Sutra 2: Language – a Complex Whole

It is the *combination* of the *idea* with a *vocal sign* which suffices to constitute the whole language.

Ferdinand de Saussure

- **2.1 Language Is a COMPLEX WHOLE**. Saussure was one of the first scholars¹ to puzzle over its distinct 'complementary facets, each depending on the other':
 - (1) The ear perceives articulated syllables as auditory impressions. ...One cannot divorce what is heard from oral articulation. Nor, on the other hand, can one specify the relevant movements of the vocal organs without reference to the corresponding auditory impression.
 - (2) But even if we ignored this phonetic duality, would language then be reducible to phonetic facts? No. **Speech sounds are only the instrument of thought**, **and have no independent existence**. Here another complementarity emerges, and one of great importance. A sound, itself a complex auditory-articulatory unit, in turn combines with an idea, to form another complex unit, both *physiologically* and *psychologically*. Nor is this all.
 - (3) Language has **an individual aspect and a social aspect**. One is not conceivable without the other. Furthermore:
 - (4) Language at any given time involves an established system and an evolution. At any given time, it is an institution in the present and a product of the past. At first sight, it looks very easy to distinguish between the system and its history, between what it is and what it was. In reality, the connexion between the two is so close that it is hard to separate them. ... There is no way out of the circle.

(Saussure: 2006)

2.2 Language Is Full of Contradictions and Dualities:

- (a) The psychological aspect of human language meaning:
 - 1. A word without meaning is empty sound: Aarrrggggghhh! Shumburum!
 - 2. Meaning, and consciousness generally are possible only through the act of thought (generalization): True human communication presupposes a generalising attitude... Man's thought reflects conceptualised actuality. That is why certain thoughts cannot be communicated to children even if they are familiar with the necessary words. ... Children often have difficulty in learning a

¹ Wilhelm von **Humboldt** (1767-1835), a German scholar, had voiced similar thoughts on language and linguistics almost a century before, but the extent of his influence on de Saussure is uncertain (Robins: 1995)

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new word – not because of its sound, but because of the concept to which the word refers. There is a word available nearly always when the concept has matured (Vygotsky: 1934).

There is no sign without meaning. The formation of meaning is the main *function* of the sign. Meaning is the *property* of the sign.

On the other hand, meanings cannot exist without their physical 'signs' – words. The Russian poet Mandelstam's poem 'The Swallow' (1920) verbalizes this idea:

But I forget what I to say so wanted ...
And fleshless thought dissolves in other shadows ...

3. Speakers' knowledge of the words & rules for putting them together to make complex meaning is essential for the very purpose of language (social communication)

(b) The physical side of language:

- The *physical forms* that we can perceive with our senses of hearing or sight (sounds/ writing), as well as the organs that produce & perceive them:
- 2. The organs of
 - a. speech production the so-called 'organs of speech' 2 and
 - b. **speech perception** our ears, brains, etc. (eyes for Sign)
- (c) The social nature of language: Word meaning is the synthesis of both intellectual and social functions of speech (the double function of the sign communication of meaning):

Communication of experience (memory/ feeling/ thought) is impossible without the mediating system of human speech 'born of the need of intercourse during work' (Vygotsky: 1934).

(d) The *historical* nature of language: Language is a process³ – at any point in time, it is 'an established system and an evolution.' Societies, individuals (and the languages they create and use) live in a 4-dimensional world, the fourth dimension (apart from the 3 dimensions of **Space**) being **Time**. Just like we all were different 10 years ago from what we are today, so

² The term 'organs of speech' usually refers to our mouths, noses, tongues, larynxes, etc. Their primary biological function, of course is breathing, eating, and drinking; strictly speaking, "they are no more to be thought of as primary organs of speech than are the fingers to be considered as essentially organs of piano-playing or the knees as organs of prayer" (Edward Sapir: 1921). 3 Re: Reading 2.4 – the 2nd law of dialectics: the law of the negation of negation

Genesutra: Sutra 2_Language – a Complex Whole English was different from what it is today – in Shakespeare's time, or even 50 years ago; yet, we are still we, and English is still English!

2.3 Language is a *living* structure of Signs; therefore, it has the properties of all *living* structures:

- Wholeness: The system functions as a whole, not just as a collection of independent parts; i.e., the human body: we are not just a collection of limbs (head, legs, arms, ears, etc.) we function as a whole, and any change in any of your organs will affect the system as a whole.
- Transformation: The system is constantly changing; gradual change results in radical change – that 'last straw that breaks the camel's back' (the 2nd law of dialectics: Quantity Changes the Quality)

'I used to think... there is no difference between one fraction of a second and the next...... Then ... now... What difficulties here, for the mind. To have always been what I am – and so changed from what I was.'

(Samuel Beckett: 1961)

Self-Regulation: The basic rules of the system are more lasting than its elements, which are constantly changing. Societies have laws that all citizens must follow or suffer the consequences. Languages often 'borrow' words from other languages, but these 'aliens' must conform to the rules of the language that has adopted them (for example, zebra, tomato, potato and bilum 'toe the line' with other English nouns).

2.4 Language reflects reality differently from our physical senses:

- (a) Physical senses perceive *concrete* physical things within the range of our perception; they tend to 'see' the world through the wide-angle lens, perceiving things in a 'flash,' as a whole:
 - We see concrete physical things all at once, as a whole: a pig, a man, a tree, etc. (our mind's eye first sees things through the wide-angle lens, though we can later 'zoom in' on parts of the whole, focusing on its details). For example, what do you see below?



Your mind's eye first sees some leaves (wide-angle lens); but what **kind** of leaves? To see that, it must zoom in and focus on individual leaves – are these banana leaves, a grapevine or, maybe, aibika?

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- We hear the chorus of sounds around us all together, not one after another; we can focus our attention on particular sounds, distinguishing them from the others, if we 'zoom in' on parts of that whole.
- We taste the food in our mouths, not its ingredients separately (we can 'zoom' in on a particular flavor, though, tasting for salt / sugar, etc.).
- **We smell** whatever is in the air around us at any given time; the smells of roasting chicken blend in with the smoke from the fire, the oil, the spices, etc.
- **We touch** (or feel the touch of) concrete physical things all at once we either touch something, or we don't! (Again, we can 'zoom in' on parts of that whole tactile perception, focusing on the *kind* of contact we feel, etc.).

So, then: our **senses react to concrete physical things** within the range of our sense perception.

(b) Language reflects our *ideas* about the physical world. Ideas are the *abstractions* we have 'squeezed' out of many concrete experiences, connected in our memory. Ideas have no physical substance – they exist only in our minds.

All human perception has meaning; we perceive all meaning less things as meaning ful, attaching meaning to them:

'There is nothing either good or bad, but thinking makes it so' (Shakespeare).

There is a dialectic leap not only between total absence of consciousness (in inanimate matter) and sensation but also between sensation and thought. ... The qualitative distinction between sensation and thought is the presence in the latter of a *generalised* reflection of reality (Vygotsky).

Evolution of Life on Earth		
Inanimate matter (non-living things)	Rocks, mountains, seas and rivers, the sun and the stars, metals and plastic, etc.	Complete absence of consciousness (no sensation, no intelligence)
Animate matter (all living things)	Micro-organisms, plants & insects, fish & reptiles, birds & rodents, mammals, etc.	Sensation &, in some animals, non-verbal intelligence
	Humans	sensation & abstract thought (verbal intelligence)

2.5 Language, rooted in the senses, is also perceived with our senses (of hearing & sight); therefore, we perceive spoken (and written!) language through the wide-angle lens of our physical senses, in *chunks* of meaning. This is why we often understand the sentence, before the speaker has finished saying it. and can even guess the words not yet spoken.

Cna yuo raed tihs? Olny 55 plepoe out of 100 can! I cdnuolt blveiee taht I cluod aulaclty uesdnatnrd waht I was rdanieg. The phaonmneal pweor of the hmuan mnid, aoccdrnig to a rscheearch at Cmabrigde Uinervtisy, it dseno't mtaetr in waht oerdr the ltteres in a wrod are, the olny iproamtnt tihng is taht the frsit and Isat Itteer be in the rghit pclae. The rset can be a taotl mses and you can sitll raed it whotuit a phoerlm. Tihs is beuseae the huamn mnid deos not raed ervey lteter by istlef, but the wrod as a wlohe. Azanmig huh? yaeh and I awlyas tghuhot slpeling was ipmorantt! if you can raed tihs forwrad it!

These are not regular English words – how come you can make sense of them?

Tihs is bcuseae the uor mnid's eye deos not see ervey Iteter by istlef, but the wrod as a wlohe – we perceive language with our physical senses!

*This example also shows how our minds generalize by *connecting* ideas – *because* of some *resemblance*, we 'slot' things into *categories* existing in our consciousness.

2.6 Understanding is possible only through generalization (thought) which simplifies the concrete world of experience into abstract categories/ideas, so that these concrete experiences can be translated into symbols:

To become communicable, [concrete experience] must be included in a certain category which, by tacit convention, human society regards as a unit (Vygotsky: 1934).

Meaning (generalization) is the psychological aspect of language.

2.7 Our Mind's Eye sees what our eyes can't see - Ideas.

Meanings do not exist in the physical world – they are the product of the human mind; from physical experiences of concrete things, connected in memory, human minds abstracted *ideas* of concrete things:

Generalization is the exclusion from visual (sense perception) structures and the inclusion in abstract thought structures, in *semantic* structures (Vygotsky: 1925).

2.8 Societies create meaning (generalization) by abstracting a single experience out of 'several memories of the same thing' and communicating it through signs:

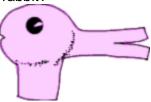
The animals other than man live by appearances and memories, and have but little of **connected experience**; ...from memory, experience is produced in men; for **several** memories of the same thing produce finally the capacity for a *single* experience (*Aristotle*: Metaphysics, Book I).

To know the meaning is to know the singular as the universal.

(Vygotsky: 1925)

2.9 We 'make sense' of things by 'connecting' our concrete experiences to the general concepts/ categories already 'installed' in our minds by society through language – we recognize 'the singular as the universal.'

We associate ideas by resemblance, contiguity in space and time, and cause / effect. Example: we come across new things every day. To understand what they are, we try to fit them into a general category we have in our minds, connecting them because they resemble it. In this drawing, what do you see – a duck or a rabbit?



Source: http://en.wikipedia.org/wiki/Philosophical_Investigations

In fact, it's a duck-rabbit⁴, and what you will actually see depends on what you think it looks like. If you don't know what a rabbit looks like, you'll think this is a duck, and the other way around. Why? Because we *recognize* the similarities with what we *know!* In other words, if something looks like something that we already know,⁵ we put it in that general category⁶:

What looks like a duck, walks like a duck, and quacks like a duck, must be a duck!

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⁴ This duckrabbit was made famous by Wittgenstein (1898-1951), the Austrian-British philosopher. Source: http://en.wikipedia.org/wiki/Ludwig_Wittgenstein (22/06/2010) ⁵ association by **cause/effect**

⁶ association by **contiguity**

2.10 Animal 'languages' communicate emotion/ feeling; human languages communicate meaning (generalization), not only emotion:

According to Edward Sapir's penetrating description, the world of experience must be greatly simplified and generalised before it can be translated into symbols. Only in this way does communication become possible, for the individual's experience resides only in his own consciousness and is, strictly speaking, not communicable. To become communicable, it must be included in a certain category which, by tacit convention, human society regards as a unit (Vygotsky: 1934).

2.11 Verbal Thought is intertwined with emotion

Thought processes cannot be separated from consciousness – from the 'fullness of life, from the personal needs and interests, the inclinations and impulses, of the thinker':

... Every idea contains a transmuted affective attitude toward the bit of reality to which it refers. It further permits us to trace the path from a person's needs and impulses to the specific direction taken by his thoughts, and the reverse path from his thoughts to his behaviour and activity (Vygotsky: 1934).

2.12 Human language is a complex whole of distinct 'complementary facets, each depending on the other'; but, contrary to Saussure's opinion, there *i*s a way out of the circle! Vygotsky's *Analysis into Units* shows us the way (Re: Sutra 3)!

