

From Terminology to Ontology and Back Again? From Eugene Wüster to Google Brothers and a few sisters

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Every age has its own quest for the ‘fundamentals’ of knowledge which is deep inside somewhere in our mind/brain. The claim has been that the description of what we know can be used to organise our knowledge and the manner in which deploy this knowledge. The ancient *hermeneutics*, interpretation of scriptural texts for gaining further knowledge or the displacement of belief in extant knowledge, has made way to our ‘modern’ secular sciences where the emphasis has been on the right choice of words for the systematic organisation and consistent deployment of what is known. Naming of things and living beings has played a key role in the history and *philosophy* of science with spectacular results in both positive and negative sense.

Carl Linnaeus (1707-1778) grouped living beings and named the categories to which they belonged. Charles Darwin’s (1809-1882) challenge to the existence of fixed species led to what is called *systematics* and its various species. Both were looking for ‘a general reference frame’ for their classifications (Mayr, 1974). We had Dmitri Mendeleev (1834-1907) who organised elements in a table –the periodic table- that led to industrial and warfare chemistry and onto chemical engineering. Eugene Wüster (1898-1977), a player in the Vienna Circle of the 20th century is one of the protagonists of this building block idea –*terminology*- focused on engineering sciences as is Wüster’s contemporaries elsewhere were equally keen on naming and shaping knowledge, especially my hero Enrico Fermi (1901-1954) who gave us semi-conductors, nuclear reactors, insights into the atomic nucleus is known to have settled a major dispute amongst key physicists, Wolfgang Pauli (1900-1958) and James Chadwick (1894-1974). Both wanted to call a new particle – the *neutron*. Pauli has postulated the existence of a neutral and light electron-like particle, whereas Chadwick’s experiments have detected a neutral, heavy proton like particle. Fermi being a wonderful user of language, suggested that that in Italian an ordinary heavy thing may be called a *thing* whereas its smaller/lighter counterpart can be called *thingino*. This gave birth to Pauli’s almost massless *neutrino* and Anderson’s heavy *neutron* – leading respectively to a major theme in particle physics and nuclear engineering respectively. New knowledge by rearranging equations on a piece of paper or by counting radiation in a laboratory. Now we have hundreds of these fundamental particles discussed over 500 pages by over a 100 authors (Olive et al., 2014). The formula here is this: you organise extant objects or animals in a scheme, a table, a hierarchical tree, and the scheme can either absorb new objects or animals, or the breakdown of the scheme will herald a new classification and a new scheme. The spin-off of observation-classification-schema cycle will be new branches of knowledge, new ways of making and doing things and equally the new way maybe replete with abuse, danger and risks.

My story is that I can see, and wish you to share what I see that, the observation-classification-schema cycle can be observed in the new science and engineering of connectivity and in the new ways of psychologizing about human and animal behaviour. I see Wüster’s traces, in very heavy dilution, like homeopathic medicines, in the current fixation with *computational ontology* on the one hand and *text mining*, *text analytics*, *topic mining* and *sentiment analysis* amongst many near oxymoronic subjects that have emerged in the last 25 years or so. These subjects are based, in one way or another, on this quest for the building blocks of knowledge – our modern day hermeneutists no longer go through parchment paper stacks or stone carvings, rather they surf the Internet at high speed, collate *Big Data*, and deploy knowledge representation schema, a term from 1930’s psychology, and create ontology – the superstructure of knowledge, sometimes without the linguistic finesse of all these Wüster adherents, the normative terminologists – some of them

happen to be my good friends as well – or the linguistic dexterity of *corpus linguists* in talking about specialist texts, and some of them are or were among my good friends. So, if you will, we will look together at the haystack of texts to find the needle of knowledge and how to wrap the needle in a schema that ostensibly our neurons generate to create the web of more texts to add to the existing haystacks for the future experts in hermeneutics. Terminology has a way to go in educating and re-educating the world about systematically organising and elaborating terms. Whither terminology? Terminology is dead and long live Terminology for all our sakes!

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