

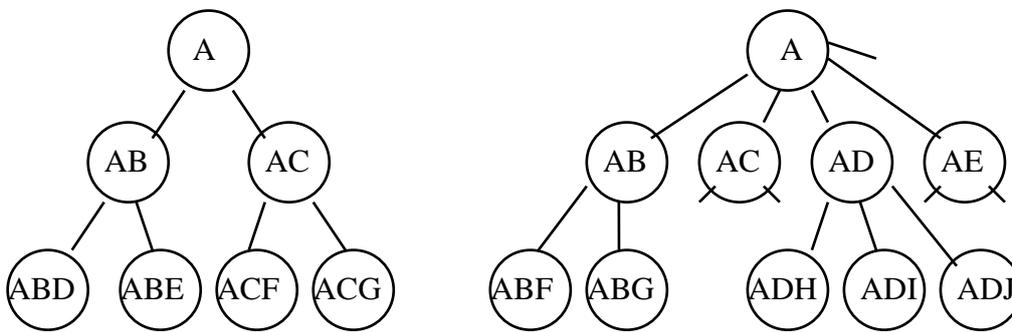
# Graphs for Concepts

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- 1. Explanations of the graphs:** 1. Letters represent the intensions of regular concepts. Circles represent the concept-position in a pyramidal hierarchy of genus, species and individuals. This 3-level hierarchy may be extended for subspecies. The pyramid visualizes the extensional domains of every concept.
2. The pyramidal position expresses the definition of every concept: the left-side letter is the “generic” intension of the (highest) genus or category (aristotelian “genus proximum”) in every included lower concept. The right-side letter is the aristotelian “differentia specifica”. Nota bene: axiomatic categories become definable by the induced common intensions of their immediate subspecies. Undefined categories can’t be genuine concepts!

## 2. Two types of conceptual pyramids

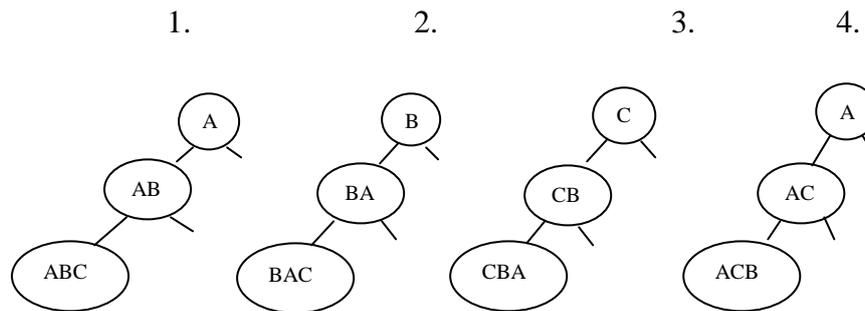
Figures 1 and 2 *Extensional-dihairctic and extensional-multiple conceptual pyramid with inscribed intensions*



## 3. Different ways for the induction (aristotelian eisagoge) or abstraction of higher level concepts from the same individual instances

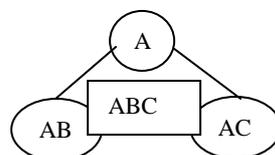
The various modes of induction explain the occurrence of concurring theories about the same instances.

Figure 3 *Four possibilities of complete induction from one individual instance*



## 4. Construction of contradictory concepts by fusing dihairctic species into one concept which contain the specific differences of both of the dihairtically distinguished species. Contradictory and contrary concepts are represented in quadrangels

Figure 4 *Establishing contradictory concepts by fusion of dihairctic species*

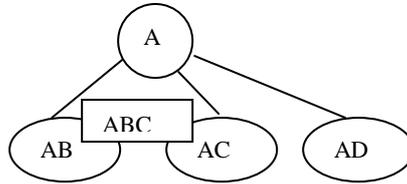


Example: A = organism; AB = living organism; AC = dead organism; ABC = mortal organism

## 5. Construction of “dispositional” concepts as contrary concepts in a multiple-species pyramid

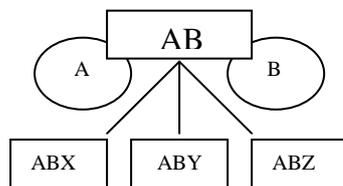
Figure 6 *Establishing contrary or dispositional concepts from multiple species*

Example:  
 A = State of Aggregation  
 AB = solid  
 AC = liquid  
 AD = gaseous  
 ABC = meltable



## 6. Applications of conceptual pyramids as “hard-cores” of theories in the deductive mode

Figure 5 *Deduction of possible worlds*

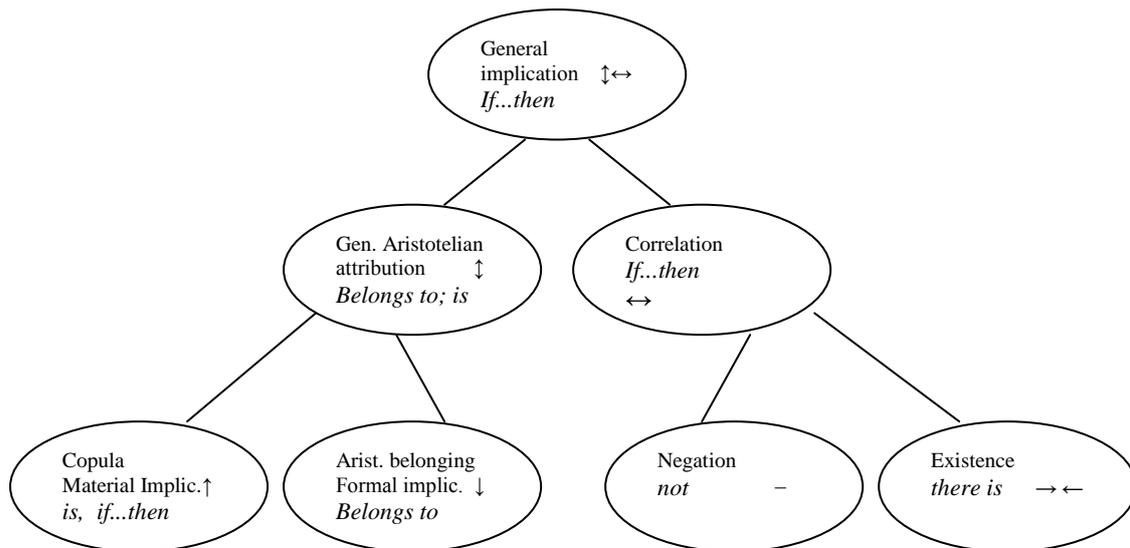


Example: A = Being; B = Non-Being; AB = Possibility; ABX = possible world X; ABY = possible world Y; ABZ = possible world Z

## 7. Pyramid of the proposition building logical connectors conveying truth values

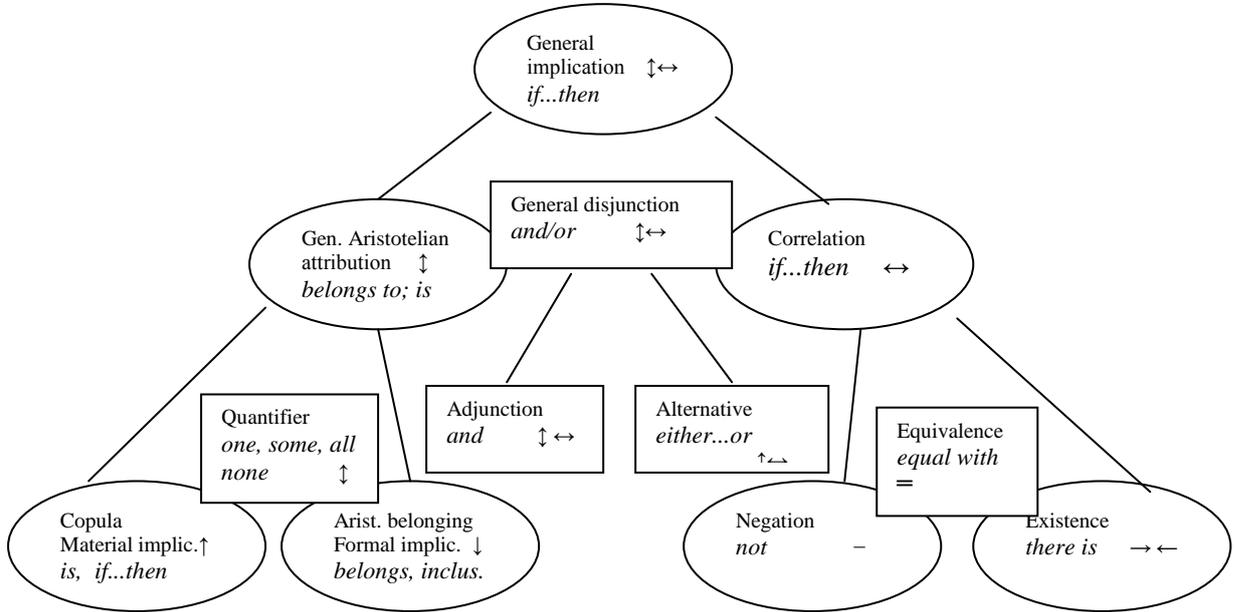
Reading of the lines in the pyramid in the indicated direction produces true assertions. Other readings produce false assertions. Negation is described by the empty spaces between concepts in horizontal relations.

Figure 8: *Pyramid of the proposition forming connectors*



**8. Deduction of the expression building logical connectors which have no truth values**

Figure 9: *Pyramid of both the proposition forming and the expression forming connectors*



**10. The three basic types of (aristotelian) syllogistic relations between concepts in parts of the pyramid**

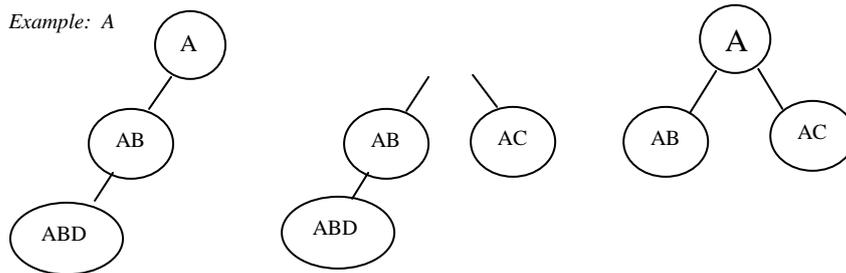
Figure 10: *The three schemata of Aristotelian syllogisms*

1. ladder

2. split

3. summit

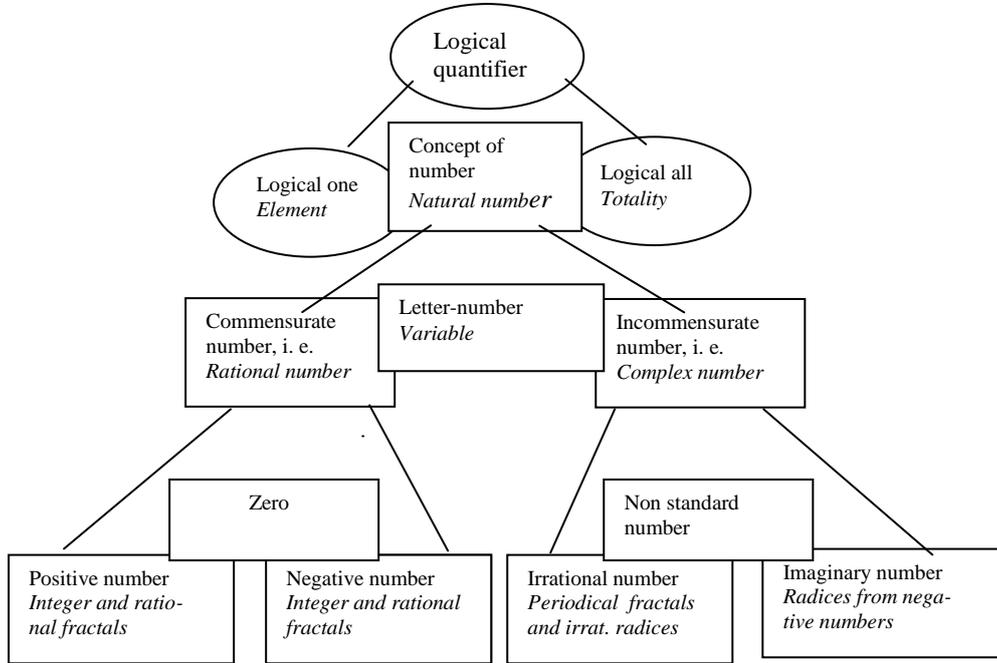
Example: A



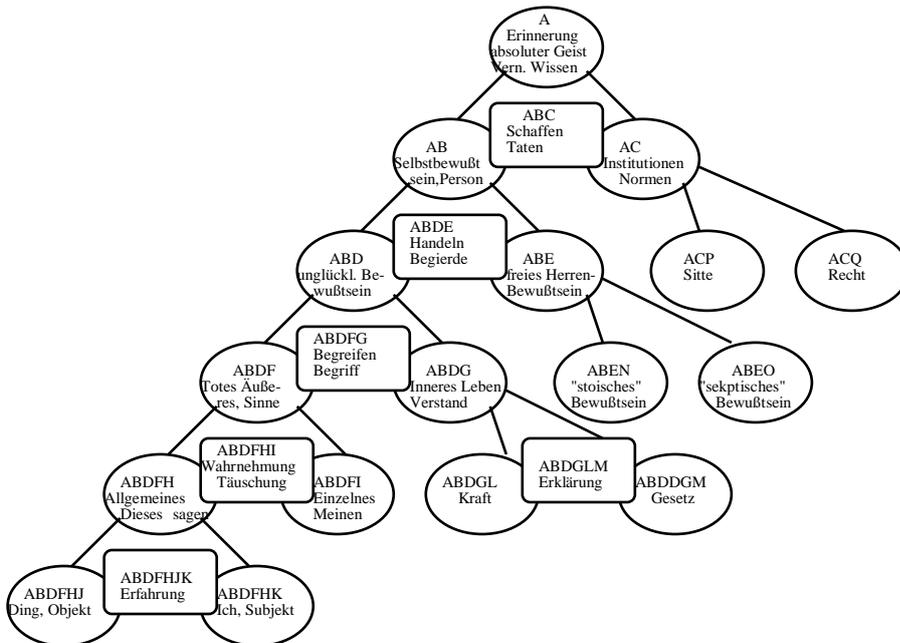
= living being    AB = animal    AC = plant    ABD = dog

**11. Deduction of the concepts of numbers from logical quantification-categories**

Figure 11: *Deduction of the concept of numbers by fusion of the general and the individual quantor*



**12. Representation of Hegels “Phaenomenology of Mind” in the pyramid showing Hegel’s “dialectical” concepts in the quadrangles and regular concepts in the circles. Readings following the connection rules delivers the true und the contradictory assertions in Hegel’s theory**



Hegel begins with the induction of “Erfahrung” (experience) by fusing the dihäretic individual instances of object and subject. Experience is a contradictory concept containing the specific differences of both of the instances. Only after this he induces the common concept of “Allgemeines” (the general) as the regular next higher concept. Contraposing (by negation) the concept of “Einzelnes” (the particular) he continues in the same way to construct all higher concepts of praxis as contradictory fusions. Under way he deduces the “dialectical” concept of “Erklärung” (explanation) as

contradictory fusion of “Kraft” (force) and “Gesetz” (law). At last he induces the “principle” of “Er-Innerung” (re-minding) as his highest metaphysical principle expressing the action of the mind.