How to Do Things with Semantic Ontologies

The Conceptual Taxonomy of the TLS

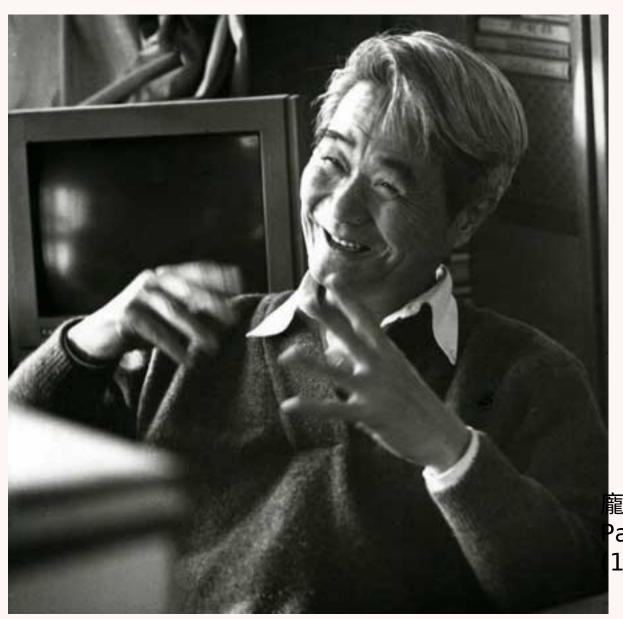
Christian Schwermann

TLS Research Seminar 28.5.2021

Conceptual History: The Study of Words that **Make** History

- Reinhart Koselleck (1923-2006): Geschichtliche Grundbegriffe: Historisches Lexikon zur politisch-sozialen Sprache in Deutschland (Historical Key Concepts), 8 vols., 1997
- Joachim Ritter (1903-1974): *Historisches Wörterbuch der Philosophie*, 12 vols., 2004
- Historisches Wörterbuch ästhetischer Grundbegriffe, 7 vols.,
 2005
- Historisches Wörterbuch der Rhetorik, 12 vols., 2015
- Otto Brunner (1898-1982): Land and Lordship: Structures of Governance in Medieval Austria, 1939
- Jost Trier (1894-1970): Lectures on Lexical Field Theory, 1973; Der deutsche Wortschatz im Sinnbezirk des Verstandes (German Vocabulary in the Semantic Field of Mental Power), 1931
- Whose keywords? Whose history? Whose logic? Whose rhetoric? Whose aesthetic? When? Where?
- post-Columbian conceptual history has barely begun, it is as if Marco Polo had never gone to China!





龐樸 Pang Pu 1928-2015)

漢學文典 Thesaurus Linguae Sericae

- •TLS aims at a very close philological interpretation in the French mode of longue durée (3000 years) of just one linguistic civilisation as different from modern Anglo-American civilization as may be
- working language in the compilation of the database has very largely been Mandarin Chinese
- for the purposes of international communication the web publication is largely in English

Semantics as Network of Systematic Relations in the Lexicon

TLS defines lexical entries not just by glosses and metalinguistic explanations, but crucially in terms of its systematically documented recurrent relations with

- •synonyms (we systematially note neutralisation of semantic contrasts in parallelism contexts)
- near-synonyms (the core of TLS is a synonym dictionary)
- •converses, e.g. offer/accept versus give/receive; slave/master
- •opposites, e.g. eat/drink
- •antonyms, e.g. good/bad
- •epithets, e.g. friend/good 友/良
- •collocations, e.g. young and beautiful, rich and powerful

What Is a Conceptual Taxonomy?

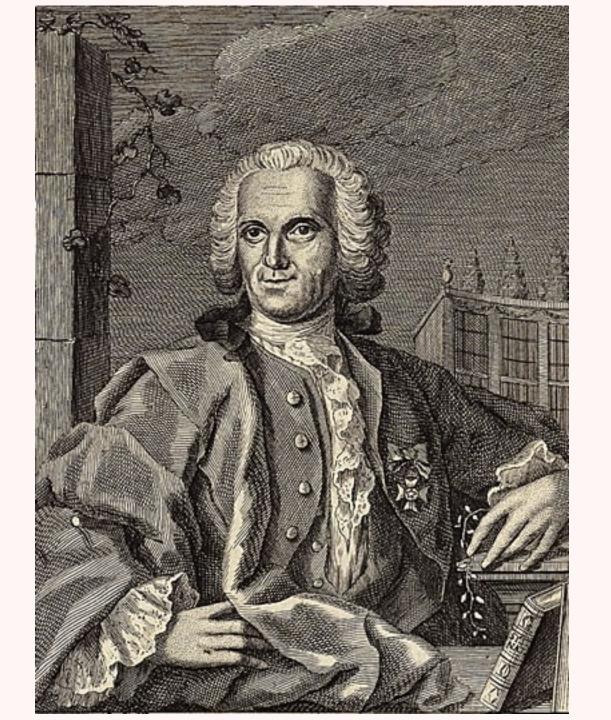
- a heuristic system and not an ontological system in the strict sense of the word
- heuristic ontology of convenience without metaphysical reification of concepts: there is no world that consists of these elements
- goal is the retrievability and organization of semantic fields
- compare Sanskrit *upāya*, "expedient means", the Chinese concept of *fangbian* 方便, or Wittgenstein's metaphor of the ladder

See *Tractatus Logico-Philosophicus* 6.54

"My propositions serve as elucidations in the following way: anyone who understands me eventually recognizes them as nonsensical, when he has used them—as steps—to climb beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.)

He must transcend these propositions, and then he will see the world aright."

Nota bene: The conceptual taxonomy of the TLS is a ladder that you will not want to throw away, because it will continue to enable cross-cultural comparison even when its imperfections are recognized!

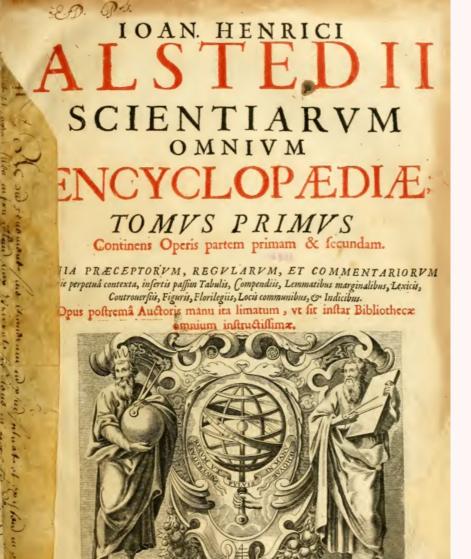


Carl von Linné, aka Linnaeus (1707-1778)

If you find this puzzling or unconvincing, I suggest you think back to our inspiring forefather Linnaeus, who wanted to describe the plants of this world. You will find that he did not merely list them, but established a systematic conceptual taxonomy in which each newly discovered plant would find its logical place.

Even with Linnaeus, one has to concede that he made up his ontology. We are nevertheless grateful to him for not only enumerating his plants, but for presenting them to the best of his ability in a wellconceived taxonomy.

- nature as taxonomic system
- the lexicon as a taxonomic system
- •understanding something in nature is to understand its place in the system of nature
- •one must study **conceptual schemes**, not concepts



LVGDVNI,
Sumptibus IOANNIS ANTONII HVGVETAN Filij,
& MARCI ANTONII RAVAVD,
viâ Mercatoriâ ad infigne Spharæ.

Johan Heinrich Alsted (1588–1638)

A reasoned taxonomic system of key concepts (with an alphabetic index as an appendix for mechanical alphabetic retrieval only)

TABVLA PRIMA Exhibens

Elenchum & seriem librorum XXXV. in hac Encyclopadia comprehensorum.

Definirio: Encyclopædia est methodica comprehensio, rerum omnium, in hác vitá homini discendarum. Brewiter : Eft vniuerfitas var grudiar. Habitus, Lib. I. Przeognoscendz; vbi funt (Natura, que (Varietate; quan- Seriem disciplinarum. Lib, H. quatuer Pracegnita em.) spectatur in tum ad nium difeiplinarum,quæ) iplatum (Firmitatesquantum ad principia. Lib. 111. precipiunt de ipfarum (Studio, Lib.IV. Philologia, Lib, V. VI. VII. VIII. IX. X. Forma fumi-Inferiorus ENCYCLOPAtur ab ob-Philosophia, Lib. XI, ad vbi eft DIÆ meditur XXIV. jecto; quad < Theologia. Lib. XXV. funt res di-Superiorus | Iurisprodentia, Lib. Partition cuius fcendz,ezr Systematibus < XXVI. que L vbi cft | Veius & ho-Medicina, Lib, XXVII. difceplinară Illiberalium, feu mechanicarum, Lib. mogenei ; Cogofcenda: quod cogquarfunt ob-XXVIII. XXIX. XXX. nofcitur in recti LPattibus svstematum, Vide tabula 32. Varij & heterogeneisquod cognoscitur in farraginibus disciplinatum. Lib. XXXI. XXXII. XXXIII. XXXIV, XXXV. Encyclopædiæ propofita est omnium proprior multitudo, Limites disciplinatum non pendent ex humano arbitrio, sed ex ipsa return di-· scendarum congenientia & differentia. Fundamentum est | I II. Limites farraginum disciplinatum pendent ex humano arbitrio. in his regulis Omnes discipling habene pracognita i caque generalia, vel specialia. Disciplinæ mechanicæ poslunt methodo cerra proponi. V I. Philosophia stricté sumra, recté distinguistus à Philologia, LVII. Philologia recte pramittitut philolophia.



Gottfried Wilhelm Leibniz (1646-1716)

- the metalinguistic logical structural core of concepts
- the **taxonomic** (is-a-kind-of-) hierarchy of most concepts
- the mereonomic (part-whole-) hierarchy of some concepts
- definition must be through defined concepts plus "syncategorematic" terms (i.e. grammatical "small fry")
- identification of as few as possible semantic primes (concepts which have no hypernym, see also Anna Wierzbicka)
- avoiding circular definitions
- the mathematics of the internal structure and composition of concepts, and indeed of whole conceptual schemes
- the non-uniqueness of the solutions of problems of concept-definition and conceptual taxonomy (see Chao Yuen Ren)

What We Must Learn to Do:

- 1. Establish a reasoned taxonomy of concepts, of conceptual schemes as systems of hypernyms and their hyponyms. (Alsted, Linnaeus)
- Make didactic use of that system as a way of analysing conceptual schemes, with discriminated synonyms, antonyms, converses, opposites, etc. (Comenius)
- 3. Specify a taxonomy of non-circularly interdefined semantic fields explaining the "mathematics" of the conceptual composition of meta-concepts. (Leibniz).
- 4. Specify a combinatorial taxonomy of syntactic (and of rhetorical) categories and functions. (Leibniz)
- Start out from the historical philology of a language as radically different from our own as possible. (Humboldt: a necessary antidote against conceptual arrogance!)

Thesaurus Linguae Sericae

G.K. Chesterton (1874-1936), as quoted by Christoph's teacher A.C. Graham (1919-1991):

"Whatever is really worth doing, is worth doing badly!"