

## S&P 2012 Lecture 1: Dialectics & Linguistics

### Today's Menu:

1. The nature of cognition: dialectical vs. metaphysical reasoning in the study of complex wholes.
2. The basic principles of dialectical linguistics (Revision)

### 1. The nature of cognition: dialectical vs. metaphysical reasoning in the study of complex wholes.

*In order to form a concept, we must be able not only to connect, but also to abstract, to single out characteristic elements, and to view them separately from the 'totality of the concrete experience in which they are embedded.*

Vygotsky: 1934

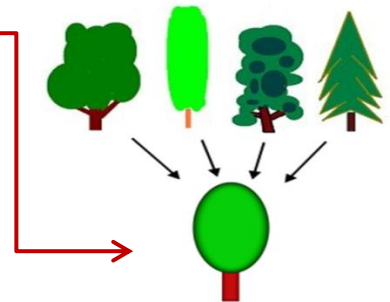
In order to individuate objects by their *kind*, the mind must be able not only to make connections between *similar* objects and put them into separate categories *because* of their similarities, but also to distinguish them by their differences from other objects – this is the root of abstract/ verbal thought, the nature of **generalization**.

Generalization, thus, is the product of all 3 kinds of association:

We note similarities/differences between multiple experiences, and abstract the **idea** they all share:

Every word of human language is a generic name of a category of things - not the name of any concrete thing; we only identify our experiences as being of a particular **kind** by their resemblance to that category.

All learning (cognition) is the process of forming concepts (ideas) – 'making sense' of things. We look with our eyes, but we see with our minds (i.e., you may look at something without seeing it). There are basically two ways of looking at things, WA & Zoom:



The Earth seen from Apollo 17  
<http://en.wikipedia.org/wiki/Holism>



Parched earth resulting from a drought  
<http://dampwater.tripod.com/id4.html>

When something catches our Mind's Eye, we view it first through the **WA** lens, **as a whole**; when trying to understand it better, we zoom in on **parts** of the whole, and examine them **separately from the whole**. Having examined parts of the whole, we then zoom out again, seeing the whole more clearly now, as we have seen parts of in detail. This pattern of alternating between the WA and zoom lenses of our Mind's Eye is typical of human cognition/ learning processes.

**Dialectics** (WA lens, **synthesis**) views things in their unity, in their essential interconnectedness, development, motion and change:



**Dialectics is the philosophy of change:**

*You could not step twice into the same river, for other waters are ever flowing on to you.*

Heraclitus, On the Universe

**The fundamental 'laws' of Dialectics are:**

**1. Everything is a 'conflict of opposites,' which powers change:**

Yin & Yang; breathing = inhalation & exhalation; 24 hours = day & night; life = birth & death, every complex whole (SYNTHESIS) is powered by the conflict between THESIS & ANTETHESIS, etc.

**2. Quantity changes the Quality**

Larva → caterpillar → butterfly; childhood → youth → adulthood → old age; ice → water → steam; 'Water cuts stone,' etc.


**3. Change moves in spirals**

Change does not go in circles; every morning is a new morning, every generation is a new beginning, every breath we take is a new breath, etc.

Dialectics is a way of reasoning which views the world in the four dimensions of all existence:

**4D = 3 dimensions of Space (LENGTH, WIDTH, HEIGHT) + 1 of TIME.**



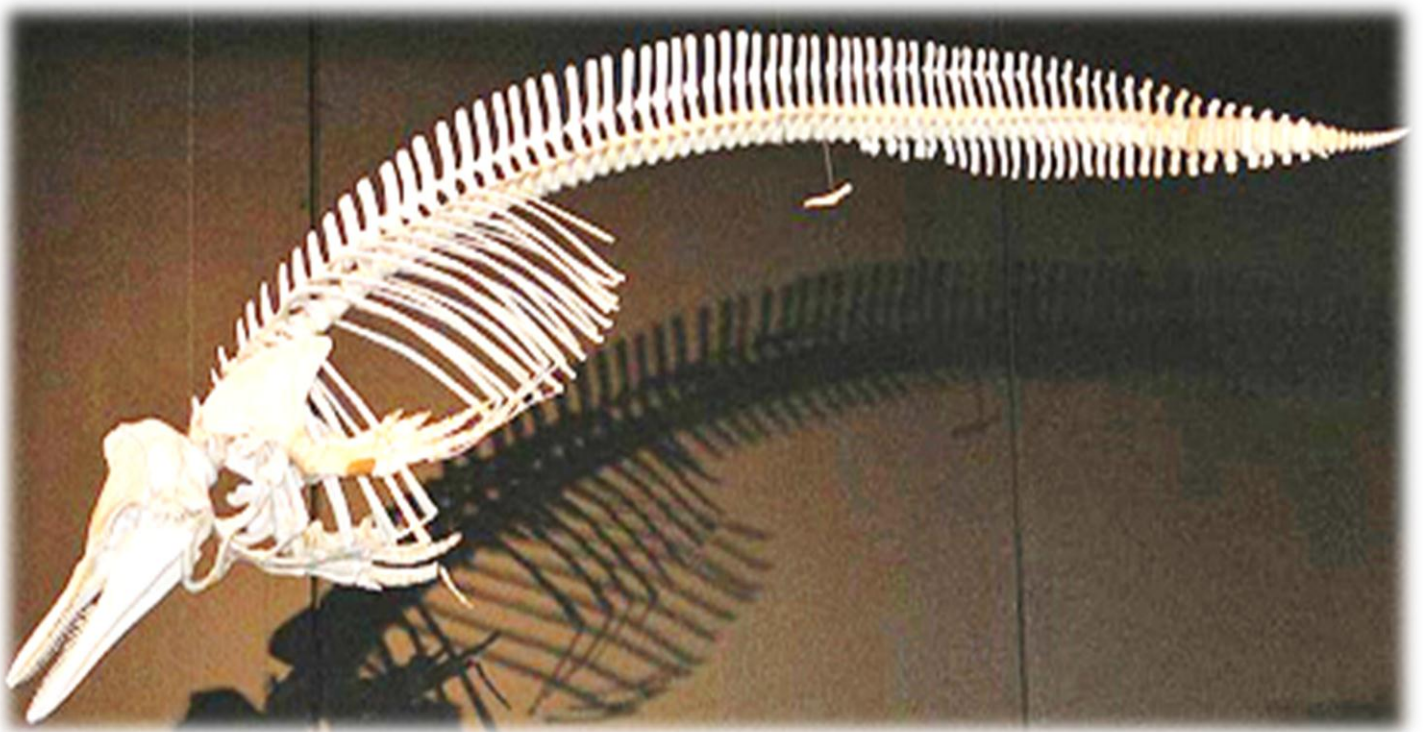
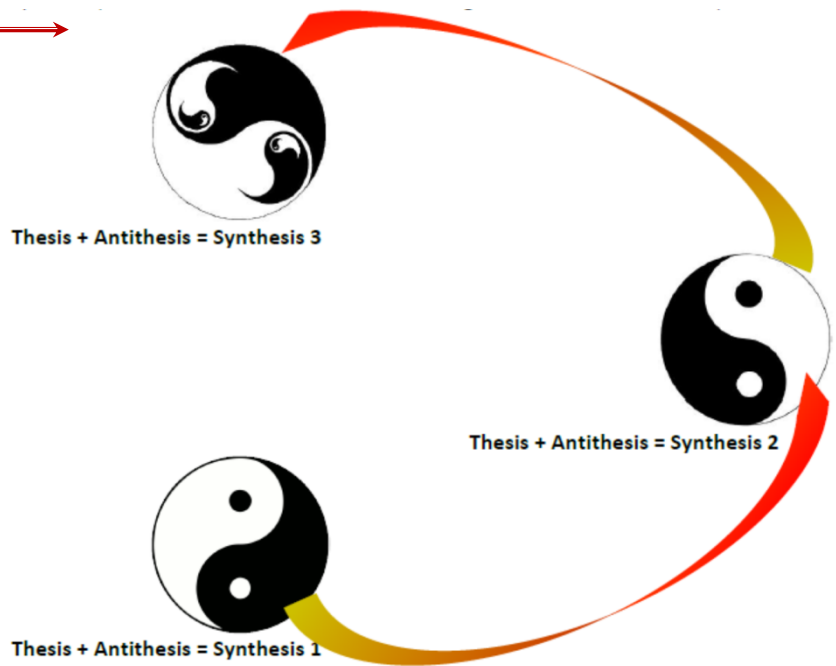
The dialectic 'Spiral of Change': 

The WA lens of dialectics captures complex wholes 'live': i.e., the dolphins above are complex living organisms; dialectical study of dolphins observes the life cycle, behavior and habits of these intelligent creatures.

However, no amount of dolphin watching can provide us with a detailed knowledge of their skeletal structure; to understand their anatomy, we must kill the dolphin, cut it open, and examine how 'parts' of it are joined together. This 'zoom-in' kind of study is called analysis:

**Analysis** = Greek for 'breaking into parts'

**Metaphysics** (**analysis**) zooms in on parts of the whole, and examines the 'fixed' details in isolation:



White-beaked dolphin skeleton. Source: Zoologischen Museum Hamburg/Soebecoearth.org

### The Process of Cognition

Just as breathing is both inhalation and exhalation, learning (*generalization*) involves both connecting ideas (synthesis), & contrasting them (analysis), changing the focus of our Mind's Eye from WA to Zoom. What we actually see depends on the lens we look through (WA or Zoom):



This course deals with meaning, the essence of Human Language. We already know that Language is a complex social tool for creating and communicating complex meanings. To see how it works to create the infinite variety of meanings, we will use the flexibility of **dialectical analysis** which combines the advantages of both synthesis (WA) and analysis (close-up) of the natural process of cognition. After a close-up examination of the functional ‘parts/units’ of the social ‘spinning wheel’ of Language and the ‘systemic’ relationships between them, we will ‘zoom out,’ to capture semantic changes that occur in it over Time. The second part of the course (pragmatics) will focus on the process of creating complex meanings – on how speakers use the social ‘wheel’ to spin their own ‘webs of significance.’

Before we sink our teeth into the substance of this course, please revise some important stuff you learnt about Language in the Introduction to Linguistics course (4.11406).

## 2. The basic principles of dialectical linguistics: Quick Revision

In our scientific examination of Language, we must view it through the wide-angle lens of dialectics, as well as through the narrow focus of metaphysical analysis – it is only then that we can rise to a higher level in the spiral of our understanding of its complex nature and behavior.

Every **word** is already a **generalization** – an **act of thought**.

**Language is Verbal Thought**; therefore, to understand Language, we must understand **how we think** in words.

**We think by connecting ideas by Resemblance, Contiguity, and Cause/Effect** – these associations are the basis of Generalization (the Rational Mechanism of Language).

**Word-meanings are the smallest units of the complex whole of language**, because they have all its properties intact: *psychological* (meaning), *physical* (sounds, & structures they make), *social* (communication), and *historical* (they are the products of minds, living in Time).

**The Whole is more than the sum of its Parts.** Language is more than the sum of its ‘units and rules’ – it is a **social tool**, the ‘spinning wheel’ we use to spin our ‘webs of significance.’

The language tool consists of conventional word-meanings and rules for putting them together to form the composite meanings of sentence-mosaics.

The **synthesis & analysis of generalization**, driven by the natural principles of human understanding (association of ideas by resemblance, contiguity in space/time, and cause/effect), **underlie grammar rules** for building sentence mosaics (complex thoughts) out of word-meanings (and groups of word-meanings) in all languages.

**2 basic principles of sentence structure /complex meaning construction** in all languages: **(1) Nexus** – connecting what we speak about with what we say about it into the S/V/C nexus, and **(2) Modification** – adding color /detail to the sentence constituents through recursion, always based on the three natural principles of human understanding, required for all generalization.

**Denotative meanings** ('fixed' in dictionaries) **are our collective generalizations** – products of our 'composite' social mind, they reflect the world as it is conceptualized by the society. The development of our social cognition can be traced through the study of etymology and grammaticalization.

**In live communication**, individual speakers connect denotative word-meanings used in society (as they would tiles of different colors) into sentence mosaics, each with its own complex, composite meaning, in which every tile acquires its own meaning, depending on how it is used (**meaning as use**).

**All meaning is the creation of human minds (collective, and individual)**. Individual verbal thought is impossible without the social means of thought – Language.

**We are born without verbal thought** – society gives us its creation, this magnificent Language tool that we, individual speakers, use to spin our own 'webs of significance' and share them with others.

**We view all complex meanings (those 'webs of significance')** through our own '**Mind's Eye**' whose vision is **relative** – it varies, based on our level of cognitive development, experience, knowledge, physical and mental state, context of communication, and a multitude of other factors. This accounts for the fluid nature and ultimate 'indeterminacy of meaning' – we all make sense of things in our own heads.

For more in-depth revision, please refer to:

Temple, O. 2011. Genesutra: pp. 1-29.

Temple, Olga. 2011. The Webs of Significance: pp. 1-26; 129-135.

Vygotsky, L. 1934. Thinking and Speaking. <http://www.marxists.org/archive/vygotsky/works/words/index.htm>