

The Critical Appropriation of Hegel.

Cognitive psychologists "use 'concept' to refer to a mental representation and 'category' to refer to the set of entities picked out by the concept" (Medin et al, 2007). So, however concepts are constituted as mental representations, it is taken that the world is composed of 'entities' with given and uncontroversial features, by means of which they may be grouped into categories. Thus, we have dual worlds of concepts on one side mirroring entities grouped according to their features, on the other. Philosophically, this is a step *backwards* from Descartes' scepticism about how thought mirrored the world outside of thought 400 years ago. On the other hand the critical discourse theorist, Jay Lemke, remarked in a private communication, in part:

Just because there is a phenomenon that one might call 'conceptual thinking' or 'meaning-making mediated by linguistic thematic networks' doesn't mean that there are concepts as such. ...

A sufficiently sophisticated model of situated, distributed, interactive, embodied sign-mediated cognition can 'rescue' the notion of 'a concept' for some rhetorical purposes, but I really think it's too risky and unwise to do so, given how much wrong-headedness (and -handedness) seems to come attached to it historically and culturally-ideologically. ... I'd leave it as an everyday locution, and drop it from efforts at a scientific discourse of these matters.

Perhaps Lemke is right and the uncritical, dualist prejudices entailed in the usual understanding of 'concept' are just too deeply ingrained for the concept to be rescued, but on the other hand, we can't even pose the question without calling on the concept of 'concept'. In his *Philosophical Notebooks*, Lenin quoted approvingly Hegel's remark in the *Science of Logic*:

Here and there in this mesh there are firm knots which give stability and direction to the life and consciousness of spirit; these knots or nodes owe their fixity and power to the simple fact that having been brought before consciousness, they are independent, self-existent Concepts of its essential nature (Hegel 1816/1969 §24).

If a concept is just a node or a knot, or a thread for that matter, in the web of meaning, it is indispensable none the less. Without knots or threads, a web of meaning can capture nothing. Let alone, if we are to understand concepts as units of a formation of consciousness. I also contend that it is only by means of the logic and structure given to us by Hegel that the challenges pointed to by Lemke can be overcome, and it for this reason that I have devoted so much space to an exposition of what Hegel has to offer to a scientific study of concepts.

Hegel wrote in the absence of any of the insights that have been provided by laboratory methods in psychology and modern biology, any real knowledge of cultures outside of Europe or the insights of social science, anthropology and linguistics which has been built up in the 200 years since. His work was entirely speculative, based on study of the available history of human culture, political life, science and so on, and his experience as a teacher. But there is a sense in which, writing at the dawn of the modern era, Hegel had a clearer perspective on the development of the concepts themselves than is possible today.

Hegel and Activity

The presentation of Hegel's *Logic* given in Part II is already an interpretation, but an interpretation aimed at giving the modern reader access to an understanding of Hegel's ideas which is relevant to contemporary problems. As it stands, the *Logic* moves entirely within the circle of logical propositions. However, it is abundantly clear that the subject matter engaged by this exposition goes to the entirety of modern social life, and I have simply drawn on the

few passages where Hegel explains this, and especially his early works, to make explicit the content of Hegel's *Logic*. That is, I have followed Hans-Georg Gadamer's advice:

... When we try to understand a text, we do not try to transpose ourselves into the author's mind but, if one wants to use this terminology, we try to transpose ourselves into the perspective within which he has formed his views. But this simply means that we try to understand how what he is saying could be right. If we want to understand, we will try to make his arguments even stronger. ...

The anticipation of meaning that governs our understanding of a text is not an act of subjectivity but proceeds from the commonality that binds it to the tradition. But this commonality is constantly being formed in our relation to tradition. Tradition is not simply a permanent precondition; rather, we produce it ourselves inasmuch as we understand, participate in the evolution of tradition, and hence further determine it (Gadamer 2005: 291-3).

Accordingly, I have taken it that the Spirit whose nature Hegel investigated is *activity* in the sense in which Marxists have understood this term, which I deal with in more detail below. The origins of the philosophical concept of Activity lie with Herder and Fichte, themselves precursors of Hegel. I contend that no loss to Hegel's philosophy is entailed in this activity-reading. If we take activity to be the fundamental category of our understanding of the world, then we must read Hegel in this way if we are to "understand how what he is saying could be right." This is not to say that such a reading immediately resolves all the problems and defects in Hegel's philosophy. On the contrary. But it does make Hegel coherent and relevant to us as people confronted with the problems of modern social life, rather than as readers of dusty old books of philosophy. Moreover, it makes it possible to *criticise* Hegel and to "make his arguments even stronger."

Consider this passage from the Introduction to Hegel's *Philosophy of Right*:

The theoretical is essentially contained in the practical. Against the idea that the two are separate runs the fact that man has no will without intelligence. The will holds within itself the theoretical, the will determines itself, and this determination is in the first instance internal. That which I will I place before my mind, and it is an object for me. ... man cannot use his theoretic faculty or think without will, for in thinking we are active. The content of what is thought receives, indeed, the form of something existing, but this existence is occasioned by our activity and by it, established. These distinctions of theoretical and practical are inseparable; they are one and the same; and in every activity, whether of thought or will, both these elements are found (1821/1952 §4 addition).

So this activity reading of Hegel, in which activity is a unity of theory and practice, can be justified in Hegel's own words, but it is necessary to take it further, making activity the fundamental concept of our approach, in terms of which all other concepts must be derived.

The great contribution that Hegel made was that, while not eliminating the subjective-objective distinction from his philosophy, he made this distinction secondary and *derivative* from the more fundamental *unity* between human beings and the world created by human activity in the world, which was his starting point. This meant that it was possible for Hegel to give us the definition of a concept which did not define concepts as inward subjective thought-forms, nor as objective worldly entities, nor a duality comprised by pairing up something subjective with something objective. The concept of 'formations of consciousness' gave him a primary concept from which objective and subjective aspects could be distinguished. Contrariwise, any approach which *begins* from entities as either objective or subjective cannot eliminate such a dichotomy because it is built into its foundations. Whether we call it Spirit or Activity is an entirely secondary question, in fact, provided we begin from a foundation which is prior to the rupture between the subject and object of activity.

There are only a limited number of concepts in our culture whose objects are not implicitly either subjective or objective. We may say that "beauty is in the eye of the beholder," but

“beauty” still designates an attribute of the object. To develop a critical approach to concepts, we will have need for concepts like ‘formation of consciousness’ which are equally subjective and objective, and it is Hegel above all who has given us this kind of concept.

Hegel’s Idealism

Much is made of Hegel’s philosophical idealism and Marx’s philosophical materialism, and the contrast between Spirit and Activity, on the face of it, would seem to justify this contrast. But the difference is not as dramatic as it appears at first sight, and it is not an ontological difference. What the two thinkers share – a conception of a social formation prior to any dichotomy between thinking and acting – is far more significant. Nonetheless, Hegel’s idealism shows itself in seriously methodological errors which need to be noted.

We can agree that nature and history (for example) are intelligible and that the task of the natural scientist or historian is to disclose that rationality, but it is very easy to slide from this conviction, as Hegel often did, to fitting your data into a preconceived rational scheme.

Hegel’s move from a dichotomy between human consciousness and the natural world to a philosophy based on the unity of human consciousness and the culture created by human activity was a crucial breakthrough. But along with this came a dichotomy between culture and Nature which led Hegel into serious errors. For example, he ascribed gender differences to Nature, where he should have recognised that these differences are cultural constructs.

From about 1805, Hegel moved away from a conception of Spirit as a *product* of human activity to a conception of Spirit pre-existing human history, and *manifesting* itself in history and culture. This opened the way to the rationalisation of all sorts of prejudices. It also led to errors in that Hegel expected history to recapitulate forms of association in *logical* order, whereas in fact the sequence of relations in history is often *opposite* to their sequence in the logic.

Finally, the progress of ideas depends on and reflects the progress in forms of real activity, but Hegel overestimated the creative and determinative role of the thinking activity of professional ideologists. He tended to see ideas progressing through the problem-solving and creative work of thinkers, reflecting upon problems manifesting themselves in activity, and the products of these professional thinkers then being taken up in activity. This is somewhat upside down. To his credit though, Hegel always emphasised the unitary character of a formation of consciousness.

These issues were dealt with by Marx.

Concepts are Processes not Entities

One of the problems which arose in the cognitivists’ study of concepts was that radically different conceptions of concepts have succeeded one another in the history of their science, without any suggestion as to how successive theories could be reconciled with one another. Each new theory seemed to simply dismiss what had gone before as a mistake, or sit side-by-side with it as alternative theories.

First we had the so-called ‘classical theory’ which rested on the idea of the mind containing a dictionary which was consulted moment-by-moment for the definition of a concept. Then this was dismissed and replaced with the idea of prototypes, catalogues of the features of a prototypical example consulted for similarity, which was in turn replaced by a whole set of exemplars. These were then joined with ideas which introduced a ‘top down’ approach locating concepts within a theory or semantic network of related concepts.

But each of these ideas has a grain of truth. It cannot be denied that the concept of ‘puppy’, for example, has images of lovable, furry pets entailed in it, but equally the concept of ‘puppy’ has the idea that it is born of a dog, and must also make sense of a term like ‘puppy

love' and 'puppy fat' and has much in common with 'kitten'. So our concept of concept has to make sense of the fact that one and the same concept takes very different forms in connection with different activities.

This is after all much the same kind of problem which physics came up against with the observation of quantum phenomena: an elementary particle looked like a particle in one experimental set up and looked like an electromagnetic wave in another experimental set up. This did not mean abandoning the concept of particle or wave but rather forming a concept of elementary particle in which 'particle' and 'wave' specify the properties of one and the same entity manifested in different kinds of interaction; and there are a range of measures which correlate the wave and particle interactions of the same type of elementary particle. That is, a photon manifested as a wave is not something different from a photon manifested as a particle. Rather, wave and particle are different manifestations of a photon, whose properties are manifested only in interaction. And yet there is no way of describing a photon that is not either a particle or a wave.

Concepts are like this, and we need a concept of concept which is commensurate, a concept which makes sense of the different manifestations of what is essentially the same concept, in the large variety of activities in which concepts are manifested. That is, we need to see concepts as processes, rather than entities, at the most fundamental level.

There are three 'dimensions' to such a study. Firstly, we need to understand the different processes, both social and psychological, which underlie the various kinds of interaction, and understand these various modes of interaction in terms of processes of manifestation, common to concepts in general. That is to say reproducing lexical definitions of concepts is one psychological process, understanding a word in the context of reading a book another, speaking and understanding speech still other processes; recognising visual stimuli and acting appropriately is one process, categorising things on the basis of their appearance still another. This is true of any concept.

Secondly, we need to know how to understand the dynamics inherent in any given concept, which is specific to that concept. The concept of 'mother' is acquired by a child at a very young age, but undergoes a series of changes as the child becomes an adult. The concept of 'mother' which forms part of the public political debate is a very different one. The life course of a concept like 'force' is very different according to whether you study physics at school. The trajectories here are not the same for every concept.

Every concept has a distinct path through cultural history, which constitutes the third 'dimension' of the development of concepts, in which entire social formations undergo change, reflected in all the concepts making up a social formation.

These three dimensions are by no means clearly distinguished and delineated by Hegel, although his Logic remains an indispensable resource for the concepts needed for each of these studies. We need to take from Hegel that a concept is a unit of what he called a 'formation of consciousness'. But I will refer to a 'formation of consciousness' as a *project*. A concept can therefore only be understood in terms of the project of which it is a part, and in connection with other projects which may have interacted with it.

As such, over and above the evolution of our neurophysiology, a concept has three distinct development processes:

- the *microgenetic* process through which it is manifested in the course of interactions;
- the *ontogenetic* or learning process in which an existing concept is acquired by an individual and subsequently enters into their life activity; and

- the *cultural-historical* process through which a concept is first formulated, developed within some project and then concretised and ultimately merges into the entire way of life.

Each of these processes requires specialist investigation, but in each case, the concepts of Hegel's Logic will prove to be an invaluable resource. Our task here is simply to give an adequate definition of what a concept is. Investigation of the processes of concept formation is another matter.

Surely it is a truism that something cannot be understood without understanding its life-process, how it comes into being and the conditions of its existence. That is to say, the *concept of something* entails its whole life process. Even more than is the *concept itself* to be understood as a life-process. It is also surely true that something can only be understood in its connection with other things, and so the concept of something must reflect those relations. Even more than must the concept itself be understood in connection with the life activity, the cultural context and the people who use it. Hegel demonstrates how such considerations may be taken up in a philosophical consideration of the concept of concept, but it is no longer tenable to carry out such a task on a purely logical basis, in isolation from concrete psychological and sociological investigations. It is now both possible and necessary to develop a critical approach to concepts which incorporates the gains of the sciences and is intended for further development in scientific investigation.

The Structure of the Concept

The feature of Hegel's concept of concept which is most challenging and novel is its structure. Hegel claims that the concept has three moments, which he calls the individual, universal and particular. He does not privilege any one of these moments, nor does he see them, like Charles Sanders Peirce, as three 'types' of concept. Rather, the concept is this structured, internally dissonant whole.

For example, the concept of "tree" is a word, a series of social practices and an infinite number of acts in which something is named by the word in the course of different social practices. You can't take away one of those three and have remaining anything resembling the concept of "tree." But all the contradictions and fuzzy edges, disagreements and typicality phenomena which makes a simple concept like "tree" so problematic, arise from the non-coincidence and dissonance between the three moments of the concept. This dissonance cannot be eradicated, and nor is there any reason to. If we want to study concepts, then we have to recognise their nature as expressed so clearly by Hegel in terms of individual, particular and universal moments.

From a sociological point of view, the social practices which, for example, establish a certain kind of plant as "tree" belong to a definite form of life alongside the sciences of botany and agriculture, market economics and the different uses to which trees are put. From the point of view of the linguist, "tree" is an English word, and has its etymology and its connection with other words in the language, and the various metaphorical uses of "tree." At the same time, there are the great variety of plants and other things which may be subsumed from time to time under the concept of tree. To understand the concept of "tree" entails understanding all this.

Each of these different moments of the concept implicate different aspects of the nervous system. We know that apprehending individual trees entails the stimulation of the various senses and the cognition of these stimuli. We know that understanding the word "tree," whether written or spoken, engages other aspects of the nervous system. And finally, participation in social practices of buying and selling, pruning, climbing, painting, pointing, shading under trees and so on, engage sensorimotor functions of the brain (c.f. Barsalou 2008:

92), and all these aspects of our inner life and implicated in the concrete conception that Hegel suggests to us.

Medical and psychological science has progressed so far in the past 200 years it is not surprising that Hegel's psychology seems somewhat antique to us today. But after all, neither Freud nor the cognitivists claimed to represent actual neuronal structures, but only conceptual models of the structure of the individual mind. So in this sense, Hegel stands on an equal footing with the cognitivists and psychoanalysts. I will make no specific claims for Hegel's psychology, but it may provide a source of inspiration.

Marx

It was Karl Marx who translated the arcane idealistic language of Hegel and his young followers into the language of practical life and it is Marx who is the link from Hegel to Lev Vygotsky, the subject of the latter part of this work. Marx published little on philosophy and nothing at all on psychology, so we have to rely on unpublished manuscripts and notes to bring his insights to light. The founding document of Activity Theory, *Theses on Feuerbach*, was written by Marx in April 1845, though not discovered until after his death.

In February 1842, Marx met the Young Hegelian, Moses Hess at the offices of the *Rheinische Zeitung* in Köln. Hess had been a follower of Johann Gottlob Fichte, and was now a communist. The two made a great impression on each other, and they collaborated until their falling out in August 1847, when Marx published a section of *The German Ideology* denouncing Hess's "true socialism." But in 1843, Hess had written "The Philosophy of the Act" in which he appropriated Fichte's concept of Activity as the foundational concept for a communist philosophy: "Not being, but the act, is the first and last." Marx in turn appropriated Hess's concept of activity and made it the foundation of his own philosophy, which he sketched in 11 short theses. This document is so crucial to resolving the problems of understanding what is a concept, I will now present these 11 theses with annotations.

1. The main defect of all hitherto-existing materialism – that of Feuerbach included – is that the Object, actuality, sensuousness, are conceived only in the form of the object, or of contemplation, but not as human sensuous activity, practice, not subjectively. Hence it happened that the active side, in opposition to materialism, was developed by idealism – but only abstractly, since, of course, idealism does not know real, sensuous activity as such. Feuerbach wants sensuous objects, differentiated from thought-objects, but he does not conceive human activity itself as objective activity. In *The Essence of Christianity*, he therefore regards the theoretical attitude as the only genuinely human attitude, while practice is conceived and defined only in its dirty-Jewish form of appearance. Hence he does not grasp the significance of 'revolutionary', of 'practical-critical', activity.

Here, in the very first recorded words of "Marxism," Marx is criticising philosophical *materialism* and giving credit to *idealism*, i.e., Hegel. And this criticism goes to all the human sciences today. Concepts cannot be treated as representing objects, irrespective of the activity through which concepts are manifested. The Jewish reference alludes to a contemporary debate in which the Jewish God of the Old Testament, had to 'get his hands dirty' making the world, representing a symbolic contrast between the Christian God of the Word, and the Jewish God of the Deed, i.e., practical life. Marx is criticising materialism for taking the standpoint of natural science: that of an observer, contemplating an independently existing object. Objects exist, distinct from thought, but it is thanks to activity, 'practical-critical' activity, that the object is perceived. The words activity, practice and *praxis* may be used interchangeably, with or without the various adjectives.

2. The question whether objective truth can be attributed to human thinking is not a question of theory but is a *practical* question. Man must prove the truth, i.e., the reality and power, the this-sidedness of his thinking, in practice. The dispute over the reality or non-reality of thinking which is isolated from practice is a purely scholastic question.

This is not just a claim that “the proof of the pudding is in the eating.” The truth is itself *internal to activity*. The truth of an action is to be found within the activity of which it is a part, and the truth of an activity to be substantiated by its viability within an entire way of life. That is not the same as saying that activity *proves* the truth of a proposition, meaning simply that you can have a theory, and then test it out, and be proved wrong or right. For example, Marx left a number of questions open when he wrote the *Communist Manifesto* in 1848. He had to wait till the Paris Commune of 1871 before he clarified these questions. Marx did not try to reason them out in his head. He did not make a proposal and then watch to see if it worked. Rather, he followed the movement of the working class and tried to give voice to it. Practice is the foundational category, the substance of human life, from which all other categories must be derived.

3. The materialist doctrine that men are products of circumstances and upbringing, and that, therefore, changed men are products of changed circumstances and changed upbringing, forgets that it is men who change circumstances and that the educator must himself be educated. Hence this doctrine is bound to divide society into two parts, one of which is superior to society. The coincidence of the changing of circumstances and of human activity or self-change can be conceived and rationally understood only as *revolutionary practice*.

This caution speaks to the whole class of professional ideologists and social scientists who take their human ‘subjects’ as objects, capable only of responding to stimuli, while exempting themselves from participation in the same conditions as their subjects. This “God’s eye view” from which a theoretician imagines himself to observe the world from outside and above culture and history is an illusion. What happens in the world, says Marx, must be understood not as individuals acting in response to circumstances, but rather as *self-change*, since the circumstances are also created by people.

4. Feuerbach starts off from the fact of religious self-estrangement, of the duplication of the world into a religious, imaginary world, and a secular one. His work consists in resolving the religious world into its secular basis. He overlooks the fact that after completing this work, the chief thing still remains to be done. For the fact that the secular basis lifts off from itself and establishes itself in the clouds as an independent realm can only be explained by the inner strife and intrinsic contradictoriness of this secular basis. The latter must itself be understood in its contradiction and then, by the removal of the contradiction, revolutionized. Thus, for instance, once the earthly family is discovered to be the secret of the holy family, the former must itself be annihilated theoretically and practically.

This refers to Feuerbach’s book, *The Essence of Christianity*, published in 1841, in which Feuerbach went through all the concepts of Christianity and showed that each apologetically reflected a corresponding earthly relation. His claim was that by saying in effect “This is how things are in Heaven,” the Church sought to *justify* the earthly institution which was reflected in the myth. (Nowadays, people say instead: “This is how things are in Nature.”) Religion, for Feuerbach, was an ideological rationalisation for the suffering and injustice the masses experienced on Earth. The idea behind this was that once the real meaning and function of religion had been *exposed* as a pernicious fiction, then the mystique would be broken and people would throw off their religious superstitions and see things for what they really were. This ignores the fact that ideology not only reflects earthly relations and serves to maintain and regulate them, but reflects *real needs* arising from those relations. It is not exposing religious illusions which will eliminate oppression and suffering but rather the elimination of oppression and suffering which will do away with religious illusions. The exposure of religion contributes nothing to that, save to make the critic feel superior to the deluded masses. Religion is the general theory of those oppressive relations.

So yes, religious ideology reflects social practices, but changing those practices is a practical question and has to be resolved practically. A changed ideological reflection of those new relations necessarily accompanies changed social practices.

5. Feuerbach, not satisfied with *abstract thinking*, wants *sensuous contemplation*; but he does not conceive sensuousness as *practical*, human-sensuous activity.

Here Marx emphasises the *active*, practical character of cognition. Sense perception is itself an *active* process, rather than a process of passively reflecting objects.

6. Feuerbach resolves the essence of religion into the essence of man. But the essence of man is no abstraction inherent in each single individual. In reality, it is the ensemble of the social relations. Feuerbach, who does not enter upon a criticism of this real essence is hence obliged:
1. To abstract from the historical process and to define the religious sentiment regarded by itself, and to presuppose an abstract – isolated – human individual. 2. The essence therefore can by him only be regarded as ‘species’, as an inner ‘dumb’ generality which unites many individuals only in a *natural* way.

Feuerbach saw human beings as essentially natural creatures, whose nature could be understood solely in terms of their biological, animal nature. Consequently, he believed that everything essential to being human is to be found in each single individual, so he believed that the propensity to religious belief must be lodged in the biology of every human being. This is a mistake, for the essence of a human being, according to Marx, is the entire ensemble of social relations. So Feuerbach takes the human species as simply an aggregate of individuals of like kind, as an ‘abstract general’ concept, whereas in fact, human communities are actively constituted by the activity of their members. In this way, human beings create their own nature.

7. Feuerbach consequently does not see that the ‘religious sentiment’ is itself a *social product*, and that the abstract individual that he analyses belongs in reality to a particular social form.

Thus, religiosity is a product of a given social formation, and Feuerbach wrongly ascribes this religiosity to an abstract, ahistorical ‘human nature’.

8. All social life is essentially *practical*. All mysteries which lead theory to mysticism find their rational solution in human practice and in the comprehension of this practice.

‘Practical’ here means purposive actions, mental and physical, directed towards solving the problems which people are confronted with in their lives, i.e., activity. Marx draws an important conclusion: all problems of theory have to be resolved by (1) practical intervention and (2) having a mind to understanding the activity of those involved. Activity is the fundamental category, or substance of all social theory and philosophy, and not even logical deduction is reliable other than in close connection with activity. This is a radical activity-theoretical claim.

9. The highest point reached by contemplative materialism, that is, materialism which does not comprehend sensuousness as practical activity, is the contemplation of single individuals and of civil society.

This characterisation remains relevant to all mainstream modern social theory which can only understand human beings interacting with one another as independent agents. Economics for example, in its theory, takes human beings to be individual, self-seeking agents, and in its practical activity contributes to making people like this. On the contrary, human beings can be truly understood only in terms of their collaborative activity and struggle within definite forms of society.

10. The standpoint of the old materialism is civil society; the standpoint of the new is human society or social humanity.

Marx takes human beings not as so many individuals but as a social organism which produces its own form of life through collaborative activity and a shared culture, and it is this collaborative activity and culture which constitutes the essential nature of every individual.

11. Philosophers have hitherto only interpreted the world in various ways; the point is to change it.

This famous thesis is often misunderstood. Marx meant that the point of philosophy is to change the world, *not* that we have to change the world and philosophy is pointless.

I will pursue Marx's notion of activity as the substance of his philosophy, and the implications of this for his approach with just one further excerpt, from the *Grundrisse* of 1857.

In the passage on "The method of Political Economy," Marx looks at the development of abstractions like "exchange-value" and how such abstractions are deployed by political economists to reconstruct real economic activity in theoretical terms. He considers the question as to why, for more than 2,000 years since Aristotle first puzzled over the question of exchange-value, it was only in his own day that the secret of the formation of exchange-value and its ramifications were being disclosed. According to Hegel, the growing understanding of economic categories such as exchange-value, was a result of the theoretical work of political economists who disclosed the content of the concepts of political economy. Most people would understand the progress of natural science in much the same way: as a long train of problem-solving each building on the solutions of those before them. But this doesn't stand up does it?

But as a category exchange value leads an antediluvian existence. Hence, [to Hegel] the movement of the categories appears as the real act of production ... this is true in so far as the concrete totality regarded as a conceptual totality, as a mental concretum, is in fact a product of thinking, of comprehension; yet it is by no means a product of the self-evolving concept whose thinking proceeds outside and above perception and conception, but of assimilation and transformation of the perceptions and images into concepts. The totality as a conceptual totality seen by the mind is a product of the thinking mind, which assimilates the world in the only way open to it, a way which differs from the artistic-, religious- and practical-intellectual assimilation of this world. The real subject remains outside the mind and independent of it – that it to say, so long as the mind adopts a purely speculative, purely theoretical attitude. Hence the subject, society, must always be envisaged as the premises of conception even when the theoretical method is employed. ... The simplest abstraction which plays the key role in modern [political] economy, and which expresses an ancient relation existing in all forms of society, appears to be true in practice in this abstract form only as a category of the most modern society (MECW v.28: 38).

The point is that human activity develops in its own way. Gradually, over millennia, all the aspects of the concept of exchange-value were actualised as real relations, ultimately in the form of money, a symbol representing exchange-value, now a central part of the organisation of social life. In modern bourgeois society, the concept of exchange-value has reached its ultimate development, and the theorist has only to reflect what has already been brought to light by the development of activity itself.

Marx took this insight very seriously. The *Communist Manifesto*, first published in 1848, is full of contradictions and ambiguous formulations, such as "all production has been concentrated in the hands of a vast association of the whole nation." Today's Stalinists, Democratic socialists, Trotskyists, anarcho-syndicalists and social democrats can all alike embrace the *Manifesto* as their own. This is because in 1848, all these tendencies were still implicit within the workers' movement, whereas over the century following each of these currents differentiated themselves out within the workers' movement. Marx's only amendment to views expressed in the *Manifesto* were made in the wake of the Paris

Commune of 1871, when he responded to the experiences of the Commune in their attempts to overcome the counter-revolution and secure their own power, and made a small amendment to the *Manifesto*.

In other words, Marx understood that concepts are forms of activity, prior to their being brought to conscious awareness in theory. The job of the theorist is to assimilate activity in thought. Problems arise in the course of the development of human activity, particularly the perfection of instruments and machinery. These problems are tackled as practical problems and resolved in practice. The new forms of activity and artefacts which are produced in turn are incorporated into new theories embodying new concepts. Because human beings are born realists, each new development in human practice is ascribed to new objects and newly-discovered properties of an independently existing natural world.

With this activity-theoretical interpretation, Hegel's highly developed speculative theory of concepts can be utilised on a scientific basis. Hegel's science of Concepts was based on an encyclopaedic knowledge of the history, culture and natural science of his times, but neither Marx nor Hegel had ever conducted the kind of experiment and observation necessary for a genuinely scientific theory of concepts. For this an entire tradition and practice of science had to be created.