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THE ANALYTICAL LANGUAGE OF JOHN WILKINS

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Translated from the Spanish 'El idioma analítico de John Wilkins' by Lilia Graciela Vázquez; edited by Jan Frederik Solem with assistance from Bjørn Are Davidsen and Rolf Andersen. A translation by Ruth L. C. Simms can be found in Jorge Luis Borges, 'Other inquisitions 1937-1952' (University of Texas Press, 1993)

I have noticed that the 14th edition of Encyclopedia Britannica does not include the article on John Wilkins. This omission can be considered justified if we remember how trivial this article was (20 lines of purely biographical data: Wilkins was born in 1614, Wilkins died in 1672, Wilkins was chaplain of Charles Louis, Elector Palatine; Wilkins was principal of one of Oxford's colleges, Wilkins was the first secretary of the Royal Society of London, etc.); it is an error if we consider the speculative works of Wilkins. He was interested in several different topics: theology, cryptography, music, the building of transparent beehives, the orbit of an invisible planet, the possibility of a trip to the moon, the possibility and principles of an universal language. To this latter problem he dedicated the book 'An Essay Towards a Real Character and a Philosophical Language' (600 pages in large quarto, 1668). There are no copies of this book in our National Library, I have consulted, to write the present article, 'The Life and Times of John Wilkins' (1910), by P. A. Wright Henderson; the 'Wörterbuch der Philosophie' (1935), by Fritz Mauthner; 'Delphos' (1935), by E. Sylvia Pankhurst; 'Dangerous Thoughts' (1939), by Lancelot Hogben.

All of us have once experienced those neverending discussions in which a dame, using lots of interjections and incoherences, swears to you that the word 'luna' is more (or less) expressive than the word 'moon'. Apart from the evident observation that the monosyllable 'moon' perhaps is a more suitable representation of such a very simple object than the bisyllable 'luna', there is nothing to add to such a discussion; apart from the composed words and the derivations, all the languages in the world (including the 'Volapük' of Johann Martin Schleyer and the romantic 'Interlingua'

of Peano) are equally inexpressive. There is not one issue of the Grammar of the Royal Spanish Academy that does not ponder "the enormous treasure of pitoresque, bright and expressive words of the extremely rich Spanish language", but it is mere bragging, without corroboration. In fact, this same Royal Academy edits every few years a dictionary, defining Spanish words... In the universal language which Wilkins invented in the seventeenth century, each word is defined by itself. Descartes, in a letter dated November 1629, had already noticed that, using the decimal number system, it may take only one day to learn how to name all the numbers up to infinity and how to write them in a new language, namely that of ciphers (1); he did also suggest the creation of a language similar to this former system, a general language, organizing and covering all human ideas. John Wilkins, around 1664, started to work on this task.

He divided the universe in forty categories or classes, these being further subdivided into differences, which was then subdivided into species. He assigned to each class a monosyllable of two letters; to each difference, a consonant; to each species, a vowel. For example: **de**, which means an element; **deb**, the first of the elements, fire; **deba**, a part of the element fire, a flame. In a similar language invented by Letellier (1850) **a** means animal; **ab,** mammal; **abo,** carnivore; **aboj,** feline; **aboje,** cat; **abi,** herbivore; **abiv,** horse; etc. In the language of Bonifacio Sotos Ochando (1845) **imaba** means building; **imaca,** harem; **imafe,** hospital; **imafo,** pesthouse; **imari,** house; **imaru,** country house; **imedo,** coloumn; **imede,** pillar; **imego,** floor; **imela,** ceiling; **imogo,** window; **bire,** bookbinder; **birer,** bookbinding. (This last list belongs to a book printed in Buenos Aires in 1886, the 'Curso de Lengua Universal', by Dr. Pedro Mata.)

The words of the analytical language created by John Wilkins are not mere arbitrary symbols; each letter in them has a meaning, like those from the Holy Writ had for the Cabbalists. Mauthner points out that children would be able to learn this language without knowing it be artificial; afterwards, at school, they would discover it being an universal code and a secret encyclopaedia.

Once we have defined Wilkins' procedure, it is time to examine a problem which could be impossible or at least difficult to postpone: the value of this four-level table which is the base of the language. Let us consider the eighth category, the category of stones. Wilkins divides them into common (silica, gravel, schist), modics (marble, amber, coral), precious (pearl, opal), transparent (amethyst, sapphire) and insolubles (chalk, arsenic). Almost as surprising as the eighth, is the ninth category. This one reveals to us that metals can be imperfect (cinnabar, mercury), artificial (bronze, brass), recremental (filings, rust) and natural (gold, tin, copper). Beauty belongs to the sixteenth category; it is a living brood fish, an oblong one.

These ambiguities, redundancies and deficiencies remind us of those which doctor Franz Kuhn attributes to a certain Chinese encyclopaedia entitled 'Celestial Empire of benevolent Knowledge'. In its remote pages it is written that the animals are divided into: (a) belonging to the emperor, (b) embalmed, (c) tame, (d) sucking pigs, (e) sirens, (f) fabulous, (g) stray dogs, (h) included in the present classification, (i) frenzied, (j) innumerable, (k) drawn with a very fine camelhair brush, (l) et cetera, (m) having just broken the water pitcher, (n) that from a long way off look like flies.

The Bibliographic Institute of Brussels exerts chaos too: it has divided the universe into 1000 subdivisions, from which number 262 is the pope; number 282, the Roman Catholic Church; 263, the Day of the Lord; 268 Sunday schools; 298, mormonism; and number 294, brahmanism, buddhism, shintoism and taoism. It doesn't reject heterogene subdivisions as, for example, 179: "Cruelty towards animals. Animals protection. Duel and suicide seen through moral values. Various vices and disadvantages. Advantages and various qualities."

I have registered the arbitrarities of Wilkins, of the unknown (or false) Chinese encyclopaedia writer and of the Bibliographic Institute of Brussels; it is clear that there is no classification of the Universe not being arbitrary and full of conjectures. The reason for this is very simple: we do not know what thing the universe is. "The world - David Hume writes - is perhaps the rudimentary sketch of a childish god, who left it half done, ashamed by his deficient work; it is created by a subordinate god, at whom the superior gods laugh; it is the confused production of a decrepit and retiring divinity, who has already died" ('Dialogues Concerning Natural Religion', V. 1779). We are allowed to go further; we can suspect that there is no universe in the organic, unifying sense, that this ambitious term has. If there is a universe, it's aim is not conjectured yet; we have not yet conjectured the words, the definitions, the etymologies, the synonyms, from the secret dictionary of God.

The impossibility of penetrating the divine pattern of the universe cannot stop us from planning human patterns, even though we are concious they are not definitive. The analytic language of Wilkins is not the least admirable of such patterns. The classes and species that compose it are contradictory and vague; the nimbleness of letters in the words meaning subdivisions and divisions is, no doubt, gifted. The word **salmon** does not tell us anything; **zana,** the corresponding word, defines (for the man knowing the forty categories and the species of these categories) a scaled river fish, with ruddy meat. (Theoretically, it is not impossible to think of a language where the name of each thing says all the details of its destiny, past and future).

Leaving hopes and utopias apart, probably the most lucid ever written about language are the following words by Chesterton: "He knows that there are in the soul tints more bewildering, more numberless, and more nameless than the colours of an autumn forest... Yet he seriously believes that these things can every one of them, in all their tones and semitones, in all their blends and unions, be accurately represented by an arbitrary system of grunts and squeals. He believes that an ordinary civilized stockbroker can really produce out of this own inside noises which denote all the mysteries of memory and all the agonies of desire" (G. F. Watts, page 88, 1904).

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(1) Theoretically, the number of numbering systems is unlimited. The most complete (used by the divinities and the angels) has an infinite number of symbols, one for each individual number; the simplest needs only two. Zero is written as 0, one 1, two 10, three 11, four 100, five 101, six 110, seven 111, eight 1000... This is an invention by Leibniz, who was stimulated (it seems) by the enigmatic hexagrammes of I Ching.
