

# The Mind from Descartes to Hegel

**PSYCHOLOGY** is the science of consciousness, so to explore the foundations of Psychology we must begin with Descartes, who also marks the beginning of modern philosophy.

It is very fashionable nowadays, or at least until very recently, to denounce René Descartes for having been guilty of dualism, of a mind/body dichotomy, because *we* want to do away with *all* dichotomies. Things are never just black and white, good and bad, male and female; the edges are always blurred and there are always in between, and to deny this is deemed to be reactionary and oppressive. Who dares to say today, with Descartes, that thought is something categorically different from matter?

The point is that Descartes effectively *discovered* the category of ‘consciousness’, and thus laid the foundation for both modern philosophy and psychology, the science of consciousness.

Descartes stands at the very beginning of modern European philosophy. He was passionately hostile to all kinds of received knowledge - the literal truth of the Bible, the authority of the ancients in science, what ‘everyone knows’, ... Descartes began to reflect on the evidence we had for our beliefs, and he put no value on the inherited wisdom of the past. At the same time, the burgeoning interest in the observation of Nature, he found to be naïve. While the Empiricists also rejected the received authority of the ancients, they uncritically identified what they apprehended with their senses with what existed outside their consciousness.

Descartes brought a withering scepticism to bear on the Empiricists’ faith that their senses gave them direct access to objective reality, that if they laid all the old books to the side and used their own eyes, then they could discover the necessary laws governing Nature. But how could you be sure that what appeared to you was really the case? How could you know that you were not profoundly mistaken? Perhaps you were dreaming, and in reality you were the Queen of Sheba. Descartes was the first to draw attention to the fact that consciousness was *not* a faithful replica of what lay outside of consciousness and given to us in the form of sense-impressions; that consciousness and its forms were outside and distinct from matter and its forms.

But not only that. As the inventor of coordinate geometry he was able to do some calculations and algebra on a piece of paper and tell an artillery man at what angle to fire his cannon in order to send a cannon ball over the wall of a besieged city. How was this possible? How was it possible for the mind to represent in symbols and accurately predict the trajectory of an iron ball as it flew through the air? These symbols were not ‘mirroring’ the cannonball, and yet by thought alone, Descartes could know the movement of the cannon ball better than the cannoneer himself.

So Descartes was confronted by two problems: Firstly, was there *any* certain knowledge? Was there any firm starting point on which science could reliably build? Secondly, given the categorical difference between thought and matter, how were thought and matter *connected* so that the movement of cannon balls and stars could be predicted by Reason? If thought and matter were not connected at some point, then they would be inhabiting two different universes and science would be impossible. How *was* science possible?



“I think, therefore I am!”

## Descartes and Consciousness



Rene Descartes  
(1596-1650)



“De omnibus dubitandum” – Doubt everything

**IN RELATION TO** the problem of certainty, Descartes observed that even though he could trust neither his senses, his own consciousness or received wisdom, he could at least be sure that his own consciousness *existed*, for that is what is immediately given to him,

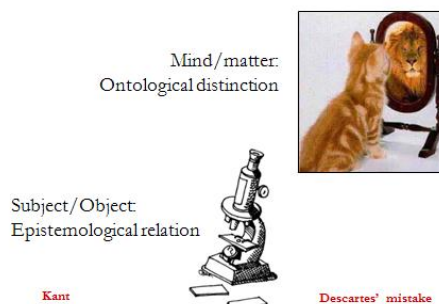
even when he is asleep and dreaming, and thus that he, Descartes, exists. He also reasoned that since he did not freely create what was in his consciousness, something *else* outside of his consciousness and greater than him must also exist. *This* was a certainty. From that starting point, remembered in the Latin maxim *cogito ergo sum*, “I think therefore I am,” Descartes built his system, including a theory of thinking and the emotions. He still saw consciousness as some kind of endowment given to human beings, while the human body, and the rest of the universe was governed by *mechanical* laws. This was in fact another problematic dualism: human beings endowed with thought, and mechanical Nature.

As is well known, this starting point, true and valuable in itself, led Descartes and those who followed him into intractable problems, summed up in the condemnation of Cartesian Dualism.

Spinoza tried to overcome Descartes’ dualism by declaring Nature, inclusive of human beings, to be, not the work of God, but God Himself, and that rather than matter and thought being distinct substances, Spinoza said there was only One substance, and thought and extension were but two *attributes* of that One substance. (Substance, by the way is a philosophical term meaning the fundamental kinds of entity making up the world, and is not necessarily to be taken in the everyday sense we understand by “substance.”) But this simply displaced the dualism of substances to a dualism of attributes. It also maintained Descartes’ *mechanical* conception of Nature, leaving human beings subject to an absolute mechanical fatalism. It also got Spinoza denounced as an Atheist and his works were effectively suppressed for more than a century.

The mainstream response to Descartes was a series of Rational critiques of Empiricism which eventually led to the profound scepticism of David Hume and the impossibility of any knowledge of necessity in Nature. If all we know are the images produced on our own sense organs, then we can know nothing with certainty *outside* of that. You cannot pair up objects and their reflections in a mirror world of thought.

Kant responded to this with his Critical philosophy which set out to determine the limits of knowledge, on the model of individuals processing the data of experience with an inborn faculty of Reason. Kant’s masterful system of concepts stands today as a monument of philosophical precision, and underpins the work of Kantians such as Jean Piaget and Noam Chomsky. But 150 years after Descartes, Kant’s system remained dualistic, with appearances on one side, and unknowable things-in-themselves on the other, with the human subject split between faculties of Intuition and Reason and numerous other such dichotomies. Ridding philosophy of dichotomies proved to be not at all easy!



**DESCARTES’ MISTAKE** was *not* in making a categorical distinction between thought and matter, but in making this dichotomy between thought and matter the *starting point* for the solution of problems of *epistemology* (the theory of *knowledge*). Thought and Matter are ontological categories (Ontology is the study of the kinds of things that can exist). Thought, or Consciousness, is what we are given, immediately, whether asleep or awake, whether animal or human. Matter is simply everything outside of thought. That is the beginning and end of what can be deduced or proven from the categorical difference between thought and matter.

Consciousness is *not* something material, because the very *meaning* of the word ‘material’ is that it is *not* just in our mind, but *exists outside consciousness*. So it would be self-contradictory for me to say that my consciousness is material. But I can say that *your* consciousness is material, since it is outside of my consciousness; *your* consciousness is not given to me immediately, but on the contrary, like the force of gravity and the ambient temperature, has to be inferred from observation.

Human consciousness arises from the interaction of human physiology and human behavior; both these two processes are perfectly objective processes which are observable. Thought cannot be identified with neurons; a thought is not a neuron or any

combination of neurons. And no matter how long I contemplate an object, my thought can never be identical to the object, either in form or content. But when my cat looks behind the mirror to find the other cat, I know what's in his mind; but it is an appearance, an illusion; it is not *my* illusion, but *his* illusion. But appearances can be studied scientifically.

The distinction which properly makes the beginning for the study of the sources and validity of knowledge is the *subject-object relation*. In this case it *is* false to treat subject and object in a dualistic or dichotomous way, there *are* halfway in between, the boundaries *are* blurred; subject and object are a mutually constituting unity of opposites. But the subject-object relation is one which can be found not only in relation to a person and the world they know, but even in the actions of a computer, an institution, or a natural process. The problem of knowledge is the problem of the subject/object relation.

Descartes was able to *pose* the problem of knowledge but he failed to suggest a fruitful method for its solution. It was only after Kant that philosophers began to get to grips with this problem and the foundations of Cultural Historical Activity Theory began to be laid down. But still, all materialist philosophers from Feuerbach to Marx, Plekhanov and Vygotsky up to present day participants in CHAT, have *sublated* Descartes' insight into their work. That is to say they have negated it, but also retained it and transcended it.

## Herder and Culture

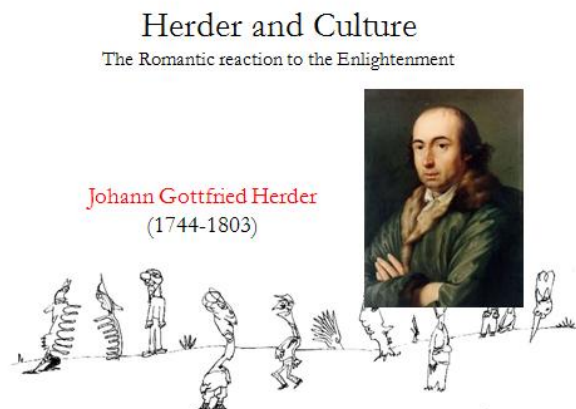
**TO FIND** the real roots of Cultural Historical Activity Theory we have to go to late 18th century Germany, and the Romantic Movement's philosophical reaction to the Enlightenment. The Enlightenment, whose foremost philosopher was Immanuel Kant, had overthrown religion, superstition, privilege and narrow parochialism, but under the banner of the universal rights of man and universal laws of Nature, laws which could be determined by the exercise of Pure Reason, for which every person possessed the innate capacity, alongside a separate capacity for sensuous observation, thus dividing the world into appearances on one side and unknowable things-in-themselves on the other. The human being was simultaneously *flattened out* into a uniform type and *broken up* and analysed into so many separate faculties.

The Romantic movement reacted against this aspect of the Enlightenment, and its first exponent in philosophy was Johann Gottfried Herder. He made his name in 1770 at age 26, with an *Essay on the Origin of Language*. Herder was the first philosopher to claim that Reason was *not* universal, that consciousness differed radically from one epoch to another, from one society to another and from one individual to another. How people think would be dependent on the cultural practices of which they were a part. He held that thinking was *working with symbols*, so thinking was intimately linked with language and culture generally.

Herder is largely remembered as a philosopher of history, through his enquiry into *Zeitgeist* (spirit of the times) and *Volksgeist* (the spirit of a people) and he approached the psychology of an individual as first of all a member of a definite people and class, with a shared history and culture, rather than proceeding the other way around, as if the nature of a society could be deduced by adding up the nature of its individual citizens.

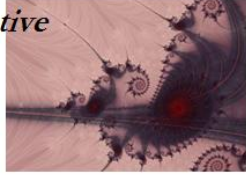
So Herder was not only the first to propose the intimate connection between thinking and language but is credited as the founder of cultural anthropology, an important philosopher of art, linguist and I think properly, the founder of Cultural Historical Activity Theory. Herder was not a *systematic* philosopher however, and unlike Kant and Hegel he did not leave us an elaborate system. Most of his writings were virulent critiques of Enlightenment arrogance.

His friend Goethe rightly said that "The greatest discoveries are made not by individuals but by their age." And it is probably more true to say that the basic philosophical ideas of CHAT emerged in Germany from the entire Romantic movement and the Classical



movement which followed: Wm von Humboldt, the founder of modern linguistics and creator of the Prussian education system, Goethe - poet and scientist, the great dialectician, Hegel, Fichte who first made Activity the foundation of the psyche, Feuerbach, the first materialist critic of Hegel, Fichte's follower, Moses Hess who wrote the "Philosophy of the Act" and introduced Marx to communism, and ultimately Karl Marx himself.

God/Nature is *Active*



Everyone has their *Schwerpunkt* !

Herder

ACCORDING to Herder, God, i.e., Nature which is just another name for God, was *active*; Nature was not just some gigantic machine, but was full of intentions, of striving, of opposing forces, and human beings were a *part of* that striving and activity. Activity was *natural*, and didn't need to be explained by some life-force or suchlike. It was this revised Pantheism which expressed the spirit of Classical German Philosophy and which inspired humanist philosophers who sought scientific explanations for Nature and human life for a century afterwards. Particularly through the popularity and literary brilliance of Goethe, this naturalistic Pantheism became respectable.

**BUT BEFORE** moving on, there are a couple of contributions of Herder's which should be recalled.

Herder, like Goethe, was a pantheist, and as such he risked denunciation as an atheist. This had been Spinoza's fate. For a century after Spinoza's death in 1677, Spinoza was a 'dead dog', he was anathema. In 1787, Herder published "God, some Conversations" in which he not only rehabilitated Spinoza but he also modified Spinoza's pantheism.

God/Nature is *Active*



Everyone has their *Schwerpunkt* !



characteristic 'strong point', the activity in which they had the home ground advantage so to speak. This idea was further developed by Goethe.

**BEFORE MOVING ON:** in his studies of national character, Herder said that every people (and every person) had their *Schwerpunkt*, which was uniquely theirs and made them what and who they were, and which they could not be forced to part with. *Schwerpunkt* is one of those untranslatable German words, but I take it as 'strong point': every people, every person has their

## Goethe, the Urphänomen and Romantic Science

**Goethe**

*and Romantic Science*

(1749-1832)



*Gestalt*

**GOETHE** was the first European celebrity. He became world famous at the age of 25 with his romantic novel, "The Sorrows of Young Werther," but he also ran the civil service in Weimar for a decade and was a natural scientist throughout his life. He aimed to develop a completely different approach to natural science, which is known as Romantic Science. Goethe's influence on culture in the German-speaking world and in Russia, was enormous, his influence was felt over the education of German



speakers from Marx and Wundt to Freud and Jung. Even Vygotsky quotes Goethe more often than he quotes Hegel, and Luria identified himself as a proponent of Romantic Science. Romantic Science entailed beginning by grasping a process as a whole, rather than analysing it into parts, and emphasised patient observation against artificial experimentation and the invention of invisible forces and arbitrary principles to explain phenomena. Recognizing that the practice of science formed part of a community's metaphysical rationale for its own cultural identity, Romantic scientists also sought methods which were accessible to the participation of non-specialists.

One of the main problems of science to which Goethe addressed himself was the problem of how to conceive of a complex process in such a way as to allow you to understand it *as a whole*, from which all the parts can be understood. The word for such a whole in German is *Gestalt*. At the same time as Herder was writing his book on Spinoza, Goethe was touring through Italy making botanical sketches, noting the changing form of plants at different altitudes and latitudes. His aim was to find the simplest or archetypal form of plant, the simplest plant which exhibited the properties of all plants, but was modified in the formation of this or that particular plant.

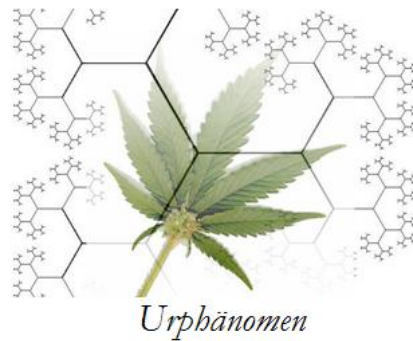
**GOETHE** arrived at an idea which he called the *Urphänomen*, or archetypal phenomenon, the smallest, simplest imaginable, single example of the phenomenon, stripped of all its particular, contingent attributes. In that one simple cell, you see the whole process.

Let's look for a moment at possible alternative ways of conceiving of a complex whole. For example, we could pick out some attribute of things and see the collective as everything that has such and such an attribute. That is the method of abstract empiricism. It displaces the problem of understanding an entity with that of understanding a contingent attribute, and fails to comprehend either part or whole; by this process the world is broken down into small pieces and put back together like a jigsaw puzzle.

Or, according to the hypothetico-deductive method, we can invent some force or principle, which is in principle unobservable (like the force of gravity, or IQ) and then deem the complex process to be caused by this unseen force. This merely shifts the problem away from something we can see to some intangible metaphysical entity. Or we devise structural explanations which take away any content from the parts, such as individual people, and put everything into a hidden structure. Or we can take the functional approach, and reduce the problem of understanding the whole to that of understanding its functional parts, again simply replacing one problem with another of much the same kind.

Goethe's most successful work was in morphology, the study of the forms of living things and their interrelations. Unfortunately, he died before the invention of microscopes which were sufficiently powerful to allow us to see *cells*; the cell was discovered 5 years after his death, in 1837. But it is generally conceded that the cell fulfilled Goethe's idea of the *Urphänomen*. The point is that the *Urphänomen* is a phenomenon, that is, something given to the senses and which is simple enough to be understood *viscerally*. It is so simple and self-evident, that it does not require some explanatory principle *separate* from itself. For example, if you want to understand the principle of mechanical advantage, it is only necessary to look at a simple lever and play with it a bit; you don't need to know Archimedes Law of Leverage or know anything about the concepts of force to get it.

This idea, of understanding a complex whole through its simplest part is Goethe's great gift to science and it marks genuine humanistic science off from the abstract empiricist and analytical science which has dominated the world since the days of Isaac Newton and Francis Bacon. Goethe's idea was welcomed by Hegel who made it the *Urphänomen* of his own philosophy.



# Hegel, Thought-objects and the Concept

KANT had moved the problem of knowledge from a problem of natural science, of interactions between substances, to one of philosophy, in particular, the *subject-object relation*. But even as a purely philosophical problem, we were still stuck with a dichotomy. Human beings could only ever know the *appearances* of things, and could never have direct access to things as they are in themselves, independently of human activity.

Certain problems *were* amenable to pure reason however, or so Kant believed, such as geometry and logic, leaving human beings processing the data of the senses with an innate logical processor, with the so-called subject, standing outside the object of knowledge (taken to be a natural process) - a philosophical construct, isolated from culture and history.

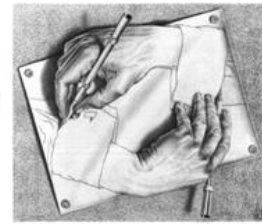
## Subject-Object



## Hegel

(1770-1831)

Subject-Object



Thought-object / Artefact

HEGEL resolved this problem by drawing on (though never crediting) Herder's idea of thought as 'working with symbols' and consequently people were not just observers of culture, but on the contrary, were both products of and participants in culture. Hegel *sublated* the problems of epistemology and ontology which had tortured the minds of previous generations of philosophers by taking the subject and object together, a whole *subject-object* which differentiated itself, rather than having to stick together two entities which

were foreign to one another to begin with. The human mind was able to represent the objects of culture, because it was after all the activity of the human mind which created and constituted them.

**THE KEY** to this move was Hegel's idea of the '*thought object*'. Thought objects are the artefacts which are created and given meaning by human beings, and in turn, become the content of their thoughts as they use the artefacts and participate in the various social practices of which their culture is composed. Thus as the object (material culture) changes, so the subject (consciousness) changes, and the differences between the two are important, but are secondary to their unity.

Thought-object / Artefact

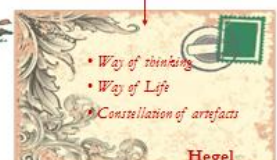


Hegel's conception rested, not on the idea of we human beings and an outside nature, but rather of the relation between human beings and the cultural world that *they themselves create*. So the problem of mind became the problem of understanding the *internal dynamics* of a community.

In the **PHENOMENOLOGY OF SPIRIT**, Hegel tells the story of European civilisation, through a series of such subject-objects beginning with the first philosophical reflections up to modern (i.e., Hegelian) philosophy from three different aspects. Each stage in this story is what Hegel calls a 'formation of consciousness' (*Gestalt des Bewußtseins*), which is the identity of three things: a way of thinking, a way of life and the constellation of artefacts through which people reflect on their of activity. A formation of consciousness is best understood, not as a whole society, but as a *project*, which could be anything from a developing nation to a social movement, a science or a family saga.

*The Phenomenology of Spirit* (1807)

## Formation of Consciousness



To tackle this problem, Hegel appropriated Goethe's idea of *Urphänomen*. At the centre of each *Gestalt* is a *concept* which functions as the ultimate criterion of truth or rules of inference within the project. That logically primitive concept, cannot be proved or reduced to anything more fundamental, within the scope of that project. Every project has some ideal or social function which constitutes the key concept, the *Schwerpunkt* or *Urphänomen* of the whole project.

Every problem that arises in the life of some project causes contradictions and disputes which ripple through the whole formation until it comes up against this key concept. Here the concept is subject to internal, sceptical critique, and at some point it proves unable to resolve the crisis, unable to withstand sceptical attack and fails. The whole project then falls into crisis, collapses, and is ultimately overtaken by a new formation which is able to withstand sceptical attack under the new conditions.

Hegel's Logic elaborates the dynamics of the *Gestalten* which he had demonstrated in the *Phenomenology*. Hegel has appropriated Goethe's *Urphänomen* in the form of a concept, which is the basic unit of a *Gestalt*. The simple, archetypal concept forms the starting point for any science which seeks to understand or work upon some complex of phenomena. As Hegel said in a letter to Goethe (21/02/1827):

“What is simple and abstract, what you strikingly call the *Urphänomen*, you place at the very beginning. You then show how the intervention of further spheres of influence and circumstances generates the concrete phenomena, and you regulate the whole progression so that the succession proceeds from simple conditions to the more composite, and so that the complex now appears in full clarity through this decomposition. To ferret out the *Urphänomen*, to free it from those further environs which are accidental to it, to apprehend as we say abstractly – this I take ... to be the truly scientific knowledge.”

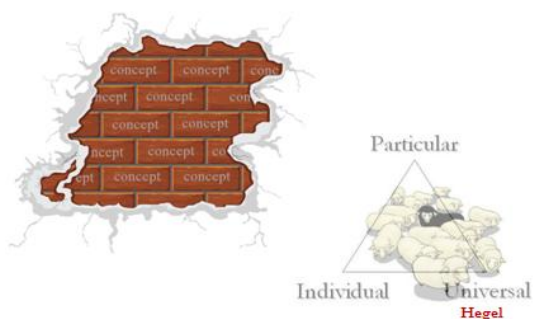
This was the model of science which Hegel appropriated from Goethe and on which he constructed each part of his Logic and the other components of his *Encyclopaedia of the Philosophical Sciences*. But instead of setting off from a simple *phenomena* like Goethe, Hegel made the beginning of a science, a *concept* of the subject matter.

But for Hegel, a concept is not just a word signifying something according to convention or some chimera existing only in the psyche, but on the contrary was as much an object of experience as anything else. But to understand how Hegel finally overcame the dichotomies which had plagued philosophy up to then we have to grasp the structure of the concept as Hegel saw it.

**HEGEL** observed that a concept is the identity of a *Universal* representation (such as a word or other artefact or form), an *Individual* instance of the concept and a *Particular* social practice or action which normatively subsumes the individual under the universal. There can be no meaning of a word except insofar as there are individual people who know it and use it, and it is only through some social interaction of such people, involving the word, that its meaning can be constituted, acquired or transmitted. Hegel elaborated this idea in the form of logical judgments and syllogisms, demonstrating that a concept was incomplete until all possible relations between individual, universal and particular were established and brought together. A culture is not just a pile of artefacts such as found in an archaeological dig, nor is it just a collection of people externally united by some fixed or contingent attribute, and a system of social practices is inconceivable independently of the language and material culture generally utilised. The smallest unit of a cultural formation is a concept only

- *Way of thinking*
- *Way of Life*
- *Constellation of artefacts*

## Concept



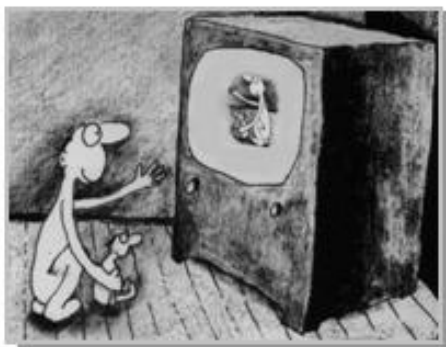
when we understand a concept in this mediated way, as a culturally mediated social practice.

This may seem a really arcane way of resolving the matter of human thought and practice, but it is extremely powerful and relies on no fallible hypotheses about human biology or physics or anything else.

**SO HEGEL** appropriated Goethe's idea of *Urphänomen* as the *concept*. But the concept is not a simple name, or an attribute for the purpose of collecting like things together in a set, but a *cell* in which the relationship between a universal representation (such as a word or tool) to an individual instance or thought is mediated by particular on-going social practices.

**LIKEWISE** the relation between social practices or institutions and individuals is mediated by artefacts such as signs, buildings, body language and clothing, etc. and well as what we now call 'discourse'. And the relation between particular institutions and the universal ideals that govern them is mediated by individuals.

**HEGEL** was an idealist: he saw the motive force of human life in terms of thought-forms and assigned the key role in human history to ideologues: philosophers, priests, artists and political leaders. But he did emphasise the *active* side of the human mind and had discovered the key philosophical ideas needed to resolve the problems of psychology.



Hegel's Idealism



**HEGEL** had his own theory of Psychology as well, which is of considerable interest in its own right, but has been largely neglected throughout the twentieth century. Hegel saw Subjective Mind as having three levels: the first is what Hegel called the Soul, which is what human beings share with all animate creatures, regulating all our animal functions without any reference to something other than itself; it just *feels*. Thanks to habituation, certain feelings stand out as Sensations. Sensations are the unit of Consciousness, which human beings share with most animals, which entails awareness of an objective world, but does not allow for self-consciousness. The Intellect, the third level of Subjective Mind, builds on the capacity of objects to be understood as Symbols, and it is these symbols which form the substance of the Intellect. Thus, there is pre-linguistic Intellect, the foundation on which language-use arises. According to Hegel, the Mind cannot think individual things, but since the substance of Thought is symbols, which represent generalisations, the Intellect can only think in generalisations, and the individual things which are given in Sensation, that is, consciousness, can only be the object of thought by means of the concentration of generalisations, and particularisation.

It is worth noting that this conception of mind makes the transition from Nature to animal consciousness to human thought without any mysterious substances or powers, using the *Urphänomen* which Hegel adapted from Goethe. Hegel's theory of Mind is, in fact, quite consistent with a materialist theory of mind.

### Hegel's Psychology





## Activity

**BEFORE FINISHING** we should review how the concept of Activity reached Marx before he wrote the *Theses on Feuerbach*. We have mentioned that *Herder* introduced the idea of Activity in his conception of Nature as inclusive of intentions, striving, opposing forces and so on, as opposed to Spinoza's conception of Nature as a giant machine with consciousness.

*Fichte*, the philosopher of the Ego and a predecessor of Hegel, took Activity as the basic substance of his philosophy. He defined the Ego as Pure Activity, and by this means he endeavoured to overcome Kant's dichotomy between subject and object, because Activity is both subjective and objective. Hegel sublated this definition of the Ego into his social theory, but he left in the background his original idea of Spirit as the activity of human beings en masse.

Moses Hess was an older contemporary of Marx, a follower of Fichte, who introduced Marx to Communism. Hess had written a book called *Philosophie der Tat*, "Philosophy of the Act," *Tat* has the same root which gives us *Tätigkeit*, or Activity. Here Hess introduced the idea of appropriating Hegel by taking Activity rather than Spirit as the fundamental substance, and he gave his idea a militant spin: the philosophy of the act saw the world not as an accumulation of beings but as *actions*.

After writing *Theses on Feuerbach* and the *German Ideology*, Marx doesn't say very much about the concept of Activity, but it underlies *Capital* and all his writings.



Activity

Herder



Fichte



Hess



Marx

## Unit of Analysis

**AND FINALLY**, let us recapitulate the source of the idea of a unit of analysis to understand a process as a Gestalt. It began with Herder's idea of a *Schwerpunkt* or 'strong point', somewhat reminiscent of the idea of 'leading activity', as a way of understanding a people as a whole. This was then developed as a central theme by Goethe as the *Urphänomen*, the simplest, undeveloped example of a phenomenon which has all the characteristics of the whole. Hegel transformed this idea into the abstract concept, with its individual, particular and universal moments. The abstract concept functions as the foundation for a theoretical science as all aspects of a complex process can be unfolded logically out of its concept.



"Unit of Analysis"

Herder



Goethe



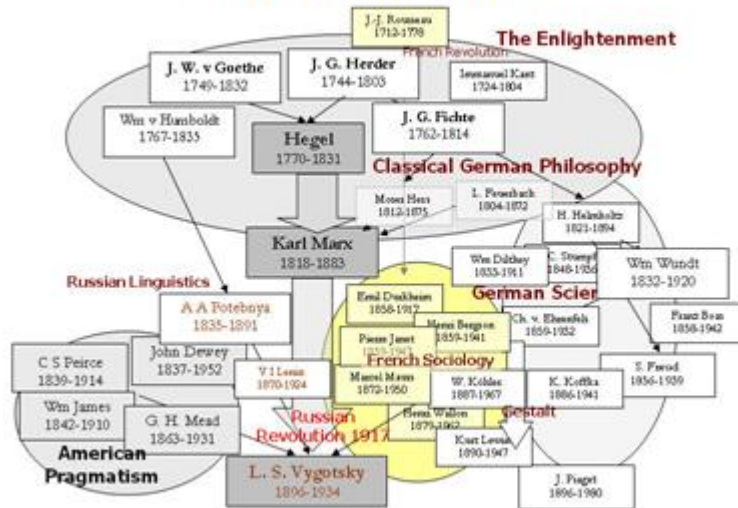
Hegel



Marx

Marx adopted Hegel's concept but maintained the materialist spirit of Goethe's original idea, which had become obscured in Hegel's elaborate system. Marx made it the foundation of *Capital*, and it was through the study of *Capital* that Vygotsky acquired the idea and dubbed it the 'unit of analysis'.

# *In Conclusion*



<http://lchc.ucsd.edu/mca/Paper/Genealogy-CHAT.htm>