forms or 'species' by a principle of natural 'selection' of forms from a free interplay which, by 1871 (in The Descent of Man), had led to the continuation of Lyell's extension of Laplace's 'natural history of the heavens' down to the inscription of man in nature, without any intervention 'from outside'. — From outside the physical frame of mathematical dynamics, in which the whole of that nature might now be supposed systematically inscribed, subsystem within system within a universal closed mechanical whole of Cosmos.

From 1850 on Voelchott, Uogt and Büchner in Germany began — as this systematic 'mechanism' was being developed — to assert a new 'scientific' materialism: everything might, in the final analysis 'however complex' be in principle inscribed in the primary 'economy of Force and Matter — figure within figure within the primary mathematical frame of a closed system of physical Cosmos.
Woehler and Röschner, like Mayer and Helmholtz (who retained a complementary 'spiritual' order complementing the closed physical order), and Lotze and Reehner (who over the main phase of German 'materialism' from 1850 to 1870 elaborated a duality of physical economy and psychological or psychical integration of this play into a cosmic unity) began their careers in medicine. The 'materialists' were all sooner or later deprived of their university chairs for their views, Woehler and Vogt finding other chairs in Switzerland — thus is the pattern first seen in the split of Hegel's school from 1830 to the mid-century repeated again within physiological faculties and institutes after the mid-century. This latter phase might be taken to extend from about the middle of the century to about 1870 — the time of Lange's *History of Materialism and his move from Switzerland to Marburg, of Helmholtz' appointment to a chair of Physics created for him at the University of Berlin, of Nietzsche's first essays, of Hartmann's *Philosophy of the Unconscious*, and so on.

Outside Germany and its southern borders this phase of 'scientific materialism' is paralleled, it has been suggested, by Marx in London from 1849. In the year of publication of *The Origin of Species* Marx published his outline of the economic dynamic of social evolution (*Towards a Critique of Political Economy*); the analysis was systematically worked out in *Capital* (1867) which appeared in the year after Marx assumed the leadership of the international socialist movement at the first meeting of the International at Geneva. The fifth meeting, called to Paris in 1870, was postponed to the following year, on account of the war, and became loosely associated with the Commune of 1871, in whose defence — as the prefiguration of the new order — Marx wrote on behalf of the International a manifesto.

The failure of the Commune might be taken to close that period in Marx's career — 1849-1871 — which parallels the 'materialist' phase in Germany. After the unification of Germany and Bismarck's introduction of 'state socialism', and the entry into the International of the anarchist group around Bakunin, Marx' faction dissolved effectively in 1873. In the *preface* to the second edition of *Capital* that year, Marx defined his relation to Hegel — of the materialist to the
idealistic Dialectic. Hegel had discovered the 'dialectical' dynamic coordinating all component figures of Reflection and its social context in the unitary movement of Abstraction itself (finally abstracting to its own character simply as abstraction in Hegel's thought), and the whole historical system of Reflection could then, through the recognition that it was throughout precisely a reflection of the material economy of Nature in which it was materially embedded - all the while formally thinking to articulate that 'outward' context in its abstract reflection - be coordinated as one, secondary component in the real, material, dialectic of social development; this, indeed, simply through the setting of Hegel's system of the Idea in its early nineteenth-century German context. Lange presents a similar view of the abstract Materialism of the 'fifties and 'sixties: through its systematic articulation of the physical order within the organising figure of inscription of the logical in the physical through the mathematical frame of 'closed system', such materialism poses the question of the place of this 'closure' in a wider order which materialism cannot 'comprehend'. In proposing the inscription of dual physical and logical orders in a third, more radical, order of their symmetry, systematic materialism presents in a simple form the question of the relation of logical and physical - or psychological and physical - in the concrete particular systems of experience (1).

Thus Lange's successor at Marburg, Hermann Cohen, led that 'Return to Kant' which marks the last phase of academic reflection in nineteenth-century Germany, through his elaboration of the radical symmetry of physical and psychological within the mathematics of 'applied theory', experimental science as systematisation of, system of, Experience.

Here we have, then, two 'coordinates' of the mid-century, two components of a structure of transition from a configuration of around 1830 to one of around 1870: the split in Hegel's school after 1830 leads through the Marx-Engels Manifesto of 1848 on the extreme 'left' to Marx part at the centre of international socialism during the Paris Commune, and his systematisation of the 'materialist dialectic in Capital. A parallel 'scientific' reaction leads through Helmholtz' enunciation of the 'closed system' to 'neokantian' coordination of physical system and (psychological) complement within the mathematical frame of all 'experience'. Meanwhile the hegelian 'right' dominates the universities at mid-century, notably in the figures of Rosenkranz at Königsberg (My Reform of the Hegelian System, 1852) and

1: Geschichte der Materialismus (2nd ed, 1873) II.166;374-5
Erdmann at Halle. The middle ground may be taken to be represented by Zeller at Marburg, perhaps by the 'Tübingen School' of his father-in-law Baur, by Trendelenburg at Berlin. Lange's *History of Materialism* might be taken as marking a convergence of the mid-century history of philosophy practised by hegelian right and centre, and the systematic materialism of Vogt, Buchner and Moleschott (who had lost their university posts in Germany, just as the left hegelians had lost theirs after 1830). One might also add to the various 'coordinates' of the configuration of around 1870 that have already been marked, Zeller's appointment to the key chair of Berlin (1872), and a closing of the mid-century hegelian tradition in the philosophical autobiography by which Rosenkranz closes the history of philosophy with his history of his philosophy (1873).

'Coordinate': the very figure itself constitutes, as it were, a further coordinate of the mid-century transition. Around 1830 Gauss at Göttingen had begun to consider the euclidean geometry of 'space' defined relative to aristotelian 'position', as an abstraction from some more general and more radical structure. About the same time Bolyai and Lobatchewski were separately engaged in the definition of alternative 'non-euclidean' geometries or 'spaces'. At mid-century Gauss' pupil Riemann presented at Göttingen his systematic analysis of 'The Assumptions which underly Geometry' - the first step toward his pupil Klein's 'Erlanger Programme' of classifying various assumptions (axioms or postulates) about 'space' according to the dependence of one upon another, so articulating various 'spatial' structures in terms of nested degrees of specification, organising a sort of 'tree' showing the various layers of structure in a particular configuration (by analysing the nesting of the various 'groups' of transformations that left some feature - length, say - unchanged, 'invariant' under that sort of transformation). Riemann, while thus analysing spatial 'manifolds' ('spaces' like Euclid's locally), was also engaged, like Weierstrass at Berlin, in a complementary analysis of the structure of transformations, 'functions' (transforming one configuration into another - movement, or mirroring, for example) in these 'spaces'. - Engaged, that is, in the 'analysis' of those 'functions' of a set of coordinates investigated by Lagrange in his *Cours d'Analyse* at the beginning of the century, as in the similar analysis of analogous functions implicit in the extension of lagrangian dynamics (by Gauss after 1831) to the duality of electric and magnetic analogues of Laplace' gravitational 'potential'. Indeed it was Riemann who, in 1850, organised
this analysis of functions of a dual or 'complex' number on the analogy of the earlier study of traditional 'real' functions (of a 'real' number).

The development of the Göttingen and Berlin schools of mathematics may be traced through such mid-century questioning of the 'logical' structure of spaces and functions in them, from Gauss at the beginning of the century of Hilbert's dominance (from Göttingen) of European mathematics at its close. I have noted the part of Gauss' work of around 1830 in preparing the work of Riemann and Weierstrass at mid-century; this central axis might be 'coordinated' with Jacobi's establishment of the Berlin school around 1830, and Klein's programme enunciated at Erlangen in 1870, during his brief period there between studying under Riemann at Göttingen, and returning...to teach Hilbert. The simple figure might be further extended to a fuller dynamics of the transition centred on Göttingen, from Gauss to Hilbert, by bringing in other German 'figures', mathematicians; but I will rather, now, move on to consider how such a transition is itself one component in the wider development of European mathematics as a whole over the century, and how that whole mathematical tradition is in its turn one component, coordinate, in a wider 'scientific' and 'philosophical' tradition - these in their turn coordinates of a still-wider drama of nineteenth-century activity in general.

In Britain the radical investigations of Riemann at mid-century are paralleled in Ireland by Boole at Cork, and Hamilton at Dublin; in England by De Morgan at the new University of London (founded 1828). Thus Boole published in the same year (1854) as Riemann's epochal lecture on the logical structure of 'space', his mathematical analysis of logic (The Laws of Thought - preceded by his Mathematical Analysis of Logic in 1847). Hamilton in 1853 published Lectures on Quaternions given over several previous years, in which were presented a mathematical frame of symmetry of logical and physical orders, along with its application to the analysis of physical 'closed systems'. (Cayley was at work on a complementary 'matrix algebra' of transformations defined by their effect on a given set of points in a space). De Morgan was engaged in an attempt at a new systematisation of mathematics through a mathematical analogue of syllogistic reasoning, and an extensive historical analysis of the temporal sequence or development of mathematical structures.
Hamilton had in the years around 1830 begun not only those re-
searches on 'complex' numbers extended by the mid-century to four-fold
'numbers' or quaternions (corresponding to spatiotemporal 'points' rather
as ordinary ('real') numbers correspond to points on a line and 'complex'
numbers to points on a sort of 'plane', one dimension of which is 'real',
the other an 'imaginary' temporal order of 'steps' back and forth on that
real spatial line); he had in 1827 given an expression of Lagrange's 'vary-
ing action' in terms of varying end-points in a generalised 'space-time'
of coordinates of a mechanical system, and in 1828 he applied this new
frame of mechanical analysis to the limiting case of light-rays (when the
Principle of Least Action reduces to Fermat's Principle of Least Optical
Path or Hero's Principle of Least Time). In 1834–5 he extended this ana-
lysis to a new formulation of Lagrange's analytical mechanics in terms of
Varying Action, whereby the dynamics of any mechanical system are expressed
in a simple symmetrical relation of generalised 'coordinates' of position
and momentum (which reduces in the limiting case of a simple point-mass to
Newton's Second Law equating disturbing force and rate-of-change of momentum).

I noted Faraday's discovery of the duality of electricity and mag-
netism at the Royal Institution in 1831; I have characterised Hamilton's
contemporary integration of optics and analytical mechanics in some detail
because it is the union of these two parallel inquiries by Maxwell around
1870 (around, say, 1871 and his appointment to the new chair of Experimental
Physics instituted at Cambridge in the general educational reform of that
period) which marks in Britain a transition from 'Correlation of Forces'
atmid-century, toward the critical configuration of physical science at the
end of the century. That is to say: the mid-century enunciation of Conser-
vation of Energy by Helmholtz in Germany and Joule in England constitutes
a transitional figure between the experimental work of Faraday and theoret-
ical work of the young Hamilton, and their combination in Maxwell's mathe-
matical representation of electrodynamics as a sort of limiting case of
Hamilton's canonical formulation of a mechanical system (as Light, now re-
cognised as the propagation of electrical-magnetic disturbance in time and
space, is a limiting dynamical phenomenon, where the 'action' is equivalent
to the time of propagation, the energy of the disturbance being constant).
I will not attempt to trace the parallel development of mathematics in France over the middle of the century, save to note that with Cauchy's exile after the July Revolution, and the death around this time of the most prominent representatives of the French school associated in the early years of the century with the Polytechnique, the German school of Gauss at Göttingen and Jacobi at Berlin dominates European mathematics (Hamilton's isolated work at Dublin, so admired by Jacobi and the French school revived by Cauchy's return, appearing as a characteristic exception, rather like Grassmann's parallel work on the 'theory of extension' at Stettin on the Baltic - Grassmann's abstract geometry of coordinates in a general Cartesian 'space' of many dimensions was preferred on the continent to Hamilton's direct correlation of logical and physical orders of fourfold spatiotemporal (Hamilton's work at Dublin, so admired by Jacobi and the French school, revived by Cauchy's return, appearing as a characteristic exception, rather like Grassmann's parallel work on the 'theory of extension' at Stettin on the Baltic - Grassmann's abstract geometry of coordinates in a general Cartesian 'space' of many dimensions was preferred on the continent to Hamilton's direct correlation of logical and physical orders of fourfold spatiotemporal).

And to suggest that the articulation of the German school's work over the century, from that of Gauss to that of Hilbert, might be paralleled by an analysis of the French school from the time of Lagrange and Laplace, through that of Cauchy, to that of Hermite and on to Poincaré at the end of the century.

Rather will I now begin to consider how the mathematical frame of applied theory - of 'science' in the restricted sense - may be inscribed in a wider frame of correlation of those various 'sciences' which, according to Comte, all partake of the limiting abstraction of that common mathematical frame, and how this nineteenth-century 'scientific' order parallels the 'philosophical' order framed in 'logic' just as the sciences are framed mathematically.

I have noted the mid-century scheme of a mathematical inscription of the logical or psychological in the physical order, and the succeeding systematic 'materialism' or 'mechanism'. Characteristically, this inscription appears in its most radical form in Germany - in the tradition of a Reflection framed by the primary figure of an inscription of the logical order in a radical economy. In Britain, Joule's parallel enunciation of the Conservation of Energy appears, equally characteristically, in a pract-
scheme of experimental correlation. In France the principle only appears - borrowed as it were from Britain and Germany - as it is later inscribed in French schemes. In each country we find a mathematical frame of 'science' as mirror of physical and logical orders: in Germany this frame is inscribed directly in an abstract Economy of Nature, potentiality; in Britain it is found as invariant frame of experimentation; in France it is proposed by Comte as the frame in which to organize experience and activity.

- But Comte around the middle of the century moves from an earlier abstract inscription of the social group in such a 'scientific' frame (in terms of a scientific 'sociology') towards an insistence upon a still-more radical inscription of this abstract scheme in the practical, 'ethical' order of a particular group in (and of) which this abstract scheme is simply a representation; the transition must be made to a more fundamental participation in a 'positive' poetic, a mystery, a 'religion', of humanity.

I have already noted Marx' parallel insistence upon the actual group in which we find ourselves as the radical frame of our 'logical' inscription of some representation of that group in some supposedly more fundamental 'Nature' (which is thus simply an abstraction from the actual outward circumstances of abstract reflection on such a 'Nature'). - And I earlier noted a transition, around the middle of the century, from Mill's initial inscription of the social order in which he found himself in an abstract order of Experience, to a recognition of the actual social order in which he found himself as 'morally' primary.

These inscriptions of the order of self-assertion in the circuit of Society parallel - reflect, and are reflected in - the inscription of the logical and psychological order in the mathematical frame of a 'mechanical' system. And the critical positions of Marx, Mill and Comte are in their turn paralleled, within the academic institutions of their respective countries, by Rosenkranz, Hamilton and Cousin - by an instituted logic which in a circular manner determines its part in the social order it defines, an into which it constitutes an 'induction', in which it constitutes itself as 'education'.
We might try to characterise the mid-century configuration of Reflection, of which these are all correlative components - 'inside' and 'outside' the educational establishment within various different 'borders', lands - in terms of a simple common figure in which all partake or share - and then try to correlate the various components as different expressions of that simple figure in various 'contexts', institutional and national - this according to the figures of the nation-state or linguistic community as frame of activity, and of the university as embodiment, in the mid-nineteenth century, of the 'logical' component of national policy.

Thus far I have only considered two components of mid-century theory, though: the mirroring - in the universities and scientific institutes - of logical and physical orders in the 'poetics' of applied theory (notably, mathematics and medicine) - and the mirroring of the logical order of instituted theory as a whole, and its actual physical context, in the analogous 'poetics' of the social group, the 'society', in which theory is but one branch of activity among others. In particular, I have attempted to trace these parallel 'mirrorings' in two mid-century reactions to the dominant hegelianism of Germany in the 'thirties and 'forties; I have only cursorily sketched parallel configurations in France and Britain.

I have not attempted to trace parallels in each national component of the common European tradition in the various analogues already identified of logical and physical domains of 'pure' theory or Reflection, or in the corresponding analogues of the abstract mathematical frame of 'applied' theory - save to note the common medical background of those figures who, in Germany, dominate the discussion of the principle of Conservation of Energy.

Nor do I mean, now, to attempt a systematic extension of the figure of the 'mathematical' inscription of the logical order in the physical (corresponding to the Conservation of Energy) to all the other theoretical analogues of this mathematics - this *gleichnung im grosse für die andern Wissenschaften* (1) - in their...
complex european contexts. The various coordinates of such an extension are, however, schematically tabulated in the chart opposite; the general principles of this extension should now be fairly clear.

- To briefly recapitulate those principles:

Beginning with the logical order of the theoretical text simply as such, one may identify analogues of this simple order of theoretical 'closure' (framed in the logical definition of 'inside' and 'outside' this logical order of definition) 'outside' the text (a 'physical' order) and in the closed frame of a 'poetic' symmetry of such an 'inside' and 'outside'. Corresponding, then, to the figure of logical self-distinction from the 'physical' order 'in' which this self-distinction takes place, we can identify three orders of self-distinction of an 'actuality' in, and from, the mere formal interplay of logical, physical and poetic orders - the three orders I have called 'psychical', 'ontical' and 'mystical'. The formal articulation of these orders in the elementary logical frame of a theoretical text I called 'psychological', 'ontological' and 'theological' (or 'mythological'). From the constitutive analogy of the formal frame of the text - its 'logical' order - and these correlative orders of 'context', one may articulate these orders in theoretical texts, constituting these correlative 'theories' as components of the logical order of 'theory simply as such. Then of course 'logic' becomes, in the restricted sense, the theory of the formal articulation of theory in abstraction from these analogous theories.

We may then, as we saw earlier, articulate an order of 'applied' theory, in which the common logical order of the various 'pure' theories is inscribed in the dramatic order of activity, this inscription itself being theoretically organised by the 'poetic' representation of that dramatic order of application. And in this 'dramatic' order such a logical abstraction to a 'poetic' representation may itself be criticised, and comprehended simply as one component (previously abstracted in a circular fashion) from
some more radical — and truly 'dramatic' — frame. Such criticism in turn may amount to, or lead to, a new theory, which is in its turn open to criticism: it is just such a dynamic which has been traced from the initial 'logical circle' of the pythagorean mystery.

Thus we might take the various expressions in different lands, in the mid-nineteenth century, of mathematics as embodying the symmetry of physical and logical orders, as so many 'coordinates' of one component of 'applied theory' — this component in its turn being one coordinate, paralleled by analogous articulations of the other primary orders of 'applied theory', in the 'applied theory' or 'Science' of the mid-century as a whole. This 'Science', then, may in its turn be regarded as so many related orders of abstraction from a common social frame of application of theory — an abstraction dominated by the traditional 'logic' of the institutions in which such 'Science' is framed — we have noted such a radical perspective in Marx outside Germany, and in Comte 'outside' the university and technical institutes of France. In general we might say that the part of mid-century 'Science' is ambiguous, embodying both tendencies critical to the abstract logic of philosophy professors, and also tendencies toward a similar abstraction, framed by the very 'institution' of Science. Thus the attempt to free Science from the hegelian logic dominant in the german universities at the middle of the century, combined, as it was in the 'materialists', with a tendency towards a criticism of the social order in which that logic was instituted in universities, led simply to their 'expulsion' from that frame. Finding themselves 'outside' the universities of Germany, they could then elaborate their positions more coherently and systematically than was possible in an institution where the very frame or form of their expression conflicted more or less directly with its content. Comte's position is analogous; in England 'Science' was not instituted in national education in a systematic way until around the time of the establishment of Maxwell's chair and laboratory at Cambridge: Joule worked at Manchester, for
example (like his mentor Dalton before him) as an independent amateur.

"The integration of the 'materialist' inscription of logical and psychological orders in a closed physical order (through the mathematical and medical mirroring of the former orders in the latter) with a complementary figuration of the inscription of that 'matter' in a logical order of definition and psychological order of conception and perception might be associated - as I have suggested above - with the appointment of Helmholtz to a chair of Physics at Berlin, and Lange's move from Switzerland to Marburg. In the 'social order' this integration of 'materialism' and 'idealism' which marks the beginning of a phase of Reflection in Germany that may broadly be called 'neokantian', is reflected in the integration by Bismarck of earlier prussian nationalism with a 'socialist' perspective which, at mid-century, stood 'outside' the older order of which conservative hegelianism at the universities was one component. At Paris a parallel integration appears in the Third Republic and in the integration of philosophy and science at the Collège de France - Claude Bernard's combination of mid-century 'philosophy' and 'science' in his academic post being reflected in his scientific work on the relation of nervous and digestive systems - Plato's Brain and Liver mirroring one another in the Life of the organism.

Maxwell's new chair and laboratory constitute another parallel - in this case the integration of British experimental and theoretical traditions - of the work of Hamilton and Faraday in particular. The mid-century witnessed the mathematical inscription of logical in physical order in the figure of a 'closed system'. With Maxwell's expression of Faraday's 'lines of force' and the duality of 'electrical' and 'magnetic' lines of force in hamiltonian form, it appeared that the mid-century Economy of integration in principle of all physical systems within a unitary cosmic mechanism (whatever be the ultimate part of such physical mechanism in the integration of physical and psychical sides of Cosmos) might now, by one further step - the reduction of the
electromagnetic 'field' to the fundamental mechanical field of newtonian matter - be established in fact.

In fact things turned out, by the end of the century, quite differently.

I characterised the opening configuration of Reflection in the revolutionary start of the nineteenth century in terms of a 'play' of figures and corresponding 'forces', and I characterised the first phase of german Reflection (our prime coordinate in the articulation of european Reflection over the course of the century) as dominated by Hegel's logical framing of a 'poetics' of such a 'play', in which this logical order of framing identified itself as, precisely, the primary order of Identity in the interplay of figure and force - as the Author of the Play which closes in his self-discovery as Author, his return to himself as constant Spectator of a Play which turns about his - His - identification and loss-of-self in a part... in every part, indeed.

- It was against the circular 'logical' or 'idealist' determination of the radical Play (and so of the part of such a logical determination in the Play it determines) that parallel 'scientific' and 'socialist' criticism reacted around the middle of the century (in the German tradition). The scientific criticism of Naturphilosophie identified the idealist dialectic of Nature with an abstraction from a more radical mathematical and empirical frame of application of Theory (and the socialist criticism of the social order of which instituted Naturphilosophie and idealist dialectic were one component had evolved from an initial recognition of the abstraction - the symptomatic abstraction - of ideal 'Nature'). The physical order was now to be understood in terms of the figure of a 'closed system', a thermodynamic cycle, in which material actuality was to be considered framed in a radical physical economy of potentiality, potential transformations and their integration into the unitary system of Lagrange and Hamilton.
ilton. The logical order of integration of physical systems into a unitary physical cosmos — the single closed system of all closed systems — was itself to be inscribed in the physical order, as mirrored in the mathematical economy of integration of action within action, within a single cosmic field of potential or potentiality. The materialists understood this inscription one-sidedly, in a sort of simple inversion of the idealist Naturphilosophie: thought itself, and the very framing of the physical system, would be inscribed in that system as the mere 'reflection' of the system as a whole in an organic (human) body — a physical 'body', then — and this 'reflection' understood in the physiological figuration of the materialist physicians. Helmholtz in 1850 measured the velocity of the nerve-impulse, and so as it were marked in the scheme of the unitary system the elementary interface of psychical and physical systems. The same year Fechner gave the simple mathematical frame of this neurological interface, enunciating as the first law of a new Psychophysik: a correlation of intensity of sensation with the logarithm of the physical stimulus: a unit increase in intensity was occasioned by an increase by a unit of proportion of the stimulus:

\[ \Delta s \sim \frac{\Delta I}{I} \]

—the 'psychological' sensation is of the form of the difference of two sensations here, as in the simple archimedean or logarithmic spiral of a sea-shell, we can see that constancy of form in successive instances of informed matter (the form in this case being simple quantity), which in the aristotelian economy expresses simply the form of form itself — Life.

Neither Helmholtz nor Fechner regarded the mirroring of psychical and physical as itself a simply physical process — neither was in that sense a 'materialist'. Yet both believed that the inscription of this mirroring in the physical order (on the 'outward' side of things, as it were) frames a radical physical 'closure', a physical determination of the relations of physical and logical or psychological orders, strictly analogous to the logical determination of logical and physical duality which constitutes the closure of the logical order, the primary logical
circuit or circle - the logical 'sphere' of determination, complete in itself like the physical order or 'sphere' - without any 'intervention from 'outside'.

I have just drawn an analogy between the fundamental correlation of psychological and physical orders in sensation as characterised by Fechner and Helmholtz in 1850, and Aristotle's radical form of distinction of Form and Matter. It will be remembered that the elementary component of the physical Economy of the aristotelian Kosmos was the Hot, as principle of distinction, differentiation, separation: the Hot which distinguishes itself, then (in particular), from the Cold, in a more or less moist or agglutinated aggregate. Thus the primary 'mechanism' of Nature is the dissociation by heat of aggregates of Hot and Cold - the movement of this 'Fire' from a thoroughly inert immobile cold dry centre, 'Earth'. And the various 'actions' of this living Fire are integrated within the divine Form of distinction (indeed, self-distinction) of Form from Matter as precisely this actuality of self-distinction, of which Fire is the first image, the reflection at the other pole of the scheme - the image in prime matter.

Now this correlation of unitary Actuality of Kosmos, and elementary movement of distinction (this distinction itself constituting the frame of 'place' and 'time', of above and below, before and after) appears in the radical correlation in Epicurean physical scheme of 'matter' and a disymmetry of movement, a 'fall' from above (and before) to below (after). And it is this simple correlation of ontological actuality and physical 'mass' or weight, 'gravity', which is reflected in Archimedes' inscription of mechanics in this radical disymmetry, through the integration of action in the residual symmetry of the mechanical system of 'falling' mass.

We saw how Lagrange and Hamilton gave a general mathematical 'Economy' of this archimedean (and latterly, newtonian)
'mechanics' of falling 'matter': components corresponding to various 'coordinates' which together specify the configuration and motion (or changing configuration) of the system may, in the case of a 'closed' system, be articulated within the radical symmetry of the 'fall' of matter - of that transformation of ('potential') energy of position into ('kinetic') energy of motion (this latter defined in terms of the work it can do to raise a unit of mass or matter a certain distance against a certain tendency to fall). That is: the simple archimedean articulation of mechanical systems within the primary symmetry of the balance may be extended to a general configuration of masses in a general 'field' of forces corresponding to the mutual gravitational attractions of these masses. The various 'coordinates' of the system of masses corresponding to their positions in some frame of reference, together with coordinates specifying the way these positions are changing with time in the case of each mass, may be combined to determine a quantity corresponding to the total energy of the system ('H', say) which, in any transformation in a closed system, is constant. In such a closed system, then, there will be a correlation between configuration and movement of massive components analogous to the simple law of Archimedes' lever. More generally we can extend that analogy to the consideration of the inscription of the closed system in a wider closed system - this corresponding to a configuration of 'external' forces acting upon the system. These 'forces' are of course only correlates of the general Economy of integration of all systems into a single unitary System (as one system is inscribed in another, and the 'forces' exerted on the former by the latter taken 'into account'). Hamilton's 'canonical equations' for any system, then, correlate change in total energy of the system with the change of position and momentum of each component under a minimal 'impulse' from outside:

\[
\frac{dq_i}{dt} = \frac{\partial H}{\partial p_i} \quad \frac{dp_i}{dt} = -\frac{\partial H}{\partial q_i}
\]

- where \( p_i, q_i \) are the generalised momentum and position
of the i-th component in some enumeration of the components of the system, t the time of the impulse, and the equations correlating minimal changes in all these elements of the action on the system. In the simplest case of a point-mass these are just the newtonian equations of motion. In general they express the economy of inscription of one system within another - a 'field' of force corresponding to the integration of all systems within a unitary Space and time.

Now the gravitational 'field' articulating the radical asymmetry of aggregating (rather than disintegrating) Matter organises (as Laplace showed) the solar system according to Lagrange's formulation of Least Action, put into symmetrical form by Hamilton. Maxwell showed how electrical and magnetic interactions of electrically 'charged' matter could be expressed simply in terms of an 'electromagnetic' field which, unlike the gravitational field with its 'potential' defined simply in terms of the force required to separate two masses, involved a symmetrical polarity in the electrical analogue of mass. - First, it seems, there is the radical concretion of Matter reflecting (as in the aristotelian scheme) the primary ontological distinction of integrated actuality and the abstract symmetry of its spatiotemporal frame; then, as it were supervening upon this 'prime' matter, is a symmetrical distinction of two possible 'charges' that may somehow characterise the primary mass, and, articulated in an electromagnetic 'field' of attractive and repulsive forces between polar charges, a dynamic of symmetrical separation of 'positive' and 'negative' electric 'charge' - and their recombination - in matter.

"This dynamic - the articulation or 'laws' of the electromagnetic field of force (measured in terms of the transformation or 'conversion' of the work of separating - 'raising' - gravitating masses and that of separating electrical 'charges' in such masses - in terms of Joule's regular 'correlation' of the corresponding electrical, magnetic, and mechanical 'energy') - was framed by Maxwell in terms of a simple correlation of the separation of electric charge and spatiotemporal symmetry. He assumed that the net flow of positive or negative 'charge' in or out of any closed region of space was zero: the transfer of charge into such a region
on or along a 'material' 'conductor' was complemented by an equal and opposite 'displacement' of charge in the insulating medium (or 'dielectric'), across the (and any) closed surface into which the 'materially' conducted charge was introduced. This 'displacement current', corresponding to Faraday's image of the 'polarisation of the dielectric', involved doing work in the surrounding medium into which charge was materially conducted: the necessity of doing this extra work corresponded to a 'magnetic' field induced in the dielectric, which tended to (in its turn) induce a contrary current in the conductor in the reverse direction - this corresponding to a 'force' which tended to oppose the electric force at work driving the initial current. In particular, a change in the electric 'field' corresponding to the 'polarisation' induced by the movement of charge induced a converse change in the magnetic 'field', and the interaction of the two fields, analogous to converse stress and strain in an elastic material medium, should produce the transmission of the initial disturbance occasioned by the movement of a material charge, through the dielectric - across successive closed surfaces - in the manner of an electromagnetic 'wave' of alternating electrical polarisation together with an alternating magnetic polarisation which (like a spring extended by the electrical separation or polarisation) tended to restore the initial state of the dielectric.

The material conductor, then (whether charged massive particle, or current-carrying wire) was only one component of a more general symmetrical system. What was one to make of the universal 'dielectric' in which all ordinarily material carriers of separated electrical charge must now be considered embedded? Could one somehow account for this 'electromagnetic aether' in terms of some previously undetected material medium of all space, in which the separation of charge (polarisation) corresponded to a 'mechanical' separation of charged material - to material compression or attenuation, relaxation?

In the same year that Hertz in Germany demonstrated the actual existence of maxwellian ('hertzian') 'waves' (1887) Michelson and Morley in America showed that the passage of the Earth through such a mechanical medium of electromagnetic waves (as required by any theory of a 'material' aether) did not produce the differential
rates of propagation of waves along and perpendicular to motion of the transmitter through the 'aether', required by a mechanical theory. In 1900 Max Planck at Berlin showed that this electromagnetic radiation 'as well as not conforming to the mid-century scheme of integration of all fields and their energies within the mechanical matter-field of newtonian mechanics) did not conform (either) to the mid-century scheme of 'equipartition of energy' among the various components of a system in equilibrium (this theorem in its turn being a direct deduction from the mechanical scheme).

Thus the symmetrical charge-separation in which the dynamics of the electromagnetic field was framed could not be considered as occurring 'in' matter. The correlation of a unitary spatiotemporal mechanical field of integration of physical systems, with a corresponding division of its energy symmetrically into component systems failed at both limits: the 'aether' could not be framed in a unitary integrated Space and Time, and there was some complementary impossibility of symmetrical articulation of elementary component systems of oscillating electrical charge which must be supposed to be the transmitters and receivers of electromagnetic waves. For if energy at equilibrium in a closed system of vibrators (Planck's black body radiation) were to be equally divided among the various possible modes of vibration of the system, then since there were more modes of vibration per unit of wavelength at shorter wavelengths than at the other end of the electromagnetic 'spectrum' of radiation, practically all the energy of a system of elementary electrical oscillators at equilibrium would be concentrated in the highest frequencies. But such was not the case; rather was the frequency at which most energy is in fact concentrated a function of the 'temperature', or average energy of vibration of the components, of the system.

Meanwhiles, Maxwell's school at Cambridge had identified, in 1897, a charged particle produced by the high-energy irradiation of a gas, which had been found by 1900 to have a mass thousandths of times less than that of the hydrogen 'atom'. Calculations seemed to show that the measured 'mass' of this new 'electron' was exactly equal to the electromagnetic inertia constituted by the resistance of the electromagnetic field to the current embodied in the motion
of this minute charge. Maxwell's former pupils now proposed that all 'mass' might turn out to be just such electromagnetic inertia, and that matter might be reduced to vortices in the 'aether' - that rather than electrical 'charge' being regarded, as at mid-century, as a differentiating character of primary 'matter', the latter might be regarded as a mere abstraction from the primary aether-field of charge-separation.

Thus the electrodynamics elaborated by Maxwell (and put into the symmetrical mathematical frame of Hamilton's correlation of logical and physical orders of spatiotemporality - quaternions - by "ait at "Edinburgh) around the time of his founding of the Cam-bridge school (1871) may be seen to constitute a transitional figure in the development from mid-century to the end of the century. At mid-century the logical order of integration of physical systems was mirrored in the apparently radical physical 'economy' of potentiality in the mathematical frame of interaction of physical systems. The logical order was inscribed in the physical - thus constituting the radical 'closure' of the latter - in the mathematical figure of the 'cl-sed system'. All systems were to be symmetrically articulated between the corresponding poles of a unitary Space-and-Time, and the infinitesimal impulse as minimal component of the systematic calculus. All physical processes were to be framed in mechanical systems of integration of elementary impulses into a unitary whole - all systems, then, to be framed within the primary ontological order in which the distinction of the unitary actuality or working of the Whole from nothing was reflected in the elementary asymmetry of the 'fall' of matter. I have noted how this mid-nineteenth-century analogue of the aristotelian scheme of integration of the physical cosmos was reflected in a similarly mathematical scheme or project of a 'formal logic', and in the framing of mathematics itself in a radical symmetry of physical and logical 'sides.'

One may see in the scheme of inscription of Maxwell's electromagnetic field, articulated in the symmetry of charge-sep-
aronation, in the matter-field of 'classical' mechanics, an 'image' (quite literally - a physical, 'outward' representation or re-
fection) of the inscription of the mathematical order in the
physical order which defines nineteenth-century mechanics as
classical - 'mechanical' or 'mechanistic'. The symmetry of charge-
separation associated with any closed surface reflects in the phys-
ical order the symmetry of logical and physical orders in the math-
ematical articulation of the electromagnetic theory of light. The
project of inscribing the electromagnetic field in the mechanical
field of interaction of material (massive) particles and bodies,
of inscribing the symmetry of charge in the radical 'physical' asym-
metry of matter, corresponds to the project of articulating a closed
physical order in abstraction from the radical symmetry, in the very
mathematical order of definition of this 'closure', of physical
and logical (or corresponding psycho-logical) orders. At the end
of the century the contradiction implicit in the abstraction of
the physical order from the mathematical symmetry of physical and
logical orders (from that logical poetics of 'application' of logic)
appears in complementary forms at the two limits of that abstract-
ion - at the two poles between which the systematic mechanical art-
iculation of universes was projected: the integration of the electro-
magnetic field in the unitary Space-and-Time of mechanical inter-
action, and the inscription in the symmetrical articulation of that
mechanical interaction of elementary electromagnetic systems (vib-
rators).

The period between about 1870 and 1930 (the date of the
publication by Dirac at Cambridge of his integration of the figures
proposed to solve the turn-of-the-century contradictions posed by
the recognition of the abstraction of the two poles of 'classical'
mechanics) might be characterised in relation to the passage from
the initial attempt to inscribe the mathematical theory of electromagnetism in the mid-century scheme of physical closure, through
the turn-of-the-century paradoxes associated with the two limits
of the mid-nineteenth-century scheme (Space-and-Time and mechanical 'element' of interaction), to a new scheme of inscription of the
physical order of 'closed system' in a more radical mathematical
and 'poetic' order of symmetry of physical and logical (or psycho-
logical). I now propose to take this simple figure of inscript-
ion, over this period, of physical in mathematical, as a sort of guiding thread around which to organise a wider structure of transition 'around' the turn of the century (from about 1870 to 1930). This will then (at last) frame the discussion of a certain order of twentieth-century figuration (of which this very writing will then be recognised as one component), in terms of this turn-of-the-century configuration as a sort of 'mid-point' around which may be articulated a structure of transition — a circuit or period — beginning in the revolutionary opening of the nineteenth century and closing with the close of the twentieth.
The turn-of-the-century recognition - or beginnings of recognition - of the twin roles of physical Kosmos and its elementary mechanical component as 'abstractions' from a more radical mathematical symmetry of the physical and logical (or psychological) 'sides' of some actual system of things might, in the terms of the inquiry thus far, be taken as one component in a wider recognition of physical and logical 'closure' or system, and the complementary identities or roles in relation to which these 'sides' of things are articulated, as symmetrical abstractions from some more radical 'dramatic' order.

- Symmetrical: thus the paradoxes associated with the limiting terms of the physical scheme of the mid-nineteenth century are reflected, at the turn of the century in a logical paradox discovered by Russell at Cambridge in the very frame of Frege's inscription of mathematics in the logical order. - In the frame of logical 'inclusion' whose mathematical expression at mid-century (by Boole) mirrors the mid-century inscription of the logical order in the physical in the figure of physical 'closure'. - A logical 'inclusion' under a 'concept' abstracted from the outward order of its 'extension' through a mathematical calculus of (en-) closure, of conjunction ('union') and disjunction ('intersection') ... these latter themselves being supposed abstracted from their physical images, sets of points in space, to articulate a sort of 'logical space'. A logical space where to a point in a spatial domain corresponds a 'term' falling under some predicate, an 'object' under some 'concept'. Yet Russell showed that the two poles of a logical 'space' - the set of all sets, corresponding to the very concept of 'concept', and the variable in the logical calculus supposed to range over 'all terms', corresponding to the definiteness of the 'object' and the part in the whole construction of an elementary supposition of reference to an object - that these (like the complementary frame and element of physical analysis) must be regarded as abstractions from the primary mathematical 'working'
of a logical calculus.

I will not here trace the parallel, turning about Russell's Paradox, of the development of mathematical physics from Maxwell to Dirac, and the development of mathematical logic over the same period from the early work (1870 on) of Cantor and Dedekind to Gödel's paper of 1931, except to note the central part, over the second part (1900-1931) of this transition, of Hilbert's scheme of inscription of the logical in the mathematical order - this as part of the "Hilbert Programme" announced to the International Mathematical Congress at Paris in 1900 - a review of the progress from the mathematics of Gauss, Lagrange and Laplace, and a projection of the future progress of the subject, framed in the systematic articulation of the 'problems', questions, then organising mathematical inquiry. I have already suggested that the mathematical development of the nineteenth century might be traced in relation to the progress of the Göttingen school from Gauss to Hilbert - one might perhaps say: from Gauss' presentation of his Disquisitiones to the Paris Academy of Sciences (or rather the Mathematical and Physical Class of the Institut, as it then briefly was) to Hilbert's presentation of his programme to the Paris Congress.

That programme, then - and most particularly the 'Problem', to give a mathematical proof of the logical consistency of arithmetic - might be taken as organising a mathematical development from 1800 to the close of the twentieth century.

In 1901 Hilbert called to join him at Göttingen Husserl; another component in the structure of transition from 1870 to 1930 might be traced from, say, Brentano's leaving of the Catholic Church after the Vatican Council of 1870, through Husserl's studies with Brentano at Vienna and Weierstrass at Berlin (where his doctoral dissertation was on the Calculus of Variations), his move from the Catholic to the Lutheran church, and to Halle (where Brentano's old pupil Stumpf held the chair of philosophy) in 1886, to the break with the attempted inscription of mathematics in the psychological order and the Logical Investigations of 1900-1 coinciding to the move to Göttingen ...... to the beginnings there of the 'phenomenological' school, the association of this research with
the Geisteswissenschaften rather than Hilbert's Naturwissenschaften in the reform of the university; to the move to Freiburg (1916) where Heidegger had arrived the year before (presenting as Habilitationsschrift an essay on Scotus' theory of meaning)... and on to his succession by Heidegger in 1928, the Formal and Transcendental Logic of the following year, the Paris lectures of 1930, and Heidegger's break around this time with the phenomenological school of his earlier master.

Hilbert in 1900 inscribes logic - the formal articulation of the logical order of reflection, the theory of the articulation of theory simply as such - in the 'applied logic' of mathematics. Husserl, one may say, effects a parallel or complementary inscription of the classical 'ontological' order of that which distinguishes itself from its definition or description or naming - or from its appearance or perception - in what I called (following indeed Husserl) the 'applied ontology' of 'phenomenology'. The ontological abstractions of a unitary-Actuality of Being and simple reference of a term to some identical actuality - corresponding to Frege's universal range of predication and particular terms covered by a 'variable' - are to be replaced by an empirical, practical inquiry into the actual working of what distinguishes itself in our experience: this 'actuality' is to be articulated within the primary figure of such self-distinction - as correlate of the simple form of reference implicit in our experience simply as such. Husserl occupied himself with this primary figure, and students over the latter part of the transition now being considered (1870-1930) articulated subordinate areas whose articulation in the primary figure, whose constitution as frames of phaenomenologische Forschung was overseen by Husserl and published in the journal of the school - just as the working-out of the unlimited detail of the hegelian system had been carried on in the Jahrbücher für wissenschaftliche Kritik a century before.

This 'phenomenological' component of the transition through the turn of the century - from Brentano's break with the papacy of 1870 to Heidegger's break with the phenomenological school - introduces another component of the transition, of which it partakes: Brentano's teaching at Vienna is framed by the austrian catholicism of the southern border of 'german' culture. Husserl came to Vienna from austrian Moravia; Heidegger entered the jesuit novitiate before discovering the work of Brent-
and passing onto that of Husserl and Rickert (the dominant figure in south-German 'neokantianism'). Freiburg-in-Bresgau lies in the south-west corner of Germany, a short distance from the borders of France and Switzerland.

I have already indicated or suggested how Freud's viennese 'dramatisation' of psychology — say the Traumdeutung of 1900 — in a way stands between the Italian 'madness' of Nietzsche and the dominant neokantianism (in its various schools) of Germany at the turn of the century. And I suggested a parallel between Freud's part at Vienna at the turn of the century, and the focussing there — in the Austrian interface of north-west and south-east Europe — in the 'Eastern Question' (La Question de l'Orient, Die Orientfrage) — of the break-down of the nineteenth-century European order.

A viennese 'dramatisation' of psychology: and this framed by an inscription of the psychological order in the 'applied psychology' already identified with medicine, physiology, 'pathology'. A recognition of the 'classical' roles of an 'I' and its elementary activity of referring action to objects (both in the sense of meaning something, and meaning to do something), of intention, intension, as abstractions from a more radical interplay of 'inner' and 'outer' worlds. 'Inner' and 'outer'; that very image itself abstracted from the radical interface and mirror of 'inner' and 'outer' in the surface of those 'bodies' we take for our own, for 'mine', for 'me', 'I'.

Abstractions of an 'I' and its reference to objects and objectives from a more radical interplay of inner and outer whose elementary figuration may be found in the dream — whose dynamic, whose drama, is as it were reflected in the 'poetic' frame of that element — that closed element somehow abstracted from the open mirroring and dynamic of inner and outer which we call waking... just as the closed frame of story, picture, theatrical drama is somehow abstracted from that same dynamic while we are awake.

What then must be substituted for the old psychological
'I' of 'self-consciousness'? Hartmann had in 1869 expressed the duality or complementarity of psychical and physical orders in terms of the interplay of the physicist's mechanical Nature and a converse 'Unconscious' (Unbewusstsein) working of a unitary impersonal articulation (in a sort of radical Choice, like Schopenhauer's Wille in der Natur) of what was left 'open' by the physical order (or 'in' the physical order) of mechanical Nature. What was thus 'open' in nature corresponded rather closely, in Hartmann's 'Philosophy of the Unconscious' with what was still 'open' in the physical scheme of contemporary natural science; Freud's 'Unconscious', on the other hand, corresponds simply to a general principle of organisation of the mirroring of 'inner' and 'outer' from the 'in'-side, a principle corresponding as it were to a general working of a radical 'I' in which we, as particular 'I's find ourselves involved, but which can only be discovered - like Husserl's corresponding ontological actuality - insofar as it is discovered 'at work' in the particular situations in which we find (more or less) ourselves. And the elementary inquiry into this 'working' or actuality of this postulated 'Unconscious' begins naturally in the analysis of the mirroring of this 'inner' working, and the 'outer' working of (an equally problematic) 'Reality', in the frame of the dream. That is where psychological inquiry must begin, rather than from some 'I' or 'me' abstracted from the mirroring of inner and outer, and from their medical or physiological interface in the body: for the principle of organisation of that interface around some identification of 'I', 'me' (and my corresponding situation), is precisely what is at the root of 'nervous disorder' - of 'madness', indeed - when such an identification organises, as part of the corresponding scheme of an 'outward' reality, the difference or distance between that essentially fictional identification, and the actuality of 'my' (real) situation. In particular, one may begin to trace the correlation of that systematic distortion of reality - the circular abstraction of some 'fictional' identity from my actual situation - with the distortion of the bodily interface of inner and outer in the hysterical 'symptom'.

- The apparently 'medical' or physiological symptom or
disorder of the bodily interface of 'inner' and 'outer' from which Freud's inquiry had in fact started, in the Paris of the 'eighties.

One might trace the development of an integration of 'pure' psychology and the corresponding 'applied' science or art of medicine from about 1870 to about 1930, turning about, say, the Traumdeutung of 1900. Hartmann's psychology of 1869 is paralleled by the first application of electrical stimuli and electrical recording of responses (in various parts of the neural system) to the mapping of nerve-function by Fritsch and Hitzig in 1870. These parallel developments in 'pure' psychology and physiology each derive from the 'psycho-physics' of 1850 - from the work of Helmholtz, Fechner and Lotze notably.

By around 1930 the 'psychoanalytic' movement was organised in various schools; Freud was extending the 'poetic' of 1900 from the individual 'patient' to the articulation of activity in the frame of societies or Society, Civilisation, as a whole.

This development of psychoanalysis must then, in its turn be inscribed in a wider frame of the development of the integration of 'pure' and 'applied' psychology over this period in various other, parallel, schools. One might perhaps begin to organise such an extension by considering the parallel which, beginning from the same physiology of 1870, turns about Pavlov's investigation of 'conditioned' reflexes (around the turn of the century. Were the inquiry into the inscription of the psychological order in a more radical mirroring of 'inner' and 'outer' is carried on, as it were, from the 'outside' - the 'out' side of the mirror, of the bodily interface of the two 'sides' of the organism. Rather than beginning from the figure of an 'inner' unconscious articulation of that interface, Pavlov begins from
the complementary figure of inscription of the relation of inner articulation and outer articulation of the sensory interface in the outer order: the sensory-motor 'reflex arc'. 'Higher' nervous centres are to be understood on the analogy of the simple spinal reflex, as a sort of second-order reflex. The 'external' approach to psychological function organised in the primary figure of determination of the relations of 'inner' and 'outer' through correlation of external stimulus and outwardly perceptible response might be traced through Watson's 'behaviourism' of 1914 to the behaviourism of around 1930 - associated in some measure with the publication in English of Pavlov's work in 1927.

Freud had been trained in 'electrical' neurology before his studies at Paris; the turn-of-the-century polarity, as it were, of Freud's Unconscious and Pavlov's Conditioned Reflex might appear as two converse perspectives on the physiology of the interface of inner and outer, as presented from a neutral or strictly physiological point of view in Sherrington's contemporary extension of the electrical methods of 1870 to the systematic analysis of 'the integrative action of the nervous system' as a whole. That systematic neurology (at Yale) or physiology of the nervous 'system' is itself paralleled in Germany by Wundt's systematisation of an 'experimental' psychology after about 1870, and by William James' allied work, over the same period, at Harvard.

I take Freud's psychology as a sort of primary focus of the integration of psychology and medicine around the turn of the century, simply because it seems to present in the most radical way the inscription of the 'psychological' figure of an 'inner' determination of the relations of 'inner' and 'outer' in the dramatic order of mirroring of 'inner' and 'outer'. Thus it may be then taken as an initial coordinate, so to say, in the articulation of the more general inscription of this 'psycholog-
ical' figure in the dramatic order of activity, in various different and parallel forms, over the turn of the century. Similarly, I take Husserl's phenomenological ontology as a primary coordinate in relation to which the analogous inscriptions of ontology in a 'dramatic' scheme by (or in) various other 'schools' may be organised, since this 'phenomenology' is organised in a more or less 'direct' expression of the 'ontological' figure of an 'outer' actuality distinguishing itself in our experience.

That 'phenomenology' of 1900-1 extends, notably after Husserl's dissociation from the Göttingen 'scientists' in the reorganisation of the university, and then at Freiburg, to what one might perhaps call 'a whole philosophy': phenomenology becomes a frame in which psychology, physics, logic (in the restricted sense of 'formal' logic), poetics, theology - as well as ontology - may be supposed 'constituted'. In a way, one finds a similar extension of one particular domain to a whole 'philosophy' in William James' transition from physiology to the 'pragmatism' of the turn of the century. Yet in this case there is perhaps less ambiguity in the relations of limited domain and totality of 'theory' as such: whereas in Husserl's case there seems to be a tension between the inscription of phenomenology in a more radical 'philosophy', and the phenomenological determination of the relations of 'pure' phenomenology and its application to the analysis of other domains, William James' physiology and psychology seem rather to constitute an access to a wider 'philosophy' embracing various orders of which they are simply one or two.
Towards the close of a course of medical study at Harvard William James, his health declining, spent eighteen months in Europe - at various spas, and engaged, during university terms, in further studies (1867-8). These studies were largely directed to German physiology and psychology - six months were spent studying under Helmholtz at Berlin.

James' health continued, however, to decline, and he returned to Cambridge (Massachusetts). In 1870 his 'nervous' disorder eventually led to a crisis, a 'breakdown', which James himself described - attributing it to an anonymous 'French correspondent' - in his Edinburgh lectures on 'The Varieties of Religious Experience' in 1901 (1). A crisis of 'identity' from which he had emerged well enough by 1872 to be a pointed one of two teachers of a new and experimental Harvard course - physiology ('experimental' both in the sense that this was the first university course in which experiment played an organising role, and that this novelty was itself an 'experiment' on the part of the university).

- A crisis of identity, between the ages of twenty-six and thirty, as so many of the European Romantics had undergone (often with fatal consequences). A crisis of what he was to become after his wide studies in Europe (from the age of thirteen: in France, Germany, England, Switzerland) and America (where for a year he had studied to become a painter) - and a crisis also of an American identity trying to find itself in the play of European culture. In letters from his stays at bohemian and Swiss spas in the summers of 1867-8, to his brother, William discusses again and again what it is to be American, French, German, English.

The Americans themselves here too amuse me much; they have such a hungry, restless look and seem so unhooked somehow from the general framework. (2)

1: p 160; cf Letters 1,145  2: Henry James, Notes of a Son and Brother, p416
One wonders where the 'Versöhnung' or conciliation of all these rival national qualities is going to take place. I imagine we English stand rather between the French and the Germans both in taste and spiritual intuition. In Germany, while unable to avoid respecting that solidity of the national mind which causes such a mass of permanent work to be produced there annually, I couldn't help consoling myself by the thought that whatever, after all, they might do, the Germans were a plebeian crowd and could never be such gentlemen as we were. I now find myself getting over the French superiority by an exactly inverse process of thought. The Frenchmen must sneer at us even more than we sneer at the Germans - and which sneer is final, his at us two, or ours at him, or the Germans' at us? It seems an insoluble question, which I fortunately haven't got to settle. (1)

- William and Henry James, 'we English', are caught in this 'insoluble' interplay (later reflected in Henry's fiction). Tom Paine in the revolutionary transition from eighteenth to nineteenth century had declared himself a 'citizen of the World'. Franklin, a century before the James, had represented independent America in and to Europe, and framed an American science in the interplay of European traditions. Rumford had gone to England, run Bavaria, and settled with Lavoisier's widow on the outskirts of Paris. Yet none had defined a strictly 'American' school. Over the middle years of the century Boston was 'transcendentalist'. Henry James Senior, a close friend of Emerson, had himself been through a spiritual crisis, and found the way out in the writings of Swedenborg. Emerson's Transcendentalism, drawing heavily on Carlyle's 'dramatic' conception of the World noted above, involved the inscriptinn of the discursive order of reflection in the figuration of a more radical poetic; Henry James Senior integrated his friend's (to him, vague) poetic in a theology articulated in the Swedenborgian mirror of Above and Below, and of the whole visible and invisible Creation in the Creature. Yet in the interplay of European figures in nineteenth century Boston and America there is no distinctly American focus and cultural identity. That identity might be said to dist-

1: ibid p 420
inguish itself, and find a focus analogous to the 'rival national qualities' of the Old World, in the Pragmatism of the end of the century - a distinctly 'american' school in which William James at the turn of the century is the focal figure. - And that 'american' focus of the interplay of European schools 'outside' Europe - William James at the turn of the century - might be taken as organising an American development from the time of his 'crisis of identity', his nervous breakdown - that 'hysterical' reflection of a missing identity - of 1868-72, and the Pragmatism of the years around 1930, dominated by Dewey.

- An American 'identity' distinguishing itself from - and first in - the interplay of European figures already traced through the parallel traditions or schools of nineteenth-century England, France and Germany. An identity constituted in this very figure of distinction - in the 'poetic' or dramatic American order of self-discovery in the 'pragmatic' frame of Action. A frame of action from which the various figures of national European schools are abstracted. A wider frame of inside and outside the Old World, from which the Old World is abstracted - an abstraction mirrored in that old order in the separation of north-west and south-east, and in the interplay of northern forces, focussed in an 'Eastern Question', in which the various northern nations find themselves inextricably involved. Involved in an interplay which none can stand outside (like an American) and so command: for the various old national figures of such a command of Europe are precisely the elements in the 'insoluble question' reflected in William James' letter to his brother from Switzerland - midway between the Prussian victory over Austria at Königgrätz, and that over Napoleon III at Sedan.

One might well, of course, find this American 'poetic' of Action prefigured over the course of the nineteenth century, and indeed before. - Prefigured at mid-century by Emerson's 'poetic', as in, say, Walt Whitman's Song of Myself and addresses to America. In some sense, though, the presentation by William James at the end of the century, of this American 'poetic' of Action
simply as such marks a new phase, paralleled by the contemporary overtaking by America of both Britain and Germany in industrial production.

Action: and the act of framing one's part in this dramatic order amounts to finding oneself at work in a wider and more radical order in which French and German, and English 'standing rather between' — those figures of two complementary traditions (with their 'logical' and 'physical' orders of dominance) with a British 'poetic' order in-between, with which the 'American' dramatic order of the whole is at first confused ('we English...') — appear as abstracted components. As three components dominating a divided Europe: together a northern Europe abstracted from the South, reflecting the abstraction of the whole from the World 'outside', itself partitioned now into colonies of the north-European countries.

What is new is the marking of a point 'outside' this interplay, from which the three dominant orders of the interplay are seen to be internal components of a common European abstraction from the World — including those 'worldly' pragmatic Americans.

In this sense, James' framing of Action as the very frame of Actuality, at a point 'outside' the common European abstraction of French, British, German — and this simply by introducing at that point 'outside', the wider frame in which this point of its very assertion can first be identified — reflects 'outside' Europe the focussing of the interplay of European figures in Europe, at the interface of the three northern colonial and industrial powers, and the older southern lands.

— And that 'American' focus to the West is in its turn paralleled or reflected to the East. Not so much in Russia, though, as by Russians outside Russia (and in Europe).
Outside the focal slavic 'space' or 'room', grown from the rurik duchy of Moscow from the time of the mongol overthrow of kievan dominance of Rus, that 'space' or 'land', in the mid-thirteenth century.

Rus - slavic 'space', a circuit traced in the eastern plains from which the successive waves of indo-european migration had spread south-east, north-west, and into the mediterranean peninsulae, from the second millenium before the christian era. The last wave, pressed forward by 'mangols', huns, hiung-nu, from the north-east - from the north-asian plains beyond the Urals - had appeared in the eastern empire in the fifth century. Without the 'feudal' organisation of the goths, these 'slavs', 'speakers' (of their common language) -τάλαροι - quickly found their name for themselves, transposed into the greek and latin languages of the disintegrating Empire, synonomous with 'slave'.

With the retreat of the hiung-nu from aryan 'Europe' (except for the group that established themselves in 'Hungary') after the death of Attila, and the breakdown of communications between Byzantium and the barbarian West, Kiev became an important focus of the communications and trade between the Baltic and the Black Sea (controlled by the teutonic 'varangs' who also formed the Imperial Guard at Byzantium). By 988, when kievan Rus formally adopted byzantine christianity, the authority of the Prince of Kiev extended over many principalities or duchies in the 'russian' or rurik plains between the Baltic and the Black Sea. After the kievan order was disrupted by a new wave of asiatic tribes (first appearing in 1240), it was the duchy of Moscow to the north-east which became the focus of the russian order as mongol control (exerted from the asiatic khanate of the Golden Horde to the south-east of Rus) declined. By the fifteenth century, and with the fall of Byzantium to the turkic (or turkic-like, 'turkoman') forces responsible for the decline of the mongol khanate, Moscow had established itself as the focus of the russian order, framed in the byzantine scheme of parallel Church and Empire on the one hand, and the primitive indo-european village-council (mir) on the other hand. The muscovite prince now proclaimed himself the successor of the deposed byzantine emperor,
and Moscow the 'third Rome'. By the middle of the seventeenth century this expanding Russian order extended to the bounds of the ruins of the old western 'Empire' in Europe, to the Pacific in the East (across the north-asian plains), and down to the Turkish khanates of central Asia to the south. In the year in which the Thirty-Years War closed to the West, the Russian order which had thus grown from the thirteenth-century duchy of Moscow was codified in a Law modelled on that of Byzantium. The two sides of the old culture - the Byzantine court and Slavonic mir - were integrated by the inscription of their relations in a unitary code focussed in the 'autocratic' rule of the tsar, монархия.

Thus the peasants of the mir, the old 'mark' order, were now bound to lands, estates, instituted in an order of property focussed in the emperor at its head - ensorbed, 'enslaved'. The old interplay of a part of the village land and allegiance to the chief of the council or mir, which allowed the peasant to transfer his work and allegiance in exchange for land to work in some other place, and the centralised order of the State or Empire, was subordinated to that centralised order through the inscription of the peasant's part, the order of the mark, in the order of property.

Parallel with this formal integration of the two sides of Russian culture (of a Byzantine court and national order and a primitive 'mark' order), over the course of the seventeenth century, there runs the beginning of an integration of the Russian court order with the 'western' order of the European courts derived from Latin feudalism. Thus Peter the Great, at the close of the century, transfers the administrative centre from old Moscow to a model city built on the shores of the Baltic - his 'window on the West', with its scientific academy organised by Leibniz, and its French court-language and etiquette.

Over the Napoleonic period Russia emerged as a prominent component in the European 'balance of power', dominating all other land-forces through the sheer size of her army, deriving from a
population roughly equal to those of Britain, France and Germany together. This power was exerted, over the first half of the nineteenth century as an implicit sanction for conservative Russian policy, rather than in military confrontation - this notably in 1848-9 when Russia acted as a focus of the old order in eastern Europe. When military force was actually exerted in a move against European Turkey that threatened the 'balance' of power (in 1853), Russian force was found by Britain and France to be greatly inferior to its notional strength, through the lack of military organisation adapted to actual conflict.

After the mid-century, and this initial entry into an active part in Europe, Russia began a parallel reorganisation of her economic, political, and military interaction with the other 'Powers' without, and of the corresponding order 'within'. The period of the Civil War which marked a similar reorganisation in America saw the abolition of serfdom (1861), an alliance with Slavic nationalism in the parts of the Austro-Hungarian Empire along Russia's border ('pan-slavism'), and a 'colonisation' of the rich khanates of Turkestan on either side of the Tien Shan ridge, which brought the Russian Empire face-to-face with the British Empire in the knot of mountain-chains at the centre of Asia.

Whereas the period 1870-1900 is marked in the New World by the integration of the forces which had led to the breakdown of the old order in the Civil War, culminating in the entry of America into the world-order of the New Imperialism and Second Industrial Revolution around the turn of the century, this period in Russia is marked rather by the progressive polarisation of reformist forces now bringing into question the very frame of the old byzantine order, and conservative forces tending to maintain this frame and (thereby) the continuance of their part within it. The 'socialist' scheme of inscription of the order of the State within a primary natural order appears in intellectual circles in the seventies, and is first focussed in Plekhanov's Socialism and the Political Struggle in 1883. On the extreme 'left' the anarchist or 'nihilist' tradition embodied by Bakunin's party (whose entry into the Socialist International at the time of the Paris Commune had led to the split of that body and the secession of Marx' party) opposed to the focus
of the byzantine order in the tsar that naked physical force of 'terrorism' which led eventually to the assassination of Alexander II in 1881. This in its turn led to the contrary embodiment of arbitrary force in the violent reaction which followed, and the disruption of the 'slavophile' or 'populist' attempts at reform from within, working from the village organisation of the old mir upwards.

'Lenin' was born in 1870; his brother was executed for his part in an assassination attempt upon Alexander II's successor in 1887, and Lenin himself expelled from university and banished to a remote province. He qualified as a lawyer, however, in 1893, and by 1895 was organising a marxist group in the capital. The group being discovered by the police, Lenin was exiled to Siberia, and upon his release in 1900 went to Europe to carry on the struggle from without. By December he and Plekhanov ('Volgin' as he subscribed his writings - Lenin would adopt as one of his pseudonyms 'Lenin' the following year - the Lena being the great river of asiatic Russia as the Volga of european Russia) had organised Iskra as the organ of the russian marxist group in Europe, distributed among clandestine groups in Russia through an 'underground' organisation integrated as a marxist 'party' around the turn of the century.

Iskra - the 'spark' which would light the fire of marxist revolution. Lenin's first editorial framed the question whose development in a succession of Iskra articles led to its systematic exposition in 1902: What is to be Done? - The question of identifying one's part in the russian frame and Lenin identifies his part precisely as that of framing the situation. Framing the situation as the question, for each participant, of his part, her part. And, in particular, framing the Party as the group which frames (revolutionary) Activity - frames the Action - as a whole.

What, then, was the situation in Russia? Lenin had written (1899) in Siberia On the Development of Capitalism in Russia. At the turn of the century Russia was being industrialised faster even than America (though still with far less industrial capacity, having begun the process only towards the end of the century). Marx had analysed the development of production from feudal times, through the first Industrial Revolution, to the
increasingly systematic organisation of the European social order by the economy of profit — of the accumulation of capital. The organisation of labour — as part of this systematic 'Economy' — had allowed the development of a 'party' structure in Germany which prosecuted the political aims of labour — the Social-Democratic 'party' founded by Marx himself. According to Marx' transposition from heaven to earth of the Hegelian dialectic, the opposition or 'contradiction' of the aims of Capital and Labour would lead through a 'revolutionary' transformation of the organisation of production to a rational social order articulated in the radical frame of Nature. The opposition of Capital and Labour could itself be inscribed as one moment in the progressive organisation of Labour, and so ultimately overcome when the political organisation of Labour would become the political organisation of society as a whole. Prussia had introduced universal male suffrage in 1867, and this was extended to Germany as a whole after 1870. The Social-Democratic Party gained at each election a larger share of the poll, and might soon be in the position to take over the political direction of Germany, in the interests of Labour — when the contradiction between the policies of Capital and Labour might be at last resolved — or at least brought to a revolutionary crisis.

Russia, on the other hand, was still organised on an essentially 'feudal' system, from which an industrial economy of Capitalism was only now beginning to emerge. Should one not, then, reject the 'populist' appeal for a democratisation of agriculture (a return to the old Slavic principles of the mir), and recognise that a 'natural' order of exploitation of Nature would only come about through the 'dialectical' development of the contradiction of Capital and Labour through the organisation by Capital of industrial production? Should one then support the transition from an inefficient 'feudal' or semi-feudal agricultural economy to a Russian 'capitalism' dominated by the liberal institutions of an entrepreneurial 'middle' class?

— Such was the majority opinion among Russian Marxists: they were to find their part in Marx' dialectic of society, of policy and economy, and prepare for the transition from a capitalist to a socialist mode of production, while in the meantime supporting
the emergence of a liberal capitalism. A 'liberal' capitalism which thrived on the free play of economic forces, and which would thus be the central force in the dissolution of the artificial institutions of the old order of landed aristocracy and imperial bureaucracy.

But no... that 'dialectic' derived precisely from the passive playing of parts in the elaboration of historical modes of production and social organisation, before the social order had arrived at the point where its historical working became apparent. That revolutionary consciousness of the working of a social order in which one found oneself did indeed first have to wait for the interplay of social forces to arrive at a systematic contradiction between the aims of Capital and Labour. But once that working had been discovered in advanced capitalist countries like England and Germany, the same principles could be applied to the working of the Russian social order at a stage of development prior to that in which 'revolutionary' activity first became possible in the first industrial countries. One had to wait for the contradiction of Capital and Labour to develop to the point where someone (Marx) could become conscious of its dialectic in some country. But the basic principles of social organisation then discovered, then 'reflected' (as Marx would have it) in the sphere of human consciousness, though they could only be first discovered once a certain stage of development had been reached somewhere, could now be applied everywhere, no matter what particular stage of development had been reached there.

Revolutionary activity, then, amounts to intervention in the play of forces first revealed under mid-nineteenth century English capitalism. The contradictions between the interests of agricultural labour and landlords enters as one component, along with the contradiction between Capital and Labour in the restricted industrial regions, into the situation in Russia. The recognition by the most 'advanced' elements in society of the working of the various forces, is itself one component of the overall situation, one more force in play. It is the business of the 'party' or the group of the most advanced elements, the 'vanguard' of revolution, to artic-
ulate this play of forces, and so articulate the part of this articulation itself in the play of forces: to actively inscribe the identification of the 'play' as one element in play.

Articulate: organise, frame - both in words, as in the Spark, Tskra, and (thereby) to organise in fact, through the part played by its verbal articulation in the situation. 'Spark': this self-inscription of the identification of a situation in the very situation it identifies is familiar throughout the western tradition (from, say, Heraclitus) as that of Fire. Fire, Word: the configuration of form and context itself serving as matter for the wider reassertion of that same form.

... The identification of a situation (in which that identification is one component) as ('revolutionary') activity: 'Philosophers have merely interpreted the world - the point is, to change it'.

'These slavs seem to be the great radical lives-out of their theories', wrote William James from Europe in 1899 (1).

... Lenin and William James in Europe at the turn of the century, their reflection focussed to the East and West of the old order respectively. William James in 1899 preoccupied with the emergence of 'les intellectuels' as a party of opposition in France over the Dreyfus trials, and the rise in McKinley's America of the European figure of colonial 'imperialism' (in the Caribbean and Pacific), as England asserts her colonial interests in northern and southern Africa. Preoccupied also with the Gifford Lectures to be given in Scotland in 1900, which are in the end postponed on account of his weak heart (like all the complaints which brought James to Europe for the sake of his health at fairly regular intervals, this seems to partake as much of a symbolic as of a physical order). Lectures on The Varieties of Religious Experience, in which the 'philosophical' principles elaborated since his last visit to Europe (and consequent transition from dominant 'psychological' to 'metaphysical and religious' interests in 1892-3) were to be applied to the 'working' of religious figures in the primary play of 'Experience'. William James, over this period (1893-99), had

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come to insist upon the 'working' of Belief, of the active framing of a situation, in the articulation of actuality - in that 'working' of the World itself. Lenin and William James in Europe at the turn of the century, each in their different situations, and different ways, are seeking to effect a 'revolutionary' transition from a tradition of passive 'reflection' of situations in thought, to the opening-up of the possibility of framing situations as a radical intervention in their very working. By 1907 James was giving a systematic presentation of Pragmatism in New York lectures. Lenin was devoting a year to the study of philosophy in Geneva and at the British Museum, in order to put the subjectivist 'Mach-ism' of a Russian neo-marxism emerging after the failure of the Revolution in 1905 'in its place'. - To put this passivist introversion in its place - to identify its place or part in the play of forces. - In a play of forces in which the part of the 'marxist' philosopher was to recognise his part - the part, the force, of his identification, his framing, of the 'play'.

Russian activism, American pragmatism... how might one frame a parallel between these two 'openings' of a new dimension from which traditional European reflection has been hitherto abstracted? A parallel, say, of the development of 'pragmatism' from James' crisis of 1870 to Dewey's retirement from Columbia (where he had invited James to lecture in 1907) in 1930, and the development of the Russian 'Revolution' from the beginnings of socialist agitation to, say, the first Five-Year-Plan (1928-33) and 'Stalinisation'.

I have already suggested the way that turn-of-the-century 'pragmatism' might be seen as an American identification of the part of American reflection in an open play of traditional figures and schools. What is new, then, in this New World, is just the open poetic of that play, the American figure of its 'framing' around the turn of the century - whether in James' poetics of 'religious experience', or Dewey's poetic of education (as access to one's part in the play) elaborated at his laboratory-school at Chicago.
When the 'Chicago School' produced in 1903 a collective statement of their position, dedicated to James, the latter in his review of their 'Studies in Logical Theory' correctly predicted that the themes of the Studies would dominate American reflection for the following quarter of a century. A similar part attaches to Lenin's statement of his position in 1902. In each case the seminal figures or themes are framed in an activism or pragmatism in which the framing of a situation enters into the configuration it frames. Might one say that the part of the 'pragmatist' figure in the open, 'pluralist', play of figures and forces in which it inscribes itself is paralleled, to the East, by Lenin's inscription of his characterisation of the situation in Russia in the closed 'byzantine' order of Russian society? - A closed circuit as it were drawn in the interplay of European forces as primary 'poetic' frame of Russian activity, mirroring a corresponding open economy in the 'New' World to the west?

- Then the primary frame of 'Russian' activism amounts to the question of the individual's self-inscription in the circuit of Slavic Russia: What is to be done? This frame was extended by Lenin and Trotsky to the situation arising in late 1914: the final systematic organisation of the World-Order by Capital (wrote Lenin) amounted to the 'imperialist' competition of the European industrial powers when the World-Market constituted by 'colonisation' of countries outside Europe as sources of raw materials and markets of that material industrially transformed in Europe had been finally divided up between the 'powers'. This limit of colonial expansion led to a conflict between the European imperialist or colonial powers, in which each hoped to re-draw their part in the global system of interplay of economic forces - in which each hoped to 'profit' in the general economy of the conflict. Lenin in Switzerland called upon the parties of Labour in the imperialist countries to unite in the Second International for the transformation of the imperialist war into civil war in each country, when the global economic system could be transformed from capitalist pluralism to an integrated world-order organised in the radical principle of Labour as transformation of a single nature that knows no national boundaries. The great majority of the workers of Europe were, however, fiercely nationalist rather than internationalist. The conflict must then be focus-
in Russia, where the international conflict was reflected in the greatest internal disorder. Because of the limited industrialisation, though, and the consequent weakness of organised labour there, this revolutionary intervention in Russia must be understood in the context of the interplay of international forces as a whole: the 'spark' of revolution in Russia, begun in the industrialised areas, would transform the situation in Europe and in her various colonies, leading to revolution in the more industrialised countries, which would in its turn provide the frame for the completion of the revolution in Russia; its extension from the restricted urban 'proletariat' to the re-structuring of the dominant agricultural side of Russian production. With the abdication of the emperor in early 1917 there was an opening for the seizure of power in Petersburg and Moscow and lesser industrial centres by organise labour whose activity was framed by the Party. And it was the part of Lenin, at the centre (upon his arrival in Petersburg) to frame this part of the Party, and so light the fire of Trotsky's 'permanent revolution'. Trotsky himself was put in charge of the army which would frame that interplay of internal and external conflict. First the initial internal transformation must be effected: Lenin therefore concluded an independent peace with the German emperor. The failure of an attempted revolution in Germany and the Slavic states of the old Austro-Hungarian Empire, though, led (rather than to the exportation of the Russian revolution and subsequent re-importation of new revolutionary forces on Trotsky's model) to the concerted attempt by the old colonial powers, led now by America, to contain the Revolution in Russia, and to exert their combined force on the side of the old order in a Russia now divided by Civil War - caught between an alliance of forces of the old order within and without, and an attempt to frame an alliance with revolutionary forces outside (whether in Europe or as a diversion in European colonies), or at least to frame the dominance of the new order within.

The parties of organised labour without would not frame their national activity within the primary international configuration of Revolution in the alliance of forces (whether reactionary or revolutionary) within and without Russia. Lenin therefore framed a 'Third International' to replace the Second International
of national social-democratic parties. The new national parties of the Third International would be constituted in the inscription of the national activity they framed within the Revolution framed in the interface of communist Russia and post-war World, and focussed in Moscow (the parts of the various member parties outside Russia being coordinated by the Supreme Soviet or Council with Lenin at its centre or head, Trotsky framing the articulation of physical or military force within and without, and 'Stalin', the man of steel, responsible for improving the coordination of the various departments directed by the members of the Supreme Council.

By 1921 Trotsky had concluded the Civil War. But how did the non-slavic provinces colonised by the earlier Empire, and how did the non-industrial agricultural production fit into the new scheme? Lenin presented the various provincial councils or soviets with the choice of alliance in revolution or independence, and in a New Economic Policy allowed a free play of market forces in agriculture. By the time of Lenin's death three years later Stalin (himself from the border of Turkey, rather than a Russian) had extended the range of his initially subordinate coordinating commission, and was articulating his part within the closed frame of 'Socialism in one Country'. Trotsky's party continued to frame Russian policy in terms of the interplay of inside and outside the new 'Soviet Union'. Lenin's scheme of 'democratic centralism' - a strictly hierarchical frame of organisation, through which the interplay of forces could be articulated at various levels within a unitary total policy - was now slowly torn between Stalin's autocratic centralism, and the democratic emphasis of Trotsky's party. In 1928 Stalin framed the first Five-Year-Plan - the integration of all soviet activity within a unitary frame focussed in his absolute authority: as earlier in the seventeenth century - in the Code of 1648 - the independent agricultural order was inscribed in a unitary scheme directed from the centre and framed in the primary correlation of central authority and Land. Private farms were confiscated by the State which directed agricultural production from Moscow, according to a systematic plan for the transformation of the old order into a fully industrial economy in the most direct manner possible - calculated precisely as such. The army
and police enforced the carrying-out of the unitary plan, rather as army and police had enforced the autocracy before 1917. In 1929 Stalin framed his position, and the articulation of the new centralised order in a Draft Constitution of the USSR. This articulation of the soviet frame within the primary circuit of Socialism in One Country, within that closed circuit, was paralleled by the expulsion from the country of Trotsky, who had represented the complementary figure of a primary interplay of forces within and without, reflected in an internal policy which emphasised a similar play - democratic rather than centralist.

Trotsky in exile presented his account of the Revolution - an autobiography in 1930, followed by a general History. Stalin in Moscow gave his account of Trotsky's part, and had him condemned by the courts that were eliminating internal opposition, in absentia. In 1937 it was Dewey, at the head of an international committee of inquiry who investigated the conflicting accounts, and prepared the conclusions: Not Guilty.

Stalin's second 'purge' in 1933 paralleled the election of Hitler's National Socialist party in Germany, and (after the dissolution of parliament after the Reichstag fire) the implementation of an analogous unitary programme of economic transformation imposed according to the policy of a central committee controlled by one man. Dewey, who had set up at Columbia a New School for Social Research in 1919, now established there a 'University in Exile' (1933) (having himself retired from the University of Columbia in 1930, as I have already noted). I noted further back that the 'Frankfurt School' might be taken to constitute a focus of German thought over the period of the thirties and forties outside a Germany dominated by the propagandist 'philosophers' of National Socialism: their work was carried on after 1933 largely in Dewey's 'University in Exile', in association with the New School for Social Research. Heidegger, that year, was appointed Rector of Freiburg, and in his inaugural address
saw in the new frame of National Socialism something like the unitary community that would mirror the individual 'place' or part of human Da-sein in the radical openness of Sein, with Hitler as the focus of the scheme. After a year the distance between the ideal and the reality of Germany was fully apparent, and the new Rector resigned. Largely as a result of this episode Heidegger was forbidden to teach by the allied occupation forces after the war, and only resumed his lectures at Freiburg in 1951.

There is already a great amount of detail in the discussion of the transition from about 1870 to about 1930 thus far — and this detailed frame already omits most of the detail that must remain in question in the sketch up to this point — must remain to call in question, indeed, the simple scheme of the sketch. Several more details, 'figures' must yet be added — several more forces brought into play — into the 'picture'.

But this should serve not only to introduce still more unanswered questions, but also to complete a correlation of figures which somehow embodies a transition from one century to the next. Embodies, rather than defines: for thus far all that has been identified is a certain interplay of 'figures', 'forces', traced in the primary figure of two points or foci marked 'outside' the geographical domain of 'European' reflection as traced to the close of the nineteenth century. Two points — one to the West, one to the East — which mark in complementary ways a wider frame from which the 'internal' order of European reflection has been in some sense abstracted. A wider frame in which the two external foci, American and 'Soviet', mark two sides — a radically 'open' play of figure and a radical closure of the frame of activity and its figuration — from which the circuit of the 'European' culture considered thus far may be taken as an 'abstraction' embodying various national frames of complementation of these 'revolutionary' schemes.
The 'outward' context in which the tradition traced thus far converges towards its close at the end of the twentieth century is framed by this 'unfolding' of the political and economic frame into a radically open play to the West and a radically closed society to the East, together with a further unfolding of this new East-West dimension into a 'North-South' axis of 'East', 'West', and a 'Third World' colonised in various phases up to the end of the nineteenth century. The transformation of the Soviet Union over the period now being considered might be taken as a limiting case of a more general process of transformation of an 'old' order, through an intermediate 'European' order, into a new order corresponding to 'decolonisation' and assertion of a national identity through a 'Marxist' or 'Marxist-Leninist' revolution which combines a component of 'European' Marxist identification of forces at play in the colonial order, with a pre-colonial frame of activity continuous over the transition through European colonisation and European 'dialectic' of decolonisation. The Soviet case provides a model (and indeed a primary component) of such transformation, through the continuity through the revolution of a 'Byzantine' administration. The Chinese revolution, from (say) the foundation of a 'Chinese Soviet Republic' in 1931, to the establishment of a 'People's Republic' in 1949, constitutes a further step away from an initial European model of 'socialism' - Lenin's application of 'dialectic' to the conflict of European powers which framed the Russian revolution is paralleled by Mao's elaboration of a Chinese 'dialectic' around 1940: the primary figures of 'Practice', 'Contradiction', 'Revolution' find a still more radical expression as they enter into Mao's framing of his situation, which also embodies a complementary component derived from the Chinese tradition. The decolonisation of Africa embodies still another step, in which the part of 'Marxist' figures and forces, transmitted through Moscow and Peking, in relation to older figures of pre-colonial traditions, is often rather unclear.

Meanwhile this complex alliance of revolutionary 'activists' is paralleled by, and enters into play with, the development of an international economy and associated policy focussed in North America - more precisely, in New York and Washington. One might take the development of 'capitalism' (for example) in Japan, 'opened up' by America and the older European powers at the same time as China,
as parallelizing the transformation of China over the period of 'western' dominance. By the turn of the century Japan had combined the 'western' policy of colonisation with an older tradition of feudal militarism: the conflict of Russian and Japanese aims led to war in 1904, the first defeat of a 'European' by a non-European power, Japanese annexation of the Korean peninsula, and the first revolution in Petersburg.

Forty years later Japan was fighting for the control of the whole Pacific. Before framing the interplay of East-West and North-South axes, though, as primary 'geopolitical' context of the last phase of Reflection (extending over the twentieth century), I must consider the American context of the rise of 'pragmatism' from the period of reconstruction after the Civil War, through the American entry into the interplay of 'imperialist' forces around the turn of the century (symbolised by McKinley's note of 1900 to the European 'powers' insisting upon an 'Open Door' to the Chinese market, rather than European partition of China), to the collapse of the international market focussed in the Wall Street Crash at the close of 1929.

I have already briefly characterised a principal component of the initial phase of this transition in William James' development of his 'position' from about 1870 to about 1900. One may see the 'pragmatist' poetic of experience and activity at the turn of the century as the primary 'logical' scheme or component in a 'pluralist' American interplay of schemes, figures, forces, which the new philosophy of the New World frames, and in this framing exemplifies. The 'liberalism' of James and Dewey thus constitutes a direct 'western' analogue of Lenin's revolutionary activism. And while Lenin was applying the principles of 1902 to the 'imperialist' conflict of 1914, President Wilson of the United States, who had himself in 1902 become 'president' of Princeton University,
was applying the principles of turn-of-the-century academic liberalism to his part in the same conflict. While Lenin at the close of the war was planning the Third International, Wilson, the old professor of Law, was planning a new frame of international relations in a League of Nations - a legal frame of an otherwise free interplay of national interests, whose principles must first be applied to the adjudication of the various claims arising out of the War.

By 1930 Lenin's and Wilson's complementary framings of a new post-war international order - each framed in the primary interface of their respective countries and the world - had been left behind as ideals. Immediately after the war indeed, each country had abstracted itself provisionally from the actual interplay of international forces, and by around 1930 each was beginning internal reconstruction in determined isolation. Stalin was organising Socialism in One Country, and American liberals, with Dewey as their theorist and Roosevelt as their representative at the wall, were working out a New Deal for Americans, a re-structuring of the market, 'protected' from the disrupting effect of external forces.

In each case an 'activist' or 'pragmatist' framing of actuality, of that - indeed, this - 'working' of things, as an interplay of figures and corresponding forces, enters into what it thus frames as play, dynamic. I have suggested that a characteristic difference between Russian and American frames - between revolutionary activism and revolutionary pragmatism - might be found in the distinction of a pragmatism which is presented as 'opening up' an essentially multiple play of perspectives or frames, the open Economy of their interplay, and an activism framed in an initial inscription of the identification of a mirroring of economy and policy in the closure of a national frame of activity, in that frame.

James had emerged from the crisis of 1870 through finding himself in Renouvier's figure of human self-activity asserting itself in an otherwise mechanical play of Nature - in that
characteristically 'french' figure of self-assertion, as it entered into play with Helmholtz' Mechanism and british empiricism.

Over the 'eighties he elaborated an experimental psychology framed in 'experience' as a play of figures and corresponding forces — chief among these those of 'inner' and 'outer', 'mental' and 'physical', finality and efficiency. 'Experimental' in that the working of these figures, the figuration of their interplay, was to be found by participation in the play itself, rather than by an imaginary framing of that play from somewhere 'outside' (there being, in principle no such 'outside': this 'outside' enters as a sort of deceptive figure into the play). I have noted how, upon his return from Europe in 1893, James completed the transition from the 'logical' order of abstraction into the more radical order of πράγματινετ, activity, actuality, 'working', by inscribing the psychological order and its logic in a wider noetic — whose elementary configuration was found, at the turn of the century, in the 'working' of a 'religious' figuration of activity, a religious framing of 'the' World, rooted in elementary figure of a 'Will to Believe', 'Faith', framing 'the World' in a certain way, in which this very act of framing enters as one component in the frame. — Such a circular figuration constitutes a new focus of 'self'-hood at its centre, a transposition or transformation of the 'self'. In his closing lecture at Edinburgh James presented as a question this relation of the 'conscious' or self-conscious focus of a 'self', and the deeper dynamic in which such a focus was constituted, and in which, perhaps, it could be transformed in 'religious experience'. While preparing the lectures he had written to the French psychologist Sully:

I seriously believe that the general problem of the subliminal, as Myers propounds it, promises to be one of the great problems, possibly even the greatest problem, of psychology... (1)

— The 'subliminal' (analogous to Freud's 'pre-conscious') which Myers in England had introduced in the attempt to frame the working of the 'psychic' phenomena — which he and James had been investigating since the 'seventies, and which form such a major part of the material analysed in the Varieties. — The subliminal from which the circuit of self-consciousness focussed in the figure of 'self' abstracts, and to which religious and 'psychic' figures might constitute an access.

1: 3 March 1901 (Letters, II, 141)
I noted a parallel between this turn-of-the-century emphasis by James upon the working of a 'Will to Believe', and Dewey's emphasis at his Chicago 'Laboratory School' upon the child's discovery of his or her part in a 'World' (in the process of learning and its direction by a teacher). One might see these emphases as complementary aspects of a common discovery of an essentially 'dramatic' or 'pragmatic' poetic of Experience. 'School and Society': the School as framing within a Society the access to a part in that Society — this by 'mirroring' within the frame of Society as a whole the working of that frame of communal activity. Framing the access to one's 'part' in that total activity through learning to distinguish one's true part in a situation from the play of various figures of situation and part in it — coming to know oneself in the socratic dialectic of that play. This access to a part in the 'World', in Society, may then itself be taken as a reflection, in a wider, 'cosmic' frame, of an access in 'religious' experience, to a more radical Actuality or working in which the 'working' of the social order is itself, ultimately, to be inscribed.

The 'parts' of Dewey and James at the turn of the century embody parallel reactions against the logical (or rather, 'theological') poetic of the British hegelianism dominant from about 1870 to 1900. James' colleagues at Harvard, Royce and Santayana, had in their turn presented characteristically 'American' versions of idealism in 1899 and 1900. From about 1905 until his death in 1910 James was concerned to embody 'pragmatism' in a systematic presentation which would counter these deceptive 'pictures' (as he saw it) of his colleagues. The project of such an anti-systematic system was never completed: James' 'position' is embodied rather — indeed exemplified — in the practical frame of the Lecture. The 'system' lies in a systematic interplay in the lecturer's stance (so to say) — in the primary figure of thesis, position — of multiple figurations. — Or (and equivalently) in the framing of questions within the primary question posed by James' assertion of the radical part of self-assertion — his insistence upon the part of 'positing', believing, framing a situation in the 'situation' to be framed. The letters
of these last years again and again express the lecturer's frustr-
ration in the attempt to convey his position, to as it were in-
fect his audience with the radical 'truth' of assertion itself,
when they doggedly imagine that this 'position' is a pointing to
some self-sufficient 'truth' outside itself, a 'truth' 'out there'
which might be comprehended in the 'intellectual' figure of an
inner determination in reflection of the relation of such reflect-
tion to some supposed 'object' or 'objective' truth outside. He
complains that only those already engaged in the revolutionary
assertion of Pragmatism can adequately frame and comprehend his
'position' - at the Oxford Lectures, for example, there is really
only Schiller (who arranged the lectures) who understood him. At
Paris there is his new acquaintance Bergson, but the focus of a
truly active assertion of the new order he sees in the group around
Patini in Florence.

I noted above the transition from Freud's poetic of 1900
to its extension to the social frame around 1930. The 'systematic'
pronouncing or proposition of the 'pragmatism' of the turn of the
century - James' last project - involved a parallel articulation
of a turn-of-the-century scheme within the social group - Society -
taken as primary frame of activity, over those same years, conclud-
ing in the revised Experience and Nature published by Dewey the year
before his retirement in 1930.

1930: the year of Dewey's formal recognition by the Uni-
versity of Paris as the central figure in a truly 'American' phi-
losophy reflected in the part of the assertion of that 'pragmatism'
in American Society, and in Dewey's embodiment of its principles
in an activity of which teaching was only one component. - Princ-
iples embodied, for example, in the part taken by Dewey in the agree-
ment by the belligerent powers of the past Great War, at Paris two
years before, not to resort to force to solve conflicts of interest.

The Paris Pact of 1928 embodies - as it were in the prim-
ary 'society' or 'comity' of Nations - of societies - themselves,
the principles set out in Dewey's systematic pragmatism of the late
twenties. Activity is most radically a 'transaction' in some
'situation'. A 'situation' that cannot be exactly defined at the outset of some traditional logical exposition, since the framing or definition of 'situations' is itself always a transaction in some situation. ... So that conflicting framings of a situation - a situation of conflict, then - is itself a radical and logically irreducible 'side' of 'situation' in general. Indeed one may call the 'physical' or physico-chemical order of 'Nature', of natural 'transaction' or interaction, just that interplay of frames, corresponding to an interplay of forces. This free play is integrated as 'Nature' in the 'logical' order of integration of conflicting figures within a unitary frame. And in the process of 'Inquiry' we ourselves participate in this integration - in the 'psycho-physical' order of interplay or transaction of logical integration and a physical order itself in some sense conflicting with any closed logical scheme.

We discover our humanity, our part in a 'human' order of interaction, of transactions, by finding our part in the integration of activity, of conflicting parts and interests, in a group. The logical order of integration of conflicting framings of situations in communally prosecuted Inquiry is seen to constitute one side of a more radical ethical order of integration of activity in a human group. Democracy constitutes an ideal figure of such integration - the elaboration of an integrated policy or policy in the free play of interests and opinions. And an essential component of such democracy is the institution of a School which frames the access of the individual to his or her part in such a democratic society: a school in which the child is led, from situation to situation, to discover his or her radical humanity, to discover the fundamental 'agreement' of all participants in a society in their part in the working of the integration of activity which itself constitutes Society.

In such a frame Dewey could integrate the inquiry of the previous thirty years - the complementary 'working' of those logical, epistemological, psychological, pedagogical, sociological, aesthetic ('or 'poetic') and religious figurations which he had articulated from the turn of the century. And in these terms he could frame his part, as the Educator of America, as proposing a mutual recognition among nations, of their joint interest
in the political integration of international transactions, rather than the attempted subordination of the interests of one nation to those of another by resort to the essentially disintegrative order of physical force.

After 1929 Dewey was to become involved in the great American debate over the proper relations between the free play of an economy of interaction which had led to the Wall Street Crash and the following Depression, and the 'political' frame of integration of the material 'Economy'. He was to be a leading proponent of framing a national economic policy within the relative isolation from a wider international economy procured by 'protectionist' tariffs. Such a local order might serve as a focus for subsequent international integration, whereas a failure to establish some such stable frame would involve America in the disintegration of the World Economy apparently resulting from the Great War.

These related questions of isolation on the one hand, and political intervention in the free play of the national 'economy' on the other, had organised the play of factions in American society since the first framing of an 'American' order over the beginning of the previous century. Wilson, supported by Dewey and liberal intellectuals in general, had emphasised the part of America in preventing the disintegration of the international order in the Great War, and in framing a new order once the war was over. But when Wilson returned from Versailles, Congress and the American public at large, turned inward, refusing to ratify the Treaty, to join the League of Nations first proposed by America, and supporting a largely isolationist and laissez-faire republican administration over the twenties. After the New Deal and the second World War would come a similar reaction to the Roosevelt years.

Wilson and Dewey, like Stanley Hall (James' partner in the initial Harvard experiment in practical physiology in the sev-
entries) had passed through the new and experimentally-oriented university of Johns Hopkins in the 'eighties. Another alumnus was Frederick Jackson Turner, who in 1893, as James turned towards the question of systematic philosophy, propounded at the Columbian Exposition (marking the four-hundredth anniversary of the European 'discovery' of America) at Chicago. The Significance of the Frontier in American History. Hegel had called America 'the Land of the Future': it would not become a true State until it had fixed a national boundary, it was a State 'in the process of becoming'. Turner framed American history in the dynamic of a western frontier of settlement, of interaction of eastern (and initially European) culture, and a western Nature. With the close of the nineteenth century this dynamic of the interface of culture and nature, and its successive inscriptions within a wider culture, this process was coming full-circle; there was no more 'internal' frontier. This closure of the circuit of the national boundary marked a crisis in American identity, in American destiny: the dynamic must now be transposed to a new interface of this physically closed America and a new context.

Over the turn of the century this figure of the 'new frontier' organised a radical questioning of the part of a New American Order. Some saw the new frontier as the Pacific — this vision was embodied in the figure of an 'Open Door' to the Chinese market. Some saw it in the interface of Man and Nature in the Machine, in Industry — over the turn of the century began Frederick W. Taylor's revolution in 'Scientific Management': an industrial activity would be analysed into its component elementary acts — into Time and Motion — and the components of a process would then be rationally articulated, allotting each worker his part in the whole so as to maximise overall production. In 1914 these principles were applied in the first 'Assembly Line' at Henry Ford's factory at Detroit, to produce a people's car that would in its turn allow the extension of rationalised Time and Motion to the world outside the factory. Herbert Hoover, a self-made millionaire, was appointed by Wilson to rationalise food production and consumption, in preparation for possible entry into the European war.

In an article in the Saturday Evening Post Hoover was said
to have given the country 'clean efficient action'. He was 'always there with the goods'. He always 'could put things through'. He established a 'methodical system' at 'incredibly low cost'. (1)

In the 'twenties Hoover became secretary of commerce in successive republican administrations, and in March 1929 was inaugurated as President. Rational management of the Economy, the systematic integration of its components within a free play of competing interests, would of itself lead to ever-increasing production and prosperity. The irrational 'business cycles' first noticed by a French physician a few years before the Crash of 1873, which had led to what the late nineteenth-century in Europe and America had called the 'Great Depression', had been left behind.

Juglar in the 1860's had analysed nine-year cycles in the expansion and contraction of markets. After the Crash of 1873 in Europe and America recurrent cycles of about nine years led to the market 'bottoming-out' in 1900, and then rising towards the financial collapse of post-war Germany in 1923, and that of America in 1929. And just as Juglar had identified the nine-year cycle before the Crash of 1873 (after which the relative growth of England became lower than those of its competitors, most particularly, of Germany and America), so a Russian economist, in 1926, identified a wider cycle of about fifty-four years, leading from the Crash which followed the close of the Napoleonic wars, to the Crash of 1873, and on to the nineteen-twenties.

Kondratieff only traced this wave of contraction and expansion back to the Industrial Revolution, associating it with the dynamic of investment and production in a 'capitalist mode of production', but it may be traced further back (in wheat prices in England) to the earliest market records of the thirteenth century. Towards the end of the nineteenth century the low prices of wheat were generally attributed to overproduction following the partial mechanisation of agriculture. In the year of Hoover's election Stalin introduced a rigid control of the Soviet economy.
- its articulation over successive cycles of 'five-year plans'. Agriculture was to be re-organised in order to allow the fullest resources possible to be employed in an industrialisation that would in its turn effect a mechanisation of agriculture, freeing further resources, and so on, until the whole activity of the new Soviet Union was integrated in a fully planned economy of labour. I have already noted the analogy between this centralised direction of the relation between Russian policy and land and seventeenth-century integration of serf labour in an earlier central policy. Kondratieff was himself sent to a 'labour colony' in Stalin's programme for the industrialisation of Soviet Asia - coupled with the systematic elimination of dissent from his 'rationalisation' of the new order.

In America - that other interface of European and non-European order to the West - Hoover's complementary 'rationalisation' was disintegrating eight months after his Inaugural Address. Here again, a primary element of disorder was a conflict between an integrated urban economy and the rural economy of its context - along with a conflict between Hoover's attempt to rationalise these two 'sides' of the American Economy, and the economic disorder on the other side of the Atlantic.

The 'classical' economics of the (first) industrial revolution, which had framed the American order in the formative years of transition from eighteenth to nineteenth century, had been articulated by the British school of Adam Smith and his successors. The French school of 'physiocrats' associated with the Encyclopédie had insisted upon the agricultural interface of culture and nature as primary economic frame (rather than the mercantilist insistence on the interface of mother-country and colony). Adam Smith had framed an interplay of this natural interface and the 'detour' of resources (chiefly labour) from this base, through an urban economy of manufacture, back to the more efficient exploitation of the base. The Wealth of Nations closes with an analysis of historical changes in the relative prices of wheat and manufactures, reflecting structural changes in the organisation of production, of which that of wheat is a primary component - providing as it were the fuel or energy for all product-
ive labour (along with all unproductive activity). Over the turn of the century the British school extended this elementary frame to more detailed analyses of the organizing role of money in production as a whole, and the part of labour as primary element in the articulation of productive activity. In America Jeffersonians argued for a free play of independent exploiters of the lands of the Union, against northern Hamiltonians who emphasized the part of central economic policy (embodied in a federal bank) in the organization of optimal overall production. Over the nineteenth century any such central intervention in the free play of independent activities was always questioned in terms of the Jeffersonian principles of the Founding Fathers and their Constitution, and had to be justified in terms of a further balancing of the radical play of interests. Of course any intervention was more in the interest of one section than another, and that section had to persuade the electorate that their interest reflected the national interest as a whole. Lincoln, for example, had to explain that the interest of northern industry in the integration of national activity was in the interest of the Nation as a whole, and so justify the forced integration of southern states who saw their interests embodied in secession.

Lincoln, raised in the western frontier, embodied that critical phase of Turner's dynamic of American integration associated with the Civil War which preceded, and to some extent framed, the Atlantic Crash of 1873. Theodore Roosevelt in his turn embodied or focussed that same dynamic in the more radical crisis identified by Turner at the close of the century. An easterner from the Anglo-Dutch culture of that part of the eastern seaboard between the first northern settlements of New England, and the early southern plantations, he spent the 'nineties closing the western frontier, then framed at the beginning of the new century the coordination of the new internal industrial interface, and the new international interface to the South, East, and West. We might take his succession to the presidency in 1901, leading out of the economic decline after 1873, as a turning-point in the development from 1873 to 1929. What, then, is the figuration of the political and economic transition from about 1870 to 1930, turning in America
about Roosevelt's succession, which is the social frame or context of the logical figuration of this period already in part considered?

I traced in 'Antiquity' an elementary interplay of figures of 'logical', 'cultural' (or social), and 'physical' orders of activity, which framed a transition, through the 'middle' ages, into the logical inscription of the logical order of reflection in a more radical 'dramatisation' of activity — activity of which reflection was taken as one order, inscribed in the seventeenth century in a primary order of experientia. The social order as a whole was inscribed in the natural interface of Culture and Nature — this, first of all, in the agricul-tural order of the Mark. The 'economy' of this natural order of society was in its turn inscribed as one component of a social 'poetic', where its mirroring in the integrative order of Policy was framed in Law. This social 'poetic', or articulation of activity, was in its turn inscribed as one component of a 'logical' order of Theory or Reflection. Such reflection was then itself embodied as a component of the social order, and so eventually in the natural order reflected in 'physical' theory — the natural order logically identified as an 'outside', an extrinsic determination, of the logical distinction of conceptual inclusion and exclusion, thus 'abstracted' from Nature.

Thus an economic 'policy' of exploitation of Nature by a Society is at once an analogue of what I have called Policy (in a more radical sense), and of the more 'abstract' or abstracted logical order of integration of 'experience' (articulated in social activity) in a unitary scheme of 'Nature' posited at the outset by (or 'in') Reflection. And just as a physical order 'outside' our construction or reconstruction of it in reflection distinguishes itself from — and through — our attempt to mark or inscribe it in the logical order of thought, so a more radical 'economy' of our material activity distinguishes itself from our
attempts to 'logically', 'rationally', frame economic policy.

Such 'rational' policy is early associated with that very 'marking' off of cultivation from 'savage' forest or 'wild' country beyond the pale which, with the related 'economy' of planting in winter or spring grain saved from the autumn harvest, or saving from slaughter an animal that will produce another in the spring (or some future spring), constitutes agri-culture.

This step from hunting and gathering in the 'wild' to pastoralism and settlement, to the framing of the year's activity in abstraction from the natural interface of 'present' need, appears prominently in the mythological figuration by which Culture distinguishes itself from Nature. The correlative abstractions from present need to an economy of activity over a year's circuit, and from 'wild' Nature to cultivated space, bounded by the 'pale', marked off, constitute a primary 'policy' which abstracts the elementary 'culture' of the field from a more primitive spatiotemporal frame of activity. They embody, as it were, a primary rationalisation of 'Time and Moti-n', in the coordination of the circuit of the 'year' with the circuit of the mark or pale in an elementary 'cultural' framing of Action.

More generally, one may consider the part of this primary economy or policy in a social order articulated in a further abstraction: from that rural or village economy to the urban order of manufacture and trade - this in the interface of the 'market'. In this 'market' or interface of urban order of production with rural primary production, one finds a cyclical order of investment and liquidation which is an analogue of the annual cycle of agricultural economy. Annual review of policy is still a major factor in this 'urban' economy, but the circuits of articulation of this activity extend over both shorter and longer periods than the agricultural year - just as the abstract 'space' constituted by the various components or parameters of this activity is abstracted (like the town itself) from the simple 'physical' space of the rural field.

Apart from the mere analogy between the urban cycle of investment and liquidation and the rural cycle of sowing and harvest, these two 'sides' of the Market are of course linked
attempts to 'logically' or 'rationally' frame economic policy or policies.

In relation to the elementary agricultural policy associated with the very 'marking' off of cultivation from 'forest', 'savage' wildness beyond the pale, policy first appears in the simple 'economy' of planting in the winter or spring grain saved from the previous harvest, or saving from slaughter the previous year an animal that will produce new stock in the spring (or in some future spring). In terms of coordination of 'labour' or work this framing of a 'year's' policy marks a step from hunting and gathering in the 'wild' to pastoralism and settlement, a primary 'economy' of abstraction from the natural interface of 'present' need to a circuit of activity, which traditionally (in the mythology of early civilisations) frames the very 'pale' and circuit of Culture. It embodies, as it were, a primary rationalisation of 'Time and Motion', through the coordination of the circuit of the year - natural 'time' - with the circuit of mark or pale - a natural 'space'.

More generally, one may consider the part of this primary component of 'economic policy' in a social order abstracted from a rural or village economy - a 'civilised' society in the literal sense of the term, articulated in the interface of urban manufacture and trade, and rural primary production. In what is in effect an analogy in this wider frame of the cyclical character of elementary agricultural policy, one finds a cyclical order of investment and liquidation, with annual review of policy still a major factor in the articulation of activity, but with the various terms of component policies extending over both shorter and longer periods than the agricultural year, just as the abstract 'space' constituted by the parameters of a particular enterprise/similarly abstracted (like the city itself) from the simple 'physical' space of the field. Apart from a purely analogical articulation, urban and rural economic policy are of course linked through the inscription of the physical order of urban activity in the natural order of nutrition (and other primary bodily constraints on activity of whatever sort), and through the entry of considerations of production of raw materials, and sale of manufactures or processed materials into urban economic policy. - That is, these two 'sides'
through the inscription of the physical order of urban activity in the 'natural' order of nutrition (and the other bodily constraints upon activity of whatever sort), and (conversely) through the part of the production of raw materials, and the sale of processed material, in the urban framing of economic policy. That is: the two sides, urban and rural, are linked in the market as interface of urban and rural activity.

In retrospect, the decline in the market share of agricultural production over the nineteen-twenties (the only serious worry of Secretary of Commerce Hoover, earlier the head of Wilson's wartime Food Administration) may be seen as an index of an imbalance of the market, which was to be focussed in the Crash of the central market - the money-market - in 1929. The chaos of Stalin's 'collectivisation' of agriculture presents an analogous conflict between urban and rural 'sides' of an economy.

What is one to make of the international market cycle extending roughly over the period (1870-1930) now being considered, which seems, together with sub-cycles of about nine years, to constitute some sort of analogy in the material economy of the 'West', of the annual cycle of agricultural policy and its review after each harvest?

- If the Crash of 1929 is in some sense the 'harvest' of the policies of this period, what are the seeds?

- Policies, of course - more precisely, investment or diversion of resources to 'economies' of shorter or longer scope - this most particularly in the period of expansion after the turn of the century. Policies elaborated or projected - framed - in a space of coordinated elements more abstract than the rural field, that interface of Heaven and Earth. - A 'space' in which various policies are articulated, and in which the agricultural correlation of annual cycle and physically bounded land is itself but one component.
One component in a wider economy abstracted (through the market) from the agricultural economy, just as the agricultural economy framed in yearly cycle and physical circuit of cultivation is itself abstracted from untamed and wild Nature.

A wider 'political economy' articulated in the interface of the market, and focussed in a central market embodying the interplay of the multiple interfaces of manufacture and primary production in different markets.

Between these two poles of central market and primary interface of culture and Nature (or we might perhaps regard the latter as the very periphery of a general economy), a multitude of policies, economies, are open - and in interplay. Various framings of components of 'national' activity, articulated as policies in a more or less 'logical' or rational order of decision, of choice within choice. Articulated as 'economies' in a corresponding finality of minimisation of resources and maximisation of production (and so of 'profit'). And the interplay of activity articulated in this 'economic' space (and its time) in principle integrated by the circulation of 'money' just as the physical 'economy' of Least Action corresponds to the logical order of integration of Nature - of natural interactions.

In this abstract economic 'space' of countless parameters the component element of the agricultural year is correlated with various other primary elements (as indicated above), in one organising correlation among many others. We might speak of this coordination of various primary orders or 'dimensions' of the economy, again on a 'physical' analogy, as a 'symmetry' of the market. And we might draw an analogy between the part of 'symmetry' in the articulation of the physical order, action within action, and that of this 'symmetry' of the Market in the articulation of economic activity. Thus, for example, one intervention in the Market, corresponding to the first step in a certain policy, itself induces (everything else supposed fixed) a new configuration of the Market, in which a second step is made, and so on. Since the elaboration of policy is in this sense sequential, while the configuration of
Interacting policies and corresponding 'economies' is synchronic, one might expect the market as a whole to embody a cyclical pattern - a 'circuit' constituted by successive steps, each amounting to choices from what is 'open' in the configuration of the market at some time, and themselves, in turn, framing what is then 'open' to subsequent choice, subsequent policy. Of course a circuit traced by the international economy over many years will embody countless subordinate steps, in extremely complex interactions of more or less independent parallel policies. Yet we may identify 'global' circuits of expansion and contraction, for example, and their correlation with subordinate circuits expressing general correlations of certain primary figurations or 'dimensions' of the market, without proceeding to any exhaustive analysis of the constitution of these general patterns in the incalculable interplay of all the component factors and decisions over the period of such cyclical patterns. The 'open-ness' of the general patterns thus evinced will then be reflected in a certain indeterminacy of their instantiation in a particular phase of the actual market. This indeterminacy, in its turn, may be introduced as one figure into a further step in the analysis, through its formal relations with the primary configurations of the market.

In fact, we find a global cycle of expansion and contraction, from the thirteenth century on, with an average period of fifty-four years. Within this we find a subordinate cycle with an average period of nine years (together with an important pattern, a periodicity of eighteen years, associated with construction - traceable, for example, in the volume of building-starts from year to year). Within the nine-year Juglar cycle, of course, we find the familiar one-year cycle of agricultural production (and of various other seasonal activities).

The one-year cycle is associated with an abstraction from 'wild Nature' whose elementary configuration was earlier found to embody a triple duplicity, a threefold duality or two-sidedness, first discovered in the relations of logical, physical and poetic figures of two-sidedness: the abstraction from phy-
sical Kosmos (from that primary configuration of three-dimensional or three-fold Space and its temporal symmetry) through the interface of Earth and Heaven, and the inscription in this interface or surface of the circuit of the 'mark', of cultivation, amounts to a sort of analogue in the physical order of the relations of logical, physical and poetic orders of 'two-sidedness'. We saw how this inscription of the circuit of the mark or pale in the physical order itself framed a 'physical poetics' of Culture, corresponding to the material economy of a Society in its (or 'on' its) Land.

In 'chaldean' society, activity was framed, cycle within cycle, mirroring in Mesopotamia, and in the primary cycle of the agricultural year, the inscription of that year in the heavenly order of stellar cycles, as the annual circuit of the sun between its turnings or 'tropics'. How can we frame a more radical correlation of the analogical orders or symmetries by which the structure of the Market is inscribed in the bounds of cultivation and civilisation, and these bounds themselves in the (again analogous) symmetry of physical Space and Time?

- What, in effect, is the relation between these 'business cycles' of 1, 3^2, 2, 3^3 'years' (or solar cycles), and the inscription of the Market in the 3-by-2 symmetry of physical spatiotemporality?

I have already traced, in the Market as general interface of urban centre and surrounding Land, the familiar configuration of two-sidedness already noted (and correlated) in the logical symmetries of Theory, in physical spatiotemporality, in the physical boundary of the 'mark', and so on. And I have already alluded to a multi-dimensional 'space' of economic policy (in which there is a complementarity of what is 'open', and the framing of this by prior decisions) abstracted from the primary correlation of circuit of cultivation and annual cycle of agricultural production. The inscription of agricultural production in this abstract space of 'Economy' as one component is formally
analogous to the inscriptions of physical difference in the logical order of distinction (which distinguishes itself from the physical difference by which this distinction is marked or marks itself) - or to the complementary inscription of the sequential order of logical determination (and decision) in synchronic physical 'space'. I have already mentioned the relation of sequential articulation of policy and synchronic correlation of 'market forces' in the cyclical pattern of trade.

On the logical analogy we can talk of an 'abstraction' of the urban economy from a 'primary' economy in the surrounding (hinter-)land. Indeed the recurrence of the primary order of bounding 'Mark' in the interface (within the 'Mark') of an etymologically cognate 'Market' directly echoes logical abstraction from the order of physical 'marks'. In the period of the feudal 'Mark' the element of articulation of the monetary interface of urban and rural was the 'mark' of silver or gold (varying from town to town). Mark, mercer, merchant, mercantilism.. and Mercury the god of trade, of traffic, as of boundaries, travel, and signs.

Within the urban order we find a further recurrence of the same radical figure of interface: on the urban side of integration of the economy (analogous in the economic order to logical integration) we find a central market (such as Wall Street in 1929) where the prices of primary 'commodities' and of money itself constitute two sides or poles - their interplay in the 'shares' of enterprises in which these are coordinated.

Here then is a simple configuration of the analogy of the central part of the money-market in a material economy, and the central part of the integrative logical order in Theory...

- Die Logik - das Geld des Geistes, der spekulative, der Gedankenwerth des Menschen und der Natur - ihr gegen alle wirkliche Bestimmtheit vollständig gleichgültig gewordenes und darum unwirkliches Wesen - das entwusserte, daher von der Natur und dem wirklichen Menschen abstrahirende Denken; das abstrakte
Denken. - Die Musserlichkeit dieses abstrakten Denkens...die Natur, wie sie für dieses abstrakte Denken ist. Sie ist ihm Musserlich, sein Selbst verlust; und es fasst sie auch Musserlich als abstrakten Gedanken, aber als entmüssertes abstraktes Denken...(1)

Die Entfremdung...d.h. der Gegensatz des abstrakten Denkens und der sinnlichen Wirklichkeit oder der wirklichen Sinnlichkeit innerhalb des Gedankens selbst. (2)

- Logic - the mind's Money, the speculative, the thought-value, of Man and Nature - their essence become equally valid for any actual instance, and so actually nothing - Thought expropriated, that is, abstracting from Nature and actual men; abstract Thought.
- The expropriation of this abstract Thought...Nature, as it is for this abstract Thought. Outside it, its losing-itself; and it in turn frames Nature from 'outside', as an abstract thought - indeed as externalised, expropriated, abstract Thought...

Alienation...i.e. the opposition of abstract Thought and sensible actuality or actual sensibility, within a thought itself.

2: ibid, p 403. The 1843 manuscripts were first published as part of the collaboration between the Moscow Institute for Marxism-Leninism and the Frankfurt Institut für Sozialforschung on the first Marx-Engels Gesamtausgabe (MEGA1) published 1927-33 (in which latter year the first 'Frankfurt School' was disbanded by the NSDAP). This publication of the 1843 manuscripts.- in a fragmentary form from 1927 on, and in a complete version in 1932 (as MEGA1 I.3) - may itself be taken as a significant index of the general european configuration of texts and contexts in the years around 1930; I will discuss below the hegelian 'grammar' of Marxism developed at Frankfurt, and the marxist grammar of Kojève's public 'reading' of Hegel at Paris, from 1933 until 1939. One might see the encounter in the twenties and thirties of Hegel and Marx, itself leading through the mid-century to franco-german pre-occupations of the 'sixties (notably expressed by Adorno, Habermas and Althusser) as a further extension of the temporal mirroring or theoretical atavism proposed by Marx in his doctoral thesis.
...And in the money-market, the image of the logical order of Thought in the material economy of Culture-in-Nature - the 'capital' sector controlling 'primary' production and 'secondary' manufacture - we once again find a simple correlation between that material Economy and its temporal dimension or development: Time is Money: in the sense that the use of money, capital, is sold at a certain price, for a certain time (at least from the 'usury' of the thirteenth century onwards).

Now the inscription of the three basic 'dimensions' of the (or 'an') Economy in this financial sector or 'side' of the wider Market - in this, one of the three dimensions - is paralleled by an analogous articulation of the other two 'dimensions' of this 'economic' analogue of the physical 'space' in which Culture (first of all agri-culture) is inscribed. In the central interface in which Enterprise - or rather 'enterprises' - coordinate investment and production, and are themselves coordinated in the Market (or rather, in markets) we find a similar triple order or dimensionality comprising capital investment, market coordination, production/consumption. And in the 'primary' base of the production and consumption rooted in human, animal, vegetable and mineral Nature, we find a further analogue (its minimal expression in the rural order of an agricultural economy). The correlation implicit in the configuration just discussed of global monetary cycles of inflation and deflation (corresponding to economic expansion and contraction - despite the political 'anti-cyclical' measures of the nineteen-seventies) and the local annual cycle of primary production - the correlation, so to speak, of 'money time' and 'natural time' - may now be understood in terms of the economic 'space' and its three basic 'dimensions', each internally mirroring their relations to the other two sectors. Sequential cycles of a linear 'working through' the coordinations of 'internal' and 'external' variables or coordinates in each of the three main dimensions appear in Juglar's nine-year period (referred to by financiers now simply as 'the cycle'); and the widest coordination of global monetary frame of investment and liquidation with subordinate annual cycle of agricultural production appears in the fifty-four-year 'long' Kondratieff wave. More particularly, the 'logic' of
Money leads to the inscription of the component order of agricultural production in the sequential articulation of abstract policies which, after about $3^3$ years (corresponding to the inscription of the annual agricultural cycle within the interface of the market, and this in its turn in the organising frame of the central market) closes in a 'Crash' of the central market, corresponding to a sort of limit of speculative abstraction from primary production and consumption. The Crash marks the beginning of a breakdown of the policies sequentially articulated, one upon another, in a logically integrated manner, over the years of expansion and investment. The steps of this breakdown of an abstract economy, and the reassertion of the 'real' economy, mirror the steps in which the abstract economy was itself articulated, and after about another $3^3$ years the dynamic of expansion again takes over. That is: the sequential organisation of decision 'within' decision over about $3^3$ years reflects (in increasing abstraction) the synchronous configuration of factors amounting to $3^3$ correlations of three three-fold orders.

'Logic is the money of the mind': if Culture is to be framed in a radical 'materialist' Economy of Nature, then what I have called the 'cultural' poetic of Society, intermediate between (and mirroring) physical and logic 'sides' of that drama, is to be inscribed in the primary working of a material economy (as a further abstraction from that primary abstraction of Capital from the 'real' material Economy), and the 'logical' poetic - as 'ideology' - in its turn inscribed in this Culture, and so in the primary material economy. And the further abstraction (from this logical poetic of 'ideology') of a formal 'logic' - of a discourse upon discourse abstracted from any particular content - is in its turn inscribed, finally, in the primary order of Nature, as a limiting reflection and analogue of the organising abstraction of one side of the Market ('Capital') from its inscription in the order of primary production, Labour.
In such a 'materialist' framing of the organisation of Culture in time (that is, of 'History'), the cultural poetic in which the Policy and Economy of a society are mirrored in the intermediate frame of Law and 'institutions', is itself to be inscribed (at the beginning of the twentieth century) in an Economy dominated by Capital's abstraction from primary production. The abstraction of a 'cultural' noetic from the organising abstraction of Capital, of Money, is to be inscribed in the frame of that primary economy of abstraction, as it enters into that dynamic of Abstraction as one component figure... the figure, indeed, of the inscription of that Economy in a wider order... a systematic illusion abstracted from the reality of Labour, and serving to block the labourer's identification of the reality of his position, his part in Society, in its primary Economy: the systematic 'alienation' or abstraction of the worker from his work, from his part.

In such a 'materialist' scheme of early twentieth-century capitalist society, the 'policy' of Imperialism appears as precisely 'the highest stage of capitalism': the abstraction of Capital from Labour through the interface of imperialist nation and its colonies as primary Market. The imperialist powers of Europe then appear as so many competing capitalist enterprises, and the political crisis of 1914 appears simply as the conflict of these rival enterprises after the limit of independent colonial expansion has been reached - after the World Market has been finally carved up between these 'powers', without remainder, at the Berlin Conference of 1885. The interplay of European policies framed by Bismarck's diplomacy in the 'seventies and 'eighties is then to be regarded, in its progressive abstraction from a workable coordination of national policies in the World Market, as necessarily, mechanically, naturally, leading to the crisis of 1914. And the initial supposition of the imperialist-powers that this global conflict would quickly be inscribed (according to Clausewitz' principle that war is simply the natural extension of diplomacy) in some natural extension of the political coordination of interests - that the 'economy' of war could be inscribed in the familiar diplomatic frame of 1885 - was naturally enough overthrown by 1916, when Lenin urged the re-organisation of European policy within the economy of international Labour.
The primary limitation, the one-sidedness, of such a 'marxist-leninist' or materialist framing of the Great War, was soon enough apparent in the fragmentation of the Second International over the period of the War. 'Ideological' nationalism prevailed, amongst the great majority of members of the various socialist 'parties' affiliated to the International, over revolutionary internationalism. And a simple analysis of the economics of turn-of-the-century Imperialism shows, anyway, that if the European colonial powers be considered as capitalistic enterprises, then Empire is overall a loss-making business. Although the scheme of neo-mercantilist exploitation of colonies as lucrative markets does indeed appear over the turn of the century as a primary component in the 'ideology' of Empire, we might just as well assert the primacy of ideological schemes in the formulation of policy (with an often erroneous 'idea' of colonial economics as one element in that 'ideology'), as assert the materialist inscription of this colonial or imperialist ideology in a more radical Economy.

The interplay of 'economic' and 'ideological' factors in the intermediate frame of the 'mass culture' arising over the turn of the century may be well seen, indeed, in the general figure of 'national' 'socialist' parties, of which the structure framed by Lenin after 1900 is a limiting case. In Britain the 'Labour Party' formed in 1900 to coordinate the activity of all socialist groups in the nation, entered in 1915 into a national War Government, coordinating its activity with that of a Conservative Party (corresponding largely with the interests of Capital) and that of the Liberal Party in-between - framing its activity within the unity of the nation as primary, even though the socialist Hobson had in 1902 identified that imperialist Nation as a capitalistic enterprise.

The 'Labour Party' in Britain, like the other European 'socialist' parties, had been formed in the period since about 1870 (the first, the German Social-Democrat Party, in 1869), as parliamentary representation had been extended from a small propertied class to the mass of the population, and as the organisation of Labour (in trades unions) was given a part within the law complementing the organisation of Capital. The primary pro-
ducers and consumers - Labour - were given a part in the framing of national activity and its coordination in national policy. This part was framed, in a mass democracy, in the play of different representations of that part, periodically focussed in the coordination of individuals' choices between different frames of activity or policy in 'elections'. After the turn of the century this interplay of 'ideology' (or different representations of the ongoing activity and the individual's part in it) and the 'economy' of material interest was framed in Europe in the cultural 'poetics' whose element might be identified in the 'stories' of a mass-circulation popular press (first appearing in America after the Civil War). Between the turn of the century and 1930 this dominant 'medium' of mass culture was supplemented by 'moving pictures' (with spoken dialogue by 1930) and, after the War, by 'radio', the transmission of aural pressure-waves by their transformation at a transmitter into electrical and so electro-magnetic waves, and the converse transformation at a receiver. Around 1930 the principles of electromagnetic transmission of 'talking pictures' were worked out, but did not enter as a significant component into mass-culture until the 'fifties, after the Second War.

Now the 'representation' of Labour, framed initially as the articulation of the national order within a rational and natural economy, enters into play, in this new 'mass culture', with what might be called, from the point of view of Labour, the 'ideology of capitalist imperialism'. In Britain, for example, this interplay is framed over the period of the First (World) War by the dominant 'liberal' principles of coordination of the two sides. Labour does not frame its part through the inscription of the national order in a more radical international Economy, but rather inscribes the organising tendency of such an inscription in a mirroring and interplay of the interests of Capital and Labour in the British 'liberal' poetics as primary. Only in Munich, Berlin and Budapest, and at the close of the War, is there a short-lived association of radical Labour with the international socialism of Lenin and Trotsky. The 'German' figure of Marx' inscription of the social frame within a more radical Economy of Nature expresses itself briefly as the 'internal' German ideology and political order breaks down: but 'western' culture re-inscribes its German component within Wilson's cordon sanitaire beyond which the new Russia is quickly isolated.
We may now begin to see, in the interplay of various orders – various elements, configurations, components – of a transition from about 1870 to 1930, an analogue of earlier patterns. I identified a figure of transition over the thirteenth century, for example, with an elementary logical determination of the inscription of the logical order of reflection (or 'theory') in a central poetic of European 'Culture' – this focused in the School of Paris. There the dominant 'ideology', so to speak, was the logical poetic of systematic Christian theology. The 'School' constituted a sort of interface between an ideal logic in which all determinations might be supposed in principle systematically integrated, and a 'medieval' European Culture of Christendom, articulated in the interplay of Church and Empire. Now we find the logical order of 'Theory' – or rather 'Inquiry' – inscribed in the central poetic of Society (as primary frame of Action) – or rather American society – in Dewey's 'School': Dewey's 'School' both in the ideal sense, as that figure of School enters into his inquiry, and in the sense that this very ideal organizes the inquiry of a real 'school' of thought. The ideal School is to be the figure of a mirroring of the logical order of integration, in a Society. And this logical poetic of American society over the turn of the century in fact constitutes one pole, one side, of American culture, mirroring (in the interplay of figures and forces in that mass culture) the more or less open play of interests that frames the material economy of its American context. – A material economy framed over the turn of the century in the correlation of an 'Open Door' to the international Market, a coordination of the internal interface of Capital and Labour through 'Scientific Management' and the technology of the 'Second Industrial Revolution', and the focal function of the New York 'stock' market. By 1929 the post-war inscription of European finance in the interface of America and Europe as primary frame of the international Market led to the focusing of the collapse of various national European markets in that of Wall Street. Here the Great War marked a turning-point: before 1914 America was financed by (in debt to) Europe; by the end of the War Europe was in debt to America, in an international Market restructured through the coordination of more or less politically controlled war economies on both sides of the Atlantic. Just as the Soviet Union emerged as the focus of a new International, so America emerged as the focus of a new international Market.
... So much for 'pragmatism' as turn-of-the-century American 'ideology' mirroring the 'open' market... now we may proceed to fill in the details of a structure of transition from about 1870 to 1930, in which these complementary sides of American 'mass culture' constitute one component.

... Or rather: I will now indicate how in principle the remaining 'coordinates' of the transition might be articulated, coordinated.

I have taken the open play of figures which constitutes an American 'pole' of European culture to the West, and the complementary closed Russian order to the East, to constitute as it were two 'interfaces' of that culture - as a whole - and its global context. I tried to correlate the 'opening-up' of these interfaces - of this 'East-West' dimension - over the period 1870-1930, with a breakdown of the nineteenth-century order which emerged from the revolutionary beginnings of the century. - A breakdown of the interplay of the three north-west European components (British, French and German) focussed (by the Hapsburg interface) to the south-east as the 'Eastern Question', and, outside Europe, in colonial conflict. The political crisis of Europe over this period may be taken as constituting the primary context of an 'intellectual' crisis. Bismarck at Berlin frames German policy in the seventies and 'eighties in a play of European forces:

All politics reduce themselves to this formula: Try to be one of three, so long as the World is governed by an unstable equilibrium of five great powers.

Nietzsche, outside, presents the self-assertion in a play of forces, of which this is the 'political' expression, as a radical

[Letter to Sabran, Russian ambassador (1880) in Schmoller (ed) Politische Texte (1927)]
question, as the question of Value - as 'Why?' itself in question, the question of Nihilism:

Was bedeutet Nihilismus? - Dass die obersten Werthe sich ent-werthen. Es fehlt das Ziel; es fehlt die Antwort auf das "Warum". (1)

What does Nihilism mean? - That the highest values devaluate themselves. The end is missing; the answer is missing for the 'Why'.

This radical question frames as its principle the activity of the period to follow:

Was ich erzähle ist die Geschicte der nächsten zwei Jahrhunderte. Ich beschreibe, was kommt, was nicht mehr anders kommen kann: die Heraufkunft des Nihilismus. Diese Geschichte kann jetzt schon erzählt werden; denn die Nothwendigkeit selbst ist hier am Werke. Diese Zukunft redet schon in hundert Zeichen, dieses Schicksal kündigt überall sich an; für diese Musik der Zukunft sind alle Ohren bereits gespitzt. Unsre ganze europäische Kultur bewegt sich seit langem schon mit einer Tortur der Spannung, die von Jahrzehnt zu Jahrzehnt wächst, wie auf eine Katastrophe bis: unruhig, gewaltsam, überstürzt: wie ein Strom, der an’s Ende will, der sich nicht mehr besinnt, der Furcht davon hat, sich zu besinnen.

- Der hier das Wort nimmt, hat umgekehrt Nichts bisher gethan als sich zu besinnen: als ein Philosoph und Einsiedler aus Instinkt, der seinen Vortheil im Abseits, im Außerhalb, in der Geduld, in der Verzögerung, in der Zurückgebliebenheit fand; als eine Wage-und-Versucher-Geist, der sich schon in jedes Labyrinth der Zukunft einmal verirrt hat; als ein Wahrsagevogel-Geist, der zurückblickt, wenn er erzählt, was kommen wird; als der erste vollkommene Nihilist Europas, der aber den Nihilismus selbst schon in sich zu Ende gelebt hat, - der ihn hinter sich, unter sich, aussen sich hat. (2)

1: Die Wille zur Macht, Erstes Buch (Der Europäischen Nihilismus), I, i (Nihilismus als Consequent der bisherigen Werth-Interpretation des Daseins), first fragment. 2: Vorrede, opening fragments.
What I am telling is the history of the next two centuries. I am describing what is coming, what can no longer come in any other way: the advent of Nihilism. This story can now, already, be told; for necessity itself is here at work. This future already speaks in a hundred signs, this fate proclaims itself everywhere; all ears are already pricked up for this music of the future. Our whole European culture is already long agitated in a tortuous tension, that grows from decade to decade, as towards a catastrophe: uneasy, violent, pressing: like a current that wants to reach the end, no longer reflecting, afraid to reflect.

- He who here speaks up, has so far done almost nothing but reflect: a philosopher and recluse by instinct, who has found an advantage in isolation, exile, patience, delay, lagging; a daredevil experimenter who has already been lost in every labyrinth of the Future; with the spirit of a bird of augury that in looking back tells what is to come; as Europe's first complete nihilist, who, though, has within himself lived-out nihilism itself right through to the end - who has it behind him, beneath him, out of him.

... and out of this radical question will arise a 'counter-move-ment' of Affirmation, framed in the assertion of self-assertion, of (that is) Will to Will, Will to Power - already here announced, with the question of Nihilism itself (which 'opens' this framing of 'The Will to Power'), as the answer to that question, to what is with it open in the configuration of a Culture in which it is inscribed. With such an opening in Culture, then, the question of the framing of questions and reasons themselves - of 'Warum?' - opens the systematic coordination of Nietzsche's 'reflection' of the 'eighties by his sister and erstwhile disciple (Gast), published the year after the 'madman's' death in 1900. A coordination, a frame, of question and affirmation, closing in the inscription of the framing, the assertion of the frame as focal coordinate in what it frames, the affirmation of the frame of this its affirmation, the inscription of the 'closing' assertion of a radical play of figures (these, then, asserting themselves, as 'forces') as one figure, one force, in ('this') play:

And do you know what 'the World' is to me? Should I show it to you in my Mirror? This World: an enormity of Force, without

1: ibid, closing fragment (ie number 1067)
beginning, without end, a fixed brazen mass of Force, which becomes neither more massive nor less, which does not spend, but only transforms itself, as a whole an unchangeable mass, an economy without outlay or loss, but also without growth or income, enclosed by 'Nothing' as by a boundary, in nothing fuzzy or wasteful, in nothing extending without limit, but as definite Force set in a definite Space, and not a Space that might anywhere be 'empty', rather as everywhere Force, as Play of forces and waves of force at once One and Many, at once increasing here and diminishing there, a sea of forces rushing and flowing into one another, forever changing, forever returning, with immense years of Return, with an ebb and flood of its figures, striving out of the simplest into the most complex, out of the stillest, most rigid, coldest, into the hottest, wildest, most-self-contradictory, and then reverting from richness to simplicity, from the play of contradictions back to the joy of Concord, affirming itself in this very constancy of its courses and years, blessing itself as that, which must forever return, as a becoming that knows no satiety, no surfeit, no tiring: - this my dionysian World of the forever-self-creating, forever-self-destroying, this Mystery-World of twofold delight, this my 'Beyond Good and Evil' without end, if there be no end in the joy of the circle, without will, if a ring have not good will toward itself, - will you have a Name for this World? A resolution for all its riddles? And a light for you, you the most-hidden, most-powerful, least-frightened, most-midnightly? - This World is the Will to Power - and nothing beside! And you yourself, too, are this Will to Power - and nothing beside!

In the free play of figures, Actuality - 'the World' - distinguishes itself from 'Nothing' in the primary circuit of self-affirmation, self-assertion, of which this Nietzsche's very assertion of the distinction, of this self-distinction, itself partakes - and in which the self-assertion of the reader as reader - we, 'you yourselves', ourselves, partake. A circuit, a recurrence, closing the framing of 'The Will to Power' in the self-assertion of its assertion, its invocation, in this circuit which frames 'the World' as assertion, as Will. ...And in the 'eighties notebooks this very circuit or closure of the Book, of 'The Will to Power' as Book, is itself but one figure in a still wider play, radically open, 'unfinish-
ed, until the circular play of different figures, framings, of the Book, in the notebooks, and 'in' the different 'Worlds' of different Books, is broken in 1901 by the linear editing or edition which opens and closes in the Question and Affirmation just cited. ... A still wider Play of the 'eighties, in which the figure of the play asserts itself as Dionysos. Dionysos in a play of forces, a Nature, in which the apollonian stability of figure articulated in the figure of Identity, Form...is itself lost (a thesis indeed, a Theseus, without Ariadne)...lost until it finds itself again in the orphic dance, the constancy of its circuit, the musical frame of the chorus in which Apollo and Dionysos mirror one another, meeting, coinciding, in the central figure of the Actor.

Nietzsche's first book was written (as he later tells us) under the walls of Sedan in 1870: The Birth of Tragedy from the Spirit of Music. His last messages, the telegrams of the first days of 1889, were inscribed in the orphic figures, masks, personae of Dionysos and the Christ, as all apollonian identity finally dissolved in the dionysian play. These last telegrams mark the self-inscription of the Actor in, on, the European Scene he takes it as his part to frame, as he invokes Cosima Wagner as Ariadne, and summons the heads of Europe (excluding the German Emperor) to meet him and the Pope at Rome—to there transform the European order threatened, brought into radical Question, by Germany.

In 1901 (then) the play of questions and assertions, projections, marked in the open configurations of the 'note' books of the 'eighties (organised by Nietzsche from time to time in the books he himself published, 'edited' from notebooks, in those years), was arranged by his sister Elizabeth and Peter Gast into a 'system' of which the published books were now presented as prefigurations, isolated components. — A system framed in the primary closed cir-
open play of forms. When Bümmler edited Nietzsche's 'works' in 1930 (adding to each his own interpretative postscript) his presentation of the Will to Power (as the editors of 1901 had called their selection of notes from the 'eighties) opened:

Der 'Wille zur Macht' ist das philosophische Hauptwerk Nietzsches. Alle grundsätzlichen Resultate seines Denkens sind in diesem Buche vereinigt. Man darf sich durch die Abneigung seines Verfassers gegen die Systematiker nicht davon abhalten lassen, dieses Werk ein System zu nennen. (1)

The Will to Power is Nietzsche's principal philosophical work. All the basic conclusions of his thought are united in this book. One should not allow its author's rejection of systematizers prevent this work being called a system.

This same year another national socialist, Alfred Rosenberg, published his Myth of the Twentieth Century, the most systematic attempt to frame 'nazi' ideology, and the following year Bümmler went on from his editorial reflections to construct a systematic picture of Nietzsche as the prophet of National Socialism, Nietzsche, der Philosoph und Politiker. In 1933, as Heidegger became Rector of Freiburg and delivered an inaugural address on the part of the University in the New Order, Bümmler was called by the Party to the chair of 'political pedagogy' at Berlin, sharing with Rosenberg the 'ideological' direction of National Socialism - direction of the ideological 'side' of the Movement, and of the Third Reich of which such 'movement' was itself to be the 'direction'. Nietzsche's framing of unitary German policy under Bismarck as a central component in the question of European Culture had been transformed into the systematic frame of renewed German self-assertion after the Great War had itself called into question a less radical German self-assertion after unification and defeat of France in 1870. (2)

1: Werke VI (Der Wille zur Macht) Nachwort, ab init. (p699)
2: Whereas Nietzsche's final 'breakdown', as he arranged publication of the autobiographical prelude to his 'system' (Ecce Homo), was expressed in telegrams summoning all European leaders save the Kaiser to Rome, to face the cosmic question posed by German self-
In considering the 'revolutionary' transition from 1770 to 1830, I took Hegel's part in the latter phase of that transition as a sort of primary 'coordinate' in relation to which assertion, Bümmler closes his 1930 Postscript confronting the question of 'closing' Nietzsche's system, of framing the play of figures from the eighteen-eighties within the assertion of germanic will — this as organizing axis of 'Nietzsche's' response to the opening question of European Nihilism:


— Resurrection or the Götterdämmerung parodied by Nietzsche in his 'Philosophy with a Hammer'. And Bümmler finds the 'Mittelpunkt' of axis and system of assertion (rather than play of questions), not in the ironic figure of a constantly questioning Zarathustra, but in the 'grossen Menschen als der Gesetzgeber der Zukunft' (p700) that he finds or puts at that 'centre': 'Dieser Diktator der Zukunft... das ist das Einzigartige am 'Willen zur Macht' (p703). 'Nicht im 'Zarathustra' sondern im 'Willen zur Macht' gipfelt die Philosophie Nietzsches' (p700):

various other components of a structure of transition might be correlated. In the geographically wider frame of a transition from nineteenth to twentieth century, I have begun to frame a configuration of that transition in relation to complementary inscriptions of the logical order of reflection or 'theory' in the 'dramatic' order of the Group (notably of 'Society') in those national groups articulated in the interface of European culture and its global context, to the West and to the East.

We might begin now to 'fill in' this abstract frame by adding - or inscribing in it - the question posed in Europe by Nietzsche. In relation to the first phase of the transition from about 1870-1930, one might take the part of Nietzsche from 1870 until his death in 1900 as an initial coordinate of a European cultural configuration, rather as the part of Hegel was taken as an initial coordinate in relation to which other components of the latter phase of the transition from about 1770 to 1830 were correlated. A characteristic difference between these two focal 'coordinates' might be seen in the radical opposition or complementarity between Hegel's assertion in the German order arising from the revolutionary period of the part of that order in the interplay of European forces opened up by the French Revolution, and Nietzsche's questioning of that part, first in the critical distance of an Italian exile, and then embodying, perhaps, a deeper question in the internal retreat, the 'asylum' as it were, of the nineties. - For that 'madness' of the nineties might be taken as simply the last phase of a movement which begins with the inscription of apollonian form in dionysian play, and passes, over the 'eighties, through the inscription of the limiting form of identity itself in that play - culminating in the 'crisis' of 1888/9 in which the identity of 'Nietzsche' dissolves in the figure of Dionysos. That crisis may be taken as one moment in a progressive movement of ever-more-radical inscription of Form in dionysian play: interlocutors in the 'nineties, finding themselves as focal identities in dialogues with the 'madman' drawn into a play of words, sometimes felt that Nietzsche was somehow hiding behind a mere mask of 'madness', and playing with them (1).

What is the central 'part' of Nietzsche, of his questioning, in the wider crisis of European culture, of which his 'breakdown' seems a sort of refiguration?

I noted how Actuality appears in the 'eighties as a question: the question of Will, Value - of 'Why?'. The figure of a 'logical' distinction of Actuality from the mere play of possibility - in which this very figure is itself one component - actually presents itself (in precisely its own paradoxical actuality) in the frame of European Culture. A question marked in that Culture by Nietzsche - one of those Urfragen which, Novalis wrote, the questioner himself - and only he - can answer. For the answer lies in the assertion of our part and participation in the radical figure of Actuality as Will, as Self-Assertion, as 'Yes!', and the assertion of this radical Assertion as expressing itself in this very assertion of it... the inscription of the assertion of Assertion in the very actuality it asserts - and so in the stoic figure of a cosmic circle or recurrence, which is the outward reflection in time and space of this logical circle in which assertion asserts itself.

... The Urfrage is not framed, though, in abstraction - but rather in the 'poetic' or dramatic order of a European culture in which these two poles of logical and physical circle reflect one another. Mirror one another in the circuit of a Europe in which Culture is itself in question: this question framed in the interface of Germany and Europe, in which Nietzsche stands. Framed by a Germany whose political order is articulated in national self-assertion, within the circuit of its physical boundaries, in the open play of European forces. This bismarckian correlation of the 'logic' of policy and the play of forces (embodied most succinctly in the maxim cited above), reflects (in the familiar 'German' figure of inscription of the logical order in a radical economy or play) and focusses the wider question constituted by Europe as a whole, as the frame of Nietzsche's 'mirror' in which the Will to Power sees its image in the Eternal Recurrence.

We may see in this focussing of the question in that of Germany a familiar figure. Within the physical circuit of Europe
the articulation in terms of a primary division of industrialised north and agricultural south, and, in the north, in terms of a further triple division into French, British, and German 'powers', reflects a familiar coordination of the subordinate 'topics' of the 'logical' domain of 'theory or Reflection. Just as the theory of theory itself reflects within the logical domain the organisation of the whole, so perhaps the German inscription of policy in the play of forces (notably, of policies) reflects within the outward context of European Reflection the frame of the interplay as a whole. Similarly, the central money-market, twice abstracted from a national economy as a whole, reflects and in part frames the whole economy. I have already traced a correlation, in the elementary figuration of the interplay in European Culture of the logical articulation of Reflection and the physical articulation of its national contexts, between logical, poetic and physical orders on the one hand, and dominant French, British and German 'schools' on the other. One might further trace a correlation between, say, the inscription of the logical order of German reflection in a more radical - often 'physical' - economy, and the articulation of the German industrial economy based on 'heavy' industry. I have already suggested something of such a sort in the characterisation of the Flugger mines of the early sixteenth century as the 'school' of Paracelsus and Agricola, contrasting with the Florentine Academy of the Medici... and in a brief notice of Novalis' association with Werner, and his employment as Inspector of Mines in Saxony.

... Of course such 'correlations' of components of different orders are only correlations (as I have more than once insisted). I do not mean to suggest any strict mechanical or deterministic relation between, say, formal abstraction and France. Rather do elementary symmetries of logical and physical orders interact in a cultural frame which embodies an analogous order of distinctions and boundaries, organised in terms of languages and nations. No coordination of components of such different orders can amount to anything more than one configuration, one
'force', entering into play with a multitude of other complex forces - in an interplay of figures and forces which is essentially open. For any framing of a rigid correlation of components of different orders will itself amount to a particular figure which must itself be questionable, must itself be open to various inscriptions in a wider play.

... What, then, is the point of these more or less 'open' correlations of figures?

- The point will become clearer when the configuration of this book itself is inscribed in the play, making in the nineteen eighties a recurrence of Nietzsche's question of a century before. ... But the articulation of this Question in the mirroring of this text and its context must be deferred to the close of the book - to that radical correlation of what is closed and what is open in that close, by which the book itself marks a question.

Before considering this question of a transition from twentieth to twenty-first century, and from the closed circuit of a tradition opening twenty-five centuries earlier into a dramatic order in which that circuit may be inscribed, we must first complete the characterisation of a transition from nineteenth to twentieth century which will in its turn frame a wider transition from the opening of the Third Period to its close.
What remains now, that the configuration of transition from nineteenth to twentieth century be completed?

This: an indication how analogous 'symmetries' in the five elementary orders - theoretical ('logical'), applied' theory ('ideology' in some broad sense), 'cultural', 'economic', and natural - each constituted by a similar order of 'boundary' or difference or distinction, and its recurrence on each 'side' of the distinction - how these enter into an open interplay in the period 1870-1830.

That time or period, together with the primary 'geographical' distinction, traced on the interface of Earth and Heaven, of Europe, constitutes a 'natural' spatiotemporal frame.

Within this primary geographical and temporal circuit we find a rough internal division of Europe into an industrial north and pre-industrial south, and the north dominated by the interplay of French, British and German activity. In the interface of 'inside' and 'outside' Europe we find to the West the American figure of an open economy, and to the East a complementary 'closed' Russia (or rather, Russian empire, or later, Soviet Union). Complementing this 'northern' axis we find, further, a 'North-South' axis, roughly corresponding to the interface of Europe and colonies: what, after the polarisation of East and West after the middle of the twentieth century, becomes a 'Third World'.

Coordinate with this primary topography of the terrestrial sphere is an international material Economy of activity, articulated in relation to national boundaries according to the interface of the 'Market'. This material 'Economy' in its turn frames a wider 'cultural' interplay, which might call a 'cultural Economy' of action - an interplay of figures and frames of action within which culture and cultures are articulated - in the first instance,
as framed in an order of Policy which reflects a 'mechanical' Economy within the legal frame of particular societies. One may see these correlative frames of Economy, Law, and Policy as a triple order of abstraction from the 'cultural' order of activity of whatever sort. The element of the cultural 'poetic' which frames the actuality of individual 'actors' on Earth was associated in the period now in question with the story as embodied in a popular press, complemented eventually by the silent stories of the popular cinema and the spoken stories 'on the air'. Stories, then, relating to the 'economy' of the society (in the restricted sense of the material economy), to 'politics', and to internal 'crime' and its external projection into the figuration of the conflicts of nations (to police and army as internal and external guardians of the national 'constitution'), constitute major themes in the 'press'.

Intermediate with this cultural 'poetic' of activity on Earth and the familiar orders of abstract Reflection or Theory lies what I called an order of 'applied theory', theoretically organised as the inscription of the various orders of abstract theory in a logical 'poetic' of application. The analogue of the logical frame of 'pure' theory in this order of application is - theoretically - determined as 'mathematics': but this logical determination constitutes the inscription of a more radical mathematical activity in the analogous domain of ideal abstraction. What is characteristic of the period of transition from nineteenth to twentieth century, in the matter of Reflection, is the logical determination of the logical order of Reflection as one 'side' of this order of 'application'. I have noted the figuration of such a determination in relation to psychological, ontological, physical and (formal)logical orders - their identification as abstractions from medical, phenomenological, (al)chemical and mathematical 'applications'. William James' turn-of-the-century identification of systematic or formal theology as an abstraction from 'religious experience' constitutes one component in the 'modernism' in theology and (catholic and 'protestant') church which characterises the transition from the theology of the nineteenth century to that of the twentieth - say from the Vatican Council of 1870 (already noted as the occasion of Brentano's apostasy) to the Concordat of 1929, at Rome. Another parallel 'modernism' in-
scribes the abstract poetic of representation in a more radical interface of subjective and objective orders. Thus central perspective appears after 1907 as an ideal pole of abstraction from a more radical interplay of subjective perspectives, the movement of logical or psychological integration, and a complementary dynamic objectivity, from which the focal identity of an inert object is an analogous abstraction, 'the unthinking 'positing' of which is now brought into question. Characteristically this 'cubist' perspective is franco-spanish, and the south-european component itself embodies components from the non-european culture of an african South.

This inscription of the logical order of central perspective in a more radical 'modernist' poetic or 'music' (in the wide sense earlier given to the word) is simply one coordinate in a more general figure of modernism. Colour and form are also 'abstracted' from the classical axis of positing or reference articulated between ideal poles of subjective and objective integration. And in Italy a more general insistence upon the inscription of narrative and visual elements in a primary dynamic frames the project of a Culture of the Future, of which 'futurist' image and narrative is to be the element.

Just as William James' 'pragmatism' presents an elementary general figure of the inscription of the logical order in a more radical order of activity, this generality of the figure corresponding to the articulation of american culture in the interface of Europe and World, and just as his turn-of-the-century inscription of the logical order of theology in religious experience embodies an elementary 'modernism', so his brother's narrative embodies — notably in descriptions of the interface of Old and New Worlds — a general figure of the new poetic: the articulation of narrative as an interplay of subjectivity and objectivity, of dynamic or organising foci of perspective, and corresponding references of these perspectives. — A dynamic in which the classic ideal focus of narrator itself enters as one element among others into the play.
Just as the transition now in question embodies, as one component of the Context of Reflection, the inscription of European material economies in a wider American Economy articulated in the western interface of Europe and World, so one may consider an analogous 'inscription' (here largely formal) of the complex figuration of European Reflection in the transition in a general figure of 'pragmatic' inscription of the logical order of theory in the dramatic order of Action. One might then say that 'pragmatism' in this sense frames an interplay of more specific European figurations of the inscription of logical in dramatic orders. The formal inscription of European 'schools' in the open frame presented by 'pragmatism' reflects the material inscription of the social contexts of these 'schools' in an 'American' frame of World Economy. One may indeed go further, and see the reflection of the latter phase of the period - if not of the transition as a whole - articulated between the two poles of this open American frame, and an eastern analogue: the closed circuit constituted by Lenin's inscription of the activity of framing the Russian order in the order thus framed.

To the south of the British, French and German orders, with their economies and 'ideologies' notionally articulated in this East-West axis of the transition, one may see in Italy from about 1870 (when Rome became the capital of a united nation) and about 1930, the correlation of this East-West articulation and the opening-up of a north-south dimension in European culture. Thus, at the turning-point of the latter phase of the transition - Italy's entry into the Great War in 1915 - the new 'poetics' of Papini, Marinetti and Gentile meet in a common recognition of the Italian Nation as primary frame for the transition into a culture of the future. - Papini whom James admired as the most forceful European proponent of 'activism', Marinetti the leading 'futurist', and Gentile who had just broken with Croce's Italian neo-Hegelianism framed in a poetics of Culture articulated as
critical History, to propound an active intervention in that 'poetic', a framing of the 'nation' which is itself one component in the activist society thus framed. 1915: a turning-point in the integration of these components of a new Italian poetic of the State as one component in the transformation of the actual Italian State... a transformation proceeding through the 'fascist' march on Rome in late 1922 to the central part of Mussolini - as central 'actor' in the new poetic or drama - in framing the new Order around 1930. In 1932 the 'leader', an ex-journalist (from the socialist popular press) framed (with Gentile's assistance) in the *Enciclopedia Italiana* the systematic poetic of *fascismo* as an activism directed by the inscription of the framing of activity in the State as primary frame of activity - a direction embodied in Mussolini as central actor-director. Activity and activism articulated between elementary actions and the limiting *Action, Act*, actuality of the State as a whole, through the integration of the individual actor, group within wider group, in a systematic corporate unity:

No individuals or groups outside the state

is presented as the central proposition of 'fascist' ideology. Ideology: that order of 'stories' which is the interface between abstract theory and an activity which may be accounted for in a more or less open range of (often conflicting) stories - that narrative 'economy' of culture which reflects an analogous material economy, within the central order of a half-interpreted activity, the radical cultural 'economy' of action. Ideology, then, in which the logical order of theory is, over this period inscribed. In 1927 Julien Aenda's publisher advertised the transition:

Les 'clercs, ce sont ceux qui', au nom de la pensée réfléchie, proposent au monde une échelle de valeurs. Or autrefois ces clercs inscrivaient, au sommet de cette échelle, des valeurs spirituelles et désintéressées; aujourd'hui ils y inscrivent

1: *Enciclopedia Italiana*, volume XIV (1932/Year, X) arti Fascez and Fascismo, p848 (Poturina: Idee, Fundamentali)
"Scholars" are those who, in the name of reflection, propose to the world a scale of values. Previously these scholars inscribed, at the top of this scale, values which were spiritual, disinterested; today they inscribe there practical values: above all, the religion of Nation and Class. This is for scholars treason.

'The religion of Nation and Class': in France, as in Italy, theory had inscribed itself in the conflicting frames of 'fascist' nationalism and communist proletarian internationalism - in the common figure of an 'activism' in which the reflexive movement of abstraction from the cultural economy of Action to an integrated and hierarchical logical order was itself 'inscribed' in a particular framing of that Action, in which it identifies itself as a movement of integration. - As a movement, an activity, from which Renda's ideal pole of 'spiritual' abstraction from the World of action, is now seen as a sort of imaginary vanishing point - like the ideal central perspective of 'autrefois'.

.. A 'religion' of Nation and Class: Religion, since that was the traditional frame of a 'story' in which the locus of enunciation - and reception - of the story enters as one component into the story. - But a religion of Nation or Class, since the theological pole of traditional religion (itself an analogue of the logical pole of traditional abstraction) now appears as a formal abstraction from a more radical drama framed in the Group - whether the primary Group be taken as a Nation, or as Working Man.

Such an analogue of the inscription of the logical pole of reflection in a primary interplay of logical (or psychological) and physical 'sides' in Action appears, indeed, in each of the orders - logical, ideological, cultural, economic, natural - as in each 'axis' of each order (as, for example, analogues appear in
in the component 'axes' or dimensions of the logical order of
Theory, of the inscription of that order as a whole in the pri-
mary frame of Action). Furthermore, this analogy between the
'logic' of the Modern, those correlative orders, and their pri-
mary component 'dimensions', extends 'at the same time' (that is,
in an inseparable way) to the wider pattern of coordination of
these various orders themselves.

We saw how this revolutionary configuration is organised
over the first phase of the transition (that is, 1870-1900) in the
frame of Nietzsche's radical Question - 'Why?'. There the dissol-
ution of the identities which, as primary coordinates, had framed
traditional questions and answers, is organised, for example, in
the 'cultural' order as the question of European Nihilism. 'Ideo-
logically' the question is framed in that of the dissolution (in
European Culture) of the theological pole - the 'Death of God'.
'Logically' the question appears as that of Truth - logical and
ontological roles dissolving in an interplay of figures or forces.
Whose truth? becomes the central question: as the traditional terms
or roles of Logic are inscribed in a more radical poetic or Drama,
this logic is itself inscribed in a cultural order from which trad-
ition had abstracted it. - 'The situation of logic in the wider
'play' reflects (and is reflected in) the part of the old identi-
ties, abstractions, in the radicalised logic.

In Renda's France, at the turn of the century, Bergson
and Poincare present us with two complementary components of a
French 'ideology', of a French inscription of 'traditional' logic
or abstraction in a more radical order of activity. I earlier
noted how these two men might be taken as closing representatives
of a nineteenth century French tradition embodied in two comple-
mentary 'schools' - beginning in the Ecole Normale and Polytech-
nique, and represented toward the mid-century by Cousin and Comte.
Thus over the turn of the century Bergson unfolds from the primary
actuality of self-identification the dramatic frame discovered in
this radical act: time, unfolding into space, spatiotemporal ex-
perience, and finally into a recognition of the part of this unfold-
ing recognition in the unfolding macrocosm of which it is a micro-
cosmic analogue. In such a scheme is inscribed an earlier logic of abstraction whose traditional dynamic had amounted to an attempt to comprehend the dramatic whole - the cosmic Drama - in that component movement of abstraction. And this order of logical abstraction is outwardly reflected in an order of mechanism in which an earlier physics had on its part too, attempted to inscribe the organic whole in one side abstracted from that whole.

This elementary framework of bergsonian 'vitalism' (which impressed itself with such force on reflection in France, and indeed outside France; between the turn of the century and the Great War) may be seen to embody the familiar figure of an unfolding of individual reflection until it discovers its part in some global analogue - whether Cousin's impersonal Reason, or Bergson's Life. That is, Bergson at the École Normale (at the close of the century) continues the nineteenth-century tradition of that school, which itself, over the course of the century, embodies one primary strand or component of what one might call the 'french school' of Reflection as a whole. One might characterise the 'bergsonian' frame of 'vitalism' - to a sort of 'first approximation' - in terms of the twin coordinates (so to speak) of its place in a european intellectual 'space' (with its various parallel national 'schools') and its participation in the general figure of inscription of the logical order of Reflection in the 'dramatic' order of activity, by which I have tried to characterise that general space at the opening of the twentieth century.

Thus one might attempt a parallel characterisation of the parts, at the turn of the century, in France, of Bergson and the polytechnicien Poincaré - as two complementary components of a 'french school' associated with the nineteenth-century order of École Normale and Polytechnique. I have suggested several times that one might see a parallel between the parts of Cousin and Comte toward mid-century, and those of Bergson and Poincaré at the close. Thus one may find in Poincaré's transition from the mathematical researches of the 'nineties to the 'philosophical' inscription of the logical order of reflection in that mathematical frame (that 'applied logic') over the first decade of the twentieth,
a 'mathematical' analogue of Bergson's 'logical' poetic - and in these together, two primary components of a 'french' order of inscription of Reflection in Action.

Comte had begun from elementary 'position', positing; within the primary mathematical frame of this 'position', the orders of the more specific and 'concrete' sciences (and actualities) were inscribed, one within the other, beginning with the astronomical frame of physical space and time, and coming full-circle (so to say) in the 'sociological' frame of a Society in which the initial act of 'position' might itself be inscribed.

In the 'nineties' Poincaré was concerned with the introduction of a new and radical primary characterisation of mathematical 'position' - a correlation of logical and physical orders of 'inside' and 'outside' in a 'topology' or analysis situs (as the preliminary work of Leibniz and Euler had been called) - and the framing within this new mathematics of position of the primary components of Laplace' celestial mechanics. (1) Over the turn of the century he addressed himself to the question of the 'metric' or geometry in which celestial mechanics was to be framed in a more radical (pre-metric' or topological) coordination of physical and logical orders of integration of Cosmos. For Riemann's metrics could be inscribed in Klein's analysis of geometric structures, within Poincaré's topology as a sort of residual or primary structure. In his analysis Poincaré correlated the various components that were a few years later to be integrated in the frame of einsteinian Relativity. But the frenchman's insistence on the primacy of the logical order of 'positing' over a formally symmetrical physical order of spatiotemporal 'position', would not allow him to recognise any radical ontical order of spatiotemporality distinguishing itself from scientific hypothesis, and it was left to the swiss-german to frame the physics of the twentieth century. For Poincaré the correlation of logical and physical orders was framed, as earlier by Comte, in a dynamic of inscription of their relation in the logical side: the 'physical' dynamic was always a reflection of this primary dynamic.

What is, the distinction of what is 'posited' from its framing in the primary act of position or hypothesis, must itself always remain hypothetical - the distinction must itself, in its
turn, be 'posited', framed, by the scientist.

After the turn of the century Poincaré elaborated his account of 'Science' in terms of this radical dynamic of framing, positing, hypothesis. Within a primary mirror of logic and Nature which we can formally posit (without being able further to characterise 'it') as expérience pure, we find ourselves at work, actively framing 'reality'. We must not forget that it is we who define the 'objects' of our experience: their constancy is a reflection of the constancy of an hypothesis. Indeed scientific 'induction' which embodies this postulate of constancy, is found to apply to Nature because this application itself defines 'Nature'. On the other hand we know the other pole of Science, ourselves as 'posing', only through a complementary circularity by which the locus of framing hypotheses is itself framed. We can no more begin from some primary bergsonian actuality and from it construct Nature by some formal unfolding, than we can (on the other hand) begin from some immediate acquaintance with some definite object in Nature. We are essentially constrained to a finitary figuration of the instance of 'position' or 'hypothesis' in ourselves, and so to the further positing of an 'unconscious' element in framing or hypothesis, which we can in principle frame only in this negative manner, and never exhaustively analyse.

The 'circular' figure of a framing or positing of the psychological order of positing had been taken by the austrian Bolzano (Paradoxien des Unendlichen, 1851) as characteristic of the irreducibility of the order of Thought, of the Gedankenwelt which is itself one term in our Gedankenwelt, to the outward order of finitary definition. Bolzano's analysis framed at once Brentano's subsequent discussion of 'intentionality', and the discussion of mathematical 'infinity' in the German school, from the eighteen-seventies until the enunciation of Russell's Paradox relating to sets which are members of themselves, at the turn of the century. Poincaré's view of the whole family of mathematical paradoxes which quickly followed upon Russell's, is as characteristic as his views
upon the metrical frame of astronomy, or upon the circularity of scientific and mathematical 'induction'. These paradoxes involved our mistaking of our radical part of framing mathematics, from the elementary configuration of simple 'position' onward. They were to be avoided by observing that all embodied a 'vicious circle': the positing or framing of an object which involves as one component that very positing, considered as already effected. That is: a mistaking of our free act of positing as an element of the 'outer' world of finitarily defined configurations, a viewing of what is irreducibly our act and choice to something independent or outside of us.

These turn-of-the-century paradoxes parallel (as I have already suggested) the physical paradoxes from which was to unfold a radically 'modern' physics. In each case the paradoxes turn upon the traditional abstraction of logical or physical 'sides' of 'in' and 'out' from what soon appears as an irreducible interplay and symmetry of the two 'sides' in an intermediate mathematical order. Just as Poincare's mathematical physics was constrained by his dynamic of inscription of the physical in the logical 'side', so an analogous constraint distanced him, at the International Mathematical Congresses, from the new logic of Russell, Hilbert and others.

Just as Hilbert's 'formalism' (as it came to be known) may be taken as a primary component of German reflection at the turn of the century - as a central expression of the work of the Göttingen School, and just as Poincare's 'conventionalism' parallels Hilbert's perspective in France (in the tradition of Polytechnique and Academie des Sciences), so Russell's 'logicism' constitutes a British component of the turn-of-the-century discussion.
of the mathematical correlation of logical and physical orders of 'in' and 'out' - of logical and physical 'space'.

Russell's part in British reflection over the period 1900-1930, though, is wider in scope than that of Poincare (until his death in 1913) in France or Hilbert in Germany. For in Russell's case the 'logic' arising from the (logical) inscription of the logical in the mathematical order (of 'applied' logic) is only the formal frame of a restatement of the position of Mill around the middle of the previous century. The analysis of the relations of physical and logical 'sides' of a mathematical 'space' of relations derives a great part of its significance in Britain as a reaction against an Anglo-Hegelian 'theology' or logical poetic which succeeded Hamilton's system as the dominant academic orthodoxy, over the first half of the transition now under consideration (that is, over the period 1870-1900), and which still in some measure informs Russell's first philosophical work (Foundations of Geometry, 1897).

The focus of the contemporary attacks of Russell and Moore against Oxford neo-Hegelianism was Bradley's doctrine of 'internal relations' - of the framing of those correlations that together constitute the 'world' within a primary logical determination of the relations of physical and logical 'sides' of relations. The 'internal' determination of the relation of internal logical order and external order of appearance framed the self-assertion of 'the Absolute', abstracting itself in this figure from the 'outward' opposition of a unitary logical order of 'internal' determinations, and the outward marking of the distinction of this order from the outward order of 'marks'.

Paradoxes were found in this 'absolute' frame analogous to those found in the traditional abstraction of 'logic' from the practical correlation of 'internal' and 'external' orders. Moore's inscription of 'logic' in the practical order of correlation embodied in our everyday activity framed in everyday language amounted to a reassertion of the 'Common Sense' that had informed the academic orthodoxy of a century before - the British parallel, indeed, to the Hegelianism lately transposed in outline to Oxford and (if less determinedly) to Cambridge. Russell's mathematical logic was
to be considered as an attempt to evolve, from the simple figure of a logical inscription of logic in the primary mathematical order of symmetry of 'inward' conception and 'outward' object, a thoroughly general and systematic frame which could progressively replace the unsystematic and piecemeal order of relations or correlations historically elaborated in working languages. Of course it would not in fact replace that practical order in everyday affairs, but would only systematise it in the domain of those abstract considerations in relation to the practical order as a whole, which frame the everyday activity of philosophers. The systematisation could be extended indefinitely, but its substitution for everyday language, through the inscription in it of the reflecting subject (who effects this substitution) himself, was only to be framed, over the course of the Great War, by the Austrian pupil who had been directed by Frege to study under Russell immediately before the War, and to impinge on British reflection via the Vienna of the 'twenties.

Over the period of ascendancy of Anglo-Hegelianism in the universities of Britain (and America), Mill's focal position outside the academies was supplanted by that of Spencer, and his systematic inscription of all relations and structures within the organising scheme of Darwinian evolution. Comte's arrangement of the sciences, one within the other, beginning with mathematics and coming full circle in a sociology which could describe the part of the mathematician in society (as a sort of new priest) was adapted as the logical component of a wider 'poetic' or Darwinian drama in which successive orders of actuality distinguished themselves from and in the natural economy or interplay of structures or forms.

In the new century Russell and Moore each addressed themselves to the question of a social order corresponding to the new conception of a primary activity in which the logical order of Reflection was to be inscribed. Moore described the ethical principles embodied in, and indeed framing, that practical order, and Russell the outlines of a rational social order. Spencer's systematic framing of the social order was attached to the 'natural' order of 'primitive' society, as seen in the new colonial domains of Africa and Oceania,
rather as the abstract anglo-hegelian community of souls in the
Absolute was seen to constitute an internal ideal pole of 'civil-
ised' society.

In France and Germany, on the other hand, 'society' as
primary frame of the activity in which the logical order of tradi-
tional Reflection was to be embodied, was approached directly (rather
than in the fragmentary british manner) as a central frame of in-
quiry in which the intellectual and practical dimensions of the
crisis of european culture might be understood as complementary.
At Paris from 1902 Durkheim embodied a third component (along with
Bergson and T'nincare) of pre-war french reflection, and at Heidel-
berg, after the 'identity crisis' of 1898-1903, Weber constitutes
a german parallel.

I have noted an analogy between the cosmic psychical frame
of Bergson's primary actuality of Elan Vital, and Poincare's 'posi-
tive' inscription of the scientifically primary order of framing or
posing in an otherwise indefinite Experience. I noted, further,
an analogy between Poincare's initial 'position' and that of Comte.
But I earlier noted a transition, over the mid-century, from Comte's
early inscription of 'sociology' within the mathematical frame of
positive Science, and the closing inscription of the logical order
of such science as a whole (from abstract mathematics to concrete
sociology) in a more radical new theology or religion of Humanity.
Poincare, concerned with the elementary frame of Science, does not
reach the scientific inscription of 'society' or sociology in that
frame, and does not (thereby) confront the comtean question of the
relations between the logical science of Society, and the converse
inscription of that logic in the social frame of activity. This
question, though, is taken up over the turn of the century by the
alsation who himself embodies in relation to french society
an analogous ambiguity - itself the focus of the conflict between
a night (who during the 'reat War associated the professor's germ-
an and Jewish background with a critical stance 'foreign' to the French order) and a Left (associating the new science with traditional 'socialist' criticism) polarised over the turn of the century by the Dreyfus Affair.

After graduating from the École Normale and teaching philosophy for some years in France, Durkheim studied in 1885-6 in Germany, coming under the influence of Wundt's experimental psychology. On returning he taught at the university of Bordeaux, publishing in 1893 his doctoral thesis on La Division du Travail Sociale. The integration of different parts in a unitary social order presented the question of the social consequences of the dissolution of the traditional organising pole of social integration—Nietzsche's 'Death of God'. If that pole was no longer a fixed focus of integration of the social 'poetic' or drama, but was rather inscribed as one function among others in an unfocussed order, then an analogous lack of focus must attach to the parts of the individual members or components of the social order traditionally ordered (at least in principle) in the logical poetic of a divine comedy. This dissolution of the integrating focus was complemented or accompanied by the interplay of unfocussed ideal poetic (or Marx's 'ideology') and the material 'poetics' of an open economy. The disintegration of the traditional focus of activity in the inscription of the ideal or logical order of integration of society in this interplay of ideal and material orders was now traced through the contemporary social order (according to those 'rules of sociological method' enunciated in 1895) to its symptomatic expression in the increase of a Suicide which amounted to the subordination of ideal finality to the fragmentary social mechanism (Le Suicide, 1897).

At Paris from 1902, Durkheim proceeded to seek an order of social integration which could, as a dynamic inscribed in the new unfocussed order, succeed the static pole of traditional ideology. I have already identified 'religion' and the School which embodies in an ideal 'poetic' of society the logical component of that poetic (and thus the definition of the part in the social order of this its definition) as correlative components of integrative 'ideology' — whether this be in the medieval university, or in turn-of-the-century American pragmatism. Durkheim's inquiry in pre-war Paris led, through the analysis of the organising funct-
ions of religion and education, to a 'dynamic' coordination of
these integrative functions in a pre-focussed or 'primitive' society
(australian 'totemism' as analysed in Les Formes Elementaires de la
Vie Religieuse, 1915). European culture, though, was by this time
proceeding through a correspondingly barbaric disintegration, rather
than reasserting integrative ideals, and T'urkheim died facing an
even more radical question than that posed at the turn of the cent-
ury, in 1917. Before the war it might have appeared that the ideal
of a 'logically' or rationally integrated social order might over-
come the forces of disintegration. The War suggested that the or-
ganising force of the ideal itself, had dissolved along with its
traditional embodiment or representation in an instituted focus of
activity.

The first 'World War' (the Versailles Peace Conference
assembled representatives of four-fifths of the 'World') may be
taken to mark a turning point in the second phase (1900-1930) of
the transition from nineteenth to twentieth century now in quest-
ion, not only in relation to Durkheim's french school of 'sociology'
(in which he was succeeded as 'organising focus' by his nephew
Mauss - in the traditional or primitive order of matrilineal author-
ity), not only in the french school or schools dominated before
the War by Bergson, Poincare and Durkheim - or only in the 'socio-
logy' of Durkheim and Weber... not only in european reflection
as a whole, but in the wider correlation of those primary orders,
logical, ideological, cultural, economic and physical (here under-
standing the physical articulation of european Culture and its
world context), of which the ideological interface of logic and
culture in which Reflection now finds itself at work is only one
component.

The relations of the approaches of Durkheim and Weber
to the question of social organisation may serve to illustrate
the wider pattern. For Durkheim the question is primarily that
of the 'ideological' analogue of logical integration, once the
theological analogue of traditional logical identity loses (like the latter) its abstract stability. For Weber (on the other hand) the question of the 'working' of the social order first arises in relation to the complementary material economy.

This complementarity of perspective, corresponding to a distinction between 'logical' and 'physical' framings of the relations of logical and physical orders already associated with the schools to the West and to the East of the Rhine (an association itself embodying that very complementarity of logical and physical orders of society) allows various parallels between the 'parts' of Durkheim and Weber. Durkheim, as a Jew from the western border of the Rhine, an outsider in French society; the Prussian Weber in self-imposed exile (on the east bank of the Rhine) from the German cultural focus, Berlin. Weber's inquiries in the 'nineties related to the material economy of the Rhine, and to the question of a liberal imperialism as a solution to the internal economic problems of the Second Reich, of which those of the Rhine were an instance. Political organisation was understood in relation to the optimal integration of the material economy as frame of (social) activity.

In their parallel developments, Durkheim's confrontation with suicide, and the book of 1897, might be related to the death of Weber's father that year, and the 'identity crisis' which it precipitated (and from which Weberian sociology emerged over the turn of the century). One might go further, and see in Weber's crisis an instance of Durkheim's correlation of religious focus and individual consciousness of one's part—here mirrored in the primary social group, the family. Indeed one might then extend the configuration to include a Calvinist mother, and see in Weber's celebrated thesis of the correlation of Calvinism and the rise of capitalism a reflection of the wider Weberian correlation of logical integration (or 'ideological' integration) and economy of social activity which emerges from the 'crisis', in the domestic frame of Weber's own part... the interplay in him of entrepreneurial father and strict religious mother.
Nietzsche had posed in the eighties the question of 'European nihilism' in terms of a cultural order in which the traditional pole of integration of activity—framing the organisation of 'why' within 'why', action within action, within the radical 'answer', the 'highest values', had itself come into question. Weber now proceeded, over the turn of the century, to frame his own identity and part, in tracing the articulation of social order or dynamic as a sort of general 'economy' of action, framed by the primary methodological postulate of the inscription of the ideological order of Value in the natural order of Fact. Society was framed in the natural order of biological subsistence by the articulation of group activity within an order of policy, of framing activity. In the interplay of Culture and Nature, of which a material economy is the physical frame, abstract 'values' are the analogue in a general 'economy' of monetary values in the material economy. We are not to understand these 'values' which articulate policy—or choice, or the activity it informs—as ourselves participating in a certain order of activity whose part in the social order we do not question (and which is thus a component in the configuration of values we are investigating). Rather must we frame the organising force of these 'values' (and the values organising their integration into unitary 'ideologies') as it were from 'outside', by inscribing the way that they actually organise activity (however differently from what they profess) within the primary figure of inscription of the social order of organised activity as a whole in a more radical economy.

That is: the social order and its dynamic is the interface between the natural order of mechanical activity and the reflective order of deliberation and choice, integrated in policies. We cannot understand that order of integration in terms of a unitary whole abstracted from the interplay of different limited frames. Rather is that 'value' of abstract integration to be understood as it enters into play among other values (of whatever order). Thus Weber can correlate, as primary historical instance of this general economy, the protestant transition from abstract roman theology to a theology or religious 'poetic' framed by the inscription of the logical order of the Book in the organisation of everyday activity, and the contemporary transition from feudal economy to capitalism.
teenth-century activity between the inscription of the dynamic of religious abstraction in the interface of heavenly and earthly orders, and the inscription of the dynamic of capitalist accumulation in the analogous interface of the Market. Indeed, as was seen in the discussion of the structure of the Market over the transition from about 1870 to about 1930, the Market as primary interface of a material economy reflects, within the analogous interface of Culture and Nature, the natural interface of Heaven and Earth in which Culture (and its material economy) is inscribed.

Like Russell's mathematical articulation of the primary relations of 'inward' and 'outward' (logical and physical or psychological and ontological) orders of experience, Weber's stance 'outside' society is essentially methodological: within the primary figuration of inscription of Culture in Nature, Value in Fact, primary relations of ideology and economy can be articulated - without any definitive inscription of the individual nexus of these orders in particular situations of choice and activity ever being attainable. Rather does the primary correlation of Fact and Value, and the recognition of the irreducible 'circuit' by which Culture distinguishes between itself and Nature, Value between Fact and Value, in the constitution of a 'social' order, amount to Weber's part in his society as the radical assertion of the value of value. - This (paralleling Durkheim's quest or question of an integrating force) assertion is a response to the question posed by the progressive inscription of values and meanings (embodied in particular cultural frames of stories, myths) in an ever-wider mechanical economy of activity - by the progressive 'rationalisation' of social activity, of the social order.

What 'ideology' could organise a 'meaning' and value of life in such a 'rationalised' order? What is the ideological complement of the systematic inscription of 'myth' in a mechanical economy of frames of action? Weber saw a possible answer in an analogue of Plato's 'divine lie' or primary myth, story, in which
the activity of an ideal Republic would be framed. A story whose locus of enunciation is itself a component of the story — this locus of (a 'mythical' or 'magical' order, of) 'charismatic' leadership serving as a pole of integration of choice and policy, of the values informing choice, which would double or complement the converse inscription of values and choices in a mechanical economy of secular rationalisation and demythologisation.

In post-war Germany, where the pre-war articulation of German activity in relation to central policy inscribed in the military interface of Reich and Europe, and World, was systematically precluded by the legalistic Versailles Treaty, just such a story or organising myth was framed by Hitler's account of 'my struggle', worked out in a Bavarian prison after the failure of the Munich 'Beer-Hall' Putsch of 1923. Weber had collaborated with Preuss (a professor of constitutional law) in framing a new Constitution for Germany within the terms of the Versailles Treaty. But this attempt to balance the economy imposed by Versailles with an order of policy abstracted from the pre-war frame of Bismarck and his successors, in the interlay of the two orders in Law, precisely in its abstraction from the fragmented old order left in opposition to it, and 'outside' the law, various elements of the old order with no part in the new. In particular it left as an extra-constitutional force the fragments of the old military order re-grouped in such para-military associations as those involved in the Munich Putsch. The abstraction of the Weimar Constitution and its order from the residual fragments of the pre-war order, left as it were 'open' in post-war Germany the project of a new integration of these fragments in a myth or 'story' — in a project which, after 1923, would incorporate as one component of German reintegration the Weimar Republic itself.

The rise of Hitler's 'poetic' as a political or ideological force is correlated directly with the economic crises of 1923
and 1929–31 (when the collapse of the German and Austrian banking system followed, over a couple of years, that of the American system). "Poetic": the 'ideological' scheme thus correlated in Weberian manner with the material economy of the incipient Depression, one mirroring the other in the cultural configuration succeeding the Great War, presents a direct analogy with the 'poetic' of Italian fascism organised over the period 1900–1930, and turning about Italy's entry into the war in 1915. The part of Italian 'futurism' in the rise of fascism might be paralleled by relations between German 'expressionism' (the dominant 'modernism' east of the Rhine) and the mythology or ideology of Hitler's New Order.

Relations embodied or focused in the focal figure of the charismatic leader himself, who explained his impatience with the detailed implementation of policies by the 'artistic' temperament which had governed his obscure career as a painter in pre-war Vienna.

"Expressionism" — as opposed to the 'impressionism' of the eighteen-seventies to the turn of the century, which had passed through Cézanne into French modernism. An 'expressionism' in which the integrative focus of the 'artist' was inscribed in a radical play of the various components of the poetic frame. — An expressionist theatre, for example, in which the action is itself organised or framed by the focal part of one of the characters — a locus of framing which reflects in the action the part of 'author' outside, and generally embodies a converse inscription of the social context of the action in the poetic frame. The inscription of the 'author' in the poetic frame is thus also the inscription of the representation in the social order. In the visual frame of expressionist painting one again finds this framing of the whole in the 'perspective' (so to say) of one of the parts of that whole — this notably in the first organised 'expressionism' of the group constituting itself in 1905 as a 'Bridge' — a 'bridge' between this inscription of the traditional focus of a poetic in the radical economy or play of figures, and the social context in which the traditional 'abstraction' of representation from Society had been previously instituted. In the Blue Rider group founded at Munich six years later the interplay of figures and forms led to a dissolution of traditional constraints of genre itself. Schoenberg, for example, who had at Vienna dissolved the traditional tonal 'space' of musical composition — the musical analogue of central
perspective, composition being as it were 'focussed', in the harmonic space of its articulation, in the Tonic - collaborated in the 1911 manifesto. - A manifesto incorporating as radical poetic 'frame' the untutored productions of the creative impulse towards 'artistic' expression in children. The interplay of genres was combined with an interplay of different components of European and non-European traditions. Kandinsky, at one extreme, found in Art the central expression of 'spiritual' (geistig) activity or actuality. In the very configuration of abstraction of the poetic frame from the physical order of natural 'objects', this activity distinguished itself, as the 'poetic' configuration of Art was now distinguished from its traditional inscription in a 'physical' configuration of natural objects, and was embodied in a more radical play of elements from which natural objects were themselves constituted as foci of organisation 'abstracted' from the complementary 'spiritual' focus. Klee, who after the war taught with Kandinsky at the Bauhaus instituted to embody a new 'poetic' in the design of everyday objects, worked at the interplay of these 'natural' and 'spiritual' orders in representation.

And it was in Klee's German Switzerland, during the war, that the very frame of 'Art' itself was brought into question, focussing in Swiss abstraction from the War the ideological frame of a European Culture (of which this instituted representation was a primary component), itself now in question - a question prefigured by Nietzsche at Sils-Maria in the 'eighties.

May we not see in Hitler's transition from the pre-war Vienna of Expressionism to his identification of his part in the European 'theatre' a parallel of the Italian transition from pre-war futurism to Mussolini's part after the winter of 1922-3? A similar transposition of the figure of inscription of locus of its enunciation or organisation in the frame of representation, to the wider drama from which the frame of 'Art' is now recognised as one component falsely 'abstracted' from its social context?

What, then, is the configuration of this context around 1930 - and what the figure of the transition through War from the questions appearing in various orders of European Culture around the turn of the century, to their sequels in that configuration?
First of all, we might begin to frame the transition of European Culture as a whole in relation to the passage from Nietzsche's Question of the 'eighties — for example, as it appears in 1886 (Jenseits von Gut und Böse) framed in the question of Truth — Truth as a 'value' entering into an economy of activity, prefiguring Weber's stance 'outside' the interplay of Fact and Value — to the embodiment of this Question in the Great War — say its outbreak in 1914 — out of which came policies inscribed in an international interplay of global economy and national policy. The War itself may be seen as the breakdown of the order of a European politics abstracted from that inscription in a more radical order of activity as a whole which appears after the turn of the century as an 'activism' embodied as a primary factor of international order and disorder after the War. — A breakdown analogous to the breakdown of the 'logical' articulation of economic policy around 1930, but one which is not simply reducible to such a material economy, but framed in an interplay of economy and policies which are essentially 'ideological'. That is: we may correlate the political breakdowns around 1915 and 1940 with the economic breakdown around 1930, and we may certainly see the coordination of national policy and economy in the 'War Economies' of 1915 as a turning point in the unfolding of the structure of the international market from the 'bottom' around 1900 to the Crash around 1930 — but as Weber emphasised between the turn of the century and the War, we must recognise a two-sided interplay between this economy of Culture and the order of 'ideas' — meanings, values, informing activity within the material frame of capitalist economics.

Nietzsche's questioning of a European Culture which had lost its ideological focus, its 'highest values', was articulated on the 'physical' side — the side of cultural 'geography' so to speak — in the question of a German Culture framed by Bismarck in the inscription of national (or rather, 'imperial') policy in the play of European forces. After the War the breakdown of the European order was attributed, at the insistence of France, to the German inscription of the integrative order of policy in an economy of forces — this in the primary frame of a military interface of Germany and Europe, and most particularly France. The French insisted upon a new integration of Europe in which
the Rhineland be closed to German troops, and indeed open to occupation by the French army until the 'economy' of Europe (in some general sense) be reorganised by monetary transfer from Germany to France commensurate with the disruption caused by earlier German inscription of the Franco-German interface in an economy of force Germany thought herself to dominate. This reassertion of a French order in analysis of the breakdown of the old order, and in the scheme for subsequent European reconstruction may of course be seen as a reversal of the German dictation of terms after 1870. It may be seen in the context of a longer historical interplay of French and German orders along the Rhine. More generally it may be seen, in the cultural configuration of Europe as a whole, as an attempted reassertion of the 'logical' order of integration of activity, even while the passing of this order was evident within France in the fragmentary government and policy after 1870, and most particularly after the turn of the century. The breakdown of the traditional scheme of a politically integrated Europe, in which the central place of the traditional logic of French policy might be guaranteed over the 'twenties and 'thirties may be directly correlated with a parallel breakdown of the 'logic' of the international market, integrated during the War in the coordination of War Economies.

We may proceed from this correlation of 'ideology' and 'economics' to frame a general figure of transition from about 1870 to 1930. I have already suggested, in the discussion of the economic 'cycle' extending from 1873 to 1929, how 'economic' activity, or the 'material' articulation of activity within the primary circuit of Culture, is articulated in an abstract 'space' whose 'symmetries' (the formal correlation of different components of economic activity) govern the cyclical development of the Market over time - from year to year. The 'symmetry' of the Market as inscribed in the primary abstraction of Culture from Nature - the 'arket within the primary 'ark - reflects the 'symmetry' articulating the inscription of that 'ark in a physical order of Kosmos (a closed circuit traced in a closed surface in physical space).
The cyclical 'dynamic' of the "market, considered re-
relative to the global articulation of Culture in an order of the
mark, of 'national' borders or frontiers thus reflects an abstract
'physics' articulated over the period now in question, in relation
to the symmetries of a spatiotemporal order abstracted from the
cosmic 'topology' of Culture and its History (or articulation in
time), and in which this cultural frame of everyday earthly act-
ivity is in its turn supposed inscribed (though of course this in-
scription is itself in effect only formal: activity as a whole is
not 'framed' in practice in terms of physics - rather this principle
of inscription enters as one component into the 'ideological' order,
or is embodied in the material economy of new machinery, 'techno-
logy', and so on). Thus we saw how, around 1870, Maxwell's electro-
dynamics framed the articulation in space and time of the Light which
embodies the symmetry of logical and physical orders of experience,
in a physical theory whose organising 'symmetry' reflected that
perceptual or 'poetic' symmetry of representation - of physical and
logical orders - in the physical order. The 'crisis' which, over
the turn of the century, led to a 'modern' physics, through the in-
scription of the physical pole (the 'object') of representation in
a more radical interplay of physical and logical orders, may be taken
as a turning-point between Maxwell's mathematical frame of about
1870, and Dirac's Quantum Electrodynamics of 1930 (also at Cambridge),
in which the abstraction of a 'quantum' of action from the tradit-
ional logico-physical axis of representation of point-mass in cont-
inuous space and time is combined with the 'relativistic' abstract-
ion of spatiotemporal frame of coordination of actions from that
same axis. As with the analogous 'abstraction' of artistic activ-
ity from the traditional roles of representation, we might here bet-
ter speak of a 'concretion'. We will eventually see how the config-
uration of around 1900 leads by about 1970 to an analogue (in relation
to the wider physical symmetry of three-dimensional 'space') of
Maxwell's electrodynamics of 1870, deriving from the configuration
of around 1900 (and framed in the 'one-dimensional' spatial symmetry
of charge separation). Here in this book, then, can be posed as one
component of its radical question, a radical mirroring of the nat-
ural dynamics associated with the abstract symmetry of physical
space and time, in the economic 'mechanism' of the Market - this
in the frame of a Culture articulated in circuits of activity traced
in the closed surface of an Earth in three-dimensional Space and one-dimensional Time.

In that closing question - a recurrence of Nietzsche's question of the eighteen-eighties, just as the 'chromodynamics' of around 1970 are a sort of 'recurrence' of the electrodynamics of around 1870 (in the three dimensions of 'colour-charge' rather than the one dimension of electrical charge), this mirroring of the physical frame of Space and Time in the material 'frame' of our activity will appear as one component inscribed within the primary mirroring of logical and physical orders of this book, in the cultural frame of interaction in which our writing and reading are components. Thus the abstract symmetry of physical theory toward the close of the twentieth century will be seen to reflect the analogous articulation of contemporary 'formal' logic, and these two limiting frames will be seen to mirror one another in the analogous order of a global Culture articulated in the bimillennial interface of Heaven and Earth - physically articulated in a primary interface of industrial North and developing South, doubled by a northern East-West axis, and this physical order reflecting an analogous ideological frame. This book itself will be found to inscribe itself or recognise itself in the play of analogous logical, ideological, cultural, economic and physical frames it identifies, and in a cosmic Actuality which distinguishes itself from and in that formal 'economy' of the various frames.

First, though, we must find a prefiguration of this closing order in the transition from nineteenth to twentieth centuries, and then frame the passage from that transition to its analogue a century later.

So far I have partly identified a play of 'frames' of various orders, each affording over the turn of the century an analogue of the theoretical frame of inscription of Theory or Reflection in the interplay of this Reflection and its Objects, articulated in action - as a sort of Drama. How does this interplay differ, then, from the interplay it prefigures a century later, theoretically framed in the identification of the interplay of physical and logical orders in the logical order of this book?
The difference is simply expressed by the inscription of the transition from about 1870 to about 1930 in the 'history' or Story (or frame of other stories) in which the writing of this book temporally inscribes itself. That History opened with an elementary logical 'circle' of logical determination of the relation of logical and physical orders or sides of a mark, 'point'. The circuit of the Story progresses from that initial circuit, through successive inscriptions of successive 'circuits' in an ever-widening interplay of 'logical' and 'physical' orders, until it closes in the inscription of the logical order of the book (in which the Story is framed) in the physical order of its 'context'. This circuit or cycle of the book or Story 'proper' (into which the Introduction is the entry and the Close the exit) falls into various subordinate cycles or 'periods' — notably into those marked by the division of the Story into three Parts. This cyclical character of Reflection parallels the cyclical character of the economic order in which it is materially framed. The dynamic, too, is of course analogous: a logical order of integration of Theory or economic policy proceeds by 'steps', each framed in an interface (whether of Theory and its 'World', or Market) articulated by the sum of earlier steps. Crises occur in each order when a frame of integration — a 'logic' so to speak — informing a certain period of successive (or parallel) steps 'breaks down'. Thus I have already noted economic crises in 1873 and 1929, and 'crises' in physical and logical theory around 1900. A further 'crisis' in logical theory, which opens a new period, might be marked by Gödel's proof in 1931 of the 'abstraction' of a logical inscription of the logical in the mathematical order — of the old logico-ontological semantic axis in a closed scheme of formal syntax.

The old order, framed in a certain circuit of abstraction, comes into question, and in a phase of reconstruction is inscribed as one side previously abstracted from a more radical order. The new order in its turn eventually comes into question, and so on and on.

Now the turn-of-the-century inscription of the logical order in a more radical order of activity or 'application' was itself framed in the project of a 'closed' poetic, which itself is in question after about 1930, with the inscription of the closed
schemes ('poetics' of application of Theory) articulated over three decades, in the general 'Play' or interplay of figuration and force in collective — now 'global' — activity. The new logical 'circuit' or circuits of the various orders of theory around 1930, in which the nineteenth-century order which breaks down around 1900 is now understood as an abstraction (and in which the figure of this abstraction can now be simply inscribed), is reflected in the 'cultural' order — in the social frame of action — after the economic collapse of around 1930, by the rapid institution in Germany of a 'fascist' ideology, itself arising from a break-down of the nineteenth-century order reflected in Weber's 'crisis' of 1897/8 — 1903. I have already noted Spencer's 'darwinian' or evolutionary sociology of around 1870 (parallelled in 1871 by Taylor's epochal application of evolutionary principles to his study of 'primitive' culture outside Europe). Haeckel's Welträtsel — his posing of the question, the 'riddle', of the World in 1899 marks a systematic integration of german materialism and darwinian evolutionary interplay of forces: within the primary economy of Matter moving in Space and Time, a 'World' is framed in the simple darwinian figure of Life as Form which rises out of the elementary mechanical play of forces, by subordinating the play to its own Form — framed, then, in the dynamic inscription of the (logical) forms of distinction from a physical economy of forms in that general economy. This assertion of a logico-physical axis, corresponding to one component of Nietzsche's Question, is complemented the same year by Chamberlain's Foundations of the Nineteenth Century, in which Spencer's 'social darwinism' is found at work in in this tracing of a racial dynamic of european Culture down from Greece and Rome to the opening configuration of the nineteenth century in which the question of survival of semitised-and degenerate culture was focussed in Germany. In their antithetical views of the part of Bayreuth in relation to the question of European Culture, we may directly link the questioning of Chamberlain and Nietzsche; indeed the questions of Chamberlain and Haeckel might be taken as each corresponding one component of Nietzsche's general question. Weber's stance 'outside' the interplay of material and ideological orders of european societies, on the other hand, corresponds to a focussing of one component of the question in the frame of sociological inquiry. By around 1930, and Rammeler's nietzschean 'system' of inscription of self-assertion, Will, in a universal play of forces,
the turn-of-the-century questions of Haeckel and Chamberlain
had been integrated — over the experience of the Great War, and
the transitional schemes of around 1923. Moeller van den Bruck's
_The Third Reich_, Günther's _The Racial History of the German Volk_,
Hitler's 'Struggle' — into the closed circuit of a new German Ide-
ology which could present itself as an answer to Nietzsche's in-
quiry as a whole. An order framed in the primary assertion in
the darwinian play of forces of a German Volk within the circuit
of a German Land — German 'Blood and Soil'. This 'ideological'
scheme, this German mythology, with Hitler inscribing himself with-
in its frame as the locus of its assertion and focus of authority,
corresponds, then, to Weber's reflection on the possibility of fram-
ing a society in a myth or story, in which the locus of enunciation
or authority appears in the person of a charismatic Leader.

This integration of a national mythology, corresponding
to the entry of the National Socialist German Worker's Party into
the configuration of political power in 1930 was paralleled by
the elaboration at the Institute for Social Research in Frankfurt
of a 'critical theory' framed in a methodological stance 'outside'
any mythological account of the relation of that mythology to the
material economy of forces. Outside the dogmatic soviet inscrip-
tion of the ideological order in an economic 'base', and more im-
portantly, outside the 'nazi' inscription of the economy in the
ideology of German Land and Volk. The latter stance was to be re-
flected with the Gleichschaltung or integration of German activity
in the nazi scheme from 1933—4 by the exile of the 'Frankfurt School'
and its formal transfer to New York, arranged by Dewey.

The 'critical theory' of the Frankfurt School was articu-
lated primarily in a 'poetics' which found in the elementary frame
of 'artistic' representation or expression a focus in the wider
social frame of a questioning, an openness, attaching directly
to the closed circuit of any fiction — whether an emerging fascist
myth, or literary narrative or painting. On the other hand the
nazi 'machine' embodied as a central component the inscription
of all representation — presided over by Goebbels — within the fascist 'poetic' of the social order.

I have suggested that the nazi ideology or mythology of around 1930 might be taken as a german analogue of the various theoretical schemes of about the same time, which bring 'full-circle' developments or transitions in various parallel orders from about 1870, through a critical phase over the turn of the century when reconstruction begins from the fragments of a nineteenth-century order. I have suggested that this or these schemes of around 1930 constitute further 'steps' in the historical succession of 'circumscriptions' of an earlier logical (or analogous) order in a new order — in its turn to break down, and to be inscribed in a still wider 'circuit' or scheme of coordination. The 'crisis' in various orders at the turn of the century may itself be seen as a turning point, not simply in the transition from nineteenth to twentieth century as articulated between about 1870 and 1930, but also in a wider configuration opening in the 'revolutionary' transition from eighteenth to nineteenth centuries, and closing in a transition from twentieth to twenty-first centuries. In the 'logical' order of Theory the transition outwardly expressed in 'french' and 'industrial' revolutions involved the figure of an inscription of the logical order in a poetic interlay of logical and physical orders. At the outset this poetic order was itself taken as 'logically' defined. The circular character of a logical inscription of the logical order in a poetic order previously defined by its inscription in the logical order corresponds to a radical openness or question marked at the beginning of the century by the 'romantic' project of a new poetic.

We might take the 'crisis' around the close of the century as marking the breakdown of the nineteenth-century attempt to define a closed scheme or poetic in which the logical order of its definition might be inscribed as one component. In american pragmatism and russian activism I saw two limiting figures of the transition from the theoretical question of a new 'poetic', to the recognition that the logical order of 'framing' the poetic in which it is itself to be inscribed as one component, amounts to the possibility of practical, actual intervention, in a dramatic
configuration. - A configuration which presents us, practically, not as abstracted theorists, but as actual participants in the configuration, with an irrevocable choice. - What is to be done?' A configuration which is itself open or indeterminate, like this its logical component, which is essentially a question: a configuration which 'is' in a radical sense, what we make it. For to consider the configuration as something definite in abstraction from what we make it is itself, precisely, one of the 'things' that we can make of it: what we make of it by the part in it of this our abdication, abstraction, passivity.

The question, then, of our part in framing the configuration - rather, a configuration - in which we find ourselves, and so in framing our part of framing, might be taken to mark a 'crisis' in the theoretical attempts of the nineteenth century to inscribe the logical order of its definition in a more radical poetic - in attempts to 'define', then, this radical poetic, presented as a question or project at the opening of the century. A crisis prefigured in complementary crises or breaks, around 1848, in the parts of Marx and Kierkegaard - the transition from a logical poetic (whether earthly or heavenly) to a Story (profane or religious) in which the earlier attempt to logically construct the Story is inscribed in a Past, identified as a hopeless abstraction from the dramatic order of History. In Kierkegaard's case the prefiguration was only widely apparent after 1927, when the forgotten dane was found by his compatriot Bohr to have provided a scheme of the part of observer-participant in an open configuration that applied to the New Physics, and by Heidegger to have presented this Da-sein in the configuration of Sein, as a question our response to which was our very essence. - Or rather, our part in Sein was exactly this openness of Da-Sein.

But the attempts, around 1930, to frame this part of our framing, took the form of various parallel 'dramatisations', so to speak, of the various different aspects of our actual parts - rather: their actual parts - in the World of 1930. That is to say: the response to the turn-of-the-century crisis, was to present particular configurations - say Bohr's or Heidegger's... or Hitler's or Stalin's... of this radical circularity or self-activity.
Bohr and Heidegger, Hitler and Stalin: the gap between reflection and dogma is itself indicative of the limited character as responses to the crisis, of a thought abstracted from action or an action abstracted from thought. Each of the various parallel responses to the radical question of our, their, 'parts', embeds a part in a particular configuration of framing that configuration—whether it be physical, ontical, political or whatever else. And each of these particular configurations framed in response to the crisis presented by the transition from one century to the next, involves the unquestioned part, or unresolved question, of framing that particular configuration (and one's part in it of framing it) rather than another. Thus, for example, in the interplay or economy, around 1930, of these parts, Heidegger could find himself inscribing the quest or question of Being in Hitler's scheme, only to quickly realise the incongruence of the radical part of that question with that of self-assertion in Hitler's frame.

In this configuration, then, of around 1930, we may see in the various analogous 'circuits' (in the various orders of Reflection) further steps in the dynamic of circumscription or comprehension of the limited character of earlier steps. And we may now begin to see how the various parallel steps over the period 1900-1930 might themselves perhaps be subsequently inscribed in a configuration of a 'part' of which these isolated aspects are components. It is precisely such a part which is in question in the Close of this writing and reading.

Now the configuration of such a 'part'—that of framing this its configuration—must involve a coordination of the various component questions constituting the critical transition from nineteenth to twentieth centuries as turning point in the unfolding of the question of a poetic frame, which opens the former century. A coordination not only of the correlative orders of Reflection, but also a correlation of this internal coordination of Theory with the coordination of Theory and the various orders of its context which the internal coordination reflects (and from which, of course, it is inseparable). This must involve the inscription of Reflection, of the 'logical' order of framing of this general coordination, in the coordination or correlation it 'reflects'. 
Working back, then, from this projected Close, we may see that the various analogous orders of successive 'steps' in logical, ideological, cultural, material, natural orders are, in successive phases of a twentieth century, to be progressively correlated and integrated in the frame of the Close - and thus as it were converge toward that projected Close, rather as they earlier diverged or unfolded from the configuration of the pythagorean mystery twenty-five centuries before.

Considering, then, the interplay of these parallel orders of development - parallel 'steps' in these parallel 'dynamic's - we may now begin to see the whole Story or History traced in the three 'Parts' of this book, as amounting to a sum of steps in the interplay of parallel orders which 'opens' out of the closed circuit of a pythagorean mystery, and closes in the circuit of this closing book: in the closed/circuit by which it identifies itself as one component in the 'cosmic' coordination it frames - and in this marks as a question, as somehow 'open'.

We will shortly discover a radical temporal symmetry in the converse orders of divergence or unfolding from the initial pythagorean 'point', and convergence or involution toward a Close. - A symmetry, precisely, mirrored in the 'poetic' order of History, Story, itself. A 'poetic', then, framed in the 'historical' time of the 'space' of Reflection constituted, framed, by the community of participants in the Story - ourselves among them, among this 'us'.

Let us now inscribe and articulate the configuration of 'around' 1930 in a general 'space' and 'time' of Reflection - of Reflection articulated in the circuit of inscription of this book, as its framing, in that space and time...of Reflection articulated in the poetic order of Story, History.

We might characterise a configuration 'around' 1930 as a 'whole', in relation to a simple turn-of-the-century figuration of inscription of the logical order of Reflection in a 'dramatic' order, in a turn-of-the-century 'poetics' of Action (and its Story, History). - In relation to a configuration in which various parallel orders of
(our) story are organised as analogues of a logical order embodied or marked (for example) in America, by Dewey's systematic inscription of that logical order in a dramatic order articulated in accordance with that 'pragmatic' logic.

More generally, we may characterise the general interplay of figures and forces (of the various orders) in terms of a limitation of the 'Play' constituted by analogous closed circuits of configuration in each order — indeed as framing each order. — A configuration of analogous 'circuits' of which the association of Dewey's 'circular' logic with the American 'circuit' or frame of activity (framed in the circuit of an American 'frontier'), is merely an indicative component.

We may then extend the figure of an historical 'dynamic' (borrowed from the physical order) from the various different orders taken separately (in their different 'spaces'), to a general space and 'economy' of their collective interplay in a 'history' — a Story of which this story or account is itself both a framing and (precisely as such) a component. We may, that is, consider parallel 'steps' in the different orders as themselves components of steps or phases in a wider common dynamic, a wider unfolding...and involution, convergence.

We may then take a turn-of-the-century 'crisis' as a sort of general coming-into-question of the 'part' of the individual participant in the wider History — a general Question of which the logical question of the part of assertion and reflection is, then, one component, in interplay with other questions of different orders. The theoretical configurations, around 1930, of parallel responses to the various 'crises' in various orders of Reflection around the turn of the century (crises in logic, physics, psychology, ontology, theology, poetics) then in their turn appear as various components of a wider theoretical response to the wider crisis of 'Culture' and its 'History'; components of a theoretical response which is itself one component of a more general collective response of the 'participants' in History to the turn-of-the-century configuration as a whole.