

# Philosophical Profiles

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19.10.2010 – 9.1.2012 (last update)

[abstracts](#) [home](#)

**keywords:** philosophical profile, plurality, archic matrix, Aristotle

## Introduction

This file contains (for the time being) some preliminary research, related to the concept 'philosophical profile', involving

- an analysis of the plurality of pluralisms
- an (exemplary) analysis of the works of Aristotle
- preparatory steps related to the setup of a website, dedicated to philosophical profiling, at first leaning heavily on the work of the pluralists McKeon, Watson and Dilworth

Below abstracts and sketches that serve(d) as a starting point for discussions on these topics within the study-and-research-group of the ALFI (The Association of Graduates of the Faculty of Philosophy of the University of Groningen in The Netherlands, Europe).

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**Links** to places on this page where you can find **abstracts** of / about:

[Aristotelian Metaphysics](#) (in shortcuts, obw)  
[Aristotelian Hermeneutics](#) (in shortcuts, obw)  
Falcon, A., [Aristotle on Causality](#) (SEP)  
Kraut, R., [Aristotle's Ethics](#) (SEP)  
Mark Cohen, S., [Aristotle's Metaphysics](#) (SEP)  
Mason, E., [Value Pluralism](#) (SEP)  
McKeon, R., [Introduction to Aristotle](#), 1947  
Robinson, H., [Substance](#) (SEP)  
Shields, C., [Aristotle](#) (SEP)  
Studtmann, P., [Aristotle's Categories](#) (SEP)  
Watson, W., [The Architectonics of Meaning](#); Foundations of the New Pluralism  
1985, 1993

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**Links** naar **abstracts** in het Nederlands

Aristoteliaanse ethiek ([dispuut 21.2.2011](#))  
Aristoteliaanse levensfilosofie (samenvatting '[Über die Seele](#)')  
Aristoteliaanse fysica (samenvatting '[Physik](#)')

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**Sites**

Falcon, A., [Aristotle on Causality](#) (SEP)  
Flyvbjerg, B., [wiki](#) ([Phronetic social science](#))  
Kraut, R., [Aristotle's Ethics](#) (SEP)  
MacIntyre, A., [wiki](#) (virtue ethics)  
Mark Cohen, S., [Aristotle's Metaphysics](#) (SEP)  
Mason, E., [Value Pluralism](#) (SEP)  
McKeon, R., [wiki](#)  
Nicomachean Ethics [wiki](#)  
Robinson, H., [Substance](#) (SEP)  
Shields, C., [Aristotle](#) (SEP)  
Studtmann, P., [Aristotle's Categories](#) (SEP)

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Hans Achterhuis – [van Plato naar Hannah Arendt](#)

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## **Abstracts in this file**

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McKeon, R., [Introduction to Aristotle](#), 1947

Some progress had been made in the use of scientific method by the scientific investigations of the atomists, Leucippus and Democritus, the definitions of the Pythagoreans, the logical inquiries of Socrates into the nature of definition and inductive arguments, and the dialectical devices and theories of Plato. These developments, however, illustrated two extremes of method: the atomists reduced scientific explanation to the discovery of the material parts of the object to be explained and the dialecticians gave explanations which were inapplicable to the changing things of experience. In both approaches the true scientific method was distorted, and Aristotle's conception of scientific method is designed therefore to provide both the treatment of first principles which was inadequate in the practice of the atomists and the applications to motion and material things which were inaccurate in the theory of

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the dialecticians. Its novelties center about the treatment of causes, by which the application of principles to things is insured, and the analysis of terms and propositions, by which the accuracy of statement and inference is ascertained.

Yet to explain natural substances and motions, consideration of the efficient and final causes were of crucial importance, and Aristotle found only little and confused evidence of their use by his predecessors.

[ A's pluralism: ] the use of the causes permitted him to differentiate a scheme of distinct sciences with distinguishable subject matters, principles, and methods, where Democritus and Plato had, according to Aristotle, only a single, unified science.

Art and science supply the causes, art for the processes of action and production, science for the understanding of being and natural change. Deliberation concerning actions to be taken is distinct from inquiry into the nature of things, and understanding of the affairs of men is distinct from opinion and scientific knowledge.

But the possibility of knowledge of any kind, theoretic or practical, depends on the discovery of causes and on the transition from individual things perceived to universals understood.

The principles of the physical sciences are arrived at by induction from the changing things of experience.

Surfaces and volumes, lines, points, and numbers can be abstracted in thought and treated separately in science. The possibility of mathematics depends on this peculiarity which adapts quantity alone among the properties of things to abstract treatment. Finally, those forms which not only can be known apart but also exist apart [?] from matter and motion are studied in First Philosophy or metaphysics.

Mathematics is distinct from both physics and metaphysics. It is not, as it has been conceived in the Platonic tradition, the basic theory on which physics is built, but rather the study of that one property of sensible things, quantity, which yields an order and matter for scientific inquiry abstracted from the natural connections and motions of things. Mathematical premisses are not necessarily true if the conclusion which is shown to follow from them is known to be true.

This is different in physics: if something happens it should be shown that the antecedent steps must necessarily have occurred, but it does not follow from the existence of the antecedent stages that the effect must necessarily follow. In metaphysics universal considerations and essential properties are absolutely necessary.

The end of the practical sciences, on the other hand, is not merely to know, but rather to act in the light of knowledge. Since the end of the practical sciences is action, they have to do with potentialities, situations, and things which may be modified by human intelligence and volition.

The principle of production is reason, or art, or some potency in the producer, while the principle of action is the will in the doer. Reason is therefore more important in art than in action, while the character of the agent is of crucial importance in the judgment of actions but irrelevant in art.

Ethics is a subdivision [?] of Politics, and human conduct is studied in both, in ethics from the point of view of personal morality but with the recognition that the conduct of the individual is influenced by political institutions, in politics from the point of view of the associations and institutions of men but with the recognition that the character of communal institutions is determined by traits of the men who compose them. In both sciences, a natural foundation is sought for the ends of action and association. Ethics is concerned with the study of virtues, which are not natures or natural powers but habits; a natural basis is found for habits, however, in the potentialities of man which are influenced by repeated actions or passions. The arts as conceived by Aristotle to include not only such arts as painting, music, and poetry, but also medicine, architecture, cobbling, and rhetoric.

## Logic

The Posterior Analytics treats of demonstration or scientific proof, which is reasoning based on true and primary premisses, that is, premisses which state the causes of the phenomena to be explained. The Topics treats of dialectical reasoning, which is based on opinions generally accepted, rather than on scientific premisses, which are believed on the strength not of something else but of themselves. On Sophistical Refutations, finally, treats of fallacious arguments which start from opinions that seem to be accepted generally, but are not really, or which seem to reason from opinions that are or seem to be accepted generally.

[ two instances of deductive syllogism:

A. Planets do not twinkle; what does not twinkle is near; therefore, planets are near.

B. Planets are near; what is near does not twinkle; therefore, planets do not twinkle.

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Syllogism A demonstrates the fact that planets are near but does not explain it because it does not state its causes. On the contrary, syllogism B is explanatory because it gives the reason why planets do not twinkle: because they are near. B shows an asymmetrical relation between premisses and conclusion. Causes are [not transcendental (vs Plato) but inherently actualized] essential properties of their subjects and necessitate their effects. A thought that the logical necessity by which the conclusion follows from the premises of an explanatory argument mirrors the physical necessity by which causes produce their effects. While Plato contrasted the inherent [transcendental] structure of Essences with the flux of all phenomenal things, Aristotle taught that, from a condition of potentiality, each phenomenal thing necessarily strives toward achievement of a full reality in which its inherent [non-transcendental] essence is actualised. Unlike Plato, the efficient cause for Aristotle is normally another phenomenal object, and not a transcendental Essence. Apple-seeds (potentially) can produce (actualize) an apple-tree, not a pear-tree. This fact demonstrates that there are 'essential' differences between apples and pears. The issue was: are these 'essential' differences something external (outside the phenomenon, transcendent) or something internal (belonging to the structure of the phenomenon itself, immanent).  
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### Physics

Aristotle conceived physics the science of natures and of natural changes broadly to include not only inorganic processes such as those studied in astronomy, physics, chemistry, and meteorology, but also biological and psychological phenomena. Four of his treatises on physics in the narrow sense have survived.

In *On Generation and Corruption* he treats of the causes of changes other than local motion which terrestrial bodies undergo, such as generation and corruption (or change in substance), alteration (or change in quality), and growth and diminution (or change in size).

Aristotle's treatment of the principles of motion reflects his conception of the organization of the sciences, the requirements of proof, and the analysis of being.

Kind of causes (formal, material, final, or efficient) - the examination of causes yields the middle terms of scientific proof.

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### Psychology and Biology

The study of the soul is a part of physics, as conceived by Aristotle, since the soul is the form of a natural body; and all branches of biological inquiry are dependent on the study of the soul, since the soul is the form of those natural

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bodies which have life potentially within them. The functions which the soul explains include, therefore, nutrition, growth, and reproduction (which animals share with plants), sensation, emotions, memory, and local motion (which man shares with other animals), and thought (which is peculiar to man among animals, although God [gods] in a sense shares [share] in thinking). The soul is related to the organic body as actuality is related to potentiality. It is the "substance" of the organic body, that is, it corresponds to the definition of the organic body's essence, in such fashion according to Aristotle's example, that if an axe were a natural rather than an artificial body, its soul would be "cutting," and if the eye were an animal rather than an organ, its soul would be "seeing."

In the treatise *On the Soul*, the soul is presented as the formal, efficient, and final cause of living, and the processes of sensation and thought are elaborated at considerable length.

Aristotle differentiates the method of the "true physicist," who investigates the functions of the soul by considering both matter and form, from the method of the "dialectician," who neglects the matter, and that of the materialistic "physicist," who reduces all explanation to the enumeration of material parts.

Psychological inquiries occupy an extremely important position in the philosophy of Aristotle, for the conception of the soul lays the foundation for the continuity of functions in nature, mounting continuously from the lifeless, to plants and animals; it provides an analysis of intellectual processes which would account for the character of the principles and materials employed in scientific inquiries and proofs; it lays the broad distinctions of potentialities in man which become by action and habituation the moral and intellectual virtues.

### Metaphysics

Metaphysics constitute an independent science in the system of Aristotle, variously designated by him as "First Philosophy," "Theology" or "Wisdom". For in a philosophy in which sciences are distinguished by their proper principles and their proper subject matter, the examination of the first principles of the sciences or of the being shared by the diverse genera of things investigated in the various sciences does not fall within the province of any one of those sciences but constitutes the field of inquiry of a separate science. (..) Aristotle found that [ Democriteans ] his predecessors had tended first to limit their attention

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to material causes, that is, to explain things by the matter or the elements of which they are composed, and then [Platonists] had turned to the formal causes, that is, essences and definitions which they separated from matter and constituted into independent and self-subsistent Forms. The efficient cause and the final cause, that is, the source of the change and what it is to eventuate in, which Aristotle conceived to be his own peculiar contribution to the discussion of causes, were touched on only sporadically and vaguely by a few philosophers like Empedocles and Anaxagoras.

Aristotle argues that truth and falsity are not in things, but only in thoughts, and that the differentiation of essential and accidental traits, which is necessary in scientific inquiry, is irrelevant to the conditions of being.

If there were no separated substances, all sciences would be reduced to physics (vs the Democriteans), while if forms and numbers were conceived to be separated all philosophy would be reduced to mathematics (vs the Pythagoreans and Plato).

### Ethics

Since every art, inquiry, and action is directed to some good, the investigation of moral problems takes its peculiar turn in the philosophy of Aristotle from his undertaking to treat that end as a principle and a cause relative to the potentialities of man. For although there is some verbal agreement among men identifying the good with happiness, there is no agreement concerning what happiness is, and Aristotle concludes that happiness must be defined, not in terms of something else with which it is identical, but in terms of activity of the soul in accordance with perfect virtue.

The study of ethics is therefore in good part a study of virtues, that is, a study of values and actions not in terms of ends in which the action terminates but in terms of habits from which it originates, and the inquiry is in that sense functional and determined by the peculiarities and potentialities of individual men. "Habit" is a source of action distinct from "nature" which is not altered as a principle of motion by prior actions or by the influence of a rational principle, and from "art," which is more dependent than virtue on knowledge. There is no virtue proper to the vegetative faculty of the soul, since its functions are not affected by reason, but there are two varieties of virtues, moral virtues proper to the appetitive soul which shares in a rational principle, and intellectual virtues proper to the intellectual soul. In addition to the virtues, however, Aristotle

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considers continence and superhuman virtue (which are also moral states), pleasure (which some men think a good and which is a mark of the good in the virtuous man), friendship (which either is a virtue or implies virtue), and the influence of the state in the inculcation of virtue. The relativity of the moral virtues to the potentialities of the individual man and the peculiarities of his environment does not lead to a moral relativism, however, for political justice is in part natural, and moral virtue is in accordance with the rule of right reason or of practical wisdom. Practical wisdom is in turn so closely dependent on philosophic wisdom, that wisdom may be said to be the formal cause of happiness, and happiness in the highest sense is found in the contemplative life.

The ethics of Aristotle reflects in many ways the place which it occupies in the system of the Aristotelian sciences. It is itself a science, although it does not employ the same method as the theoretic sciences and it does not aim at the same precision. It depends on the nature of man and borrows dialectical distinctions therefore from psychology to differentiate moral from intellectual virtues. Yet it treats, among the intellectual virtues, of those habits of mind which are the source of discursive scientific proof, intuition of first principles, and wisdom itself which combines scientific proof and principles. Moreover, among the practical sciences, it is not distinct, strictly, from political science, but it is rather the other aspect of the analysis of human action by which the study of the associations of men (which are affected by the character of their members) is supplemented by the study of the virtues of men (which are affected by political institutions). Political science, finally, which as a science makes use of first principles treated properly in metaphysics, is itself an "**architectonic science**" and as science of action determines what sciences will be studied in the state and in what manner.

## Politics

Since every community is established with a view to some good, the investigation of political problems takes its peculiar turn in the philosophy of Aristotle from his undertaking to treat the communities of men in terms of the natural bases of human association and the varieties of ends obtainable by association. He stresses the differences that distinguish the qualifications of statesman, king, householder, and master, which Plato had argued were the same, and his demonstration that the state is "natural," since it is essential to living well, is based on analysis of its parts the

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family, the household, and village which are likewise "natural" since they are essential to mere living.

There is therefore a basic **pluralism** and **dynamism** in the political analyses of Aristotle, for there are as many kinds of states as there are characteristics in men and their situations affecting human relations or the purposes that may be sought in association.

There is no simple relation between ethics, which is part of political science, and political science conceived as the study of the state, for the state influences the education and formation of its citizens and the character of its citizens determines the constitution of the state. Nor is there a simple relation between politics and the theoretic sciences, for knowledge affects the conditions of citizens and states, and states influence the development of science; nor indeed between politics and the arts, since the same interdependence is found there.

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#### Rhetoric and Poetic

Rhetoric is closely allied to logic, for it is the counterpart of dialectic, in Aristotle's analysis, and it has not infrequently been used by his successors to suggest improvements or substitutions for logical devices. It has a moral and political dimension, and the Sophists, as Aristotle views their practices, confused it with the art of politics. It is finally a verbal art, the development of which, both before Aristotle's analyses and since, has been closely associated with the interpretation of poetry. Consistent with his differentiations among the arts and sciences, Aristotle separates the arts of rhetoric and poetic.

Rhetoric like dialectic is opposed to the method of science and limited to questions on which variation of opinion is possible. There are three modes of persuasion available to a speaker: the use of his character to make his speech credible, the excitation of desired emotions in the audience, and proof or apparent proof.

Virtues are judged by the state of character from which the action is produced and arts are judged by the quality of the objects produced by the action.

Nature is a cause of motion internal to the thing moved, while art is an external cause employed by the artist to impose on matter a form first conceived in his mind, and artificial objects are not natures or substances and therefore have no strict definitions comparable to those discovered in physics for natural objects.

Shields, C., [Aristotle](#) (SEP)

The Aristotelian sciences divide into three: (i) theoretical, (ii) practical, and (iii) productive. The principles of division are straightforward: theoretical science seeks knowledge for its own sake [ metaphysics, mathematics, physics (also including biology, )]; practical science concerns conduct and goodness in action, both individual and societal [ ethics, politics ]; and productive science aims at the creation of beautiful or useful objects [ agriculture, architecture, medicine, rhetoric and the arts ]

Aristotle developed the first formalized system of logic and valid inference. In Aristotle's framework—although he is nowhere explicit about this—logic belongs to no one science, but rather formulates the principles of correct argumentation suitable to all areas of inquiry in common. ( Organon (= tool) deals with category theory, the doctrine of propositions and terms, the structure of scientific theory, and to some extent the basic principles of epistemology)

Human beings philosophize, according to Aristotle, because they find aspects of their experience puzzling (aporiai). We begin philosophizing by laying out the phenomena, the appearances, or, more fully, the things appearing to be the case, and then also collecting the endoxa, the credible opinions handed down regarding matters we find puzzling. If the objections are answered and the credible opinions remain, we shall have an adequate proof.

Appearances tend to track the truth. While our faculties are not infallible, neither are they systematically deceptive or misdirecting.

Philosophical discussions start with endoxa (opinions we spontaneously regard as reputable or worthy of respect, even if upon reflection we may come to question its veracity). Aristotle applies his method of running through the phenomena and collecting the endoxa widely, in nearly every area of his philosophy.

### Logic, Science, and Dialectic

Whereas science relies upon premises which are necessary and known to be so, a dialectical discussion can proceed by relying on endoxa, and so can claim only to be as secure as the endoxa upon which it relies. Minimally, however, all reasoning—whether scientific or dialectical—must respect the canons of logic and inference. Aristotle not only developed a theory of deduction, now called syllogistic, but added to it a modal syllogistic and went a long way towards proving some meta-theorems pertinent to these systems.

Aristotle approaches the study of logic not as an end in itself, but with a view to its role in human inquiry and explanation. Logic is a tool, he thinks, one making an important but incomplete contribution to science and dialectic. Its contribution is incomplete because science (epistêmê) employs arguments which are more than mere deductions. Science not only reports the facts but also explains them by displaying their priority relations. Science seeks to capture not only the causal asymmetries in nature, but also its deep, invariant patterns.

Aristotle contends that not all knowledge is demonstrative: knowledge of the immediate premises is indemonstrable. Knowers move from perception to memory, and from memory to experience (empeiria) and from experience to a

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grasp of first principles. Somehow we begin in sense perception and build up to an understanding of the necessary and invariant features of the world.

Not all rigorous reasoning qualifies as scientific, e.g. reasoning about any matter proposed to us on the [ sole ] basis of endoxa. A in Topics: Dialectic is useful for three purposes: for training, for conversational exchange, and for sciences of a philosophical sort (..) since it is what cross-examines, dialectic contains the way to the first principles of all inquiries.

### Essentialism and Homonymy

Sciences capture essences: genuinely necessary features of reality ((i) to ti esti (the what it is); (ii) to einai (being); (iii) ousia (being); (iv) ho per esti (precisely what something is) and, most importantly, (v) to ti ên einai (the what it was to be)), the last being Aristotle's favored technical term for essence. It is an abbreviated way of saying 'that which it was for an instance of kind K to be an instance of kind K'. There is some feature F which all and only humans have in common and, second, that F explains the other features which we find across the range of humans. Aristotelian essentialism differentiates his approach from the now more common modal approach, according to which:

F is an essential property of x =df if x loses F, then x ceases to exist.

Propria are non-essential properties which flow from the essence of a kind (e.g. being capable of grammar is flowing from being reasonable).

Aristotelian essentialism holds:

F is an essential property of x =df (i) if x loses F, then x ceases to exist; and (ii) F is in an objective sense an explanatorily basic feature of x.

A denies essentialism in many cases where others are prepared to embrace it (vs Pato & Platonists, who often mistakenly hold homonyms for synonyms – e.g. Aristotle counters that Plato is wrong to assume that goodness is 'something universal, common to all good things, and single'. Rather, goodness is different in different cases.).

Aristotle insists that there is a tertium quid between family resemblance and pure univocity, a kind of core-dependent homonymy (focal meaning or focal connexion) as in e.g.:

Socrates is healthy.

Socrates' exercise regimen is healthy.

Socrates' complexion is healthy.

At one point, Aristotle denies that there could be a science of being, on the grounds that there is no single genus being under which all and only beings fall, but there is nonetheless a science of being qua being - his recognition of this science evidently turns crucially on his commitment to the core-dependent homonymy of being itself.

Socrates exists.

Socrates' location exists.

Socrates' weighing 73 kilos exists.

Socrates' being morose today exists.

the last 3 depending on Socrates' protê ousia (primary being).

### Category Theory

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Of things said without combination, each signifies either: (i) a substance (ousia); (ii) a quantity; (iii) a quality; (iv) a relative; (v) where; (vi) when; (vii) being in a position; (viii) having; (ix) acting upon; or (x) a being affected. (Cat. 1b25–27)

The constituents of facts contribute to facts as the semantically relevant parts of a proposition contribute to its having the truth conditions it has. Thus, the items categorized in Aristotle's categories are the constituents of facts. These beings (facts) may be basic without being simple.

The theory of categories in total recognizes ten [exhaustive and irreducible] sorts of extra-linguistic basic beings:

**Category Illustration**

Substance	man, horse
Quality	white, grammatical
Quantity	two-feet long
Relative	double, slave
Place	in the market
Time	yesterday, tomorrow
Position	lying, sitting
Having	has shoes on
Acting Upon	cutting, burning
Being Affected	being cut, being burnt

(According to Kant, Aristotle's categories are groundless.)

Example: time. A claims that 'time is the measure of motion with respect to the before and after' (Phys. 219b1–2) > time does exist, because it is an entity in the category of quantity [ in physics ] : time is to motion or change as length is to a line. Time thus exists, but like all items in any non-substance category, it exists in a dependent sort of way: no change, no time. As time is a dependent entity in Aristotle's theory, so too are all entities in categories outside of substance. All the non-substance categories rely upon substance as the core of their being. So, he concludes, being qualifies as a case of core-dependent homonymy.

Aristotle's philosophy of being and substance, like much else in his philosophy, relies upon an antecedent commitment to his theory of categories. For this reason, questions regarding the ultimate tenability of Aristotle's doctrine of categories take on a special urgency for evaluating much of his philosophy.

**The Four Causal Account of Explanatory Adequacy**

What it is (formal), what it is made of (material), what brought it about (efficient), and what it is for (final): the questions for meeting explanatory adequacy (being necessary and sufficient for an adequate explanation).

Example: a bronze statue:

**The Four Causes**

The material cause: that from which something is generated and out of which it is made, e.g. the bronze of a statue.

The formal cause: the structure which the matter realizes and in terms of which it comes to be something determinate, e.g., the shape of the president, in virtue of which this quantity of bronze is said to be a statue of a president.

The efficient cause: the agent responsible for a quantity of matter's coming to be informed, e.g. the sculptor who shaped the quantity of bronze into its current shape, the shape of the president.

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The final cause: the purpose or goal of the compound of form and matter, e.g. the statue was created for the purpose of honoring the president.

NB not all phenomena admit of all four causes (e.g. a coincidence lacks a final cause, a mathematical triangle lacks a material cause).

A forges a general connection between causal explanation and knowledge where he thinks that the four **aitia** feature in answers to knowledge-seeking questions (Phys. 194b18; A Po. 71 b 9–11, 94 a 20).

(Most critical judgments vs A's 4 causes reflect an antecedent commitment to one or another view of causation and explanation—that causation relates events rather than propositions; that explanations are inquiry-relative; that causation is extensional and explanation intensional; that explanations must adhere to some manner of nomic-deductive model, whereas causes need not; or that causes must be prior in time to their effects, while explanations, especially intentional explanations, may appeal to states of affairs posterior in time to the actions they explain.)

### Hylomorphism

=df ordinary objects are composites of matter and form

Aristotle's hylomorphism was formulated originally to handle various puzzles about change. In whatever category a change occurs, something is lost and something gained within that category, even while something else, a substance, remains in existence, as the subject of that change. What remains is matter and what is gained is form.

Another fundamental distinction is that between potentiality and actuality ( e.g. bronze is potentially a statue, ... ).

\* form =df that which makes some matter which is potentially F actually F

\* matter =df that which persists and which is, for some range of Fs, potentially F

### Aristotelian Teleology

Aristotle observes that nothing potential can bring itself into actuality without the agency of an actually operative efficient cause. The operation of some actuality upon some potentiality is an instance of efficient causation.

It is natural and easy for us to recognize final causal activity in the products of human craft. The ends of artefacts are the results of the designing activities of intentional agents. Aristotle recognizes these kinds of final causation, but also, and more problematically, envisages a much greater role for teleology in natural explanation: nature exhibits teleology without design [ intentionality ] – teleology as immanent in nature.

A: If, then, these are either the result of coincidence or for the sake of something, and they cannot be the result of coincidence or spontaneity, it follows that they must be for the sake of something. (Phys. 198b32–199a8)

A: puzzlement for those who wonder whether it is by reason or by some other faculty that these creatures work—spiders, ants and the like - If then it is both by nature and for an end that the swallow makes its nest and the spider its web, (..) it is plain that this kind of cause is operative in things which come to be and are by nature. And since nature is twofold, as matter and as form, the form is the end, and since all other things are for sake of the end, the form must be the cause in the sense of that for the sake of which. (Phys. 199a20–32)

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## Substance

Aristotle insists upon the primacy of primary substance in his *Categories*. We have not one but three potential candidates for primary substance: form, matter, and the compound of matter and form. The question thus arises: which among them is the primary substance? Is it the matter, the form, or the compound? In the middle books of his *Metaphysics*, which contain some of his most complex and engaging investigations into basic being, Aristotle settles on form (*Met.* vii 17) as being both knowable and particular ( and because matter seems to be form-dependent for its own diachronic identity conditions ). Socrates is something else [ than the material parts he consists of ], something more (heteron ti; *Met.* 1041b19–20). This something more is form, which is 'not an element...but a primary cause of a thing's being what it is' (*Met.* 1041b28–30).

## Living Beings

The soul is the cause and source of the living body.

Soul and body are simply special cases of form and matter:

soul:body :: form:matter :: actuality:potentiality

The soul, as the end of the compound organism, is also the final cause of the body. The soul is the 'first actuality of a natural organic body' (*DA* ii 1, 412b5–6), that it is a 'substance as form of a natural body which has life in potentiality' (*DA* ii 1, 412a20–1) and, again, that it 'is a first actuality of a natural body which has life in potentiality' (*DA* ii 1, 412a27–8).

Aristotle deploys hylomorphic analyses not only to the whole organism, but to the individual faculties of the soul as well. Perception involves the reception of sensible forms without matter, and thinking, by analogy, consists in the mind's being enformed by intelligible forms.

## Happiness and Political Association

According to *A* a good is a life lived in accordance with reason. Happiness (eudaimonia) is achieved by fully realizing our natures, by actualizing to the highest degree our human capacities. In determining what eudaimonia consists in, Aristotle makes a crucial appeal to the human function (ergon), and thus to his overarching teleological framework. When he says that happiness consists in an activity in 'accordance with virtue' (kat' aretên; *EN* 1098a18), Aristotle means that it is a kind of excellent activity, and not merely morally virtuous activity. The suggestion that only excellently executed or virtuously performed rational activity constitutes human happiness provides the impetus for Aristotle's virtue ethics.

*A*'s *Nicomachean Ethics* introduced political theory as a continuation and completion of ethical theory. The basic political unit for Aristotle is the polis (both state and civil society), regarding human beings as by nature political animals.

Central question: what sort of political arrangement best meets the goal of developing and augmenting human flourishing?

Six possible forms of government, three correct and three deviant:

	Correct	Deviant
One Ruler	Kingship	Tyranny
Few Rulers	Aristocracy	Oligarchy

Many Rulers	Polity	Democracy
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Necessary to the end of enhancing human flourishing, maintains Aristotle, is the maintenance of a suitable level of distributive justice.

Falcon, A., [Aristotle on Causality](#) (SEP)

From the very beginning, and independently of Aristotle, the investigation of the natural world consisted in the search for the relevant causes of a variety of natural phenomena. According to A his predecessors lacked a complete understanding of the range of possible causes and their systematic interrelations - most of his predecessors recognized only the material and the efficient cause.

A develops a theory of causality in Physics II 3 and Metaphysics V 2.

A distinguishes four causes:

- \* The material cause: “that out of which”, e.g., the bronze of a statue.
- \* The formal cause: “the form”, “the account of what-it-is-to-be”, e.g., the shape of a statue.
- \* The efficient cause: “the primary source of the change or rest”, e.g., the artisan, the art of bronze-casting the statue, the man who gives advice, the father of the child.
- \* The final cause: “the end, that for the sake of which a thing is done”, e.g., health is the end of walking, losing weight, purging, drugs, and surgical tools.

<picture aristotle\_causes>

[A problem with this example could be a tendency to interpret it psychologically (involving e.g. the beliefs, desires, intentions etc of the artist. These psychological factors seem not to be relevant in the explanation of natural phenomena.]

The four causes have to explain natural change. Aristotle offers final causality e.g. as his explanation for this regular connection: the teeth grow in the way they do for biting and chewing food and this is good for the animal. In the first book of the Parts of Animals A argues for the explanatory priority of the final cause over the efficient cause.

Aristotle is not committed to the view that everything has [sc. needs for explanation] all four causes, let alone that everything has a final or formal cause. In the Metaphysics, for example, Aristotle says that an eclipse of the moon does not have a final cause (Metaph.1044 b 12). In each and every case there is some cause that is the primary cause about which one needs to know in order to have proper knowledge [sc for an adequate explanation].

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Interpretation questions:

Aristotle’s theory of causality as a way of understanding the human experience of physical nature OR as pertaining to that physical nature itself rather than the human experience of it?

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Final cause as overarching the other 3 causes? (e.g. Transformative Teleology drawing attention to the self-organizing complex responsive processes of emerging values, goals, strategies, and so on)

Generality/universality of the different causes?

if A then x% chance that B (probabilistic relation);  $0 \leq x \leq 100$ ; deterministic causation as an (marginal) instance of probabilistic causation.

different types of causation in different sciences, e.g.:

Physics: four fundamental forces (gravity, the strong and weak nuclear forces, and electromagnetism) 'cause' all events in the universe. Interpreting these forces causally is complicated in mechanics (e.g. gravity-tides), general relativity and quantum mechanics.

Biology & Medicine: association or causation in epidemiological research, e.g. the relation smoking and lung cancer.

History: historical events bringing about other historical events ( does this reify causes as ontological entities (Plato, Hegel) or is this an instance of the Aristotelian efficient cause?).

In the Physics Aristotle rejected Plato's assumption that the universe was created by an intelligent designer using eternal forms as his model. For Aristotle, natural ends are produced by "natures" (principles of change internal to living things), and natures, Aristotle argued, do not deliberate. P & A both vs metaphysical naturalism, or accidentalism of Democritus and Lucretius, like in "Nothing in the body is made in order that we may use it. What happens to exist is the cause of its use. (Lucretius, De Rerum Natura).

Can 'final cause' be interpreted as the 'function' (the 'what is it good for') of a phenomenon? If so, does function (always) imply a kind of teleology? Extrinsic finality: do something for the sake for something else (e.g. parent doing something for the sake of the child); intrinsic finality: do something for its own sake).

Modern (sc beta) science aims to develop explanations that avoid teleology. This does not mean that everything is reduced to 'mere necessity'.

Within the framework of thermodynamics, the irreversibility of macroscopic processes is explained in a teleological way. Gottfried Wilhelm Leibniz, Max Planck, and Alfred North Whitehead, among others, have claimed that least action principles are teleological. The immediately future state of the system depends on the whole path of the system, including future states.

In recent years, end-driven teleology has become contrasted with "apparent" teleology, i.e. teleonomy or process-driven systems. A teleonomic process, such as evolution, produces complex products without the benefit of a guiding intention, purpose or foresight.

The Kantian view sees teleology as a necessary principle for the study of organisms, but only as a regulative principle [of human understanding], and with no ontological implications.

Both "teleology" and "teleonomy" lack the precision to describe the physical mechanisms involved and do not address the potential role of [hyperincursion](#) in anticipatory computing of a system that contains a model of itself and/or its environment, computing its present state as a function of the prediction of the model (as applied in e.g. adaptation and feedback).

An incursion, an inclusive or implicit recursion, can be written as:

$$x(t+1) = F [\dots, x(t-1), x(t), x(t+1), \dots]$$

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Hyperincursion is an incursion with multiple solutions.

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Studtmann, P., [Aristotle's Categories](#) (SEP)

Aristotle's first system of classification is of beings, (τα οντοα) (1a20). The division proceeds by way of two concepts: (1) said-of [ universals (ta katholou) ] not-said-of [ particulars (ta kath' hekasta) ] and (2) present-in [ accidental, non-substantial ] or not-present-in [ non-accidental ]; non-accidental universals are essentials, non-accidental particulars are primary substances (prôtai ousiai). Aristotle divides what he calls ta legomena (τα λεγόμενα), i.e. things that are said [ words, concepts or the objects concepts are referring to? ], into ten distinct kinds [ categories ]: (1) substance; (2) quantity; (3) quality; (4) relatives; (5) somewhere; (6) sometime; (7) being in a position; (8) having; (9) acting; and (10) being acted upon.

Aristotle's two classificatory systems can, so to speak, be laid on top of each other. The resulting structure would look something like the following.

Substance	Quantity Relatives Quality ...
Said-of Not Present-In	Said-of Present-In
Not Said-of Not Present-In	Not Said-of Present-In

Whereas Plato treated the abstract as more real than material particulars, in the Categories Aristotle takes material particulars as ontological bedrock. Aristotle's equating an increase in generality with a decrease in substantiality is at least in spirit strongly anti-Platonic.

According to Aristotle, some words do not express a genus but instead are what he calls 'pros hen homonyms' — that is, homonyms related to one thing (pros hen), variously called cases of 'focal meaning' or 'focal connection' or 'core-dependent homonymy' in the literature on this topic. An example of such a homonym, according to Aristotle, is 'healthy'. Similarly, according to Aristotle, things in the world are not beings because they stand under some genus, being, but rather because they all stand in a relation to the primary being, which in the Categories he says is substance.

Substance (ousia)

- \* Immobile Substances — Unmoved Mover(s)
- \* Mobile Substances — Body
  - o Eternal Mobile Substances — Heavens
  - o Destructible Mobile Substances — Sublunary bodies
    - + Unensouled Destructible Mobile Substances — Elements
    - + Ensouled Destructible Mobile Substances — Living things
      - # Incapable of Perception — Plants
      - # Capable of Perception — Animals
        - \* Irrational — Non-Human Animals
        - \* Rational — Humans

Quantity

- \* Continuous Quantities
  - o line
  - o surface

- o body
- o time
- o place
- \* Discrete Quantities
  - o number
  - o speech

[ How can body be a species in both the category of quantity and the category of substance? ]

Aristotle's category of relatives is a kind of halfway house between the linguistic side of relations, namely relational predicates, and the ontological side, namely relations themselves.

Quality

- \* Habits and Dispositions
- \* Natural Capabilities and Incapabilities
- \* Affective Qualities and Affections
- \* Shape

Aristotle assumes rather than defends a posture of realism with respect to the metaphysical structures in the world. It is thus appropriate to assume realism along with him and then inquire into the question of which categories there might be.

Methods for generating a list of categories: (1) The Question Approach [ what is it: e.g. 1 Socrates > human > animal > living thing > ... > substance e.g. 2 whiteness > color > ... > quality ]; (2) The Grammatical Approach [ paying attention to the structures inherent in language ]; (3) The Modal Approach [ categories as those types of entity to which any sensible particular must be related ]; (4) The Medieval Derivational Approach [ categories as a priori derivations ].

Mark Cohen, S., [Aristotle's Metaphysics](#) (SEP)

Metaphysics is coined as terminus technicus in the 1<sup>st</sup> century, literally meaning coming after the book about Physics. A called it first [ highest ] philosophy', or 'the study of being qua [ in so far as they are ] being', or 'wisdom', or 'theology', dealing with the first causes (**aitia**) and the principles (**archai**) of [all] things.

A holds that the clearest examples of substances [(**ousia**)] are perceptible ones, but leaves open the question whether there are others as well.

Primary question: what is it to be a substance (tên ousian prôton ti estin)?

Four possible candidates for being the substance of something: essence, universal, genus, and subject.

subject: either matter or form or the compound of matter and form. In the Categories, individual substances (a man, a horse) were treated as fundamental subjects of predication. They were also understood, indirectly, as subjects of change. Change is seen in the Physics as a process in which matter either takes on or loses form. The subject criterion leads to the answer that the substance of x is the formless matter of which it is ultimately composed. But although matter is in a sense separate and in a sense 'some this', it cannot be both separate and

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'some this'. It thus does not qualify as the substance of the thing whose matter it is.

essence (to ti ên einai, o ti esti): only primary essences are substances. The 'eidos' that is primary substance in Book Z is not the species that an individual substance belongs to, but the form that is predicated of the matter of which it is composed.

Both the matter and the form must pre-exist. But the source of motion in both cases — what Aristotle calls the "moving cause" of the coming to be — is the form. The substance of a thing is its form.

A substantial form is the essence of a substance, and it corresponds to a species. Since it is an essence, a substantial form is what is denoted by the definiens of a definition. Since only universals are definable, substantial forms are universals. But Z.13 states that universals are not substances.

Some maintain that Aristotle's theory is ultimately inconsistent, on the grounds that it is committed to all three of the following propositions:

- (i) Substance is form.
- (ii) Form is universal.
- (iii) No universal is a substance.

There are two main, and opposed, lines of interpretation. According to one, Aristotle's substantial forms are not universals after all, but each belongs exclusively to the particular whose form it is, and there are therefore as many substantial forms of a given kind as there are particulars of that kind. According to the other, Aristotle's arguments in Z.13 are not intended to show that no universal is a substance, tout court, but some weaker thesis that is compatible with there being only one substantial form for all of the particulars belonging to the same species.

Conclusion that a universal cannot be the substance of all of its instances (for it could not be 'idion' to all of them), and conclusion that it must be the substance "of none." But note that this conclusion does not say that no universal can be a substance, but only that no universal can be the substance of any of its instances. [ > an universal form as the substance of a species, a particular form as the substance of an instance of a species? ]

Z17 A's new idea is that a substance is a "principle and a cause" (archê kai aitia) of being. A: "what we seek is the cause, i.e., the form, by reason of which the matter is some definite thing; and this is the substance of the thing" (1041b6-9) and "the primary cause of its being".

Matter and form is a synchronical distinction. A diachronical distinction is that between potentiality (dunamis) and actuality (entelecheia or energeia). Dunamis is the power that a thing has to produce a change [of itself]. The exercise of such a power is a kinêsis — a movement or process. Dunamis as 'potentiality' is not a thing's power to produce a change but rather its capacity to be in a different and more completed state.

Universals are not material objects, and so it is not clear how they can be viewed as hylomorphic compounds. But Aristotle has at his disposal a concept that can fill this bill perfectly, viz., the concept of intelligible matter (hulê noêtê). (The main purpose of intelligible matter is to provide something quasi-material for pure geometrical objects). Aristotle concludes that "the proximate matter and the

form are one and the same thing, the one potentially, and the other actually ... the potential and the actual are somehow one.”

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Is het mogelijk om vast te stellen welke principes en oorzaken van het zijnde binnen en/of buiten het zijnde liggen? Als de principes en oorzaken die binnen het zijnde gevonden worden, het zijnde bevredigend verklaren, vervalt de noodzaak om te zoeken naar principes en oorzaken buiten het zijnde.  
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Kraut, R., [Aristotle's Ethics](#) (SEP)

Ethics has as subject good action for human well-being. Ethical virtues (justice, courage, temperance,... as rational, emotional and social skills) are central to a well-lived life. Practical wisdom is acquired through a practice in which friendship, pleasure, virtue, honor and wealth fit together as a whole.

Aristotle wrote two ethical treatises: the Eudemian Ethics and the Nicomachean Ethics (a later and improved version of the Eudemian Ethics). Both begin with a discussion of eudaimonia ( “happiness,” “flourishing”), and turn to an examination of the nature of aretê (“virtue,” “excellence”) and the character traits that human beings need in order to live life at its best.

There are differences of opinion about what is best [ the highest good ] for human beings. Aristotle assumes that the highest good has 3 characteristics: it is desirable for itself, it is not desirable for the sake of some other good, and all other goods are desirable for its sake.

Health, wealth and other resources promote the highest good. The ‘ergon’ (function, task) of a human is to act rationally in accordance with virtue - using reason well over the course of a full life, actualizing one’s virtues, is what ‘eudaimonia’ (happiness) consists in. Although we must be fortunate in having supportive parents, friends, good health etc, we ourselves share much of the responsibility for acquiring and exercising the virtues.

Could a rational foundation of virtues be provided (moral scepticism: no). Or do we have to start with the experience of enjoying what is just, courageous, generous and the like as noble, worthwhile, and enjoyable in themselves?

A regards ethics as an autonomous field within all branches of knowledge as a unified whole.

Virtuous activity makes a life happy not by guaranteeing happiness in all circumstances, but by serving as the goal for the sake of which lesser goods are to be pursued. Poverty, isolation, and dishonor are normally impediments to the exercise of virtue and therefore to happiness, although there may be special circumstances in which they are not. The possibility of exceptions does not undermine the point that, as a rule, to live well is to have sufficient resources for the pursuit of virtue over the course of a lifetime.

A distinguishes virtues of mind (intellect) and virtues of character.

Virtues of mind: theoretical reasoning and practical thinking.

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During childhood proper habits must be developed as basis for the to be acquired 'phronêsis' (practical wisdom). The virtuous person takes pleasure in exercising his intellectual skills and is able to resist irrational counter-pressures ('enkratês'), different from the evil person ('kakos', 'phaulos') who are driven by 'pleonexia' (the desire for more and more) which leaves them dissatisfied and full of self-hatred. But some vulnerability to these disruptive forces is present even in more-or-less virtuous people; that is why even a good political community needs laws and the threat of punishment.

Ethical virtue is not a kind of knowledge (vs Plato), but a "hexis" ("state" "condition" "disposition") - a tendency or disposition, induced by our habits, to have appropriate [ethical] feelings. A describes a kind of ethical topography as applying to every ethical virtue: all are located on a map that places the virtues between states of excess and deficiency. This 'mean' is to be determined in a way that takes into account the particular circumstances of the individual. This 'mean' does most of the time not have a quantitative meaning. E.g. 1 a judge searches for the verdict that results from a deliberative process that is neither overly credulous nor unduly skeptical. E.g. 2 in a situation that arouses anger, the virtuous agent looks for a response that avoids too much or too little attention to factors that must be taken into account in making a wise decision. [ OBW because the word 'mean' could raise the misunderstanding that the right ethical position is right in the middle, a better expression could perhaps be: 'proportional', sc to the circumstances ]

According to A emotions as anger and fear are not inappropriate (as the Stoics hold), but we have to learn how to master them and experience them in the right way at the right times for the sake of the "kalon" ( the "beautiful," "noble," or "fine").

Ethical Theory Does Not Offer a Decision Procedure. What must be done on any particular occasion by a virtuous agent depends on the circumstances, and these vary so much from one occasion to another that there is no possibility of stating a series of rules, however complicated, that collectively solve every practical problem. This feature of ethical theory is not unique; Aristotle thinks it applies to many crafts, such as medicine and navigation. The good person's reasoning does succeed in discovering what is best in each situation.

A makes it clear that certain emotions (spite, shamelessness, envy) and actions (adultery, theft, murder) are always wrong, regardless of the circumstances. So, although Aristotle holds that ethics cannot be reduced to a system of rules, however complex, he insists that some [restricting] rules are inviolable.

A: Virtue makes the goal right, practical wisdom the things leading to it. A good person starts from worthwhile concrete ends because his habits and emotional orientation have given him the ability to recognize that such goals are within reach, here and now. A discusses various kinds of intellectual virtues: theoretical wisdom, science (epistêmê), intuitive understanding (nous), practical wisdom, and craft expertise. Is exercising theoretical wisdom a more important component of our ultimate goal than practical wisdom, as suggested by RK? In X.7-8, A argues that the happiest kind of life is that of a philosopher—someone who exercises, over a long period of time, the virtue of theoretical wisdom, and has sufficient resources for doing so. Compare the political leader who needs a lot more resources in order to realize good(s) for the community.

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The highest good consists in [ a human approach of ] the pleasure of pure thought. This pleasure [of contemplation] accompanies other activities, and in some sense brings them to completion (or perfection). A pleasure's goodness derives from the goodness of its associated activity. To live our lives well we must focus on one sort of good above all others: virtuous activity.

Friendship. One might like someone because he is good, or because he is useful, or because he is pleasant. If friends are equally virtuous, their friendship is perfect.

Aristotle says that three kinds of lives are thought to be especially attractive: one is devoted to pleasure, a second to politics, and a third to knowledge and understanding. The happiest life is lived by someone who has a full understanding of the basic causal principles that govern the operation of the universe, and who has the resources needed for living a life devoted to the exercise of that understanding. Philosophical activities are better than ethical activities because the last ones are remedial: they are needed when something has gone wrong, or threatens to do so. The pleasures of exercising the ethical virtues are, in normal circumstances, mixed with pain. Unalloyed pleasure is available to us only when we remove ourselves from the all-too-human world and contemplate the rational order of the cosmos.

The best life is not to be found in the practice of politics. But the well-being of whole communities depends on the willingness of some to lead a second-best life - a life devoted to the study and practice of the art of politics, and to the expression of those qualities of thought and passion that exhibit our rational self-mastery.

The broad spectrum of consequentialist ethics, of which utilitarianism is likely the most well-known, focus on the end result or consequences, with such maxims as Utilitarian philosopher John Stuart Mill's "the greatest good for the greatest number", or the maximum utility. Hence they are teleological in nature. This is in contrast with deontological ethics, such as Immanuel Kant's Categorical Imperative, in which an end-result or consequences are less important, or even irrelevant, but the action itself, the means or will, is the focus.

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<http://www.iep.utm.edu/aris-eth/>

Learning to control impulses, desires, passions and fears, moral habituation (active acquiring of authentic knowledge and experience) leads to a stable moral character ([open-minded and balanced,] seeing truly and judging rightly) leads to hexis: virtue, manifesting itself in action leading to a pleasant life (natural pleasures having no opposite pain and no excess).

The goodness is never in the action but only in the doer (Ethics II,4). [?]

There is no single action that can be prescribed as right for every person and every circumstance.

What the person of good character loves with right desire and thinks of as an end with right reason must first be perceived as beautiful.

A tells us there are three kinds of good toward which our choices look, the pleasant, the beautiful, and the beneficial or advantageous. (1104b, 31-2)

The goods sought for their own sake are said to be of only two kinds, the pleasant and the beautiful. (1110b, 9-12) Lasting and satisfying pleasure never

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comes to those who seek pleasure, but only to the **philokalos**, who looks past pleasure to the beautiful. (1099a, 15-17, 13)

If all people competed for the beautiful, and strained to do the most beautiful things, everything people need in common, and the greatest good for each in particular, would be achieved ...for the person of moral stature will forego money, honor, and all the good things people fight over to achieve the beautiful for himself. (1169a, 8-11, 20-22)

The beautiful in A's Ethics is not an object of contemplation simply, but the source of action.

<http://www.humanities.mq.edu.au/Ockham/y67s08.html>

Moral virtue makes a person good at feeling and acting in accordance with judgment, and judging is the work of reason, which is made good at judging by practical wisdom. So 'virtue is concerned with... a mean relative to us, this being determined by... that principle by which the man of practical wisdom would determine it' (1107a1-5).

Perhaps A in his doctrine of the 'mean' is overemphasizing the right amount of feeling or action. It has other important aspects, which he mentions more briefly. 'To feel them (fear and confidence) at the right times, with reference to the right objects, towards the right people, with the right motive, and in the right way, is what is both intermediate and best' (1106 b20; cf. 1109 a25, 1110 b30).

The virtuous do the right thing without struggle or regret and with pleasure; the vicious do the wrong thing without hesitation and without remorse. Obviously most of us are neither virtuous nor vicious; to do what is right is often a struggle, and when we fail we suffer remorse.

A: virtuous acts in which human happiness consists, are themselves ends, done for their own sakes and not as a means to some further end. [ compare works of art and A's use of 'kalon' (beautiful) regarding virtuous acts ]

The intellectual virtues are either theoretical (intuitive reason, science, wisdom) or practical (art, practical wisdom). The intellectual virtues are not 'moral' in the modern sense; to be a good mathematician does not make a person morally good. However, to practice skilfully as a mathematician is a possible part of the good life, which is Aristotle's subject.

Happiness (eudaimonia) is not a state of mind, but consists in action (1098 a5), desirable in themselves, not... for the sake of something else, ... from which nothing is sought beyond the activity' (1076 b1-8). [ problem with the relation good & pleasure: pleasure in vice ] Good actions are internal (thinking, intentions) and external (acts of courage, justice etc.); internal (health) and external conditions (like tools, equipment, money, friends) are needed for carrying out the intentions. The optimal conditions are largely a matter of chance, whereas virtue and goodness... are not a matter of chance but the result of knowledge and purpose' (Politics 1322 a30). The virtue is self-sufficient, makes life desirable and lacking in nothing' (1097 b15) (cf Kant's 'good will', not as a mere wish, but as the straining of every means so far as they are in our control, as something which has its full value in itself (Groundwork of the Metaphysic of Morals, tr. H.J. Paton, New York, 1964, p.62)).

It is not possible to spend all one's time in activities desirable for their own sakes. Production is for the sake of instruments of further production or of possessions which are a means of intrinsically worthwhile action. Good action

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itself is its end' (1140 b7). 'Life is action not production' (*Politics* 1254 a8).  
[ distinguish means and ends and point out confusion where means are taken as ends ]

The good life consists primarily in intellectual activity, 'contemplating truth' either by oneself or better still with fellow workers (1177 b1). The part which engages in philosophical activity is rational in the strict sense and in itself, and the part perfected by moral virtue is rational in the sense that it is persuadable by reason. The good for human beings consists in performing their 'work' or 'function', the thing that only a human being can do, or what nothing else can do so well. Contemplation is higher and better, and is happiness 'primarily'; activities in accordance with practical virtue are happiness 'secondarily' because they are 'rational' in a secondary sense, and are lower in the cosmic scale of values.

Aristotle's ethics is not consequentialist. Consequentialism is the doctrine that the goodness or badness of an action always derives entirely from the goodness or badness of its consequences, so that no action is good or bad intrinsically. In A's view only actions can be good intrinsically [?], which is the opposite of consequentialism.

Friendship is reciprocal and explicit goodwill expressed in activity carried on in one another's presence, i.e. in a sharing of life. Aristotle distinguishes three kinds of friendship, based respectively on utility, pleasure and goodness. A friend is another self (1166 a31, 1170 b7); this is not literally true, it is a graphic way of saying again that disinterested love is possible, that we can 'identify' with another and make that person's good one of our own goals, sought for its own sake.

To A ethics and politics are two parts of the one subject. The happiness of the individual is the same as that of the state' (*Politics* VII.2), 'the end of individuals and of states is the same' (*Politics* VII.15). We need friends 'since man is a political creature and one whose nature is to live with others' (E.N., 1169 b18); this is the meaning of Aristotle's dictum that man is by nature a political animal (*Politics* 1253 a2) The end of political activity is not the production of external goods (affluence, economic growth, the national income), or military power (*Politics* VII, 2, 14); it is to enable citizens to live a life of leisure together as friends, sharing in intrinsically worthwhile activity (*Politics* VII. 3, 15). Friendship is most likely if citizens set their hearts not on scarce external goods, which bring people into competition and conflict, but on intrinsically worthwhile activities, and especially thought and discussion, for which a large supply of external goods is unnecessary (E.N., 1177 a28-, 1178 a25-, 1178 b35-). Politics is the 'master art', but it is merely an art, concerned with production. The politician tries to produce the conditions of the happy life, the philosopher lives it (1177 b15).

Compared with modern approaches to politics, Aristotle's is much more ethical. Aristotle is not a deontologist. There are objective standards (1113 a25-6, 1114 b7-, 1176 a15), but they are difficult or impossible to formulate in abstract terms [as obligatory rules]; one learns the standards by associating with virtuous people and becoming virtuous oneself -- a virtuous person decides intuitively, not by applying rules of duty.

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Comprehensiveness, and orientation to an overall goal, is a feature of teleological theories generally. What makes Aristotle's different is that the goal is activity of certain kinds. People who habitually use all, or too much, of their time preparing for the future [in production] are not living the good life 'throughout a complete life', because they are not living it now. Practical wisdom involves knowing how to allocate time -- judging the right moment to switch back and forth between production and action, and between practical action and intellectual activity, so as to strike the right balance between means and ends and among different elements of the end.

A: 'a possession is an instrument of action' (*Politics* 1254 a3); pleasure is a by-product of acting well. One of the advantages of the philosopher's life is that it is more 'self-sufficient', since 'it would seem to need external equipment but little' (1177 a28, 1178 a25).

[ vs a transformation of the intellectual life into a form of production, which has been helped along by K.R. Popper, who says that past philosophers were mistaken in supposing that knowledge requires a person knowing -- knowledge may be 'objective' in the sense that it consists in objects (e.g. computer offprints) and need not ever exist in anyone's mind. (See K.R. Popper *Objective Knowledge* (BD161.P73), p.106 ff.) ]

J.A. **Smith**, Aristotle Ethics Introduction, 2004

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The Ethics of Aristotle is one half of a single treatise of which his Politics is the other half. Both deal with one and the same subject. This subject is what Aristotle calls in one place the "philosophy of human affairs;" but more frequently Political or Social Science.

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The distinction is not that the one treats of Moral and the other of Political Philosophy, nor again that the one deals with the moral activity of the individual and the other with that of the State, nor once more that the one gives us the theory of human conduct, while the other discusses its application in practice, though not all of these misinterpretations are equally erroneous.

In the Ethics A explores the formation of an individual's character in his social and political context. But knowing what is (a) good (man) is not yet being (a) good (man). So in Politics A explores: by

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what organisation of social or political forces, by what laws or institutions can we best secure the greatest amount of good character? Aristotle draws no hard and fast distinction between the spheres of action of Man as individual and Man as citizen. Ethics is largely and centrally a treatise on Moral Education in order to be a good citizen.

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The subject-matter of Human Conduct is not governed by necessary and uniform laws.

At best, practical rules state probabilities, not certainties; a relative constancy of connection is all that exists, but it is enough to serve as a guide in life. Moral experience — the actual possession and exercise of good character —

is necessary truly to understand moral principles and profitably to apply them. The mere intellectual apprehension of them is not possible, or if possible, profitless.

All human life involves an ideal element—something which it is not yet and which under certain conditions it is to be. In that sense Greek Moral Philosophy is essentially idealistic. Necessity of knowledge {of the conditions of the best life} as {a condition of the best life}.

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The end is what we all, wise and simple, agree in naming “Happiness” (Welfare or Well-being). This is not physical pleasure, political power/honour of mere possession of wealth.

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Human Happiness lies in activity or energising, and that in a way peculiar to man with his given nature and his given circumstances, it is not theoretical, but practical in the development of certain relevant powers and capacities.

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The main factor which determines success or failure in human life is the acquisition of certain powers, sc virtues (“goodnesses,” “perfections,” “excellences,” or “fitnesses”), some being physical, others psysical, others rational (intellect acquired by study and character acquired by discipline). Character, good or bad, is produced by what Aristotle calls “habituation,” that is, it is the result of the repeated doing of acts which have a similar or common quality.

A’s doctrine of the ‘mean’ gives some nice examples of virtue as balancing between over-shooting and falling short, but A’s treatment is often forced and this form of the doctrine is of no great significance.

Difference voluntary act (could be influenced by passion or ignorance) and deliberate act (whole person in action).

Justice discussed by A not on the level of lawmaking, but on the level of judging and administrating, hampered by an unhappy attempt to give a precise mathematical form to the principles of justice.

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True practical wisdom and true goodness of character are interdependent; neither is genuinely possible or “completely” present without the other.

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Aristotle is not an intuitionist, but he recognises the implication in conduct of a direct and immediate apprehension both of the end and of the character of his circumstances under which it is from moment to moment realised.

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The phenomena of “Incontinence,” weakness of will or imperfect self-control, is not really solved by A.

Pleasure, according to A, is the natural concomitant and index of perfect activity, distinguishable but inseparable from it—“the activity of a subject at its best acting upon an object at its best.” The highest and best pleasures are those which accompany the highest and best activity.

True Happiness, great satisfaction can be found “in the life of the philosopher, the life of scientific and philosophic contemplation.” The great agency in the production of such life is the State operating through Law, which is Reason backed by Force. For its greatest efficiency there is required the development of a science of legislation.

A teleological view of human life and action: (1) Every human activity, but especially every human practical activity, is directed towards a simple End discoverable by reflection, and this End is conceived of as the object of universal human desire, as something to be enjoyed, not as something which ought to be done or enacted. Aristotle’s Moral Philosophy is not hedonistic but it is eudæmonistic, the end is the enjoyment of Happiness, not the fulfilment of Duty. (2) Every human practical activity derives its value from its efficiency as a means to that end, it is good or bad, right or wrong, as it conduces or fails to conduce to Happiness Thus his Moral Philosophy is essentially utilitarian or prudential. [ ? ]

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Criticism JAS: everything is both means and end, and so neither in distinction or separation, and all thinking about it which presupposes the finality of this distinction wanders into misconception and error. The thinking which really matters in conduct is not a thinking which imaginatively forecasts ideals which promise to fulfil desire, or calculates means to their attainment—that is sometimes useful, sometimes harmful, and always subordinate, but thinking which reveals to the agent the situation in which he is to act, both, that is, the universal situation on which as man he always and everywhere stands, and the ever-varying and ever-novel situation in which he as this individual, here and now, finds himself. In such knowledge of given or historic fact lie the natural determinants of his conduct, in such knowledge alone lies the condition of his freedom and his good.

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dispuut 21.2.2011 – korte inleidingen op Aristoteles  
Rob – logica  
Eite – psychologie  
Otto – ethiek  
Jan - metafysica

Aristotelianse Ethiek (AE) - samenvatting voor dispuut 21.2.2011

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De Aristotelianaanse wetenschappen zijn verdeeld in drie groepen:

- theoretische (wiskunde, fysica, biologie, metafysica)
- praktische (ethiek, politiek)
- productieve (landbouw, architectuur, medicijnen, retorica, kunst)

De praktische wetenschappen ethiek en politiek hangen nauw met elkaar samen. Enerzijds wordt het gedrag van het individu beïnvloed door politieke instituties en anderzijds wordt het karakter van politieke instituties bepaald door kenmerken van de mensen die deze instituties tot stand brengen.

De morele mens is volgens AE gericht op een goed doel: geluk in het handelen, actief welzijn. AE onderzoekt de dynamiek van het 'gelukkig handelen' om begrijpelijk te maken hoe dat tot stand komt en wat het betekent.

AE staat bekend als deugdethiek. Het concept 'deugd' is echter niet een exclusief ethisch begrip, AE onderscheidt redelijkheidsdeugden (filosofische wijsheid, oordeelsvermogen, praktische wijsheid) en zedelijkheidsdeugden (zoals bv vrijgevigheid en matigheid). Hieronder blijkt dat deze verschillende typen deugden meestal zijn verweven, maar niet altijd.

Gunstige condities vergroten de kans dat iemand door disciplinerende een deugdzaam en uitmuntend karakter ontwikkelt en zo een goed leven kan leiden. Bij gunstige condities kun je denken aan materiële zaken zoals voldoende bezit van basale levensbehoeften, bepaalde biologische kenmerken zoals gezondheid en een aantrekkelijk uiterlijk, psycho-sociale zaken, zoals bv vriendschaps-netwerken en politieke omstandigheden zoals een goed bestuur en goede wetten.

Van jongsafaan moet binnen de marges van de genoemde condities gewerkt worden aan de vorming van een goed karakter. Dat gebeurt niet alleen door theorie (kennis van regels), maar vooral in de praktijk (het opdoen van ervaring met moreel handelen in specifieke situaties – en het daarbij leren van de les dat de goede keuzen proportioneel zijn tov de omstandigheden (proportioneel als variant op de wat geforceerde AE doctrine van het 'juiste midden')). Het morele karakter wordt gevormd binnen en onder invloed van de netwerken waarin iemand actief is. Binnen die netwerken kan een sterke morele persoonlijkheid zich ontwikkelen. [maar ook een zekere mate van conventionaliteit]

Goed leven is vanuit praktische wijsheid de juiste beslissingen nemen om nastrevenswaardige doelen te bereiken [dat ligt in de productieve sfeer]. AE gaat echter een stap verder: goed leven is bovenal de realisatie van een unieke, bij uitstek menselijke mogelijkheid: actieve, rationele contemplatie [the pleasure of pure thought, devoted to knowledge and understanding, selfsufficient for its own sake], [wat niet in de 'productieve', maar in de 'actieve' sfeer ligt].

Op het eerste gezicht lijkt AE's 'actieve, rationele contemplatie' verdacht veel op datgene waar vooral filosofen zich mee bezig houden, waarbij AE ook nog even de goden van stal haalt die zich ook al, of beter gezegd: uitsluitend bezig

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houden met datgene wat het hoogste geluk biedt: denken. Dit zou afgedaan kunnen worden met 'hier hijst de filosoof zichzelf op het hoogste schild'.

Actieve, rationele contemplatie zou echter ook opgevat kunnen worden als een mogelijk uitkomst van de benadering die A bij alle eventiteiten toepast. Deze benadering gaat er van uit dat elke eventiteit een eigen, specifieke, immanente essentie heeft en A wil verklaren hoe elke eventiteit excelleert in zijn unieke functionaliteit. Actieve, rationele contemplatie [reflexief bewustzijn van de morele persoonlijkheid] is dan volgens AE het unieke dat bij uitstek aangetroffen wordt in de mens en niet bij andere levende wezens. Door recht te doen aan dat unieke in zichzelf zou de mens ook het beste in staat zijn om recht doen aan de anderen en het andere.

We zouden verschillende punten kunnen bespreken.

Wat zijn de kenmerken van A's deugthiek (goedheid in de deugdzaam handelende, de 'philokalos' [kalon=beautiful]) in relatie tot deontologie (goedheid in de regels en het willen handelen volgens die regels), consequentialisme (goedheid in het grootste goed voor de meeste mensen) en ethisch relativisme (verschillen tussen culturen en mensen maken het onmogelijk om vast te kunnen stellen wat moreel goed is in algemene zin)?

Verschillen in interpretatie van aspecten van AE:

- strekking(en) van AE: descriptief, verklarend (bewijzend/interpretatief), educatief, ...?
  - de verhouding ethiek-politiek in AE: ondergeschikt, nevensgeschikt, verweven, interdependent, ...?
  - verschil middelen en doelen – essentieel, relatief (alles is middel en doel), ...?
  - wie of wat is nu precies goed volgens AE: de 'action' of de 'doer' of de unieke verwevenheid van handelende, handeling en context waarin alles op z'n plaats valt (of lijkt te vallen) of ...?
  - de opvallende samenhang van de spits van moreel handelen volgens AE (liefde voor het beste dat ook het mooiste is en dat om zichzelf) met verschillende (toenmalige en hedendaagse) opvattingen van kunst
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'Über die Seele', vertaling door Willy Theiler, bewerkt door Horst Seidl, Wissenschaftliche Buchgesellschaft, 1995.

Aristotelianaanse Levensfilosofie (AL) is een onderzoek naar de principes van levende wezens. Deze principes verschillen van de principes van bv getallen.

In boek 1 inventariseert AL de op te werpen vragen en de door eerdere filosofen daarop gegeven antwoorden.

Waar is leven te plaatsen in de termen van de Aristoteliaanse categorieën? Is het mogelijk en/of werkelijk, deelbaar en/of ondeelbaar, gemeenschappelijk en/of uniek voor elke soort van levende wezens?

Wat is de beste volgorde in het onderzoek: bv eerst vermogens of eerst functies (bv eerst waarnemingsvermogen of eerst het waarnemen), bij functies: eerst het waarneembare of eerst het waarnemingsvermogen, eerst het begrijpelijke of eerst de rationaliteit?

Vanuit (essentiële en accidentele) eigenschappen is veel te leren over wat leven is. De kenmerkende (bv biologische en cognitieve) eigenschappen van leven lijken allen verbonden met het lichaam. Maar de bioloog ('Physiker') en de psycholoog ('Dialektiker') hebben wel een eigen invalshoek: de materiële (bv toorn als koken van bloed) en de formele (of begripsmatige/conceptuele, bv toorn als het streven om pijn te vergelden). En ook de arts houdt zich op een andere manier bezig met de kenmerkende eigenschappen van leven (technische/praktische toepassingen) dan een mathematicus (abstracties). De filosoof mag een poging wagen om deze verschillende invalshoeken te integreren – of kan de 'eerste filosoof' (sc metafysicus) iets vinden dat boven al deze invalshoeken uitstijgt ('von der natürlichen Materie der Lebewesen abtrennbar')?

Het levende wezen kenmerkt zich met name doordat het zichzelf kan bewegen ('Bewegung') en kan waarnemen ('Wahrnehmung'). AL geeft een overzicht hoe eerdere filosofen beweging en waarneming uitwerken in termen van de in hun tijd aangenomen elementen (vuur in de vorm van kogelvormige deeltjes, lucht (adem), stofdeeltjes, getallen, water (cf zaad)), met daarbij de immateriële gedachte rede ('Vernunft') die (zelf onbewogen en ongedeeld) alles in beweging zou zetten. AL bespreekt problemen ('Aporien') die bij verschillende uitwerkingen rijzen.

In boek 2 begint AL van voren af aan en hanteert daarbij als begrippen [conceptual tools]: materie (potentie, mogelijkheid), vorm (entelechie, actualisering) en de samenstelling van deze twee. Een organisme is een levend lichaam. Hieronder een paar citaten die het 'levend' in 'levend lichaam' nader proberen te bepalen als een soort organisatie-principe:

'Also muß die Seele ein Wesen als Form(ursache) eines natürlichen Körpers sein, der in Möglichkeit Leben hat. Das Wesen [der Seele] aber ist Vollendung. (...) Seele ist das Wesen [des Lebewesen] dem Begriffe nach (...) das wesensmäßige Sein für eine sobeschaffene Körper. (...) Cf Sehkraft ist das Wesen des Auges dem Begriffe nach und das Auge is die Materie der Sehkraft (...) so verhält sich analog die ganze Wahrnehmungskraft zum ganzen wahrnehmungskraftfähigen Körper als solchem (...) so bilden die Seele und der Körper das Lebewesen (...) also ist die Seele nicht abtrennbar vom Körper (...) das Beseelte ist durch das Leben bestimmt (...) Leben als Vernunft, Wahrnehmung, örtliche Bewegung, Ernährung, Schwinden und Wachstum. (...) Die Seele ist das Prinzip, wodurch wir primär leben, wahrnehmen und denken.'

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(..) Die Seele ist weder ohne Körper, noch (selber) ein Körper, aber etwas (Prinzip), das zum Körper gehört (..) Vermögen der Seele: nähren, streben, wahrnehmen, bewegen, denken (..)

Die Nährseele ist das erste und gemeinsamste Seelenvermögen (..) Die Seele ist Ursache und Prinzip des lebenden Körpers (..) sowohl Ursprung als Zweck der Bewegung (..) Alle natürlichen Körper sind Organe der Seele (..) von was sich natürlicherweise bildet, gibt es eine Grenze so wie in rationales Verhältnis der Größe und des Wachstums (..) Zweck [der Nahrung] ist das Erzeugen eines artgleichen Wesens.

Wirkliche Wahrnehmung geht auf das Einzelne, die Wissenschaft dagegen auf das Allgemeine (..) Das Wahrnehmbare ist eigentümlich (bv het zien van kleuren, horen van tonen), algemeen (bv beweging, rust, getal, grootte) oder akzidentell (bv de kleur van een paard).

Hierna bespreekt AL de zintuigen: zien (lucht of water als medium, de rol van licht), horen (lucht of water als medium, verschil in frequentie van hoge en lage tonen), ruiken (lucht of water als medium), proeven (lucht of water als medium), en voelen. Met als algemene conclusie: 'Die Wahrnehmung ist das Aufnahmefähige für die wahrnehmbaren Formen ohne die Materie, wie das Wachs vom Ring das Zeichen (Siegel) aufnimmt ohne das Eisen oder das Gold [der Siegel]. (..) Das eigentliche Sein des Wahrnehmungsfähigen wie auch der Wahrnehmung ist ein gewisser Begriff (Verhältnis) und Vermögen des Wahrnehmungsorgan. (..)

In boek 3 gaat AL dieper in op de relaties tussen de zintuigen en hoe de verschillende soorten waarnemingen zich verhouden tot 'vernünftig Erfassen' en 'Einsehen'.

De levende wezens bezitten waarnemingsorganen die samengesteld zijn uit de bekende elementen (zoals bv water, lucht, warmte). Na het verdwijnen van waarneembare objecten blijven de waarnemingen en voorstellingen in het waarnemingsorgaan. De **werkelijkheid** van het waarneembare en de werkelijkheid van de waarneming is een en dezelfde, het **zijn** ervan echter niet. Die werkelijkheden zijn ook aan te duiden met verschillende woorden: klinken en horen [ tonen en zien, rieken en ruiken, smaken en proeven, aanraken en voelen ] Een overmaat (aan geluid etc) schaadt het waarnemingsvermogen.

Bij 'Einsehen' ('vernünftig Erkennen') gaat het verschil tussen waar en onwaar een rol spelen omdat het [interpreterend] denken fouten kan maken. Het rationele begripen bevat voorstellingen en aannames. Een voorstelling in de slaap is noch een mogelijkheid noch een werkelijkheid. De voorstelling is er echter niet zonder waarneming. Fouten ontstaan door een verkeerde interpretatie van een door waarneming bepaalde voorstelling (bv ik zie een figuur (altijd waar) > dat figuur is een mens (waar of onwaar)).

De 'Vernunft-Seele' (het nadenken en aannames bepalen) zou niet met het lichaam 'vermisch' zijn, maar is het 'Ort der Formen in Möglichkeit', waarvoor AL als argument aanvoert dat de zintuigen door een overmaat aan input (bv te fel licht, te hard geluid) overweldigd kunnen worden, maar dat de 'Vernunft-Seele' alleen maar meer begrijpt als er sprake is van een 'übermächtiges intelligibles Object', waaruit zou blijken dat de 'Vernunft abtrennbar ist vom Körper' en dat zou dan ook een volgende stap mogelijk maken: 'Dann vermag sie auch sich selbst zu erkennen.'

Nog een paar citaten over de 'Vernunft-Seele':

'Für die denkfähige Seele sind die Vorstellungsbilder wie Wahrnehmungsinhalte. (...) die Seele erkennt nie vernünftig ohne Vorstellungsbilder. (...) die Seele ist in gewisser Weise das Seiende (...) die Vernunft ist die Form der intelligiblen Formen (...) ohne Wahrnehmungen könnte jemand nichts lernen, noch auch begreifen (...) Das Wahre und das Falsche ist eine Verknüpfung von Begriffen (Vernunftinhalten) (...)

Het zichzelf bewegen van een 'Lebewesen' wordt veroorzaakt door een samenwerking van streven en praktische, doelgericht denkende rationaliteit. 'Worauf sich das Streben richtet, dies ist Prinzip der praktischen Vernunft. Der Endpunkt des praktischen Denkens ist der Anfang der Handlung.'

Het voorgaande leidt tot de conclusie: 'Das Lebewesen ist ein beseelter Körper.'

Waarna AL nog even terugkomt op het onderzoek naar de zintuigen: 'Kein Lebewesen kann sein ohne Tastsinn. (...) Die anderen Wahrnehmungssinne hat das Lebewesen nicht wegen des bloßen Seins, sonder wegen des Wohlseins.' Zodat de geduldige lezer kan concluderen dat voor een essentialistisch onderzoek naar 'Lebewesen' het tweede deel van het tweede hoofdstuk dus aardig wat korter gekund had...

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[  
'Physik', vertaling door Hans Günther Zekl,  
Felix Meiner Verlag, 1987 I-IV, 1988 V-VIII (Griechisch-Deutsch)  
Wissenschaftliche Buchgesellschaft, 1995 (Deutsch)

'Aristotelian Physics' (AP) is een onderzoek naar de 'φυσικ' (natuur, wezen  
essentie, kenmerkende eigenschappen) van beweging (kinesis), verandering,  
ontstaan en vergaan van 'Naturgegenstände'.  
Let wel: een onderzoek niet op basis van een uitgewerkte en toegepaste  
wiskunde, een technisch onderzoeksinstrumentarium en experimenten, maar op  
basis van een combinatie van zintuigelijke waarnemingen en rationele  
argumentatie, toegespitst op de aannames tav de kernbegrippen.

Boek 1 gaat met name over aannames mbt de materie. De meeste  
Naturgegenstände veranderen en de natuurlijke processen die tot  
veranderingen leiden, zijn kenbaar. De natuurfilosofen voor AP benaderen  
verandering vanuit tegenstellingen (warm-koud, vochtig-droog, etc), maar AP  
wijst er op dat er altijd een derde (sc. substantie, substraat) moet zijn, dat deze  
eigenschappen kan aannemen of verliezen. Sommige eigenschappen zijn  
essentieel, andere accidenteel, sommige mogelijk(heid), andere werkelijk(heid).

Boek 2 werkt het Aristoteliaanse 4-oorzaken-schema uit als principes van de  
natuur: causae materialis, formalis, efficiens, finalis. De mathematica  
abstraheert 'zuivere vormen' (en ontbeert in A's tijd nog de methodische  
middelen voor een mathematische beschrijving van natuurverschijnselen), AP  
blijft gericht op de incorporatie van vormen in de 'natuurlijke dingen'  
(Naturgegenstände) - daarbij is ook omgekeerd niet af te zien van de  
materialiteit ervan. Het 4-oorzakencomplex verklaart de regelmatigheden in de  
natuur, toevalligheden spelen daarbij volgens AP een accidentele rol (bv als  
doelbelemmeringen of als onbedoelde gevolgen), maar voegen zich wel in het  
4-oorzaken-schema als 'Nebenbei-Ursachen' (accidentele/contingente  
oorzaken).

AP overweegt een natuur die bepaald wordt door (blinde) noodzakelijkheid,  
maar geeft uiteindelijk de voorkeur aan 'finaliteit', doelgerichtheid in natuurlijke  
processen, naar analogie van zijn interpretatie van technische en biologische  
processen. Elke AP oorzaak is 'conditio sine qua non', maar elke oorzaak op  
zich is niet 'voldoende grond'.

[

close reading book 2

in trefwoorden – in keywords:

οντα - zijnden - beings

φυσικ - natuur – nature

ουσια - zijn, substantie – being, substance

αρχη - principe – principle - Anfangsgründe

αιτια - oorzaak – cause – explanans (explanatory factors)

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- 1 υλη, το υποκειμενον, τα μερη του ολου  
– stof, substraat, delen van het geheel – matter, substrate, parts of the whole
- 
- 2 ειδος, μορφη, συνθεσις, το ολον  
– essentie, vorm, synthese, geheel – essence, form, synthesis, the whole
- 3 αρχη, το ποιουν  
– begin/aanzet, het creërende – beginning/impetus/offset, the creating
- 4 τελος, το ου ενεκα  
– doel/functie, waarvoor – goal/function, for the sake of

Zijnden (οντα, beings) die bestaan in/vanuit de natuur (φυσει - natural), zoals dieren, planten en elementen, hebben in zichzelf (εν εαυτω) de aanzet (αρχην - beginning, impetus) tot verandering (κινησεως - change) van plaats (τοπον - place), groei (αυξιων - growth), vergaan (φθισιν - decay) en van eigenschappen (αλλοιωσιν - alteration of properties). Dit natuurlijke karakter (ουσης της φυσεως - natural character), het in zich hebben van de aanzet tot verandering, is een essentiële eigenschap (καθ' αυτο - per se) van de natuurlijke zijnden.

Artefacten (ποιουμενα - artefacts), zoals een huis, hebben de aanzet tot hun constructie (αρχην της ποιησεως - start of construction) niet in zichzelf, zodat je daar slechts in accidentele (overdrachtelijke) zin (κατα συμβεβηκος - contingently) van zou kunnen zeggen dat ze oorzaak van zichzelf kunnen worden (αιτια γενοιτ' αν αυτοις - selfcausing).

Wat een aanzet in zichzelf heeft, heeft [daarmee ook] een natuurlijk karakter (φυσιν εχει – has nature, a natural character). En al deze [natuurlijke] dingen zijn substanties (ουσια - substances). Het natuurlijke karakter (φυσις - nature) is ook altijd in (eigen aan) het substraat (υποκειμενον – the underlying). Van een essentiële eigenschap kun je niet zeggen dat deze natuur is (φυσις εστιν – is nature) of natuur heeft (φυσιν εχει – has nature), maar dat deze natuurlijk (φυσει - natural) of volgens de natuur (κατα φυσιν – according to nature) is.

Sommigen stellen dat het eerste, intrinsieke en nog ongevormde (το πρωτον ενυπαρχον αρρυθμιστον – the first intrinsic unformed) de natuur en substantie is van de natuurlijke zijnden (η φυσις και η ουσια των φυσει οντων – nature and substance of the natural beings). Daarvoor worden de elementen aangevoerd: vuur, aarde, lucht, water (πυρ, γην, αερα, υδωρ – fire, earth, air, water), of één daarvan of meerdere (ειτε εν ειτε πλειω – or one or more), als eerste, onderliggende stof/materie (πρωτη υποκειμενη υλη – first underlying matter).

Anderen stellen dat de natuur (φυσις) de vorm (μορφη - form) is, het begrip van het soort [zijnde] (το ειδος το κατα τον λογον – kind of [species] according to reason), bv 'mens'. Vorm is in hogere mate natuur (φυσις) dan materie (υλη) : de verwerkelijkte vorm (εντελεχεια – realized form) is meer dan de mogelijkheid (δυναμει - possibility) ervan.

Natuurlijke aanleg als wordingsproces vormt het pad naar het [voltooide] natuurlijke wezen (φυσικὸς ὡς γενεσις ὁδὸς ἐστὶν εἰς φύσιν). Wat wordt natuurlijk gevormd (τι οὖν φυεταί)? Niet het waaruit, maar het waartoe (οὐχὶ ἐξ οὗ, ἀλλ' εἰς οὐ). De [gerealiseerde] vorm is dus het natuurlijke wezen (ἡ ἀρα μορφή φυσικῆς).

De mathematicus abstraheert, scheidt (χωρίζει - separate) vlakken, vormen, lijnen en punten van de natuurlijke lichamen en hun eigenschappen en veranderingen (χωριστὰ τῆ νοήσεως κινήσεως – abstracted from the thought of change).

Natuur is tweevoudig [op te vatten]: als vorm en stof (φυσικὸς διχῶς, τὸ τε εἶδος καὶ ἡ ὕλη – nature is twofold: form and matter). Het natuurlijke is niet zonder materie, maar ook niet tot materie beperkt (οὐτ' ἀνεὺ ὕλης οὐτε κατὰ τὴν ὕλην – neither without matter nor restricted to matter).

Empedocles en Democritus hebben zich vooral gericht op de materie. Het is echter de taak van de natuurwetenschap om beide begrippen [εἶδος, ὕλη – form, matter] te verduidelijken. (τῆς φυσικῆς ἀν εἰη τὸ γνωρίζειν ἀμφοτέρων τὰ φύσεις – physics should make clear both sides of nature [sc form and matter]), evenals het waarvoor/hoe (ἐνεκά – for which, why, how to) en waartoe (τέλος – for which, goal / ἐσχατὸν – ultimate end).

Het waarvoor/hoe (τὸ οὐ ἐνεκά) heeft twee betekenissen: kennis van de vorm, het ontwerp (τοῦ εἶδους γνωριστικὴ, ἡ ἀρχιτεκτονικὴ, bv de stuurman die weet welke vorm een scheepsroer moet hebben) en vaardigheid in het bewerken van de materie om die vorm aan te kunnen nemen (ποιητικὴ τῆς ὕλης, de timmerman die weet hoe hij het hout moet bewerken om zo'n roer te realiseren).

De fysicus onderzoekt de vorm in de materie (εἶδος ἐν ὕλει), de metafysicus (de 'eerste filosofie') het begrip van de te abstraheren vormen (τὸ χωριστὸν).

Welke en hoeveel oorzaken (αἰτία – causes, ἀρχαί - Anfangsgründe) spelen een rol bij ontstaan, vergaan en natuurlijke verandering (γενεσεως, φθορας, φυσικῆς μεταβολῆς - origin, decay, natural change)?

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1 dat waaruit iets ontstaat (τὸ ἐξ οὗ γίνεταί τι ἐνυπαρχόντος – that already existing from which something [else] comes into being), het onderliggende substraat (τὸ υποκειμένον- underlying), materie (ὕλη - matter), de delen waaruit het geheel bestaat, de samenstellende delen (τὰ μέρη τοῦ οὐλοῦ - parts of whole), bv zilver [van een schaal], letters [van een lettergreep], vooronderstellingen [van een conclusie] (ὑποθέσεις τοῦ συμπερασματος - propositions of a syllogism) en hun soortbegrippen (γενῆ – genera)

2 de vorm en het model (τὸ εἶδος καὶ παραδειγμα – the type and example), de verklaring van wat het werkelijk is (ὁ λόγος οὗ τοῦ τῆ ἦν εἶναι – the explanation of what it really is, & τὰ μέρη ἐν τῷ λόγῳ – the parts of the explanation), het geheel (ὅλον - whole), de synthese (συνθεσις - synthesis), de soort (εἶδος – type, essence), de vorm (μορφή – form(at)), bv de verhouding 2:1 bij de octaafklank, en hun soortbegrippen (γενῆ – genera) zoals bv het getalsbegrip (ἀριθμὸς – concept of numbers).

3 de aanzet tot verandering of rust, beweging of stilstand (αρχη της μεταβολης η της ηρεμήσεως, η κινήσεως η στασεως – offset of change or quietude, motion or halting), het bewerkende (το ποιουν – the creating, producing), het veranderende (το μεταβαλλον – the changing), bv het zaad van de vader [van het kind] (σπερμα – sperm).

4 het doel (το τελος – end, fulfilment), het waarvoor (το ου ενεκα - for the sake of), het beste (ταγαθον, βελτιστον - the excellent).

Er kunnen meerdere oorzaken van hetzelfde zijn (πολλα του αυτου αιτια – many causes of the same), bv metaal en beeldhouwer [van het standbeeld]. Ook wederzijdse veroorzaking (αλληλων αιτια – mutual causation). En tegengestelde gevolgen van hetzelfde (bv van de aan- of afwezigheid van de stuurman).

Verder zijn nog de volgende onderscheidingen van belang: essentiële (οικειως – essential) en accidentele (συμβεβηκος - contingent) eigenschappen, bv het beeld is gemaakt door Polykletos (accidenteel), de beeldhouwer (essentieel), die elk uitgedrukt kunnen worden als mogelijk [makend] (δυναμενα – possible) of werkelijk/gerealiseerd (ενεργουντα – realized, in action).

φυσικ - nature αρχαι - origins αιτια - causes	ακειως - essential καθ' αυτο - per se		κατα συμβεβηκος - accidental (contingent)	
	δυναμενα - possible	ενεργουντα - realized	δυναμενα - possible	ενεργουντα - realized
το εξ ου - made from το υποκειμενον - underlying υλη - matter τα μερη του ολου - parts of whole				
το εις ο - made as το τι εστιν - what-it-is το τι ην ειναι - what-it-really-is ειδος - form, species, kind of μορφη - form, model συνθεσις - synthesis				



το ολον - the whole				
το ποιουν - the making αρχη - start, beginning - origin - offset (aanzet)				
το ου ενεκα - made for (the sake of), because of, why, how to αρχιτεκτονικη - architectonic (design) ποιητικη - capable of making, creative, productive το τελος - goal ταγαθον, βελτιστον - the excellent εσχατον - ultimate end				

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Er is sprake van oorzaken van oorzaken (εφ ων αιτια τα αιτια – causes of causes), bv de oorzaak van dit stuk ijzer, van ijzer in 't algemeen of van alle materie (ολως υλης – all matter (altogether)).

Hierna onderzoekt AP of het lot (τυχη – fate) of toeval (αυτοματον - accidental) ook bij de oorzaken gerekend moeten worden.

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[ ivm de meervoudigheid van de A oorzaken:  
 explanandum simplex/complex – explanans simplex/complex  
 vergelijk bv touwdeling met celdeling:

touwdeling:

Explanandum

het scheuren van een touw bij belasting

Explanans

(major) als een touw met sterkte r met een gewicht van minstens K belast wordt, scheurt het

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(minor 1) dit is een touw met de sterkte  $r$   
(minor 2) het aangehangen gewicht is minstens  $K$   
(conclusio) het touw scheurt  
celdeling:  
(..)  
]

Boek 3 onderzoekt de begrippen verandering (van plaats, uitdijen/krimpen, van eigenschappen, ontstaan/vergaan) en oneindigheid. Verandering is het werkelijk worden van wat mogelijk was. Daarin speelt zowel wat verandering bewerkt als wat verandering ondergaat een rol. Is aan het begrip oneindig een fysische betekenis toe te kennen? De definitie van 'lichaam' impliceert grenzen. En ((on)deelbare?) lichamen moeten onderling wel begrensd zijn, anders kan er geen sprake zijn van plaats, structuur of beweging (sc verandering). Een lichaam kan dus niet oneindig zijn. Het begrip oneindig is een procedureel begrip (tellen, delen) dat mogelijk toegepast kan worden op deelbare en telbare getallen, ruimte en tijd. Omdat het oneindige nooit compleet is, gaat dat begrip ook niet goed samen met een begrip van het volmaakte of gehele.

Boek 4 onderzoekt de begrippen plaats (ruimte), leegte (vacuum) en tijd. AP definieert plaats als een verhouding van lichamen (sc de grens tussen lichamen). Het begrip 'leeg' (vacuum) krijgt in AP geen fysische betekenis.

Tijd lijkt een paradoxaal begrip in de zin van zijn/niet-zijn. Het verleden is er niet meer, de toekomst is er nog niet en het tegenwoordige 'nu' is ongrijpbaar in beweging (op de loop). Tijd is niet identiek met beweging en verandering (de laatste twee kunnen sneller of langzamer gaan, tijd niet), maar plaatst markeringen in de continuïteit van beweging en verandering ( $nu_1 \dots nu_2 \Rightarrow$  tijdvak, tijdsduur), maar  $nu_1$  en  $nu_2$  zijn sporen van het verleden (of projecties op de toekomst) en verschillen van het voortschrijdend nu van de 'tegenwoordige tijd'. Gemeten tijd kwantificeert beweging en verandering – en omgekeerd bepaalt beweging/verandering de te meten hoeveelheid tijd.

Wat kan bewegen/veranderen ligt binnen het bereik van de tijd (is aan te vreten door 'de tand des tijds'), het geldig of niet-geldig zijn van bv wiskundige stellingen is niet in-de-tijd.

Een tijdvak is begrensd (door  $nu_1 \dots nu_2$ ) - is de tijd als geheel ook begrensd? Nee - AP vergelijkt hiertoe tijd als geheel met een cirkel en een tijdvak met een cirkelboog. Ook al is de metriek van tijd het beste af te leiden van de gelijkmatige cirkelvormige beweging [van hemellichamen], daaruit moet niet associatief geconcludeerd worden dat de tijd zelf cyclisch (een kringloop) is.

Een paar kernbegrippen in AP mbt tijd:

χρονος - tijd - time  
συνεχες – continue – continuous  
ποσα – telbaar – countable  
διαίρετα – deelbaar - dividable  
νυν - nu – now

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στηγμης – moment – moment  
οντων - zijnden – beings  
αιει οντα – altijd zijnden – eternal beings  
ουσιας – zijn – being/substance  
φυσις – natuur/wezen/essentie - essence  
γεγονε - (gebeurd) feit – fact, past  
απειρος – oneindig(e) – infinite  
πεπερασμενον – eindig - finite  
περας – einde/grens – end/border  
παρελθον – verleden – past  
μελλον – toekomst – future  
προτερον – eerder/vroeger – ante/before/earlier  
υστερον – later – post/later  
αργότερα – later - later  
αμα – gelijktijdig - simultaneous  
κίνησις – beweging – movement  
ηρεμια - rust - rest  
μεταβολη – verandering – change  
αναγκη – noodzakelijk – necessary  
αριθμος/μετρον - getal/maat – number  
γενεσις – ontstaan - creation  
φθορα – vergaan – decay

In AP opgeworpen vragen (ook van voorgangers) en stellingen:

behoort tijd tot de (niet-)zijnden?

wat is het wezen (φυσις) van tijd?

is tijd deelbaar?

is het nu een deel van de tijd of de grens van tijden?

is het nu aan zichzelf gelijkblijvend of steeds iets anders?

[ vergelijk: de volwassen man is niet meer het kind en is nog niet de bejaarde –  
is de volwassen man zichzelf gelijkblijvend of steeds een andere? ]

is de relatie nu-tijd te vergelijken met punt-lijn?

[ivm de vraag uit hoeveel nu-en/punten bestaat de tijd/lijn]

is tijd het universum (σφαιρα) of de beweging en verandering (κίνησις και  
μεταβολη) van alles?

is tijd alleen verbonden aan beweging en verandering of is tijd overal bij alle  
dingen?

kan een beweging/verandering sneller of langzamer verlopen, maar de tijd zelf  
niet?

tijd is niet gelijk aan beweging/verandering, maar is er zonder  
beweging/verandering wel tijd?

ουκ εστιν ανευ κινήσεως και μεταβολης χρονος – zonder beweging en  
verandering is er geen tijd (IV,11, 218b, 33)

τι της κινήσεως εστιν χρονος – wat van beweging is de tijd? (IV, 11, 219a, 3)

κίνησις εστιν συνεχης, δια δε την κινήσιν ο χρονος– beweging is continu, en door  
beweging [is] ook tijd [continu] (IV, 11, 219a,13)

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και δυο ειπη η ψυχη τα νυν, το μεν προτερον το δ' υστερον, τοτε και τουτο φαμεν  
 ειναι χρονον - το γαρ οριζομενον τω νυν χρονος ειναι δοκει -  
 wanneer het bewustzijn twee nu's bepaalt, de ene als ervoor en de andere als  
 erna, dan noemen we dit [wat er tussen ligt] tijd (IV, 11, 219a, 27f)  
 το οριζομενον τω νυν, χρονος ειναι δοκει – dus wat begrensd is door nu['s], is tijd  
 (IV, 11, 219a, 29)  
 [ dus ook wat voor en na één nu ligt? ]  
 αριθμος κινησεως κατα το προτερον και υστερον – de maat van beweging  
 volgens [ op grond van een bepaling van ] eerder en later (IV, 11, 219b, 2)  
 [ van elke willekeurige (chaotische) beweging? Is binnen een set van dingen die  
 random van snelheid veranderen tijd te meten? ]  
 tijd als getelde/telbare (αριθμουμενον/αριθμητον) beweging  
 [metriek bepaalt de betekenis van de getallen – de regelmatige beweging van A  
 bepaalt de metriek om de tijdsduur van B in een maat uit te kunnen drukken]  
 το νυν τον χρονον οριζει η προτερον και υστερον – het nu begrenst de tijd  
 volgens [ op grond van een bepaling van] eerder en later (IV, 11, 219b, 12)  
 τω φερομενω ακολουθει το νυν, ωσπερ ο χρονος τη κινησει – het nu volgt het  
 voortbewogene, zoals de tijd de beweging volgt (IV, 11, 219b, 23)  
 η δ'αριθμητον το προτερον και υστερον, το νυν εστιν – voor zover ervoor en erna  
 geteld kunnen worden, bestaat het nu (IV, 11, 219b, 25)  
 συνεχης τε δη ο χρονος τω νυν, και διηρηται κατα το νυν – in het nu is de tijd  
 continu, maar door het nu [wordt de tijd] ook gedeeld (opgesplitst) (IV, 11, 220a,  
 5)  
 ουδεν μοριον το νυν του χρονου, ουδ' η διαιρεσις της κινησεως, ωσπερ ουδ' η  
 στιγμή της γραμμης – het nu is geen deel van de tijd en ook de indeling van  
 beweging [door splitsing] is geen deel van de tijd, net zoals de punt geen deel  
 van de lijn is (IV, 11, 220a, 19ff)  
 η μεν ουν περας το νυν, ου χρονος, αλλα συμβεβηκεν – voor zover het nu een  
 grens is, is het niet tijd, maar ... (Duits: 'trifft nur nebenbei zu) (IV, 11, 220a, 21ff)  
 conclusie: ο χρονος αριθμος εστιν κινησεως, κατα το προτερον και υστερον, και  
 συνεχης (συνεχους γαρ) – tijd is de maat van beweging volgens een bepaling  
 van eerder en later en [tijd is] continu (want betrokken op iets dat continu is [sc  
 beweging]) (IV, 11, 220a, 25ff)  
 ου μονον δε την κινησιν τω χρονω μετρουμεν, αλλα και τη κινησει τον χρονον δια  
 το οριζεσθαι υπ αλληλων – we meten niet alleen beweging met tijd, maar ook  
 [omgekeerd] tijd met beweging omdat ze door elkaar bepaald worden (IV, 12,  
 220b, 15)  
 ακολουθει μεγαθει η κινησις, τη δε κινησει ο χρονος, τω και ποσα και συνεχη και  
 διαιρετα ειναι – grootte (ruimte), beweging en tijd volgen elkaar en [alle drie zijn]  
 telbaar, continu en deelbaar (IV, 12, 220b, 25)  
 το εν χρονω ειναι το μετρεισθαι τω χρονω και αυτην και το ειναι αυτης – in-de-tijd-  
 zijn is door-de-tijd-gemeten-worden naar aard en duur (?) (IV, 12, 221a, 4ff)  
 τα πραγματα εν αριθμω τω χρονω εστιν. ει δε τουτο, περιεχεται υπο χρονου –  
 gebeurtenissen zijn in-de-tijd net zoals ze vallen onder een getal. Als dat zo is,  
 dan zijn [de gebeurtenissen] door de tijd omvat [ingebod in de tijd] (IV, 12,  
 221a, 16ff)  
 τω οντι εν χρονω ειναι τινα χρονον οτε κακεινο εστιν – Voor wat in-de-tijd is [moet  
 noodzakelijk gelden] dat er tijd is, zolang het er is [bestaat] (IV, 12, 221a, 25)

Tijd is verbonden aan ontstaan en vergaan, dus τα αιει οντα, η αιει οντα, ουκ εστιν εν χρονω – wat altijd bestaat, in zoverre het altijd bestaat, is niet in-de-tijd (IV, 12, 221b, 4)

ο χρονος μετρον κινησεως, εσται και ηρεμιας μετρον – tijd is de maat van bewegen en ook van rust (IV, 12, 221b, 7)

μετρησει δ'ο χρονος το κινουμενον ψαι το ηρεμου, η το μεν κινουμενον το δε ημερου – de tijd meet het bewegende en het rustende in zoverre het een beweegt en het andere in rust is (IV, 12, 221b, 16ff)

οσα μεν ουν φθαρτα και γενηται και ολωσ οτε με οντα οτε δε μη, αναγκη εν χρονω ειναι – alles wat vergankelijk is en ontstaan kan en wat op het ene moment kan bestaan en op een ander moment niet, moet [tijdens het bestaan] noodzakelijk in-de-tijd-zijn (IV, 12, 221b, 28ff)

εστιν χρονος πλειων, ος υπερεξει του τε ειναι αυτων και του μετροντος την ουσιαν αυτων – [tov wat ontstaat en vergaat] is er een groter tijdstuk, dat het zijn [de tijdsduur] ervan overtreft en ook de maat van het zijn [de tijdsduur] ervan (IV, 12, 221b, 30)

De tijd omvat de niet-zijnden (μη οντων) die er niet meer zijn (bv Homerus) en die er nog niet zijn (IV, 12, 221b, 31ff)

De tijd omvat niet de niet-zijnden (μη οντων), die er niet waren, niet zijn, en niet zullen zijn (ουτε ην ουτε εστιν ουτε εσται), zoals proposities en hun tegengestelden (bv een diagonaal is asymmetrisch [tov de zijden]) die altijd zijn (αιει εστι) [gelden] – wat altijd is [geldt] (αιει εστι/ οντι), is dus niet in-de-tijd (ουκ εσται εν χρονω) (IV, 12, 222a, 3ff)

Ontstaan en vergaan (γενεσις και φθορα) geldt voor wat kan zijn en niet kan zijn (δυναται και ειναι και μη) (IV, 12, 222a, 8)

Het nu verbindt de tijd (continuïteit - συνεχει χρονου) en splitst de tijd (discontinuïteit, mogelijkheid van deling, grens - περας χρονου) (IV, 13, 222a, 10ff)

Deling en vereniging (δαιρεσις και ενωσις) betrekken zich op hetzelfde [nu], maar verschillen wat zijn betreft (το δ'ειναι ου ταυτο) (IV, 13, 222a, 19ff)

**ΠΟΤΕ** χρονος ωρισμενος προς το προτερον νυν - **οοιτ** duidt op een tijd die afgegrensd is door een eerder nu (IV, 13, 222a, 25) en die ook afgegrensd is van het [actuele] nu (πεπερανθαι προς το νυν) (IV, 13, 222a, 27)

χρονος υπολειπει; - komt de tijd tot een einde? (IV, 13, 222a, 29)

Nee, want er is altijd beweging, en de tijd is steeds weer (altijd) in (aan) het begin (χρονος αιει εν αρχη (IV, 13, 222b, 7))

IV, 13, 222b, 15ff stelt een [wat onduidelijke] asymmetrie van de oorzakelijke rol van tijd in ontstaan (minder) en vergaan (meer, vergelijk de uitdrukking 'tand des tijds' (χρονου φθοραν)). Overigens is niet tijd de [eigenlijke] oorzaak, maar ook deze verandering vindt [nu een keer] plaats in-de-tijd (συμβαίνει εν χρονω γινεσθαι και ταυτην την μεταβολην)

πασα μεταβολη και πασα κινησις εν χρονω εστιν – elke verandering en elke beweging vindt plaats in de tijd (IV, 14, 223a, 14)

πως εχει ο χρονος προς την ψυχην, και δια τι εν παντι δοκει ειναι ο χρονος – hoe verhoudt de tijd zich tot het bewustzijn en waarom schijnt de tijd alomtegenwoordig? (IV, 14, 223a, 17)

αδυνατον ειναι χρονον ψυχης μη ουσης, αλλ' η τουτο ο ποτε ον εστιν, ο χρονος, οιον ει ενδεχεται κινησιν ειναι ανευ ψυχης. το δε προτερον και υστερον εν κινησει εστιν, χρονος δε ταυτ' εστιν η αριθμητα εστιν – het is onmogelijk dat er tijd is, wanneer bewustzijn [daarvan er] niet is, behalve dan als dat wat als zijnde tijd is [ten grondslag ligt aan tijd], zoals mogelijk is bij beweging zonder bewustzijn van die beweging. Vroeger en later is in de beweging, tijd is dit [...] voorzover het telbaar is. (IV, 14, 223a, 26ff)

Ook al zijn er verschillende vormen van verandering (ontstaan, vergaan, groei, eigenschapsverandering, verplaatsing), als het getal van de tijd gelijk is en de afloop gelijktijdig (ο αριθμος ισος και αμα), dan is er sprake van dezelfde tijd (IV, 14, 223b, 1ff)

ο χρονος χρονω τιμι ωρισμενω – de tijd wordt door een vaste tijd [een vastgelegde tijdseenheid] bepaald/gemeten tijd (IV, 14, 223b, 14)

υπο της ωρισμενης κινησεως χρονω μετρεται της τε κινησεως το ποσον και του χρονου – door de tijd van [die samenhangt met] een vaste beweging wordt de hoeveelheid gemeten van zowel beweging als tijd (IV, 14, 223b, 16)

το πρωτον μετρον .. η κυκλοφορια η ομαλης μετρον μαλιστα - voor deze eerste maat (...) levert de cirkelbeweging [sc van de hemellichamen] als meest gelijkmatige beweging (tov eigenschapsverandering, groeien en ontstaan) de beste maat op (IV, 14, 223b, 18ff) [grappige einduitkomst, omdat het getal π dat bij de cirkelbewegingen hoort nu net een irrationaal getal is... ]

## Boek 5

Ontstaan en vergaan is niet verandering. Verandering van plaats, aantal (groeien/inkrimpen) en eigenschappen.

Boek 6 ruimte, beweging en tijd: samengesteld uit ondeelbare 'eenheden'?

Bij tijd – 'nu-en' als 'ondeelbare stukken'?

Tijd is continu = deelbaar in iets wat steeds weer deelbaar is.

Tijd als geheel vormt een samenhang (continuïteit).

vs Zeno: in begrensde tijd zijn niet oneindig veel punten te doorlopen, net zomin als in een onbegrensde tijd een eindig stuk is te doorlopen.

Noch een lijn noch een vlak noch de tijd noch iets wat continu is, is ondeelbaar.

Het [actuele] nu is ondeelbaar en in elke tijd is het [nu] inbegrepen als [ondeelbare] grens van het verleden en de toekomst.

Elk tijdvak [ de tijd tussen nu1 en nu2 ] is deelbaar.

[ Tijd (en dan met name het actuele nu) goed typeren lijkt op het raken van een bewegend doel. ]

Het is onmogelijk om in onbegrensde tijd een slechts begrensde beweging uit te voeren, wanneer het tenminste niet steeds dezelfde beweging is [ bv cirkelbeweging of oscillatie ]

Omgekeerd ook onmogelijk om in een begrensde tijd zich over een oneindige [lengte] te bewegen. Ook een begrensde [lichaams-]ruimte(grootte) kan een onbegrensd [pad] niet doorlopen in een begrensde [tijd]. Ook kunnen onbegrensde lichamen geen begrensd pad doorlopen.

Je kunt niet de hand leggen op het tijdstip [het eerste 'moment'] waarop iets in beweging of tot rust komt.

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Tijdsduur is niet samengesteld uit ondeelbare nu's. Het nu is niet een (deelbare) fractie van een seconde. [ Kloktijd is deelbaar, zijnstijd niet. ]

Alles beweegt in de tijd, er is echter geen 'eerste tijd'. Dat geldt ook voor ruimte en voor elke continuïteit: deze zijn tot in het oneindige deelbaar. In de tijd waarin iets zich beweegt, kan dat zich bewegende onmogelijk precies op een bepaalde plaats zijn.

De fout in de redenering van Zeno is dat hij er van uitgaat dat tijd uit ondeelbare nu's bestaat.

Iets wat niet te delen is, kan zich niet in beweging bevinden (behalve dan 'in nebenbei zutreffender Bedeutung' (terloops toepasselijke betekenis), vgl bv iemand die niet zelf beweegt, maar meevaart op een schip). 'niet te delen' = wat betreft het 'hoeveel' niet uit elkaar te halen. Beweging van het geheel verschilt van beweging van de delen -vergelijk de snelheden van de delen van een ronddraaiende kogel.

De tijd bestaat dus niet uit 'nu's', net zomin als een lijn bestaat uit punten en net zomin als een beweging bestaat uit bewegingseenheden.

Een punt (of iets anders dat ondeelbaar is) kan niet in beweging zijn.

Als alles zich in-de-tijd beweegt, in het nu echter niets, en wanneer de tijd [ het tijdvak ] deelbaar is, dan moet er dus een tijdsduur ('Zeitspanne') zijn voor elk bewegend [voorwerp], die kleiner is dan de [ tijdsduur ] 'in der es sich um die eigene Erstreckung [, Ausdehnung, omvang] bewegt'. Een niet-te-delen punt [heeft echter geen omvang en] kan zich [dan dus ook] niet bewegen in een niet-te-delen tijd. [ beweging noch rust is van toepassing op iets wat ondeelbaar is ]

Er is geen enkele vorm van verandering die oneindig is. [ ofwel: elke verandering is temporeel en dus eindig ] Elke verandering is van iets dat zus is naar iets dat zo is, waarin een omslag (grens, uiterste punt) zit van 'dit' naar 'dat', van 'ja' naar 'nee', van 'zijnd' naar 'niet-zijnd'. Voorbeweging is niet begrensd in deze zin (van tegenstellingen). Orde: verandering van plaats > eigenschap(pen) > groei > ontstaan. In deze zin is geen enkele beweging/verandering wat betreft tijd oneindig – behalve dan de cirkelbeweging.

## Boek 7

Alles wat in beweging/verandering is, moet ergens door in beweging/verandering gebracht zijn. Er moet een eerst-bewegende zijn, dat zelf in beweging is wanneer het iets anders in beweging brengt. Beweging van het bewegende en beweging van het bewogene moeten gelijktijdig zijn.

Beweging/verandering kan uniform ('einheitlich') zijn wat betreft genus (bv 'zijn' of 'eigenschap'), species (bv kleur van wit naar zwart) en getal (bv in dezelfde kloktijd).

Alle (gelijktijdige) bewegingen zijn daarmee ook begrensd in-de-tijd – oneindige [beweging] in begrensde [tijd] is onmogelijk.

Het in-beweging-brengende is op dezelfde plaats als wat in beweging gebracht wordt. Wat in beweging gebracht wordt, wordt door zichzelf of door iets anders in beweging gebracht. Soorten voortbeweging (verandering van plaats): trekken (pull), stoten (push), meenemen (drag), draaiing (rotate, samengesteld uit push&pull).

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AP onderscheidt het zintuiglijk waarnemende deel van het organisme (dat met eigenschappen veranderbaar is) van het denkende/kennende/het-algemene-begrijpende deel van het organisme (dat geen verandering van eigenschappen kent). Niet elke vorm van verandering is vergelijkbaar – wat niet deel uitmaakt van hetzelfde begrips-domein, is niet vergelijkbaar (vgl bv wat is scherper: het potlood, de wijn of de hoge toon? Opletten dus met ‘toevallige woordgelijkheid’.)  
186ff Er is geen evenredige relatie tussen kracht – massa – afgelegde afstand – daarvoor nodige tijd. Bij het steeds halveren van de kracht komt de massa bij een bepaalde kracht überhaupt niet meer in beweging. Vergelijk ook het wel of niet horen van geluid bij het vallen van één of meer graankorrels (vs Zeno).

## Boek 8

Is er wetenschappelijk iets vast te stellen over de ‘eerste grond’?

Democritus stelt dat de tijd ongeworden is, Plato dat de tijd tegelijk met de hemel is ontstaan.

Organismen lijken vanuit zichzelf te bewegen zonder van buitenaf daartoe aangezet te zijn. Dat is echter een vergissing. Delen van het lichaam bevinden zich namelijk steeds in verandering en daarvan is niet het organisme zelf de oorzaak, maar veeleer de omgeving ervan: omgevingsfactoren > veranderingen in het lichaam > denken en begeren > handelen.

Wat is nu precies in beweging/verandering en wat in rust?

De stelling dat ‘alles [altijd] in rust is’ klopt niet, want de natuur is het begin van verandering(en). De stelling ‘alles is [altijd] in beweging’ klopt ook niet (nagegaan met groeien/krimpen, eigenschapsverandering en plaatsverandering). Het is echter ook niet mogelijk dat het ene ding altijd in rust is en het andere ding altijd in beweging/verandering.

Alles wat beweegt is door iets in beweging gezet. Dus moet er iets zijn dat als eerste in beweging zet, dat niet door iets anders in beweging is gezet en dat zelf onbeweeglijk/onveranderbaar blijft. [ Volgens AP is er energie nodig om iets in beweging te brengen en te houden – het omgekeerde van de hedendaagse dynamica. ]

Wat in beweging is, is deelbaar. Een zichzelf-bewegende moet omvatten: een ‘bewegend-maar-onbeweeglijk’ en een ‘bewogen-maar-niet-noodzakelijk-bewegend’. Voor alles wat in beweging/verandering is, is er een intrinsiek onbewogen-bewegende. Iets dat alles omvat, de oorzaak van alle dingen.

Verandering van plaats is de meest oorspronkelijke soort beweging.

Oorspronkelijk zowel in logische, chronologische als essentiële zin.

Continuïteit is te delen, niet in werkelijkheid, maar mogelijk (in principe).

Wat beweegt, doorloopt, niet in eigenlijke zin, maar alleen terloops (nebenbei) een oneindig aantal delen [van kloktijd]. De tijdsgrens als markering is wat betreft getal één en dezelfde, begripsmatig echter niet (namelijk zowel einde als begin), en in feite (‘der Sache nach’) hoort ze steeds bij de volgende toestand.

Alleen de cirkelbeweging is uniform, continu en gelijkmatig.

Niets wat begrensd is, kan in oneindige tijd beweging in gang zetten of houden.

In een begrensde ruimte kan geen onbegrensde werkingskracht huizen.

Wat het snelst beweegt, zit het meest dicht op wat in beweging zet.

Het eerste onbewogen bewegende kan onmogelijk een bepaalde omvang hebben, want dan zou het begrensd of onbegrensd zijn en iets met onbegrensde



omvang kan niet bestaan [want dan zou er niets anders bestaan], en iets wat een begrensde omvang heeft, kan geen onbegrensde kracht hebben. Het eerste bewegende zet echter voortdurende [de] beweging [van alles] in gang en onderhoudt deze in oneindige tijd. Daarom is het onbewogen bewegende ondeelbaar en heeft het geen omvang.

Eerste opzetje van een schematje voor AP met differentiatie van de in AP gebruikte woorden tijd ( $\chi\rho\nu\nu\omicron\varsigma$ ) en nu ( $\nu\nu\nu$ ) door toevoegingen aan ‘..tijd..’ en ‘nu..’:

	properties	nu1	nu2	nu
ruimte	continu deelbaar telbaar			
beweging	continu deelbaar telbaar			
bewustzijn ( $\psi\upsilon\chi\eta$ ) bepaalt van beweging:	ondeelbaar	tijdsgrens1 splitsend eerder niet-zijnde	tijdsgrens2 splitsend later niet-zijnde	tijdsgrens verbindend  zijnde
	continu deelbaar telbaar eindig begrensd	tijdvak / tijdlijn (wat ligt tussen nu1 en nu2)		
	uniform continu			zijnstijd
cirkelbeweging (sc van hemellichamen)	uniform continu deelbaar telbaar	tjidsmetriek (wat geldt als maat van beweging)		lopende kloktijd kalendertijd
verandering van: plaats				
eigenschap meer/minder				
ontstaan/vergaan				
eventiteit, bv organisme	continu begrensd deelbaar telbaar eindig	levensduur (tijdsduur) in-de-tijd-zijn		
		ontstaan	bestaan	
niet-zijnden bv meetkundige proposities	gelden	niet in-de-tijd (ruimte/beweging/verandering is er niet op van toepassing)		
wat altijd bestaat	ondeelbaar	niet in-de-tijd (ruimte/beweging/verandering is er niet op van toepassing)		

]

[

'Metaphysik' - vertaling door Hans Günther Zekl, 2003

inleiding

(..)

overzicht inhoud

1

De historische ontwikkeling van kennis – bijdragen van eerdere filosofen aan de kennis van de vier oorzaken en kritiek op reducties door verschillende eerdere filosofen tot minder dan vier oorzaken (bv reductie tot elementen (stof/materie) of tot ideeën (vorm)).

2

Het aantal oorzaken is beperkt – een oneindig aantal oorzaken (zonder eerste oorzaak en laatste doel) zou een oneindige regressie met zich meebrengen en daarmee kennis en wetenschap onmogelijk maken.

3

Opsomming van te behandelen problemen (aporieën): 1 het aantal wetenschappen in relatie tot de verschillende soorten zijnden, 2 horen aannames tav bewijsvoering en die tav zijn tot hetzelfde wetenschapsgebied? 3 horen de verschillende vormen van zijn tot één of meer wetenschapsgebieden? 4 heeft de eerste filosofie (metafysica) alleen betrekking op het zijn? 5 komt 'bestaan' alleen toe aan stoffelijke zijnden, en als er meer (soorten) zijnden zijn, is er dan één bron van zijn of zijn er meer bronnen van zijn? 6 zijn de verschillende soorten van zijn of de immanente bestanddelen de bouwstenen of aanvangsgronden? 7 als er verschillende soorten van zijn bestaan – zijn deze dan de eersten of de laatsten? 8 zou er zonder iets 'algemeens' (universeels) wel kennis van de concrete zijnden mogelijk zijn? 9 is er één of zijn er meer aanvangsgronden? 10 hebben vergankelijke en onvergankelijke zijnden dezelfde aanvangsgronden? 11 zijn 'zijn' en 'één' zelf zijnden of eigenschappen (van zijnden)? 12 zijn getallen en geometrische eenheden ook zijnden? 13 zijn ideeën ook zijnden? 13 bestaan de bouwstenen als mogelijkheid of als werkelijkheid? 14 bestaan de aanvangsgronden in de vorm van het algemene (universalia) of alleen concreet (particularia)?

4

De eerste filosofie heeft betrekking op het zijn van de zijnden. Daarbij wordt uitgegaan van de axiomata 'Satz vom Widerspruch' (SvW) en de 'Satz vom ausgeschlossenen Dritten' (SaD).

Meervoudige betekenissen van 'zijn(de)' en van 'één'.

5

Meervoudige betekenissen van filosofische termen: 1 oorsprong, aanvang(sgrond), 2 oorzaak, 3 element, 4 natuur, 5 noodzakelijk, 6 één, 7 zijn, 8 wezen, bestaan, substantie, 9 identiek, gelijkend, 10 tegengesteld, 11 eerder-later, 12 mogelijk(heid), 13 kwantiteit, 14 kwaliteit, 15 in verhouding tot, relatie, 16 voleindigd, volkomen, 17 grens, einde, 18 wezenlijk, essentieel, 19 structuur, 20 hebben, zich verhouden tot, 21 ondergaan, inwerking, 22 ontneming,

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onteigening, 23 hebben, bezitten, 24 zijn/komen uit..., 25 deel, moment, 26 geheel, 27 brokstuk, beschadigd, 28 soort zijnde, 29 vals, onwaar, 30 niet noodzakelijk (contingent), accidenteel.

6

De vakwetenschappen zijn soort-gericht (op soorten zijnden) en gaan uit van het bestaan van deze zijnden. Zijn in accidentele betekenis is verwant aan niet-zijn. De wetenschap van het zijn [sc de eerste filosofie / metafysica] gaat niet over zijn in de zin van 'gelden' (waar zijn) resp niet-zijn in de zin van 'niet gelden' (onwaar zijn): zijnd in de betekenis van 'waar' en niet-zijnd in de betekenis van 'onwaar' zijn kenmerken van het scheidende en verbindende denken.

7

Overweging wat het wezen (de essentie, 'dat wat het is') van het zijn zou kunnen zijn, uitgewerkt aan de hand van de vier oorzaken: welke oorzaak heeft het primaat? AM conclusie: de (verschijnings)vorm maakt het geheel (dat meer is dan de som van de delen waaruit het bestaat) tot dat wat het is.

8

Stof/materie en (verschijnings)vorm zijn het begin (de oorsprong) van elk natuurlijk wezen. De (verschijnings)vorm kent geen ontstaan – stof/materie is de oorsprong van alles wat (uit elkaar) ontstaat, in elkaar overgaat en vergaat. Primaat van stof/materie bij verandering.

9

Zijn als mogelijkheid en werkelijkheid. Mogelijkheid/kunnen als begin van verandering. Realiserende actie gaat wat betreft begrip, tijd en zijn vooraf aan mogelijkheid/kunnen. Stof/materie is een vermogen omdat het een bepaalde vorm kan aannemen. Verwerkelijking van de vorm als de gerealiseerde verandering. Wat onvergankelijk, noodzakelijk en altijd in beweging is, bestaat altijd als (ver)werkelijk(t).

10

Over de begrippen één, tegenstelling, veel, het midden, identiteit en verschil.

11

Fundamenteel betoog over de eerdere AM thema's (herhaling van het voorgaande).

12

Over het onbewogen bewegende als oorsprong en doel van alle beweging/verandering.

13

De Platoonse ideeën en getallen. De scheiding van particularia en universalia als oorzaak van de problemen van Plato's ideeënleer.

14

Kritiek op de Platoonse en Pythagorese getalsleer. De scheiding van mathematika (getallen en geometrische eenheden) en concrete zijnden is de oorzaak van de problemen van de Platoonse en Pythagorese getalsleer.

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close reading adhv Aristoteles, Metaphysik, VII-VIII (Griechisch-Deutsch, Kommentar von Wolfgang Detel), Surkamp Studienbibliothek 17, 2009

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### 7.17 zijnsessenties als oorzaken

Onderzoek naar de zijnsessentie (ουσια) die gescheiden (geabstraheerd) is van waarneembare zijnsessenties (ουσιας ητις εστι κεχωρισμένη των αισθητων ουσιων). Zijnsessentie is een soort oorsprong en oorzaak (ουσια αρχη και αιτια τις εστιν). Het dat en bestaan van iets moet [als uitgangspunt] duidelijk zijn (δει γαρ το οτι και το ειναι υπαρχειν δηλα οντα), de vraag is steeds: waardoor is het één kenmerk van het andere (δια τι αλλο αλλω τινι υπαρχει / τι αρα κατα τινος ζητει δια τι υπαρχει). Daarbij zoekt men naar de oorzaak (ζητει το αιτιον), d.i. dat wat het in essentie is (το τι ην ειναι). De ene keer is dat een waartoe (ενεκα), de andere keer een eerst bewegende (τι εκινησε πρωτον) - daarmee wordt gezocht naar de oorzaken van ontstaan, vergaan en zijn (ειναι).

Men onderzoekt de stof/materie waardoor deze iets bepaalds is/wordt (την υλην ζητει δια τι εστιν τι), bv stenen, dakpannen > huis. Die oorzaak die de materie maakt tot iets bepaalds (το αιτιον της υλης ω τι εστιν) is de zijnsessentie (τουτο δ' η ουσια). Wat samengesteld (συνθετον) één geheel vormt (εν ειναι το παν), is meer dan de delen ervan, vgl woord-letters, vlees-elementen (vuur, aarde).

De zijnsessentie is de primaire (eerste) oorzaak van het bestaan (zijn) van iets bepaalds (ουσια αιτιον πρωτον του ειναι). Omdat zijnsessenties volgens de natuur door de natuur gevormd zijn, blijkt de natuur zelf (φανειη αυτη η φυσικς) (niet als element, maar als oorsprong (ου στοιχειον αλλ αρχη)) zijnsessentie (ουσια).

Formele representatie van de Aristoteliaanse wetenschappelijke verklaringen (Detel, 2009, 527ff):

(i)  $AaC, CaB \Rightarrow AaB$

(AaC A geldt voor alle C, CaB = een Aristotelische oorzaak )

(ii)  $AaC, CiB \Rightarrow AiB$

(AaC A geldt voor enige C, CiB = een Aristotelische oorzaak )

(iii)  $A:=C, CiB \Rightarrow AiB$

(A:=C A wordt door C gedefinieerd – C is de TEE en daarmee oorzaak van A)

( TEE is de afkorting van το τι ην ειναι = de zijnsessentie )

(iv)  $A:=C, CiB \Rightarrow AiB$

(v)  $F:=U, UaM \Rightarrow FaM$

(De zijnsessentie U van vorm F is de oorzaak dat de vorm F toekomt aan de algemene materie M – algemene metafysische predikatie)

[ vgl kategoriale predikatie ' de vorm F komt het ding A toe' ]

(vi)  $F:=U, UzM \Rightarrow FzM$

(De zijnsessentie U van vorm F is de oorzaak dat de vorm F toekomt aan deze specifieke materie M – singuliere metafysische predikatie)

(vii) Als X datgene is waarin het geheel van een composiet K meer is dan de delen van K, dan is X niet een deel van K, maar de zijnsessentie van K – de eenheid van K berust op de zijnsessentie X.

### 8.6 de eenheid van vorm en materie in form-materie-composita

Wat is de oorzaak van de eenheid (τι αιτιον του εν ειναι) van definities en composita (ορισμους και αριθμους)?

De ene [oorzaak] is materie, het andere vorm, het ene mogelijk, het andere verwerkelijking (το μεν υλη το δε μορφη, και το μεν δυναμει το δε ενεργεια).

Wat-het-betekent-dit-te-zijn is onmiddellijk één en ook een zijnde (το τι ην ειναι ευθους εν τι εστιν ωσπερ και ον τι).

Andere theorieën zoeken naar iets dat verschilt van mogelijkheid en verwerkelijking, en dat deze tot een eenheid maakt.

Er is echter geen bijkomende oorzaak nodig.

De uiterste stof/materie en de vorm is dezelfde [oorzaak van eenheid], het ene als mogelijkheid, het andere als verwerkelijking (εστι δ η εσχατη υλη και η μορφη ταθτο, το μεν δυναμει, το δε ενεργεια).

Formele representatie (Detel, 2009, 629ff):

Stel X is een vorm-materie-compositum met de vorm F en materie M.

X is wb verwerkelijking F, M is wb mogelijkheid F.

M is wb mogelijkheid hetzelfde als X wb verwerkelijkheid, namelijk F, of preciezer: de TEE van F.

X is als verbinding van M en F een eenheid.

Als X een individueel vorm-materie-compositum is, dan is er altijd een bewegingsoorzaak voor het ontstaan van X.

De verticale eenheid van individuele vorm-materie-composita bestaat daarin dat

- (i) de zijnsessentiële vorm F van het compositum K de disposities van zijn materie-vormen M verwerkelijkt
- (ii) de zijnsessentiële vorm F, opgevat als verzameling relaties R tussen de individuele materie-delen M van het compositum K, constitutief is voor het compositum K

De verticale eenheid van individuele vorm-materie-composita is accidentieel in zoverre de bewegingsoorzaak ervan accidenteel kan zijn.

De horizontale eenheid van artificiële vorm-materie-composita bestaat in een constitutieve verzameling relaties tussen de materie-delen, waarbij pre-existente materie M\* veranderd wordt in functionele materie M. Daarbij overleeft de pre-existente vorm F\* van M\* als algemene structuur.

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[ TODO ]

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[Griek Word Study Tool](#)

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[

Relatie (dynamisch-reflexieve) patronen en media van een eventiteit: welke patroon- en media-kenmerken zijn accidenteel en welke essentieel voor het (voort)bestaan van een eventiteit?

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Mason, E., [Value Pluralism](#) (SEP)

[ apply to the values happiness, liberty and equality ]

**Political pluralism** is associated with political liberalism and is concerned with the question of what sort of restrictions governments can put on people's freedom to act according to their [different] value systems. Options: all value systems are equal, all value systems should be tolerated, only some value systems (sc the reasonable ones) should be tolerated.

**Moral pluralism** is not about different value systems or viewpoints, but about different values: is there one super-value (monists) or are there different [irreducible] values (pluralists)?

Objectivists, subjectivists or realists can obtain a moral pluralist or monist position.

**Consequentialists**: values as realized by goods in the world > one highest good?

**Deontologists**: values in terms of rules/principles > one overarching principle (e.g. Kant monist, Ross pluralist)?

**Virtue ethicists**: values in virtues > one basic virtue?

Monists: one ultimate value (e.g. happiness, other values are than instrumental to happiness, or pleasure as attitudinal state (F.Feldman)).

Monism may be too simple — it may not capture the real texture of our ethical lives. However, pluralism faces the difficulty of explaining how different fundamental values relate to each other, and how they can be compared.

**Foundational pluralism**: when we say that something is good we are never ascribing a property of goodness (vs Moore, who is a foundational monist), rather we are always saying that the thing in question is good in some way.

There is a fundamental plurality of ways of being good. We cannot reduce them to something all 'good things' have in common.

**Normative pluralism** posits a plurality of bearers of value but can be monist at the foundation. e.g. Moore is a foundational monist, for although he thinks that there are many different bearers of value, he thinks that there is one property of goodness, and that it is a simple non-natural [mental? conceptual?] property that bearers of value possess in varying degrees > comparison of plural goods in terms of the amount of goodness they have [ applying quantitative ranking ]. Mill, a classic utilitarian, often has been interpreted as thinking that there are irreducibly different sorts of [higher intellectual and lower physical] pleasure.

**Decision procedure pluralism**, making a distinction between decision procedure and criterium of right action (e.g. maximize good consequences): even a monist theory could use a pluralist decision procedure if that most likely would result in success.

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A theory that tells us that e.g. welfare is the only value may only be nominally [linguistically] monist. The metaphysical question is rather more difficult, and concerns whether there are any genuinely unitary values at all.

Moore thinks that goodness is a genuinely unitary [non-natural] property: 'good' has no definition because it is simple and has no parts. (Moore, 1903, p. 9).

Could pleasure/good have one value? cf the concept 'milk': human, cow, goat, coconut, soya...

The attraction of pluralism is that it seems to allow for the complexity and conflict that is part of our moral experience.

Mill's distinction between higher and lower pleasures allows us to say that no amount of lower pleasures can outweigh some amount of higher pleasures. As Mill puts it, it is better to be an unhappy human being than a happy pig. [ better to be very intelligent & unhappy than being simpleminded & happy? ]

Discontinuities in our value rankings seem to support pluralism.

The most extreme form of discontinuity is incommensurability or incomparability — when two values cannot be ranked at all.

It can be rational to regret the outcome of a correct moral choice or regret the rejected option, so choices involve genuine value conflicts.

Not all cases of value conflict point to pluralism (e.g. conflicts due to ignorance or irrationality).

Goods become different values in different temporal situations, and the monist cannot accommodate this thought, although...

Using a monist utilitarian account of value, we can distinguish between the non-evaluative description of options, the intermediate description, and the evaluative description as follows:

Non-evaluative description of option	Intermediate description of option	Evaluative description of option
Painting a picture →	Producing x units of beauty →	Producing y units of value
Reading a book →	Producing x units of knowledge →	Producing y units of value

The non-evaluative options (e.g. eating donuts) have diminishing marginal non-basic value. On top of that, the intermediate effect, or non-basic value, (e.g. experiencing pleasure) can have a diminishing contribution to value. Varying diminishing marginal value in these cases is easily explained psychologically. Pluralism can explain akrasia, or weakness of will, but a distinction between a cognitive and an affective element to the choice can explain akrasia on a monist account of value too.

Another argument for pluralism starts from the observation that there are many and diverse appropriate responses to value.

Pluralists often insist that sometimes it may not be possible to make a rational choice between two values. Complexities in value comparison are so deep as to sometimes result in incomparabilities. The big question facing pluralism is whether rational choices can ever be made between irreducibly plural values.

### 3.3 (..)

The pluralist's most common strategy in the face of worries about choices between incommensurable values is to appeal to practical wisdom — the faculty described by Aristotle. [ vgl het inzicht van een ervaren schaker in een stelling ] Isaiah Berlin claims that goods such as liberty and equality conflict at the fundamental level.

Robinson, H., [Substance](#) (SEP)

There could be said to be two rather different ways of characterizing the philosophical concept of substance. The first is the more generic. The philosophical term 'substance' corresponds to the Greek *ousia*, which means 'being', transmitted via the Latin *substantia*, which means 'something that stands under or grounds things'. (e.g. Democrit: atoms, Plato: forms, Hume: impressions & ideas). [ substraat ]

The second use of the concept is more specific. According to this, substances are a particular kind of basic entity, and some philosophical theories acknowledge them and others do not. This conception of substance derives from the intuitive notion of individual thing or object, which contrast mainly with properties and events.

**Aristotle's** Categories distinguish between individual objects and the various kinds of properties they can possess. Examples of substance are: horse, man [both as individual objects (particulars as primary substances) and kinds of individual objects (universals as secondary substances) + third type of substance: kinds of stuff like water or copper]. The individual substances are the subjects of properties in the various other categories, and they can gain and lose such properties whilst themselves enduring.

It seems, in summary, that there are at least six overlapping ideas that contribute to the philosophical concept of substance. Substances are typified as:

1. being ontologically basic—substances are the things from which everything else is made or by which it is metaphysically sustained;
2. being, at least compared to other things, relatively independent and durable, and, perhaps, absolutely so;
3. being the paradigm subjects of predication and bearers of properties;
4. being, at least for the more ordinary kinds of substance, the subjects of change;
5. being typified by those things we normally classify as objects, or kinds of objects;
6. being typified by kinds of stuff.

We shall see later that the Kantian tradition adds a seventh mark of substance:

7. substances are those enduring particulars that give unity to our spatio-temporal framework, and the individuation and re-identification of which enables us to locate ourselves in that framework. (It should be remarked in passing that at least one major expositor of Aristotle (Irwin: 1988, especially chs 1, 9, 10) attributes a very similar intention to Aristotle himself.)

And further the connection between substance and teleology:

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8. The substances in a given system are those entities crucial from the teleological or design perspective of that system. 'Crucial' means that other things exist either to constitute them or to provide a context of operations for them.

Many of the pre-socratic philosophers in fact had a concept of substance rather like that above attributed to chemistry: that is, their emphasis was on criterion (vi) above [being an elementary kind of stuff].

Plato rejected these materialist attempts to explain everything on the basis of that of which it was made. According to Plato, the governing principles were the intelligible Forms which material objects attempted to copy. Aristotle's main criticism of Plato's Forms was that they are a bastard confusion of universal and particular, see Fine (1993).

There are two main sources for Aristotle's approach to substance, the *Categories* and *Metaphysics Z*. The primary substances are individual objects (e.g. Fido is a primary substance, and dog—the secondary substance—can be predicated of him ('said of'), as well as fat or brown ('part of' or 'in').

The marks of primary substance are:

1. Being objects of predication but not being themselves predicable of anything else.

2. Being able to receive contraries. A substance can go from being hot to being cold, or from being red to being blue, but the instance of blue in an object cannot similarly take on and lose a wide range of attributes.

3. If substance did not exist it would be impossible for things in any of the other categories to exist. There could be no instances of properties if there were no substances to possess them.

The *Categories* sets out important logical distinctions between different kinds of attribute, but it does not enter into a metaphysical analysis of substance itself.

This takes place mainly in *Metaphysics*, Book Z. Here Aristotle analyses substance in terms of form and matter. The form is what kind of thing the object is, and the matter is what it is made of. And there is the composite of form and matter. The composite seems more consonant with the doctrine of *Categories*, for the composite is the individual. Aristotle, however, chooses the form as more paradigmatically substance, the particular individual being the form individualized in the matter [strange, because if forms are universals, they would be secondary (cf *Categories*) – or shows the interpretation that A 'chooses the form as more paradigmatically substance' a platonic twist? see Z ].

Questions: (i) Are such forms universals or particulars? (ii) what is the relationship between the substantial form and the properties which enter into its definition? (iii) What is the ontological status of such forms?

Aristotle is undoubtedly a realist about substantial forms, in the sense of thinking them to be something more than a mere collection of properties, but how are we to understand this 'more'?

Interpretation compatible with modern science: Empiricist philosophers of science used to believe that the concepts in higher order sciences could be reduced, either by means of reductive definition or by 'bridging laws', to those in the more basic sciences like physics (e.g. Nagel, 1961). Few, if any, philosophers of science believe this now. They agree that, even if the world is 'closed under physics' — [meaning that] every event has a complete set of

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physical causes — the concepts of the other sciences are irreducible and do autonomous explanatory jobs. There are interpreters of Aristotle who think that this kind of irreducibility is all that Aristotle means.

The stronger, incompatibilist interpretation is that Aristotle did not believe that the behaviour of complex entities followed from the laws that govern their parts or their matter (Gotthelf 1987, Robinson 1983). How matter behaves depends on the substantial form present in it. The substantial form plays, therefore, an essential role, not merely in certain kinds of scientific explanation, but by being a fundamental efficient cause in its own right. [ ? confusion of A's 4 causes? ]

Modern problems with A's substance concept: 1. the explanatory power of 'substantial forms' compared to mechanistic physics, 2. difficulties understanding the relation of substantial form to [ primary and secondary ] properties.

The concept of substance figures centrally in a positive way for the rationalist philosophers, in a way that it does not for the empiricists. The rationalists' substances are not, however, the individual objects of everyday life.

**Descartes** believed in only two kinds of substance: material body, which is defined by extension, and mental substance, which is defined by thought/consciousness. D's material substance falls more naturally into the stuff category, rather than into the thing category. The situation is different for mental substance. The cogito shows that Descartes definitely believes that each person is a different individual mental substance. His two substances are each defined in terms of one property (extension for matter and thought for mind).

For **Spinoza**, there is only one substance, the existence of which is demonstrated by a version of the ontological argument, which is thought of as being both God and Nature. Everything else is a mode of this one substance as the fundamental existent conceived of as wholly necessary and self-subsistent.

**Leibniz** presents monads as individual substances, created or uncreated (so God is a monad as well). Even temporary properties are essential for the existence of every monad (vs Aristotle). Each monad reflects the whole world from a different perspective: "The result of each view of the universe, as looked at from a certain position, is...a substance which expresses the universe in conformity with that view."

According to **Locke**, we have two conceptions of substance. One is a 'notion of pure substance in general' (Essay II xxiii 2) [ substrative substance, only having the property of being, which suffers from logical emptiness ], the other 'ideas of particular sorts of substance' (II xxiii 3), called 'sortals' [ the types that we categorize them in depend on the properties we happen to be able to perceive and kinds or sorts are defined in terms of these observable properties ]. Locke's doctrine of sortals is in some respects realist and in some conceptualist or conventionalist. The properties in terms of which sortals are defined do correspond to real qualities and powers in the world. The internal constitution of a sortal "make the whole subsist by itself" (xxiii 6). Locke is more conventionalist, however, about their classification under particular sortals. Sortals, unlike Aristotelian species, place no constraints on how individual objects must or ought to be.

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The potential for a stronger realism in Locke has been exploited by Putnam and Kripke in their development of a modern, essentialist conception of natural kind terms.

According to **Hume**, in the Treatise, our belief in substance is the result of a mistake or illusion: a succession of very similar things does not constitute the real continuation of anything, only the illusion of real continuation. Substance (like causation) is the projection onto the world of a tendency of our minds.

**Empiricism** developed Hume's approach into a form of reductionism.

**Kant** took Hume's 'tendencies of the mind to pass' from one idea to another, without which we could not construct the world, and canonized them as a priori categories of the understanding - it is only by applying the categories of substance and causation that we can have intelligible experience. This way substance has become a formal concept of central importance - that is a concept with a special central role in the structure of our conceptual scheme - rather than being the name for certain kinds of important things in the world.

Contemporary controversies:

1 how to characterize substance in contradistinction to properties and the other categories: is substance something independent? and does substance require some extra component beyond properties, (and, if so, what?) or is a 'bundle of properties' theory of substance adequate?

2 the relation between substances and our practices of individuation and reidentification: must objects be individuated under the kind of sortal expressions that correspond to Aristotelian substance concepts, or will a more generic notion, such as physical body, be sufficient?

Mutual dependence of substance and events and properties?

It seems not natural to talk of the temporal parts of objects, though some philosophers, led by David **Lewis** (1986), think that there are compelling philosophical reasons for doing so. The rationale implicit in our ordinary concept is that an object is wholly present at all the temporal points of its existence.

Substance and events are property-instantiators. Events are composed of events. Substances endure through their period of existence.

**Lowe** (1998): independence account of substance in terms of identity:

'x is a substance if and only if x is a particular and there is no particular y such that y is not identical to x and the identity of x depends on the identity of y'.

**Hoffman and Rosenkrantz** (1994 and 1997): substance is the only category of thing which might have only one instance through at least a minimally extended period of time.

The question remains, however, how far these distinctions between substances (& events) and properties are nominal and how far real.

Properties might be conceived of as universals, or as individuals—that is, property-instances, which are sometimes called 'tropes'. The question is whether anything could perform a role as the one [essential] property (that's chosen to fill the role of substratum, because the other properties inhere in, or are modes of, it) from amongst the properties that are basic to modern, post-Newtonian physics—properties such as charm, energy, spin and mass.

**Crane and Farkas** 2004: a substance is a thing which has properties, and that is all one needs to say.

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**Bennett** (1987) makes substancehood a function of how we operate on the properties we perceive (more Kantian than realist).

At the current state of the debate, it looks as if there is no compelling reason for accepting substratum.

The Aristotelian tradition anchors the concept of substance, at least in nature, primarily to instances of species of natural object. The Kantian tradition ties it to those enduring bodies the individuation of which gives sense and structure to our spatio-temporal framework. David **Wiggins** (1967, 1980, 2001) has made a sustained attempt to prove that these two objectives necessarily go together and to make the Aristotelian notion of substance, even including its bias towards the biological, central to our practice of individuating objects. Wiggins assumes that individuating a temporally enduring object involves being able to re-identify it at different times and under different descriptions. This assumption makes it possible to state substance individuation using the language of identity.

Implication: every ultimate sortal has its own principle of individuation. DW proposes also 'phase sortal' (e.g. 'child' is a phase sortal which applies to a phase of the things fully designated by human being). . It is a necessary condition for F's being an ultimate sortal that, whenever it applies to something, it applies in a present-tensed manner to the thing through the whole of its existence.

Three views current in the literature on the status of non-atomic, or complex, bodies are:

1. Van Inwagen (1990): there are no complex bodies, except living ones. That is, there are only atoms and living bodies, inanimate complex bodies are not true individuals.

2. Wiggins (1997): as we saw above, for Wiggins the concept 'body' is always generic, never sufficient in its own right, needing to be filled out by appeal to a more determinate sortal, such as 'dog' or 'table'. Call this 'sortalism'.

3. Ayers (1974, 1991): the notion of a coherent, unified body or material object is the basic notion for individuating objects and is presupposed by sortal concepts. It is only in so far as dogs and tables are unified bodies that these notions can be used to individuate objects. Call this 'somatism'.

Philosophers acknowledge that we cannot function without using substance concepts in the narrower sense, for the notion of an enduring particular or individual substance is essential to our making sense of the world as we live in it. But three things at least remain controversial. First, it is disputed what kinds of concepts need to be deployed to characterize these enduring things: are they the rich variety of traditional or 'Aristotelian' substance concepts, or will various ways of identifying things simply as physical bodies with certain characteristics do the job? Second, it is still unclear how far our substance concepts purport to reflect a component in reality (real or imagined) over and above the bundle of properties that constitute its intelligible aspects. Third, the unclarity of the connection between what a thing is and what it does leaves unresolved the degree of interdependence between substance concepts and notions of purpose and final causation.

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	substances	instances	properties	
pre-socratics	elementary stuff: water (Thales) air (Anaximenes, Diogenes) fire (Hippasos, Herakleitos) 3+earth (Anaxagoras)			
Plato	intelligible Forms			
Aristotle	particulars	man, horse		
	universals			
	matter		made of	
	form		kind of	
	composite of form & matter	the individual, form in matter		
Descartes	matter (stuff)		extension	
	mind		thought	
Spinoza	Deus sive Natura			
Leibniz	monads		temporary, each reflecting the whole	
Locke	idea of substrate		being	
	sortals		observables	
Hume	illusion, projection of the mind			
Kant	the noumenal		categories of	
	the phenomenal		understanding	
Popper	the material			
	the mental			
	the conceptual			
Lowe	identity			
Hoffman & Rozenkrantz	category of thing	one instance in time		
Crane & Farkas	a thing with properties	a thing with properties		
Bennett	function of how			

	we operate on properties			
Van Inwagen	atoms			
	living bodies			
Wiggins	phase sortals			
Ayers	unified bodies (somatism)			
questions reg. relations s i p	independent?	individuation? reidentification?	bundle of p = substance?	temporality, nominal? real?
	concept of enduring	relation of what it is and what it does	constituting intelligibility	

### **Aristotelian Metaphysics (AM)**

The immanent essence of this [changing] particular being is this **form-matter-product-function**.

The [[immanent] essence of the] being of [all / the whole of] beings is [ .. ]

According to AM, ousia (Greek for being, Latin: substantia) is a combination of form (kind of) and matter (made of), bearing essential and accidental properties (synchronic), involved in the dynamics of potentialities and realizations (diachronic).

The being of beings is (has as predicates/properties):

- basic (ontologically (one or more?), made of (substrative or ..?))
- independent (cf mathematical dependencies)
- durable (cf biological or physical undurabilities)
- subject of predication (bearer of properties) [ predicable of anything/all? ]
- subject of change
- typified by (kinds of) objects (particular, universal)
- typified by (kind of) stuff [ pre-socratics ]
- typified by (kinds of) perceptions
- typified by (kinds of) productions (made by)
- typified by (kinds of) goals (made for, functions)
- potential and/or real (realized)

- 
- (im)perceptible
  - (un)knowable
  - verb-noun-adjective
  - ( .. )

Which predicates (properties) of being/substance are accidental and which essential?

Are the properties [nominally and/of realistically] different from being/substance?

Related to the assigned predicates/properties, is the being of beings (substance of substances) one, two or many?

tension Categories (primary substance: this man [a particular instance of a kind], secondary substance: man, 'kind of') and Metaphysics (primacy/priority of form ('kind of'))?

form [of this concrete particular – e.g. this specific character of this specific man] different from universalia ('kind of' in general, e.g. the concept 'character of man')

matter without form is ...

form without matter is ...

primary substance as 'this particular form-matter' ('**form**-matter-product-function')

particular: a concrete, primary substance [ a particular is not predicable of anything else ]

universal: a derived, secondary substance [ an universal is predicable of a sample of beings ]

Plato: only universals are real

Aristotle: only particulars are real (nominalist interpretation of universals as immanent in particulars)

alternative: both are real in their own realm

what is predicable of anything?

what is predicable of all (the whole)?

Could an universal be described as 'abstract particular'?

Encapsulated (immanent) essences (essential properties):

The essence of anorganic bodies (like atoms and molecules) is [...] (AP)

The essence of organisms is reproduction (AL)

The essence of humans is contemplation (AE)

The essence of substance (being qua being) is [...] (AM)

Only substances have a primary definition and (immanent) essence.

Are there beings without (immanent) essence(s)?

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If a particular loses its (immanent) essence(s), it ceases to exist.

Can an universal lose its essence(s)? And 'being qua being'?

{ Regarding the principles of reproduction: already some of the most basic Cellular Automata show reproduction of patterns. Simplicity makes sense, literally. }

Substance - what is / determines the coherency / connectivity / consistency / continuity / (inter)dependency and the dynamics of reality as an intertwined whole [ or of the being of beings, or of the concept of being ] ?

To be distinguished from the coherency / connectivity / consistency / continuity / (inter)dependency and the dynamics of an eventuality – e.g. water potentially

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frozen but actually fluid – which again is different from an organism potentially being mature but actually being immature.

What would be the 'substance' of thought? What made-by made-of kind-of made-for is thought? Are there eventities that could be characterized as the 'atomic components of thought'? What kind of eventities would be involved at the basic level(s) of thought? Is there one basic level or are there different, irreducible levels of thought (e.g. are the neurological and semantical levels irreducibly different)? What are its principles of organization on different levels?

Does it make sense to distinguish perceptible, knowable, dependent and changing substances from (an) imperceptible, unknowable, independent and unchangeable substance(s)?

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### **Aristotelian Hermeneutics (AH)**

[http://en.wikipedia.org/wiki/De\\_Interpretatione](http://en.wikipedia.org/wiki/De_Interpretatione)

Περὶ Ἑρμηνείας (De Interpretatione) deals with the relationship between language and logic in a comprehensive, explicit, and formal way.

It's the second part of the Organon, Aristotle's collected works on logic.

1

Aristotle defines words as symbols of 'affections of the soul' or mental experiences. The same experience, although different words in different languages.

2

A noun signifies the subject by convention, but without reference to time.

3

A verb carries with it the notion of time. An untensed verb indicates the present, the tenses of a verb indicate times outside the present.

4

The sentence is an expression whose parts have meaning. Only when words are added to a noun, we do have affirmation and negation.

5

Every simple proposition contains a verb. A simple proposition indicates a single fact, and the conjunction of its parts gives a unity.

6

An affirmation is an assertion of something of something, a denial an assertion denying something of something.

7

Some terms are universal. A universal term (e.g. 'moon') is capable of being asserted of several subjects. An individual or singular term (e.g. 'Plato') is not predicated (in the same) sense of more than one individual.

Contrary: a universal affirmative proposition and a universal negative proposition having the same subject and predicate ('Every man is white' – 'No man is white') – both cannot be true, both can be false, their contradictions can be true ('Every

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man is honest' – 'Every man is dishonest' – 'Some men are dishonest' – 'Some men are honest')

Contradictory: a universal affirmative proposition and the non-universal denial of that proposition ('Every man is white' – 'Some man is not white') - one must be true, one false.

8

An affirmation is single, if it expresses a single fact (sc if the word in it has only one meaning).

9

Of contradictory propositions about the past, one must be true, the other false. But when the subject is individual, and the proposition is future, this is not the case. For if so, nothing takes place by chance. (the problem of the future contingents)

10

Afirmations and denials that can be assigned when 'indefinite' terms such as 'unjust' are included.

Distinction between the use of the verb 'is' as a mere copula or 'third element', as in the sentence 'a man is wise', and as a predicate signifying existence, as in 'a man is [i.e. exists]'.

Deborah K. W. Modrak, Aristotle's Theory of Language and Meaning, 2001

**Gouguenheim, S.**, Aristote au Mont Saint-Michel, 2008

supported by Jacques Le Goff (both medievalists)

Western Europe did not break completely with the Greek classics. Greek manuscripts were available around Europe during the MA, also a lot of them in Constantinople, the capital of the Eastern-Roman Empire and regularly visited by West-Europeans. During the MA there was interest in the Greek sources – the New Testament was written in Greek and the church fathers knew the work of Plato as well. The intellectuals (mainly monks) in England, France and Italy themselves searched for lost texts and from the beginning of the 12<sup>th</sup> century a lot of translations were made – some decennia before the Arab Aristotle-translations that were made in Spanish Toledo. Besides these translations were made mainly by Armenian christians. The speculative character of Aristotle's work greatly influenced the intellectual attitude in Europe, acknowledging, challenging and partly rejecting Aristotelian (and other) thoughts, paving the way for Enlightenment.

In islamic thought the impact of the Greek sources was very limited. For instance: although Averroes (1126-1198) seemed to connect Quran with reason, his real aim was the protection of islamic faith, trying to prove the superiority of Quran against reason. Nevertheless Averroes was excommunicated and his books were burned three years before his death.

**Watson, W.**, *The Architectonics of Meaning; Foundations of the New Pluralism*, 1985, 1993

xiii Pluralism states that the truth admits for more than one valid formulation.

xv Discovery of an unrecognized dimension that's present in all our knowledge.

A philosophy is concerned with what is primary and universal.

xvi W's work is based on that of Richard McKeon, although e.g. perspective as archic variable is not found in RM's work. W is looking for principles that are grounded in conditions of knowing that are the same for all.

I Archic Variables

2 Incompatible – or not? Examples: 10 feet = 3 meters (different metrical units);  $7+5=12$  (decimal),  $7+5=10$  (duodecimal – different base notation); the angles of a triangle equal two right angles (Euclidean) or not (non-Euclidean).

4 Incompatibility lies only in the fact that one must use one system [sc philosophical approach] at the time, and not mix them up indiscriminately.

5 Different philosophical epochs can be distinguished: ontic (concerned with being, that which is), epistemic (concerned with how we know that which is) and semantic (concerned with the expression (meaning) of what we know about that which is).

6 Hume looks for the foundation of the system of the sciences in the principles of human nature.

7 Kant: not our knowledge must conform to objects, but objects must conform to our knowledge.

Moore: linguistic turn - concerned with what is meant, and with the question whether what was meant is true or false.

12 Philosophic diversity is not a function of a single variable, but of multiple variables.

10 W states that Reciprocal Priorities (between being, knowing and meaning / things, words and thoughts; RP=each is [sc can be made] prior to the other two but also includes them) underly philosophical differences, rather than inadequate data or faulty arguments.

11 Fundamental characteristics of philosophical texts are called 'principles' [not an unambiguous term in W's text, because he calls one of the four archic variables 'Principle' as well, so 'principle' can mean one specific archic variable OR each of all the archic values...], 12 a common aspect or dimension of the texts is called a 'variable' and the different reciprocally prior principles the 'values' of this variable. We must derive the principles from a conception of the text as functioning. The principles must be implicated in any functioning of the philosophy – it will be impossible to proceed without them. The variables must be essential elements in a philosophical text.

13 W calls them 'archic variables' (derived from Greek arche = beginning, principle): they cause without being caused, and they are variables insofar as they assume different values in different philosophical texts.

The word text in this context includes any expression of thought.

[ missing: explanatory introduction of the 4 variables and their 16 values – W jumps right into the first of the four archic variables... ]

**II Perspective**

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15 Perspective is the way in which the text presents its own authorship. The fundamental architectonic perspectives are complete, mutually exclusive (not two at the time) and mutually inclusive (each includes the others in its own way).

16 code 11 idiocentric perspectives: individual or personal, human and group. Perspectivism states that there is no escape from the limitations of one's own perspective. e.g. Xenophanes, Protagoras: 'Man is the measure of all things.', Montaigne, Descartes: 'I think, therefore I am.', Kierkegaard: 'The truth consists in that conception of life which is expressed by the individual.' 20 Nietzsche: 'The human intellect cannot avoid seeing itself in its own perspectives.' 'Every great philosophy is the personal confession of its author.' William James, Merleau-Ponty: 'We find in ourselves, and nowhere else, the unity and true meaning of phenomenology.' Percy W. Bridgman: 'We never get away from ourselves.' Walt Whitman: 'I celebrate myself and sing myself.'

22 There is no common doctrine or substantive content associated with this particular kind of perspective. What is common is simply the starting-point or principle in a procedural sense.

code 12 objective or impersonal perspectives. Democritus, Francis Bacon: 'Human understanding builds a true model of the world, such as it is in fact.' Spinoza: 'Our mind reflects the order of nature.' Newton, Hume, Darwin, Freud: 'The aim of scientific thought is to arrive at correspondence with reality – that is to say, with what exists outside us and independently of us.', Max Weber: 'The objectivity of science requires freedom from value judgements.', Shakespeare.

27 code 13 diaphanic, revelatory, transcendent, absolute perspectives. Parmenides, Plato, 28 'There is a source of wisdom through whom a higher truth may be revealed.', St Augustine, Leibniz, Hegel, Schopenhauer, Bergson, Heidegger, Tolstoy, Asiatic traditions. 32 A revelatory perspective does not itself determine what is to be revealed (God, ideal world, the universal substratum of this world); that depends upon another archic variable.

code 14 disciplinary perspectives, a multiplicity of independent and impersonal disciplines, [scientific community]. Aristotle: theoretical (interest in knowing), practical (interest in acting) and poetic (interest in making) perspectives. 34 e.g. man can be investigated qua substance in metaphysics, qua shape in mathematics, qua body in physics, qua animal in biology, qua agent in ethics, qua citizen in politics, qua curable in medicine, qua persuadable in rhetoric, qua imitable in poetic – all disciplinary we-perspectives. Thomas Aquinas, Kant: 'The knowledge becomes scientific when the mind recognizes its role in the constitution of science.', John Dewey: 'Any vital experience is at once emotional and intellectual and practical.', Jane Austen, James Joyce. 37 Disciplinary perspectives have a characteristic success in the great architectonic philosophies.

38 A perspective can be a perspective on other perspectives. 39 E.g. the physics-ethics-logic distinction serves as a commonplace that can be given different meanings in different philosophies. 40 In typical cases, idiocentric perspective gives us infinite sciences, objective perspective gives us physics, ethics and logic, diaphanic perspective gives us hierarchies culminating in a single unified science, and disciplinary perspective gives us theoretical, practical and poetic sciences. The differences between the perspectives cannot be settled by an appeal to the facts.

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### III Reality

41 Texts have a perspective on reality as presented in the texts. W calls this textual reality the 'signification' of the text or the 'interpretation' of being, knowing and meaning. 42 The archic variables are independent only as starting-points for the constitution of meaning – the way each starting-point is developed will depend on the other starting-points with which it is associated, so that all together become constitutive of an organic whole. There is a reciprocal priority among the realities – each must include what the others take to be real, in a way appropriate to its own reality.

code 21 existential (perceived, apparant, phenomenal) realities. 'esse est percipi' 43 Protagoras: 'The perciever is in flux and the perceived is in flux and perception is the momentary interaction of the two.' Berkeley, Hume (perceptions, including impressions and ideas), Ernst Mach: 'Nature is composed of sensations as its elements.' Einstein: 'Sensations are the primary reality and our concepts are free creations of the mind by which we order our sensations.' Max Weber: 'Our conceptual constructs ('Gedankenbilder') are aids in understanding reality in its individuality.' Wittgensteind: 'family resemblance' ordering the particularity of perceived things. Is there anything common to all games? W only sees a complicated network of similarities. Buddhism (Nagasena, Nagarjuna), Shakespeare.

code 22 substrative (GR hupokeimenon), material, physical, entitative realities. 'What is real, is the object as it is in itself, apart from its effects on us.' 51 Thales: water, Anasimenes: air, Anaximander: indeterminate, Pythagoreans: numbers, Democritus: the atoms and void. 'Reality is not found in sense perception, but in atoms and void.', Epicurus, Lucretius, 53 Newton (absolute space and absolute time – classical mechanics) > Einstein (relativistic spacetime – relativistics mechanics) – showing how archic differences complement each other in the historical development of a science., Machiavelli, Marx, Nietzsche ('Most of the conscious thinking of a philosopher is secretly guided and forced into certain channels by his instinct.' 'Man is not the measure of things, rather it is the substrative reality of our instincts and physiological demands that is measuring our measurings.'). Freud (constrasting the manifest and latent content of dreams), Tolstoy, Lao Tzu (the Tao).

57 code 23 noumenal, transcendent, supersensible, ideal, intelligible realities. Plato, Plotinus, Augustine, Kant ('The gulf between nature and freedom is bridged by the judgment seeking a purposiveness in nature that would accord with the determination of nature by reason.') Koran (The unseen reality is accessible only through revelation and not through reason.), El Greco.

61 code 24 essential, phenomenal [, immanent] realities. Anything is real as it is – e.g. a statue of a man is not a real man, but a real statue. Essences are like existential realities, being real **in** particular individuals, but [the definition/formulation of] an essence is rather general [universal] than particular [problem: universals not primary but secondary in A's system?]. Essences are like substrata (what it is apart from changing appearances), but the essence is not the substratum (e.g. a man is not a body but a living body). Essences are like noumena (consistency and continuity), but essences are not noumena (reals separate from individuals), essences are real **in** the individuals [immanent, not transcendent].

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Socrates, Confucius (both looking for virtues that are real in individuals), Aristotle: 'Reasoning and refutation are sometimes real and sometimes not, [if not:] appearing to be real owing to mens' inexperience (like those who view things from a distance).' 63 All A's sciences are looking for some essential reality. 'It is the mark of an educated man to look for precision in each class of things just so far as the nature of the subject admits. (..) It is foolish to accept probable reasoning from a mathematician and to demand scientific proofs from a rhetorician.', William Harvey (observations of beating hearts), Descartes (body and mind each its own essential reality), Hegel ('What is rational, is actual, and what is actual, is rational.', applied to historical events), Husserl ('essential predicables qualify it qua being as it is in itself', example tone ('every tone in and for itself has an essential nature, and at the limit the universal meaning-essence 'tone in general' – a phase or aspect intuitively derivable from the individual tone' [cf the essence of the 'tone in general' (e.g. frequency) with the essence of 'the tone in the voice of Andrea Bocelli' (..)), 'Different life-worlds [e.g. different social spheres with their own facts and truths] have a common general structure and thus can be investigated scientifically.', Heidegger (looking for the essences of Dasein, truth, art, technology, nihilism), Whitehead's 'eternal objects' (pure potentials): 'Every element of our experience can be interpreted – everything of which we are conscious (..) shall have the character of a particular instance of the general scheme.', Michelangelo, 68 Constable (landscapes showing the essential unity of man and nature), James Joyce (seeking recurrent essences in the history of human thought and using Hellenic texts as paradigmatic). 69 Each kind of reality includes the others (reciprocally prior, as derivative from itself), e.g. essential realities include all realities as what they are – appearances are real as appearances, matter is real as matter, noumena are real as noumena (although this last need not imply an existence outside the mind).

#### **IV Method**

71 The way in which the text orders the real from some perspective, can be called its method (GR methodos – following-way, pursuit). Examples of methods: mathematical (Spinoza, Russell), aphoristic (Heraclitus, Nietzsche), dialectical (Plato, Hegel), a plethora of methods (Kant). 72 Philosophies do not differ because each has a part of the whole, but because they have different ways of appropriating the whole. They do not differ in the presence or absence of certain elements, but in their relative priority in the whole that includes them all.

73 code 31 agonistic, paradoxical, eristic, antilogistic methods.

Protagoras (opposite arguments, contests of words), 74 Sextus Empiricus (opposing phenomena to phenomena, noumena to noumena and phenomena to noumena), Heraclitus ('Things exist only so far as they embody a tension of opposites.' 'War is the father of all and the king of all. '), Empedocles (cosmic cycle with never-ending contest between love and strive), Ovid, Andreas Capellanus, Galileo, Einstein (relativistic vs mechanistic theory), Milton, Machiavelli (the origin of Roman liberty in the opposition of nobles and people), Montesquieu (liberty through competing interests between legislative, executive and judiciary powers), Madison (separation of powers – checks and balances), Freud (neuroses, dreams, taboos, religions, civilizations as the outcome of conflicting forces).

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78 code 32 logistic, constructive, compositive, combinatorial, formal, canonical, calculative, computational methods. Logical validity if the conclusion follows from the premisses. Here the parts determine the whole.

79 Leucippus: 'Nothing comes to be at random, but all things according to reason [GR ek logou] and by necessity [GR hup' anagkes].', Democritus ('Necessity is the resistance, motion and impact of matter. '), Descartes ('Following certain and simple rules, man will never suppose anything false to be true, and increase true knowledge of all things to which his powers are adequate. '), 80 Hobbes (reasoning as addition or subtraction), Spinoza (Ethics written in 'modo geometrico': 'In nature there is nothing contingent, but all things are determined from the necessity of the divine nature to exist and act in a certain manner. '), Leibniz ('Identities or immediate truths affirm the same thing of itself and are necessary, derivative truths can be reduced in an infinite progression and are contingent. '), Newton ('Necessities in nature correspond to necessities in the propositional proofs.' 'We can derive the phenomena of nature by some kind of reasoning from mechanical principles, investigating the forces of nature from the phenomena of motion. '), 81 Hume (his laws of necessary connection are laws connecting impressions themselves, 'Mankind must act, and reason and believe, though they are not able to satisfy themselves concerning the foundations of these operations. '), Adam Smith (outcome of economic competition as logistic consequence of the factors entering into it (industry, capital, division of labor)), Malthus (deterministic logic of the arithmetical increase of the means of subsistence and the geometrical increase of the size of population), Darwin (deterministic struggle for existence applied to the whole animal and vegetable kingdoms), Russell & Whitehead (Principia Mathematica), the Computer (programs extending the logistic method to more and more complex tasks), Max Weber (modern capitalism as logical consequence of Protestant ascetism), 84 Hardy, Bach, Mozart.

code 33 dialectical, self-transcending methods. Here the whole determines the parts, uniting the opposites. 85 Science progresses through the unification of theories that were initially separate. A dialectical dialogue preserves and transcends the standpoint of the other.

Plato (noumenal dialectic), Pythagoras, Augustine (noumenal dialectic), Raphael (School of Athens), Comte, Hegel (essentialist dialectic), Marx (materialist dialectic), Bergson (dialectical evolution), Whitehead (dialectic of Speculation and Scholarship), Sartre (existential dialectic, 'Singularity is the particular aspect in which in this case generality is presented.')

91 code 34 problematic, inquiry, analytic methods. Validity resides in the reciprocal determination of parts by the [organic] whole and of the [organic] whole by its parts, or of matter by form and form by matter. The true theory is the one that accounts for all the facts.

Aristotle ('There is a reciprocal relation between the basic definition(s) [knowledge of the essential nature of a substance] of a science and the [derived] properties [of the substance] that follow from it. ') 93 The validity of the principle lies in its capacity to order the whole. 94 Kant ('By a system I understand the unity of the manifold modes of knowledge under one idea.' 'An architectonic idea of the idea of the whole sees the parts as mutually related and by means of their derivation from the concept of the whole.' 95 Matter of sensations united by the

forms of intuition > empirical intuitions united by the concepts of understanding > knowledge united by the ideas of reason > systematic unity of science. Form orders matter and matter gives content to the form. Whewell ('Every step in our knowledge consists in applying the Ideas and Conceptions furnished by our minds to the Facts which observation and experiment offer us.'), Dewey (situations as wholes, involving both subject and object, 'Perceptual materials locate and describe the problem, while conceptual materials represent a possible method of solution.'). Medeleev (selecting atomic weight and later atomic number as principle, combining that with natural groups of elements > periodic table of chemical elements. Sophocles (Oedipus Rex), Poe ('The necessary knowledge is that of what to observe.'). Henri James.

100 grouping methods in pairs and description how they can be reciprocally prior to one another. Analytic methods incorporate all the others: agonistic helps to discover misunderstandings, logistic provides a formal structure that we use in ordering the data, and dialectic provides a test for the coherence and consistency of our views. The difference of method are differences of priority within a system of reciprocal priorities. So the different methods are only procedurally and not substantively incompatible. One can only use one at the time, but not only one is true or right or valid.

#### **V Principle**

101 The text has something within it that causes it to function, a principle of its functioning, an end or purpose. [confusing: causa finalis, but explained as creative beginning...]

103 code 41 creative, arbitrary, actional principles.

Genesis (OT), Thales (the creative power of water), Protagoras (the power to effect changes from what appears bad to what appears good), Isocrates (the power of speech as the key to man's creative activity), Augustine ('Nothing can make the mind a companion of desire except its own will and free choice.'). Koran [or more elemental?], Pico della Mirandola, Calvin, Locke, Hobbes (reducing the will of all to the single arbitrary will of an artificial person (Common Power)), the Chinese legalists, Max Weber (creativity in the charismatic individuals – charismatic creativity as revolutionary force), Darwin (historical origin of biological species), Marx ('World history is nothing but the creating of man by human labour, the man having proof of his self-creation, of his own origin.'). Heidegger (temporality of Being and Dasein's freedom to choose itself), Whitehead ('Creativity is an ultimate principle by which actual occasions introduce novelty into the universe.'). Sartre ('There is no determinism, man is free, condemned to be free.'). Dewey ('The universe is now conceived as open and in progress, while classical Greece thought of it as finite, finished, complete and perfect.'). [113 W started his philosophical development with Dewey, but separated from D's creative principles, escaping from 'provincialism']

114 code 42 elemental, persisting, conservational, inertial, simple principles.

What stays the same through all changes. Anaximenes (air: underlying substrate only differing in its substantial nature by rarity and density > fire > wind > cloud > water > earth > stones), Parmenides (noumenal materialism, absolute Being, 'Reality is uncreated and imperishable, for it is entire, immovable and without end.'). Empedocles (agonistic materialism: 'Love and Strive generate all compound things by putting together or taking apart the four roots fire, water,

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earth and air.’), 116 Leucippus and Democritus (pluralized the noumenal one of Parmenides into the atoms of pure being and the void of non-being – the atoms differ in rhythm, contact and turning (shape, order and position), causing all other qualities {so there is no beginning or principle of motion}), Plotinus (dialectical materialism: ‘All things emanate from the One, which is itself without definite characteristics.’ ‘The One comes to us by a presence transcending knowledge, because knowledge multiplies by discursive reasoning and misses the One in multiplicity.’ Plato about the One: ‘It can neither be spoken nor written about.’) > Christian neo-Platonists, Indian and Chinese traditions, e.g. Upanishad: ‘The Being is the seed; all else but His expression. He is truth. He is Self. Shwetaketu! You are That.’ Bhagavad Gita: ‘All beings pass into my material nature. At the end of a world-eon I send them again forth at the beginning of a new world-eon, again and again.’ Tao-te ching: ‘All things come into being and I see thereby their return. All things flourish, but each one returns to its root.’ 120 Newton (‘Some other Principle was necessary for putting Bodies into Motion, and now they are in Motion, some other Principle is necessary for conserving the Motion.’ ‘It seems probable to me, that God in the Beginning formed Matter in solid, Massy, hard, impenetrable, movable Particles (..)’), Laplace (Cosmogenic hypotheses of Leucippus and Democritus rather than the creation of Genesis: ‘The order of the universe is determined throughout infinite time by the state of the universe at any one time and the laws governing the interactions of its particles.’), 121 Hume (‘There appear to be only three principles of connexion among ideas, namely Resemblance, Contiguity in time or place and Cause or Effect.’ Reasoning about these principles is founded on experience, which is founded on custom or habit – a kind of inertia of the mind, by which it is led to expect that the future will resemble the past. Hume finds the moral elemental principle of sympathy or humanity as general principle ‘beyond which we cannot hope to find any principle more general’.), 122 Dalton (elementary atoms), Medeleev (atomic weight), 123 Helmholtz (force or energy as one thing appearing in multiple forms: ‘The universe appears to be endowed with a store of energy which, through all the varied changes in natural processes, can neither be increased nor diminished (..), from eternity to eternity of unchanging magnitude.’), Nietzsche (‘The world viewed from inside, the world defined and determined according to its ‘intelligible character’ – would be ‘will to power’ and nothing else.’, expansion of power, not from free choice (liberum arbitrium), but from necessity, so not creative, but elemental), Freud (psychic energy (inspired by physics), line of Empedocles (philia and neikos) > Eros and destructiveness), in the arts: Euripides, Poe, Dostoyevsky.

126 code 43 comprehensive principles. Approach from the design of the whole. The principle governs all things, but always remains beyond our knowledge. Anaximander (A principle of justice or balance or symmetry controls the sequence of becoming in time.), Heraclitus (Logos as comprehensive principle: The world is in tension everywhere but everywhere governed by the hidden harmony of the Logos. The principle unites agonistic opposites in a paradoxical unity.), Plato (the goodness of the creator as the cause of the world of generation; ), Leibniz (God made the things because they are good (comprehensive p) vs things are good because God made them (creative p) > this is the best possible world; the essence of bodies does not consist in

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extension and is not mathematical, rather it is an internal principle of activity, a substantial form or entelechy.), Confucius (the fate of succeeding emperors and dynasties depended on their maintaining through reverence and virtue the accord with Heaven. 'Always strive to be in harmony with Heaven's Mandate.' 132 'If you set your mind on humanity, you will be free from evil.' 'A superior man follows justice as the standard.'). Neo-confucianism (all things understood as composites of form (li) and matter (qi); the Great Principle (Tai-Ji) is the principle of form: all forms and things put together), 133 Kepler (3 laws of planetary motion as partial orderings along the way to the comprehensive harmony of the whole system), 134 Einstein (comprehensiveness in the logical unification (Einheitlichkeit) of the foundations of science: SR classical mechanics, electricity and magnetism, GR mechanics and gravitation), Walt Whitman (The principle is not present in the whole as a part, but emerges from the whole), Tolstoy ('Each individual has within himself his own aims and yet has them to serve a general purpose incomprehensible to man.')

136 code 44 reflexive principles. Functioning as principle and cause of itself, making activities ends in themselves (knowledge for its own sake, virtue its own reward, art for art's sake).

Xenophanes' mind is a reflexive cause of activity: its own functioning is self-determining and the cause of functioning of other things. 137 Cyclic character of reflexive functioning. Anaxagoras (doctrine of the rule of the self-ruling (autokrates) mind), 138 Aristotle (All his sciences represent the activity of thought governed by reflexive principles. Thought thinking itself (first philosophy). Motion actualizing itself through motion (physics, 'Nature is like a doctor doctoring himself.'). 139 Cycles within cycles (cosmic, physical, biological). Selfdetermination through reason (animal rationale). Happiness actualizing itself through thought determining our actions (Ethics). Emotions actualizing themselves through works-of-art (Poetics). Persuasion actualizing itself in speech (Rhetoric.), Stoics ('The criterion can be established as a criterion of itself and of other things too – e.g. light reveals other objects and itself.'). 141 Thomas Aquinas ('Nothing can be reduced from potentiality to actuality except by something in a state of actuality.' 'So all existence depends upon a God whose nature is his act of existence.'). Descartes (starting from a human, personal rather than a divine reflexivity: thought thinking itself recognizing its own existence. Foundation of the sciences in the knowledge of three reflexively self-determining substances: self-thinking thought (mind), self-existing God, self-extending matter.) Spinoza (shows from an objective perspective reflexive beginnings for existence, knowledge and action. 'By cause of itself I understand that whose essence involves existence, or that whose nature cannot be conceived unless existing.' 'That which is in itself and is conceived through itself.' 'What can be clearer or more certain than a true [adequate] idea as the standard of truth?'), 143 Kant (from a disciplinary perspective: the original synthetic unity of apperception by which different intuitions are united in one selfdetermining consciousness (theoretical reason), moral law formulating the condition for the self-determination by reason of action (practical reason), judgement of objects as purposive for us and for themselves (nature and art)), Hegel (from a diaphanic perspective: 'The actual is the same as its Notion only because the immediate, as purpose, contains the self or pure

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actuality within itself.’), John Stuart Mill (synthesis of Hume and Kant), 144 Science: Newton saw inertia as a property of bodies (a force proportional to their quantity of matter), but Faraday thought of forces as closed systems of action: electric currents and magnetic fields as closed upon themselves. 145 Maxwell gave this principle its mathematical form, understanding light as self-determining activity. Literature: Chaucer’s Canterbury Tales, James Joyce. 148 Reciprocal priority: Creative principles include all other principles as their own creations. Elemental principles include all other principles as emerging out of themselves. Comprehensive principles include all other principles within themselves. Reflexive principles include all other principles insofar as they function. 149 W treated all the kinds of principles as principles by which texts actualize themselves.

All archic values are reciprocally prior to one another. Every archic profile specifies a potentially adequate philosophy. Each philosophy subordinates all others to the end of its own self-actualization, and yet all are components of a single architecture of self-actualization (pluralism).

150 Aristotle’s Metaphysics is an architectonics of being, seeking the principles and causes through which all substances are self-determining.

Kant’s Critique of Pure Reason is an architectonics of knowing, seeking a priori elements through which all sciences are self-determining, each in its own way. W’s book is an architectonics of meaning, seeking archic elements through which all texts are self-determining, each in its own way.

#### VI Archic Analysis

151 The **archic matrix** consists of 4 **archic variables**, each with its 4 **archic values**, which are the possible starting points for the constitution of meaning. The set of values for the 4 archic variables constitute an **archic profile**. This archic profile defines the **archic mode** of a text or author. If an archic mode is constituted from an affinitive set of archic values, it is called a **pure mode**, otherwise a **mixed mode**.

154 There is no formal reason to prefer the pure to the mixed modes (..), there is no absolute sense in which one is superior to the others.

155 The validity of the archic matrix depends on its ability to order intellectual history, not from its formal derivation from some higher principle. Nevertheless W refers to Aristotle’s aitiai (4 causes): matter [causa materialis], form (essence) [causa formalis], change [causa efficiens] and end [causa finalis]. W suggests an analogy to Aristotle’s Metaphysics as applied to texts (rather than to things): the origin of a text in the author’s mind (cf M,I-III), 156 the signification of the terms of a text (cf M,IV-V), the forms and methods by which texts are ordered (cf M,VI-X), the principle that causes the text to function (cf M,XI-XIV). W suggests similar analogies with A’s other works. 157 W regards the archic variables as instances of A’s 4 causes ‘as sought in texts’, causes which determine the complementary aspects of a single whole [sc a philosophical text]. A cause can [dominate,] subordinate the other causes to itself, but resulting incompatibilities are procedural, not substantive – the different causes are after all causes of the same thing [sc text]. The procedural difference between two archic modes no longer lies in the way a particular subject is approached, but in the way all subjects are approached. 158 cf the way A’s Politics can be taken as starting point for different parts of a single politics, but also for independent modes of

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political analysis (McKeon): ideal (like Plato), constitutional (like Spinoza), revolutionary (like Machiavelli) or circumstantial (like Aristotle). cf also A's Ethics: character, thought, irrational and good can be taken as parts of one ethics, but also for four different kinds of ethics: voluntaristic ethics (like Nietzsche), deontologistic ethics (like Kant), hedonistic ethics (like Epicurus), functional ethics (like Aristotle). 159 The sophists begin from man, the democriteans from matter, the platonists from form and the aristotelians from functioning.

The 4 causes are responsible for both axes of the archic matrix. The horizontal axis represents the different approaches within the science, the vertical axis the different architectonic forms of the science itself.

as approach within.. >	causa efficiens - authorizing perspective	causa materialis - ultimate reality	causa formalis - logical or conceptual form	causa finalis - integrating intention
as different form of.. (architectonic) V	made-by	made-of	kind-of	made-for
efficiens – man				
materialis – matter				
formalis – form (essence)				
finalis – functioning				

160 The matrix is organic: it can be generated from any of its archic values, schematizing the organic structure of knowing in its multiple modes. The causes can be reciprocally prior to one another because they are different ways of knowing one thing. The archic matrix and particular texts are the same thing in universal and in particular form. The mystery: any subject should be knowable through universals.

The discipline **archic analysis** has itself a specific archic profile: it interprets a semantic rather than an ontic or epistemic subject matter, and being and knowing are included as they are expressed in texts. Its perspective is disciplinary, its signification essential, its method analytic and its principle reflexive.

161 The archic matrix orders expressions of thought about the world in poetic or scientific texts and interpretations of texts. 162 The world is not an interpretation and does not have an archic mode. In the interpretation of a text mostly two archic profiles are involved: the ap of the text and the ap of the interpreter, so  $256^2 = 65.536$  possible combinations of profiles in the most simple case of a hetero-archic interpretation.

164 What is easy in one mode, is often difficult in another, and there is seldom a straightforward translation from one mode to another. There is an interplay of different archic modes in the development of special sciences.

165 Archic analysis can also be applied to traditions of a culture or civilization, e.g. compare the creative value of Western traditions with the elemental value of Indian traditions and with the comprehensive value of Chinese traditions. In no cultural tradition [so far] have the reflexive principles been dominant. But W

suggests that the reflexive principles provide a basis for the new universal tradition that is now emerging.

166 There is no reason why one author should not write texts in different archic modes, but this seldom occurs. A change in even a single archic variable can constitute a fundamental revolution in an individual mind. The archic values (or philosophical principles) make the mind or tradition what it is.

167 Agreement on (all) philosophical principles is pointless in view of the parity of archic modes. 168 Instead it becomes important to discriminate archic differences, which are undecidable, from factual differences, which are decidable, even if this is not easy, for what the facts are depends on the principles by which they are known.

The result of W's book is an awareness of the intrinsic diversity present in awareness itself. As the archic matrix is emerging from the Aristotelian mode, thinkers in other modes cannot be expected to agree with the validity of the archic matrix. 169 But according to W their criticisms serve to confirm the validity of the archic matrix 170 as tool to advance the awareness of awareness (sc philosophical progress). It's not final, but one further step in the progressive realization of thought by itself.

[ primary semantical network – perhaps a more appropriate label, related to what it is and how it works, compared to 'archic matrix' ('archic' too obscure, 'matrix' too static)? ]

<picture hr>

## Notes OBW

dynamics of meaning

principle **PR<sub>i</sub>** makes sense of reality **RE<sub>i</sub>** using method **ME<sub>i</sub>** from perspective **PE<sub>i</sub>**

method makes reality concrete ( gives it 'form') (DD, 1989,100)

Questions / points of research

Are the archic variables plausible interpretations of Aristoteles' 4 causes?

The values of the 4 archic variables are possible patterns of philosophical thought.

- are there perhaps variables and/or values missing?
- are there perhaps too many variable and/or values?
- are they irreducible (Dilworth,1989 p 15,42)?
- (..)

Are different world views

- like different but compatible measuring systems of temperature  
or

- like measurement of temperature : measurement of length?  
or ...?

[ Ik kan me iets voorstellen bij de compatibiliteit van bv drie manieren om temperatuur te meten (KFC), maar wat moet ik me voorstellen bij de **complementariteit** van deze drie meetmethoden? ]

Semantic properties of texts reflect properties of the reality of appearances, facts, knowing and meaning.

Semantical dynamics past 4 stepping-stones , from top to bottom (in time):

Sophistic

Democritean      Platonic

Aristotelian

human

material              immaterial

plural

personal/subjective

objective                              transcendental

general/intersubjective/essential

art

hard sciences                      religion/spirituality

interpretive sciences

s>d/p>a also as a historical timeline for the Greek 'pure modes'

Logic of thought-development: starting from experiential particulars, diverging to objective facts and/or transcendental speculations, converging into scientific universals.

comparative association:

variabelen en hun waarden – wat wil je meten met het oog op welk doel?

bv schilderijen

variabele: kleur

waarde: dominante primaire kleur

welk kleurmengsysteem? drukwerk (CMY, subtractieve kleurmenging van cyaan, magenta en geel), beeldscherm (RGB, additieve kleurmenging van rood, groen, blauw), dekkende verf (partitieve kleurmenging van cyaan, magenta, geel, rood, groen en blauw).

Welke informatie heb je over een schilderij als je de dominante primaire kleur ervan vaststelt?

Hoe verhoudt een dergelijke meting zich met de kwaliteit van de weergave van bv de lichtval in een binnenruimte?

De variabele 'kleur' met als waarde de 'dominantie primaire kleur' biedt dus geen zinvolle informatie voor het vergelijken en profileren van schilderijen.

Welke variabelen en waarden wel?

Schilderijen zijn ook te interpreteren als 'teksten' – is dezelfde archic matrix toe te passen op zoiets als 'de betekenis' van schilderijen? Volgens Watson en Dilworth wel – zij passen het bv toe op literaire werken en op complete culturen.

Andere analogie voor de verhouding van semantische aannames en teksten: aannames tav verschillende typen atomen (het elementaire fysisch-chemische systeem op atomair niveau) en de werking van moleculaire systemen – cellulaire systemen – organismen - ...

Als de essentiële kenmerken van een zijnde ontbreken, dan bestaat dat zijnde als dat specifieke zijnde niet meer. Hoe werkt dat bij universalia en bij 'het zijn'?

### **Arguments against essentialism**

Essentialism is the idea that every eventity can be described by a specific set of necessary essential (beside possible accidental) properties.

Essence refers to the Aristotelian hylomorphic interrelationship of matter and form or A's particular, immanent finalmatterform or form-matter-product-function (as embodiments of A's 4 'causes'), which are very different from the Platonic ideal, transcendental forms.

Often associated with essentialism: determinism, biological reductionism and speciesism, ethical universalism (e.g. murder always and everywhere wrong), political conservatism (anti-change), ...

Essentialism can be contrasted with contextualism: eventities are not always and everywhere the same, but change in interrelationship (interactions) with each other and with an equally and simultaneously changing context as the evolution of species shows.

Popper is a methodological nominalist (vs essentialism): the proposition 'puppy is a young dog' should be read from right to left ('What shall we call a young dog?'), not from left to right ('What is a puppy?'), and he is a realist (vs idealism).

Essentialism can be contrasted with Richard Rorty's ironism, in which people are completely aware of the contingency of their placement in history and of their vocabulary. The mind does not mirror nature. Meaning is a social-linguistic product, and sentences do not 'link up' with the world in a correspondence relation. RR extended critiques of Sellars (vs the Myth of the given) and Quine (vs the analytic-synthetic distinction).

[http://en.wikipedia.org/wiki/Richard\\_Rorty](http://en.wikipedia.org/wiki/Richard_Rorty)

Contingency, irony, and solidarity

[ TO BE CONTINUED ]

What sets the answer to this question in motion?

---

Propositions pool for TAM Selftest

NN

first number = archic variable (perspective, reality, method, principle)

second number = archic value of this variable

propositions taken from selftest Eite Veening:

11 Inwardness, subjectivity is essential

11 We have to find our own perspective

11 The truth is in here; in me

12 Our thinking should reflect the objective reality of nature

12 We have to find objective standards

12 The truth is out there; it's in reality

13 We should look for the reality behind the mere phenomenon

13 All true knowledge is knowledge of [ immutable DD,23 ] essences

13 All minds are illuminated by the same source

14 Pluralism cannot be avoided

[ geen positieve stelling... – daardoor onduidelijk ]

14 There are different perspectives and they are all relevant and legitimate

14?? There is no ultimate way of seeing things

[ onduidelijk ]

21 Reality is what is perceived and experienced

21 The world is composed of individual sensations

21 Subjectivity is true reality; reality is existential

[ twee proposities... ]

22 Our subjectivity is an epiphenomenon of our physical (bodily/brain-)reality

22?? There is no real truth that is not an impersonal truth  
 [ dubbele ontkenning – te ingewikkeld? >> Real truth is impersonal.]  
 22 We should look for objectivity behind our subjectivity  
 23 We should look for essences behind the phenomena  
 23 There is a higher / deeper order of things  
 23 Reality is transcendent and shines through our experienced reality  
 24 Everything is real in its own way  
 24 There are real kinds of things, not just one  
 24 Reality is relative to life-worlds

propositions taken from books WW (1985,1993) & DD (1989) & Eite:

11 Man is the measure of all things [ WW Protagoras ]  
 11 I think, therefore I am [ WW Descartes ]  
 11 The truth consists in that conception of life which is expressed by the individual [ WW Kierkegaard ]  
 11 The human intellect cannot avoid seeing itself in its own perspectives [ WW Nietzsche ]  
 11 Every great philosophy is the personal confession of its author [ WW Nietzsche ]  
 11 We find in ourselves, and nowhere else, the unity and true meaning of philosophy [ WW Merleau-Ponty ]  
 11 Inwardness, subjectivity is essential [ Eite ]  
 11 We have to find our own perspective [ Eite ]  
 11 The truth is in here; in me [ Eite ]  
 12 Human understanding builds a true model of the world, such as it is in fact [ WW Francis Bacon ]  
 12 Our mind reflects the order of nature [ WW Spinoza ]  
 12 The aim of scientific thought is to arrive at correspondence with reality – that is to say, with what exists outside us and independently of us [ WW Freud ]  
 12 Truth lies only in a material sense of reality [ DD, 24 ]  
 12 The sage seeks to understand the regularity of natural phenomena [ DD, 77 ]  
 12 The senses deceive, but also supply the means of discovering their own errors, so with the help of the intellect we can find the facts of nature [ DD, 104 ]  
 12 Our thinking should reflect the objective reality of nature [ Eite ]  
 12 We have to find objective standards [ Eite ]  
 12 The truth is out there; it's in reality [ Eite ]  
 13 There is a source of wisdom through whom a higher truth may be revealed [ WW Plato ]  
 13 The sage is contemplating and studying the illustrious decrees of heaven [ DD, 76 ]  
 13 The text is a vehicle of a higher, superhuman revelation and presence [ DD, 141 ]  
 13 Philosophy is absolute knowledge, the highest form of the self-manifestation of spirit [ DD, 141 ]  
 13 We should look for the reality behind the mere phenomenon [ Eite ]  
 13 All true knowledge is knowledge of [ immutable DD,23 ] essences [ Eite ]  
 13 All minds are illuminated by the same source [ Eite ]  
 14 The knowledge becomes scientific when the mind recognizes its role in the constitution of science [ WW Kant ]  
 14 Any vital experience is at once emotional and intellectual and practical [ WW Dewey ]  
 14 The sage appreciates universal qualities of mind, their possibilities of full development, and their self-sustaining powers [ DD, 77 ]  
 14 Scientific inquiries and technical achievements are historical and social products [ DD, 49 ]  
 14 Pluralism cannot be avoided [ Eite ]  
 [ geen positieve stelling... – daardoor onduidelijk ]  
 14 There are different perspectives and they are all relevant and legitimate [ Eite ]  
 14?? There is no ultimate way of seeing things [ Eite ]  
 [ onduidelijk ]  
 21 The perceiver is in flux and the perceived is in flux and perception is the momentary interaction of the two [ WW Protagoras ]



21 Nature is composed of sensations as its elements [ WW Mach ]  
 21 Sensations are the primary reality and our concepts are free creations of the mind by which we order our sensations [ WW Einstein ]  
 21 Human appearances form the real basis of abstractions [ DD, 22 ]  
 21 Reality is what is perceived and experienced [ Eite ]  
 21 The world is composed of individual sensations [ Eite ]  
 21 Subjectivity is true reality; reality is existential [ Eite ]  
     [ twee propositions... ]  
 22 What is real, is the object as it is in itself, apart from its effects on us [ WW, 50 ]  
 22 Reality is not found in sense perception, but in atoms and void. [ WW Democritus ]  
 22 Man is not the measure of things, rather it is the substrative reality of our instincts and physiological demands that is measuring our measurings [ WW Freud ]  
 22 Human consciousness is an epiphenomenal play of illusionary appearances [ DD, 22 ]  
 22 Material forces and energies underly the surface of human consciousness [ DD, 23 ]  
 22 The building blocks of reality are material [ DD, 24 ]  
 22 Ultimate material elements exist forever [ DD, 57 ]  
 22 The womb of matter underlies all superficial appearances of the false surface of individual consciousness [ DD, 86 ]  
 22 The surface life of human consciousness is an illusory play of appearances [ DD, 90 ]  
 22 Human consciousness is an epiphenomenon of a physiological basis, an underlying flux of material or vital energy [ DD, 90 ]  
 22 The material causes of the impulses that result in our phenomenal perceptions are properties of unobservable particles [ DD, 115 ]  
 22 Men are motivated by their instincts and passions [ DD, 115 ]  
 22 Our subjectivity is an epiphenomenon of our physical (bodily/brain-)reality [ Eite ]  
 22?? There is no real truth that is not an impersonal truth [ Eite ]  
     [ dubbele ontkenning – te ingewikkeld? >> Real truth is impersonal.]  
 22 We should look for objectivity behind our subjectivity [ Eite ]  
 23 The gulf between nature and freedom is bridged by the judgment seeking a purposiveness in nature that would accord with the determination of nature by reason [ WW Kant ]  
 23 Perfect being entirely transcends the appearances of our perceptions [ DD, 56 ]  
 23 There is only one true idea – that of the reality of God's eternal and infinite perfection [ DD, 108 ]  
 23 We should look for essences behind the phenomena [ Eite ]  
 23 There is a higher / deeper order of things [ Eite ]  
 23 Reality is transcendent and shines through our experienced reality [ Eite ]  
 24 Anything is real as it is, in particular individuals [ WW Aristotle ]  
 24 We have to look for precision in each class of things just so far as the nature of the subject admits [ WW Aristotle ]  
 24 What is rational, is actual and what is actual, is rational [ WW Hegel ]  
 24 Every element of our experience can be interpreted – everything of which we are conscious (...) shall have the character of a particular instance of the general scheme [ WW Whitehead ]  
 24 Categories of human relevance and significance are the essential realities [ DD, 70 ]  
 24 Benevolence and righteousness are the main topics [ DD, 78 ]  
 24 The superiority of man brings to moral and aesthetic completion the teleological processes of the natural universe [ DD, 99 ]  
 24 Everything is real in its own way [ Eite ]  
 24 There are real kinds of things, not just one [ Eite ]  
 24 Reality is relative to life-worlds [ Eite ]  
 31 Things exist only so far as they embody a tension of opposites [ WW Heraclitus ]  
 31 War is the father of all and the king of all [ WW Heraclitus ]  
 31 There is a never ending contest between love and strive [ WW Empedocles ]  
 31 Oppositions of classes and competing interests are the sources of freedom [ WW Machiavelli, Montesquieu ]  
 32 The parts determine the whole, going from premisses to conclusions [ WW, 78 ]  
 32 Nothing comes to be at random, but all things according to reason and by necessity [ WW Leucippus ]

32 Necessity is the resistance, motion and impact of matter [ WW Democritus ]

32 Following certain and simple rules, man will increase true knowledge of all things to which his powers are adequate [ WW Descartes ]

32 In nature there is nothing contingent, but all things are determined from necessity to exist and act in a certain manner [ WW Spinoza ]

32 Necessities in nature correspond to necessities in the propositional proofs [ WW Newton ]

33 Science progresses through the unification of theories that were initially separate [ WW, 85 ]

33 The whole determines the parts, uniting the opposites [ WW, 84 ]

33 Science progresses through the unification of theories that were initially separate [ WW, 85 ]

33 Truth is in the harmonic attunement of the soul with the cosmos [ DD, 53 ]

33 Dialectical opposites (like the interaction of yin and yang) harmonize in the unity of man and nature [ DD, 82 ]

33 The appropriate logic affirms the unity of natural and human life [ DD, 87 ]

34 Validity resides in the reciprocal determination of parts by the whole and of the whole by its parts [ WW, 91 ]

34 The validity of the principle lies in its capacity to order the whole [ WW 93 ]

34 An architectonic idea of the idea of the whole sees the parts as mutually related and by means of their derivation from the concept of the whole [ WW Kant ]

34 The parts and the whole have to be seen together [ DD, 14 ]

34 In a reciprocity of form and matter the minds forms universals [ DD, 15 ]

34 Wisdom is knowledge of principles and causes at the most fundamental level [ DD, 15 ]

34 Wisdom is be guided by practice combined with reason [ DD, 51 ]

34 It's a good method to examine a subject through the interrelationships of the whole to its parts [ DD, 123 ]

41 Nothing can make the mind a companion of desire except its own will and free choice [ WW Augustine ]

41 World history is nothing but the creating of man by human labour, the man having proof of his self-creation, of his own origin [ WW Marx ]

41 Creativity is an ultimate principle by which actual occasions introduce novelty into the universe [ WW Whitehead ]

41 There is no determinism, man is free, condemned to be free [ WW Sartre ]

41 Living creatures throughout the world have freedom of the will [ DD, 45 ]

41 Human beings have the power to effect changes in life [ DD, 62 ]

41 Voluntary making a difference emphasizes the generative process and product through which the new replaces the old [ DD, 72 ]

41 Goodness is the result of conscious human activity [ DD 74 ]

41 God in his almighty will continues to exercise absolute dominion over the forces of nature [ DD 113 ]

41 Human work, dedicated to revolutionary goals, can change the world [ DD, 130 ]

42 Reality is uncreated and imperishable, for it is entire, immovable and without end [ WW Parmenides ]

42 All things come into being and I see thereby their return. All things flourish, but each one returns to its root [ WW Tao-te ching ]

42 The order of the universe is determined throughout infinite time by the state of the universe at any one time and the laws governing the interactions of its particles [ WW Laplace ]

42 Custom and convention govern human action [ DD, 44 ]

42 Only absolute metaphysical identity (the One) and eternal sameness make sense [ DD, 46 ]

42 There is an eternal, self-sameness, identity and self-conservation of the 'All' [DD, 58 ]

42 Everlasting natural parts or elements make sense of reality [ DD, 58 ]

42 The necessity of things is grounded in the eternal pre-giveness of ontological elements [ DD, 59 ]

42 Moral heart-and-mind is intrinsic and moral sentiment innate [ DD 72,73 ]

42 In nature some people are born good and some born evil [ DD,95 ]

42 Custom and habit are the the instinctual tendencies of our nature [ DD, 121 ]

43 A principle of justice or balance or symmetry controls the sequence of becoming in time [ WW Anaximander ]

43 The world is in tension everywhere but everywhere governed by a hidden harmony [ WW Heraclitus ]

43 The principle is not present in the whole as a part, but emerges from the whole [ WW Whitman ]

43 Each individual has within himself his own aims and yet has them to serve a general purpose incomprehensible to man [ WW Tolstoy ]

43 An all-embracing totality makes sense of reality [ DD, 53 ]

43 Only a perfect and just order really makes sense [ DD, 53 ]

43 A cosmic religious feeling is the strongest and noblest incitement to scientific research [ DD, 55 ]

43 An antecedent cosmic rationality makes sense of reality [ DD, 62 ]

43 Both society and individual are to be governed and judged by the rules of propriety, grounded in overarching concepts of the Way, heaven, the mandate of heaven and the like [ DD, 70 ]

43 The relation of equilibrium and harmony is the great root from which grow all human actions in the world, and this harmony is the universal path which all should pursue [ DD, 71 ]

43 The One is in all things and not a single one of them [ DD, 145 ]

44 The mind is a reflexive cause of activity: its own functioning is self-determining and the cause of functioning of other things [ WW Xenophanes ]

44 All his sciences represent the activity of thought governed by reflexive principles [ WW Aristotle ]

44 The criterion can be established as a criterion of itself and of other things too – e.g. light reveals other objects and itself [ WW Stoics ]

44 Different intuitions are united in one self-determining consciousness [ WW Kant ]

44 The autonomous activities of our rational faculties make sense of reality [ DD, 46 ]

44 The active mind transforms matters of cognition into its own intellectual principles [ DD, 49 ]

44 Mind and thought make sense of things [ DD, 61 ]

44 The intellectual love of the mind towards God is part of the infinite love wherewith God loves himself [ DD, 109 ]

44 A moral agent always acts as a representative of mankind [ DD, 123 ]

44 The cognitive, practical and productive faculties of reason are self-sufficient, self-complete and self-determining [ DD, 123, 126 ]

44 Organize generalities of natural and human cultures, provide clearer insights into the history of ideas and moderate the more extreme claims of other phil. theories [ DD, 135 ]

first concept of the selftest-propositions:

11 We find in ourselves the unity and true meaning of philosophy

11 Inwardness, subjectivity is essential

11 We have to find our own, personal perspective

11 The truth is in me and expressed by me

12 Truth lies only in a material sense of reality

12 Our thinking should reflect the objective order of nature

12 We build a true model of the world, such as it is in fact

12 Knowledge is about what exists outside us and independently of us

13 The reality behind the mere phenomena is a higher truth to be revealed

13 True knowledge is the highest form of the self-manifestation of spirit

13 True philosophy provides a higher, superhuman revelation and presence

13 True knowledge is knowledge of immutable essences

14 It is the mind itself that makes knowledge scientific in a pluralistic way

14 Any vital experience is at once emotional and intellectual and practical

14 Scientific inquiries and technical achievements are historical and social products

14 There are different perspectives and they are all relevant and legitimate

- 21 Human perceptions form the real basis of reality
- 21 Reality is what is personally perceived and experienced
- 21 The world is composed of individual sensations
- 21 Subjectivity is true reality, reality is existential
  
- 22 The building blocks of reality are material
- 22 What is real, are the objects as they are in themselves, apart from their effects on us
- 22 Material forces and energies underly the surface of human consciousness
- 22 Properties of unobservable particles are the material causes of everything
  
- 23 Perfect being entirely transcends the appearances of our perceptions
- 23 There is only one true idea – that of the reality of infinite perfection
- 23 True reality is transcendent and shines through our experienced reality
- 23 The true essences lie outside (behind or above) the phenomena
  
- 24 Anything is real as it is, the essences are within particular individuals
- 24 Categories of human relevance and significance are the essential realities
- 24 Everything has the character of a particular instance of the general scheme
- 24 Appearances, objects and thoughts are all real in their own way
  
- 31 Things exist only so far as they embody a tension of opposites
- 31 War is the father of all and the king of all
- 31 There is a never ending contest between love and strive
- 31 Oppositions of classes and competing interests are the sources of freedom
  
- 32 The parts determine the whole, going from premisses to conclusions
- 32 Nothing comes to be at random, but all things are determined according to reason and by necessity
- 32 Following certain and simple rules, man will increase true knowledge of all things
- 32 All things are determined from necessity to exist and act in a certain manner
  
- 33 The whole determines the parts, uniting the opposites
- 33 Knowledge progresses through the unification of ideas that were initially opposed
- 33 Dialectical opposites harmonize in the unity of man and nature
- 33 The appropriate logic affirms the unity of natural and human life
  
- 34 Validity resides in the reciprocal determination of the parts by the whole and of the whole by its parts
- 34 The validity of a principle lies in its capacity to order the whole and the parts as seen together
- 34 Wisdom is knowledge of principles and causes at the most fundamental level
- 34 Wisdom should be guided by the mutual relation of practice and reason
  
- 41 Creativity as ultimate principle introduces novelty into the universe
- 41 Living creatures throughout the world have freedom of the will
- 41 Human beings have the power to effect changes in life
- 41 Changes for the good are the result of conscious human activity
  
- 42 The material foundation of reality is uncreated and imperishable
- 42 The order of the universe is determined by the laws that govern the interactions of its particles
- 42 Everlasting natural parts or elements make sense of reality
- 42 Custom and habit are the instinctual tendencies of our nature
  
- 43 An all-embracing totality makes sense of reality
- 43 Only a perfect and just order really makes sense
- 43 The world is in tension everywhere but everywhere governed by a hidden harmony
- 43 We should be guided by equilibrium and harmony

- 44 The mind is a reflexive, selfdetermining cause of transforming matters of cognition into its own intellectual principles
- 44 Different intuitions are united in one selfdetermining consciousness
- 44 The cognitive, practical and productive faculties of reason are self-sufficient, self-complete and self-determining
- 44 A moral agent always acts as a representative of mankind

## Quotations pool for TAM Research / Education

usable quotations from book DD (1989), with archic values involved:

pp

- 35 Sextus Empiricus about Democritus (22)
- 38 Aristotle about Socrates, Plato, Pythagoras
- 45 Lucretius from De Rerum Natura (41)
- 50,51 Hyppocrates (14, 34, 44)
- 53 Hippolytus about Pythagoras (43)
- 55 Copernicus from De Revolutionibus (43)
- 58 Empedocles (42, 31)
- 68 Mo Tzu (11, 22, 32, 43)
- 76 Great Learning (13)
- 81 Ssu-ma Ch'ien (12, 43)
- 86 Tao Te Ching (22, 42)
- 86 Tao Te Ching (33)
- 93 Kung-sun Lung (12,24,32,43)
- 95 Wang Ch'ung (22)
- 96 Yang Chu (11,21,32,42)
- 104 Bacon (12)
- 106 Descartes (32)
- 107 Descartes (11)
- 107/108 Spinoza (12)
- 109 Spinoza (44)
- 111, 112 Hobbes (11, 22, 32, 41)
- 113 Newton (12)
- 114 Locke (22)
- 115,116 Locke (22, 32, 41)
- 117 Adam Smith (12, 22, 32, 41)
- 120, 121 Hume (21, 42)
- 131 Freud (42)
- 135 Pierce (12, 24, 34, 44)
- 138, 139 Santayana (12, 22, 32, 42)
- 143 Bhagavad Gita (13, 33, 42)
- 144 Schelling (13, 23, 33, 42)
- 149 Nishida (13, 21, 31, 42)
- 154 Kant (34)

156 Pierce (24, 34, 44)

[ TODO ]

## Quotation Database

Preparation for quotation database – 4 examples

93 Kung-sun Lung (12,24,32,43)

111, 112 Hobbes (11, 22, 32, 41)

135 Pierce (12, 24, 34, 44)

156 Pierce (24, 34, 44)

144 Schelling (13, 23, 33, 42)

### table-structure (MySQL to be extracted from XML)

quote\_era  
quote\_name  
quote\_quote  
quote\_source  
quote-values

### XML structure quote.xml

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<?xml version="1.0" encoding="ISO-8859-1"?>
<philosophical-profile>
<metadata>
<title>Philosophical Profile</title>
<description>Quotations Base Philosophical Profile</description>
</metadata>
<database>
<record>
<qe>325 - 250 BCE</qe>
<qn>Gongsun Long (Kung-sun Lung)</qn>
<qq>Heaven, earth and their products are all things. When things possess the
characteristics of things without exceeding them, there is actuality. When
actuality fullfills its function as actuality, without wanting, there is order. To be
out of order is to fall into disorder. To remain in order is to be correct. What is
correct, is used to rectify what is incorrect. To rectify is to rectify actuality, and to
rectify actuality is to rectify the name corresponding to it.</qq>
<qs>A Source Book in Chinese Philosophy, trans. and comp. Wing-tsit Chan,
Princeton University Press, 1963, p 243</qs>
<qv>12 24 32 43</qv>
</record>

<record>
<qe>1588 - 1679</qe>
```

<qn>Hobbes</qn>

<qq>Nature (the Art whereby God hath made and governes the World) is by the Art of man as in many other things. so in this also imitated, that it can make an Artificial Animal. For seeing life is but a motion of Limbs, the beginning whereof is in some principall part within; why may we not say that all Automata (Engines that move themselves by springs and wheels as doth a watch) have an artificall life? For what is the Heart, but a Spring; and the Nerves, but so many Strings; and the Joynts, but so many Wheels, giving motion to the whole Body; such as was intended by the Arfiticer? (..)

Art goes yet further, imitating that Rationall and most excellent worke of Nature, Man. For by Art is created that great LEVIATHAN called a COMMON-WEALTH, or STATE (in Latine CIVITAS), which is but an Artificiall Man; though of greater stature and strength than the Naturall, for whose protection and defence it was intended; and in which, the Sovereignty is an Artificial Soul, as giving life and motion to the whole body; the Magistrates, and other Officers of judicature and execution, artificiall Joynts; Reward and Puhishment ... are the Nerves, that do the same in the Body Naturall; the Wealth and Riches of all the particular members, are the Strength; etc

</qq>

<qs>Leviathan, ed Randall, 1964, p xxvii</qs>

<qv>11 22 32 41</qv>

</record>

<record>

<qe>1775 - 1854</qe>

<qn>Schelling</qn>

<qq>The unruly (das Regellose) lies ever in the depths... This is the incomprehensible basis of reality in things, the irreducible remainder which cannot be resolved into reason by the greatest exertion but always remains in the depths. Out of this which is unreasonable, reason in the true sense is born. Without this preceding gloom, creation would have no reality; darkness is its necessary heritage... Nevertheless we can think of nothing better fitted to drive man to strive towards the light with all energy, than the consciousness of the deep night out of which he was raised into existence... All birth is birth out of darkness into light; the seed must be buried in the earth and die in darkness in order that the lovelier creature of light should rise and unfold itself in the rays of the sun.</qq>

<qs>Philosophical Inquiries into the Nature of Human Freedom, trans. James Gutman, p 34</qs>

<qv>13 23 33 42</qv>

</record>

<record>

<qe>1839 - 1914</qe>

<qn>Pierce</qn>

<qq>The universality and justly laudable parallel which Kant draws between a philosophical doctrine and a piece of architecture has excellencies which the beginner in philosophy might easily overlook; and not the least of these is its

recognition of the cosmic character of philosophy. I use the word cosmic because cosmicus is Kant's own choice; but I must say I think secular or public would have approached nearer to the expression of his meaning. Works of sculpture and painting can be executed for a single patron and must be by a single artist... But a great building, such as alone can call out the depths of the architect's soul, is meant for the whole people, and is erected by the exertions of an army representative of the whole people. It is the message with which an age is charged, and which it delivers to posterity... If anybody can doubt whether this be equally true of philosophy, I can be recommend to him the splendid third chapter of the Methodology in the Critic of the Pure Reason. (..)

To be a nominalist consists in the undeveloped state of one's mind of the apprehension of Thirdness as Thirdness. The remedy for it consists in allowing ideas of human life a greater part in one's philosophy. Metaphysics is the science of Reality. Reality consists in regularity. Real regularity is active law. Active law is efficient reasonableness, or in other words, is truly reasonable reasonableness. Reasonable reasonableness is Thirdness as Thirdness.</qq>

<qs>Collected Papers, 1.176-178, 5.121</qs>

<qv>12, 24, 34, 44</qv>

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Suggestions for further research in DD (1989)

pp

66

85

92

102

128,129

134

135

142

147

153

155

168, 169, 170

{ DD, Descartes as triadist (106,111) or dualist (111)? cf WW (141) }



117 two essential components of the substrative ontological focus: the deceptive appearance of the surface and the deep causation of the substrative.

Comparison of British, French, German, American philosophy (122, 125, 126)

displace, share, reject, assimilate, reinterpret,  
as part of the dynamics of semantic transference

Goals of this approach:

Balance the historical significance of different philosophical systems (127)

Moderate the truth claims of different philosophical theories (129)

Examine what is really scientific in our knowledge (155)

Find the variety of first principles of thought (159)

Analyze the difference between pure en mixed modes of thought (159)

( Pure modes are distinguished by coherence, simplicity and elegance (160);  
highest degree of affinity among the archic variables in each configuration of the  
pure modes (162); sheer generality and precision of insight (170) )

Discover the Aristotelian mode as the measure of the degrees of truth and reality  
attainable in theories (160)

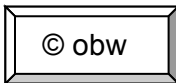
Analyze homogeneity/heterogeneity in archic profiles (related to the pure modes)

( Two-voiced texts are often dialectical or agonistic in method (167) )

( Two-/Three-voiced texts show often rhetorical brilliance, compensating for their  
loss of formal generality and precision (168) )

Tracing texts to the sources [of pure modes] makes discourses compatible (169)

Organize first principles of thought synoptically into pedagogical models (171)



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dispuut 16.1.2012 mee:

samenvatting Falcon, A., [Aristotle on Causality](#) (SEP) + notities

close reading Physics book II,3, zie bij samenvatting '[Physik](#)'

close reading Metaphysics I,1-3,7 en V,2

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