W. A. HEANEY

SEMANTOGRAPHY

"One Writing for One World"

A REPRINT FROM NEUMA

The Magazine of the Arts Society of

NEW ENGLAND UNIVERSITY COLLEGE

ARMIDALE, N.S.W., AUSTRALIA.

Editor: John Brummell.

SEMANTOGRAPHY PUBLISHING COMPANY

United States: P.O.B. 167, Yellow Springs, Ohio. Australia: 5 Maroubra Bay Road, Pagewood, Sydney, N.S.W.

SEMANTOGRAPHY

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SEMANTOGRAPHY

THIS is not just another Esperanto, but it is a new system for WRITTEN communication through pictorial symbols, a WRITTEN "language" invented to make international understanding clearer and easier, in fact, to make international understanding really possible; for it is obvious to-day not only that international congresses are sensitive instruments because of language difficulties, but also that even within a group speaking the same language a war of words is carried on between political parties and a desecration of words is organised by journalists; and the consequence is the man-in-the-street suffers a general ignorance and uncertainty about words and language becomes less effective as a means for precise and clear communi-

Mr. C. K. Bliss, a graduate of the University of Technology, Vienna (Austria), now an Australian citizen, the inventor of Semantography, was made to realise how fearful and powerful was Hitler's war of words. Slogans like "Germany above all," and to excuse the atrocities committed in the name of Nazism, "Es war notwendig in einem hoeheren Sinne—it was necessary in a higher sense," vague catchwords, highsounding phrases of ruthless propaganda mean nothing (in fact, they become ridiculous) when analysed into their scientific significance (Greek semanticos) by the pictorial "language" of Semantography; yet they served their purpose.

But even in peacetime the lack of thorough international codes can cause disaster. Witness the ambiguity and diversity of road signs in different countries. symbol for a railroad crossing in U.S. is very similar in form to the European "No stopping allowed! Drive on!" The symbol "No hooting" in Austria is the opposite of a symbol in South Africa meaning the same thing. The signs for "cross roads," "schools," "curves," are different in most countries of the world. Within one State in Australia you will often find different road signs with the same meaning. What confusion then must the variety cause the foreigner, and what disasters are liable to happen. To overcome these difficulties an international code is necessary that is clear both to the intellectuals and the ignorant, to diplomats and business men, to peasant farmers and illiterate natives. And Mr. Bliss claims (and with ample support of his claim) that he has devised an answer to this need in his Semantography.

The aim of the language is to communicate through simple pictorial symbols the

-W. A. HEANEY

meaning of words BY REPRESENTING PHYSICAL THINGS IN OUTLINE AND NON-PHYSICAL THINGS IN GEOMETRIC SYMBOLS WHICH ANALYSE THEIR SIGNIFICANCE. The language is simple, analytical, pictorial; it is almost grammarless and syntax-less; there are no inflexions to learn; and there are NO INCONSISTENCIES. Almost every symbol suggests its meaning by its outline, so that it is easy to learn the "language," and in understanding the basis on which it works you will find great intellectual delight and satisfaction, for being as closely related to reality and nature as possible, it wastes no words and makes its communication clearly and economically.

The idea of a universal language is not new. An extraordinary uniformity existed under the Roman Empire where Latin penetrated all the known world and retained in the ranks of the officials, Roman and native. an extraordinary uniformity, so that the Latin of an educated Spaniard or African was almost identical with that of a Roman. Latin was used down the Middle Ages as the Ecclesiastical language of the Church, and the official language of scholars. England, even in the Sixteenth Century, there was a strong tradition that sanctioned the use of Latin in all fields of knowledge for English along with other vernaculars was regarded as a popular language, a vulgar tongue, immature, unpolished, and limited in resources, having no faculty to express the abstract ideas and the range of thought which the ancient language was regarded as being so notably capable of.

As early as 1661 George Dalgarno, in his "Ars Signorum," and Bishop John Wilkins (1668) in his "Essay Towards a Real Character," had attempted new universal symbolic languages, but the arbitrariness of their symbols and the consequent vagueness and complication in their representations leave the attempts interesting curio-Gottfried Wilhelm Leibnitz, the German philosopher, saw that Dalgarno's and Wilkins's attempts LACKED CON-TACT WITH REALITY, and he said in his "News Essays Concerning Human Understanding": "A universal characteristic very popular....might be introduced if small figures were employed in the place of words, which would represent visible things by their outlines, and invisible by the visible which accompany them," But practically nothing has been done in this direction. True, physicists, chemists, and certain technicians have evolved certain internationally recognised symbols, but the

tinks, the words that relate what the scientist was about and the general method of his enquiry, are written in his own "phonetic" language; and so to study his subject in detail he has to be a practised linguist, having at least three languages at his command, as well as a capable student.

Attempts have been made, too, in the direction of "phonetic" languages that can be both written and spoken, but the barriers they have had to face were too much for them. For it seems their very conception was opposed to the laws of nature. People do not take to learning new languages. The late eminent philologist, Otto Jesperson, has said no one can learn more than one language, his mother tongue, perfectly, whatever his acquired ability may be in others. Memories of the real waste of time at school spent on learning foreign languages which we hated and which, moreover, we could acquire no more than a shaky, elementary knowledge of, may remind us of this. Such inability (and antagonism) is one good reason why Esperanto has failed (UNESCO has abandoned it). Nor can you force people to learn a new language. Mr. Bliss cites Stanley Rundle, "Language as a Social and Political Factor in Europe" (London, 1945) as mentioning that the Lithuanians were prohibited by penalty of death from using their mother tongue, with the result that 200 years after the verdict was issued, 93 per cent. of the popuation spoke ONLY Lithuanian. And how are you going to teach the complicated system of the manmade languages when some 70 per cent. of the world is illiterate. "The chief reproach to be addressed to Volapuk, Esperanto, Ido, Romanal, etc., is," says Albert Leon Guerard, ("A Short History of the International Language Movement," London, 1922), "that their conjugations are too subtle and too rich. The conjugation of Volapuk was extremely rich, but arbitrary and complicated. A Volapuk verb, according to Mr. Karl Lentze, could take 205,440 different forms."

But how did Mr. Bliss come to conceive the idea of a new universal language. As a research chemist, even though he had a fair command of four major European languages, he realised the difficulties he encountered in translating material written in a foreign tongue, but he had conceived no way of beating the difficulties. Now it happened that the Pacific war found Mr. Bliss and his wife marooned in China. There he started to learn Chinese writing, and he realised that, while those from the south could not converse with those of the north, people from all quarters of China could read the daily newspapers printed in Shanghai. But more than this, Chinese

writings 2500 years old, were easily comprehensible by modern Chinese. English prose and verse of the Fourteenth Century is not easy for an untrained English reader; and the English language of a thousand years ago requires special study before it can be read. But what was the reason for the universal understanding of Chinese? It was that the language was originally a pictorial one, and remains so, even though in the course of three or four millenia the characters have been modified and inconsistencies and useless symbols have appeared; yet basically Chinese is a pictorial representation of real things, of geometric reality.

Essentially, Mr. Bliss's pictorial "language" is a simplified Chinese: it is the clear, pictorial representation of real things as we see them. Each symbol looks like the object it represents: and where the "thing" is abstract, or intangible, it is represented by geometrical objects which are associated with the abstraction. Our language is termed a "phonetic" language. since we use symbols which represent sounds to form words, words which above a few hundred of some quarter million and more in the Oxford English Dictionary. which remotely suggest the ideas they represent, "splash, biff, toot, quack, etc.," are nothing but a CONVENTION; they have practically no direct bearing on reality. Yet to represent all his ideas, Mr. Bliss uses only 100 symbol-elements.

The first twenty-five are already internationally accepted and therefore should provide no difficulty. They include the digits 0 to 9; the symbols for addition, subtraction, multiplication and division; the dot, comma, question mark, and arrow. Many of the succeeding symbols could be represented from the first thirty-nine but for the purpose of simplicity a happy mean is struck between complete analysis (using basic symbol-elements only) and pictorial representation. And semantography can be written with a specially adjusted type-writer in which the second set (which usually contains the capital letters) made up of the geometric lines for the composition of the symbols. Thus the usual phonetic letters can be used with the Semantographic symbols. For Semantography does not aim to displace ordinary writing; IT IS MEANT ONLY TO BE AN AID, A SUPPLEMENTARY WRITING.

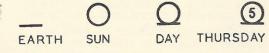
We have already observed how people are not eager to learn new languages and how in Lithuania the mother tongue could not be put down even through persecution. And Mr. Bliss is quite aware of this: Semantography is not out to replace, but to supplement one's native tongue, where necessary by an international code. He

recommends its use first of all for emergency warning signs with the language of the appropriate country under the symbols: these signs would be at once clearly comprehensible to the native for he can read his own tongue and easily comprehend the symbols too, and to the foreigner or the illiterate, who finds the phonetic language meaningless to him, but can recognise the significance of the symbols immediately.

But let us look at some of the symbols of Semantography.

DOOR, ENTRANCE EXIT FIRE-EXIT

These symbols, which are almost self-explanatory, could be put into operation in Australian ports, where foreigners and new immigrants are not familiar with the English language. They could be used in public buildings, cinemas, theatres, etc. The symbol for FIRE indicates the wavy outline of a flame. Mr. Bliss is now preparing a set of warning signs for Australian factories (where many New Australians are working). The symbol for FIRE can be used for other warnings, like INFLAMMABLE, DON'T SMOKE, etc., and also for bush-fire prevention.



These symbols can be used for an international calendar, which can be read and understood in all languages. The sun over the earth indicates obviously DAY. The symbol for the MOON over the EARTH line indicates NIGHT. The numbers attached indicate the days of the week or the months of the year.

These symbols can also be used for agricultural instructions to illiterate farmers in the backward areas of the world.

A CUTTER OF EARTH is a plough and the symbol looks like a plough. Harvesting means cutting the stalks.

Let us assume that an agricultural research station has developed a special seed for special areas. It will be necessary to write some directions on the seed packages, when to plough, when to sow, and

when to harvest. The symbols shown above could be combined with the calendar symbols in these directions.

M MY MY

LETTER, TELEGRAM, WINGS AIRLETTER

These are a few symbols from the list of Semantographic symbols for postal communication. They can also be used in correspondence, when writing in Semantography. Furthermore, Mr. Bliss envisages that cables in Semantography will be sent by Radio-Photo. At present commercial firms have to code and decode their messages, and then to translate the message in their native language. A Radio-Photogram in Semantography will need no translation. It can be sent for instance by an English firm to any country and read there in the native language.

MAN WOMAN I YOU

The symbols for MAN and WOMAN are obvious, and similar to children's drawings. First, second and third person, are represented by the appropriate number. The plural is indicated by a multiplication mark on top. Now we can form a sentence.

A1 PEN (A) LETTER (TO) YOU

The order of the symbols follows the order of the PHYSICAL ACTION.

The oblique line indicates a pen in position for writing. As such it indicates the material thing only. But if we place the action indicator on top, it symbolises the action performed with a pen.

MATERIAL PHYSICAL HUMAN ON THING ACTION EVALUATION

Here are the 3 most important symbols of Semantography. Mr. Bliss realised that he had to devise a simple universal grammar, which fits all languages. Being a chemist, he based his grammar on the following assumption: All languages are used to describe the phenomena of our physical world; and the main manifestations of our world can be classified into MATTER. ENERGY, and what we may call the Life,

or MIND Force. All this happens in SPACE and TIME.

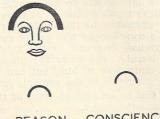
The first 3 groups are represented by the symbols shown above. MATTER 1s symbolised by a square to indicate that the structure of matter is not chaotic. On the contrary, a divine simplicity and harmony reveals itself in the structure of a crystal, and the geometrical arrangement of the molecules. The symbol for ENERGY indicates the Latin letter A in the word ACTUS, our English word Action. The symbol indicates also the primeval action on our planet, the throwing-up of volcano cones, and the thrusting-up of mountains.

The symbol for human EVALUATION indicates the Latin letter V in VALERE, our English word Value and Evaluation. This outline suggests a cone standing on its point, a position which in physics is termed LABILE. As you will soon see, we can easily agree about words which indicate THINGS or ACTIONS, as for instance what is a PEN, and TO PEN. All words relating to THINGS and ACTIONS refer to something real, which exists outside of our brain. But human evaluations, which we express in words, for instance BEAU-TIFUL and UGLY, depend upon the mind of each individual as HIS SYSTEM OF REFERENCE. And two individuals may never agree about their different EVALUA-TIONS of the same thing. Here is an example how those 3 symbols are used as indicators on top of symbols.



The second and third indicator refer to the verb and adjective. The first symbol referring to those nouns which are material THINGS, is usually unnecessary. We need not put this indicator on top of those symbols which by their outline indicate a MAN, a PEN, a LETTER, etc. The verb TO MAN refers to actions performed by men, as for instance to man a ship, to man a gun. The third indicator refers to how different minds may evaluate actions performed by man. Some actions may be evaluated as MANLY, meaning noble and heroic. However, some women, having had bitter experiences with men and their actions may use the word MANLY in quite a different way. The same applies to the evaluation of WOMANLY.

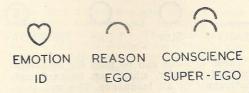
So far, the EVALUATION indicator has been used for adjectival derivations of words which represent material THINGS But we have also words which refer to reactions of our mind. For these we use the MIND symbol.



EMOTION REASON CONSCIENCE

The mind symbol shows the outline of the upper skull, which encases the brain. The division into these 3 levels is real, and brain surgeons have operated on these notions, and restored to health and sanity, persons tortured by a perverted conscience.

The modern theories of psycho-analysis are based on the same notions. "We don't live our lives," said Sigmund Freud, "IT lives us. We are lived by unknown and uncontrolled forces." He termed therefore the part of the brain which contains the passions and emotions, the ID (Latin for IT). The medical Latin words for Reason and Conscience are Ego and Super-Ego. (This word has nothing to do with egotistic). To make these meanings more self-evident, the following alternate symbols are chosen.



The heart is used in all languages to indicate emotion. In the symbol for CON-SCIENCE we see clearly another mind superimposed upon the individual mind According to Freud, it is the mind of the father, mother and people in authority. According to Gustav Jung, once Freud's coworker, it is the mind of God.

Here are a few symbols.





The plus and minus symbols indicate a positive or negative judgment of our mind. And here is another symbol combination, to indicate a complex meaning: apology.

o o OIO

APOLOGY is a verbal expression (a saying) of SHAME. SHAME is a downhearted feeling of what our conscience judges negatively as BAD.

ିଠାଠି! APOLOGY

The phonetic word has been placed next to the symbol, to show that the symbols do not take up more space than the phonetic symbols of the same size.

The next symbols refer to a favourite idea of Mr. Bliss. He has done years of scientific library research, and knows from his own bitter experience that the Babel of scientific publications "is a social problem of the first magnitude" (Hogben).

The flood of expensive scientific books and journals, which industrious publishers and printers pour out on poverty-stricken Universities is so great, that even the richest University cannot buy them all. Besides, many books are written in languages, of no use to many scientists.

Bliss proposes a simple universal science abstract, which should consist of inexpensive mimeographed filing cards, which students of every university could print on a duplicator. The result of researches in any science going on at a university should be given half-yearly on such cards in not more than 100 words in English (at Anglo-American Universities), in French (at French Universities), etc. These words should stand beneath the symbols. Anyone who knows English or French will read the words in these languages and need not bother about the symbols. Anyone else, interested in the research, would learn to read the symbols in his own language, be it Danish or Hindustani, or any other language. These research reports could be exchanged between universities, and any chemist, doctor, engineer, etc., could subscribe to these inexpensive cards for his particular field only.

CHEMICAL CHEMIST CHEMICAL ANALYSIS

The symbol for chemical is the outline of a retort, which is an age-old symbol for chemistry. ANALYSIS is clearly indicated as CHEMICAL DIVISION OF MATTER.

MEASURE MEASURING PHYSICIST MOVEMENTS

7 →□ •

GRAVITATION, PRESSURE MIXTURE GAS

GAS is unpicturable, but if it is collected under water or a liquid it forms bubbles which go up.

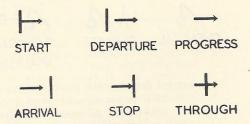
ABSORP- WATER DELIQUES EFFLORESTION CENCE CENCE

These symbols and the others shown above, are almost self-explanatory.

MEDICINE DOCTOR INTUSSUSCEPTION

Here are a few symbols for medical research and case histories. The symbol for medicine is the simplified outline of the rod of Aesculapius. Medical men use already Latin words, as for instance ileum and colon. The symbols of Semantography can be used to form complete sentences, which doctors can read in any language. Intussusception means the entering of the ileum into the colon (parts of the intestines).

The next symbols represent ideas concerning space and time.



These symbols can be used in railway stations, time tables, etc. But they can be used in science, too, for they are constructed according to the relativity theory. Any directional movement may mean progress in any direction. What is needed is a system of reference, which is indicated by the lines of reference in the symbols above. We realise that these words are meaningless, unless referred to those lines of reference.

In our present war of words, the meaning of PROGRESS has been applied by people and parties who oppose each other. The symbols of Semantography teach us to ask for the system of reference, and not to accept vague and ambiguous words. Progress? Where to? To the building of parliaments or concentration camps?

Bertrand Russell has tested Semantography and has asked Bliss to symbolise the most controversial meanings, as for instance, the meaning of God.

Bliss has responded by drawing an ageold symbol, an eye inside an equal sided triangle. The triangle may remind us of the Trinity; the eye of the all-seeing mind of the Creator. Remove the eye and you have the symbol for nature, creation. The Greek philosophers have considered geometrical configurations as direct proof of the divine harmony in nature.

CREATOR NATURE SCIENCE SCIENTIST

The mind contemplating the aspects of Nature symbolises Science and Philosophy in general. Bertrand Russell was completely satisfied with these symbols. He wrote afterwards: "I have been looking through your system of Semantography and I think very highly of it. The logical analysis is good. The symbols are ingenious and easy to understand, and the whole is capable of being very useful. Any man or men who will spend the money necessary to get your work printed will, in my opinion, be per-

forming an important service to mankind." High, too, was the praise of Professor Oliver L. Reiser, of the University of Pittsburgh, U.S.A., Chairman of the International Committee on Scientific Humanism, who said in his paper for the symposium "Operation Knowledge" of the American Association for the Advancement of Science: "Bliss . . . realised the ambition of the great mathematician Leibniz The system of Semantography has many virtues . . . it provides a powerful stimulus and aid to President Truman's 'Point Four Program' . . . Bliss's heroic work is certainly headed in the right direction . This new language design comes with the high praise of Bertrand Russell, suggesting that we do well to study thoroughly Bliss's creation." Amongst other prominent figures who have admired Mr. Bliss's system of Semantography we may note Professor Lancelot Hogben, University of Birmingham (author of "Mathematics for the Million," etc., editor of "The Loom of Language"); Professor Carleton Washburne. Professor of Education, Brooklyn College. New York, John Metcalfe, of the N.S.W. Public Library, and many others.

Mr. Bliss lives Semantography. It is never out of his mind; he has a notebook at hand in case an idea should come into his mind at work; returning home after being a manual labourer all day, he works at his idea late into the night; and he is spending all his own substance in having his work published and publicised. But he is growing old, too. It is too much to expect a man to labour with his hands all day and with his mind all night, unencouraged and unsupported; to see him go down, his energy spent and his industry wasted, an heroic figure scoffed at because his idea was unusual, snubbed by the proud-blind intellectuals with the patronising "charming but positively fantastic." Louis Braille's (1825) auxiliary writing for the blind was scorned, too; it was rejected by the Academy and even his colleagues-but it has won through.

Mr. Bliss needs all his time to continue working on and perfecting his new writing: his plea is for support that will enable him to leave the factory and give all his faculties to Semantography. And if you are interested in Semantography, you can get more information by writing to Mr. Bliss, of 5 Maroubra Bay Road, Pagewood, N.S.W., and in doing this you will aid yourself and give Mr. Bliss much happiness and satisfaction.

W. A. Heaney, of New England University College, Armidale, is a member of the English Honours School in Sydney University.