

## **Mannoury's signfic philosophy**

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#### **BIOGRAPHICAL NOTIONS:**

Gerrit Mannoury was born in Wormerveer, a village in the neighbourhood of Amsterdam, in 1867. His father, who was a merchant captain, died in China when Mannoury was only one year old and, together with his mother, sister and two brothers, he grew up in poor circumstances. Therefor his chances of a university education seemed remote. But a scholarship from the City of Amsterdam enabled him to complete the five-year program at the H.B.S. (high school) in Amsterdam. Three months after his final examination in 1885, he succeeded in obtaining the teacher's diploma. During the years that followed he qualified in a large number of sciences and arts, which among other things resulted in obtaining diploma's for secondary school teaching in mathematics (1887), bookkeeping (1893), mechanics (1895) and the diploma in mathematics (1902) which authorized him to teach at high school. He also wanted to attend lectures at university, but because of his poor financial circumstances this was not possible. In addition, he received lessons from professor Diederik Korteweg (1848-1941). However, Mannoury never came to a university education. Until the age of fifty he always had to combine his scientific studies with his teaching duties at primary and secondary schools and with his work as a self-employed accountant.

#### **MATHEMATICS AND PHILOSOPHY**

After Mannoury had become a member of the Dutch Mathematical Society in 1895, he made his entrance into the world of science with seven remarkable papers largely published in the *Nieuw Archief voor Wiskunde*. But his work in mathematics pure would remain rather limited. His attention increasingly moved to philosophy and the foundations of mathematics.

In 1903, he was appointed private (unpaid) lecturer in the logical foundations of mathematics at the University of Amsterdam. One of his first pupils was L.E.J. Brouwer (1888-1960), who later became famous for his intuitionistic mathematics.

But then in 1906 Mannoury moved to Helmond and four years later to Vlissingen to earn his money as a teacher at high school.

In 1917 he went back to Amsterdam, because he was appointed associate professor at the University of Amsterdam. One year later he became a full professor in geometry, mechanics and the philosophy of mathematics, as the successor of Korteweg.

He retired in 1937 and from then on Mannoury continued working mainly in the field of signfic (I will come back on that). In 1946 the University of Amsterdam presented him with an honorary doctorate. He still published seven more books besides a hundred articles after his retirement till his dead in 1956.

An amazing career for someone lacking any university education.

#### **SOCIALISM**

Mannoury was not only interested in mathematics and philosophy. He was driven by a strong social feeling like many other contemporaries and intellectuals at that time. He became a member of the Dutch Labour Party (Sociaal Democratische Arbeiderspartij) in 1900. One year later he co-founded the Social Democratic Study Group (Sociaal-Democratische Studieclub) which aimed at promoting the interests of the Labour Party. He was a secretary and librarian of this Study Group and spent much of his time to it. There is a letter in which Mannoury says that he cancelled his lecture at university because he worked all night for the Study Group.

The Study Group was not only interested in political issues, but also in philosophical ones and Mannoury had a special interest in the topic of 'universal language' about which he corresponded with the mathematician Louis Couturat (1868-1914). Mannoury points to the proletarian importance of this universal language, because it has not been intentionally made, but is rather discovered as something that is common to all languages. Therefore it shows the existence of a hitherto unknown commonality between the nations. In addition, the use of this language could be important for the international socialist congresses. During his lifetime his plea for the use of Esperanto in science returns regularly and some of his articles or summaries are written in Esperanto.

### **SYMBOLIC LOGIC**

His interest in language also comes to the fore in Mannoury's public lecture (1903), which was the starting point of his university courses. In this lecture he introduced the symbolic logic of Guiseppe Peano (1858-1932) in the Netherlands. Mannoury stressed the importance of a formal language, not only for mathematics but also for philosophy. The idea behind this was the view that philosophy originates from linguistic problems. In his lecture he states that philosophy is caused by words, or symbols. When people use words they try to evoke mental representations in other people. However, the speaker's mental representations associated with the words are never completely in line with the hearer's mental representations associated with the same words.

An advantage of symbolic logic now is that it considers words or symbols completely separated from the mental representations. Only the interplay of the symbols is studied. Therefore symbolic logic can help to discover reasoning errors in philosophical arguments. It prevents all sorts of impure additions to slip into our reasoning. An error in a philosophical argument can be discovered just as easy as the error in a mathematical addition.

It is striking that Mannoury introduced symbolic logic, but that he did not use the method himself. His lecture is, as far as I know, the first and last time he talked about it.

### **FIRST SIGNIFIC MOVEMENT: 1917-1926**

Mannoury was already interested in conceptual criticism before he, in 1917, joined the International Institute for Philosophy in Amsterdam, which was founded by amongst others L.E.J. Brouwer and Frederik van Eeden. It was the first official signific society in The Netherlands. Significs (and concept analysis in general) aims at a better understanding in group life and social intercourse.

After the collapse of this project Mannoury continued his efforts in the Signific Circle (1922-1926) together with Brouwer, Van Eeden and the linguist Jac. van Ginneken S.J. Their discussions were focussed on the philosophy of language, but somewhat broader in scope. Philosophy of language was combined with political philosophy to arrive at a program of social action.

The discussions between the members of the Signific Circle were published as Signifische Dialogen (Signific Dialogues) in 1937. In the decade after the disintegration of the Signific Circle, significs became more and more Mannoury's private enterprise.

### **SECOND SIGNIFIC MOVEMENT: 1936-1956**

The Dutch signific movement was revived in an institutional form in 1936 when the psychologist David Vuysje – since 1949 Mannoury's son-in-law - founded the journal Synthese. This second signific movement adopted the declaration of principle, laid down in the Signific Dialogues, from the former group.

The International Group for the Study of Significs (1937) and the International Society for Significs (1946) emerging from this journal, formed the main forum by which significs was further developed.

These institutions are not to be considered as schools of Mannourians. In fact, it was a quite heterogeneous group in which scientists and philosophers from different disciplines

holding different views met each other. Besides true significists such as Mannoury, Vuysje and David van Dantzig, the mathematicians Arend Heyting and Evert Beth as well as the physicist J. Clay took part in the meetings. Logical empiricism was represented by Otto Neurath, who fled to The Netherlands in 1934, and Friedrich Waismann, both former members of the Vienna Circle. The logical empiricists had a section of their own in Synthese called Unity of Science Forum.

### **MAIN INTENTIONS SIGNIFIC MOVEMENT**

At the Second International Signific Summer Conference in Naarden in 1946, Mannoury held a speech about the aims and objectives of the signific movement in The Netherlands. In it he gives a brief survey of the way the program of the Signific Movement has developed. He also indicates some resemblance and differences between similar foreign movements and significs. Furthermore, he indicates what items of the program of the earlier Signific Group are adopted by the second one and what other items they have dropped. We will have a look at it.

The signific movement in Holland regards as its main object the study of the Theory and Practice of Human Understanding (Analytical and Synthetical Significs), comprising different branches of scientific discipline like sociology and psychology. To further these aims it strives after:

a. the bringing into contact of the different centres of thought in all countries of the world; and to establish cultural relations between them.

(means to accomplish these tasks are: the international journal "Synthese", international conferences, the furthering of the interchange of books between Governments, public libraries, a.s.o.);

b. the purifying of education from the yet predominating group-egoistic tendencies;

c. the analysing and neutralising of dangerous symbols and slogans by exposing the emotional background of their usage;

d. other ways that may prove to be useful and practicable for the purpose.

### **THE PROBLEM OF LANGUAGE**

Two of the problems occupying the attention of the former Vienna Circle have also the interest of significs. These are: the unity of science and the problem of language, so closely related to it. Certain words have certain meanings within the boundaries of a specialized science. But in the domain of another specialized science the same words are being used in a widely different meaning. The relationship between the meaning in both instances, however, is still strong enough to give rise to misunderstandings which do not stimulate scientific research and are entirely unproductive for science.

Mutual understanding is very much hindered, too, by the fact that an effort is being made to re-establish the contact between the specialized sciences by a kind of "Oberwissenschaft", a super-science, which often goes by the name of philosophy. In this super-science the words used in the specialized sciences are being practically deprived of all meaning, so as to be applicable in one science as well as in the other.

By this procedure the difficulties are not solved but blurred. Words like e.g. mechanism, totality, system, freedom, determinism, aim, have quite different meanings in physics, in biology, psychology, medical and technical science.

What is really necessary is that a form of expression is used that may be maintained in the one science as well as in the other.

According to Mannoury the confusion in scientific and philosophical thinking is caused by language. How to put order into this confusion is not only a question of insight but also of tradition. In foreign centres of culture other traditions reign. But there as well as here it has increasingly been perceived, that the development of all branches of science is being imperiled by the growing lack of rational understanding between thinkers.

Some foreign centres have turned their attention to scientific language and therefore also to the language of philosophy. The Dutch significists however also included everyday language in their investigations. And, according to Mannoury, they had good reason for that. People understand each other badly or not at all. They often imagine they are speaking the same language. But how different are their languages! Speaking about the same facts, their "speaking and auditive-significance" often even exclude each other.

He states that the cause of this is easy to understand. In our interrelation acts in daily intercourse there is preponderance of emotional value. And even though the conformity between the speaking-value and the auditive value will be rather far-reaching with regard to the symbolic value contained in them, the emotional values will differ widely in most cases. For these values depend on the remaining psychic contents of the person in question. And as a rule the difference between speaker and hearer is very large just in this respect. How many discussions on emotional subjects have not come to a dead end for this very reason !

### **THE FIRST AND SECOND SIGNIFIC MOVEMENT**

Coming to the point, as to what the second signific movement has adopted from the former one, Mannoury directs the attention to some passages of the declaration of principle of the Signific Circle (of 1922). This declaration was signed by Brouwer, Van Eeden, Van Ginneken and Mannoury. The passages are:

"The meaning of an act of understanding for the speaker and the hearer may only partly be judged by the words and symbols used in it. It can only very approximately be expressed in other words. There is a great difference, however, in the degree in which an analysis and approximation in words is possible.

In scientific language, especially in the language of mathematics and, in a lesser degree, in that of technical science, a rather large stability in the meaning of words and acts of understanding may be reached by indication and by gradational definition.

In primitive, passionate and poetical language and even in that of daily intercourse there can be no question of definitions in the strict sense of the word. What we find here are just complexes of conscious and half-conscious elements of thought and emotion which are more or less coupled with word-images and stand isolated in each case.

It must be noted, however, that neither the more intellectual elements of consciousness nor the opposite more emotional ones will lack in any act of understanding.

The significists distinguish between two extremes which may be taken to be the formalistical-logical and the immediately-intuitive one. These extremes and the relation between them make out the content of signific analyses of language.

Mannoury's point out that the difference between the logistic and the signific way of proceeding briefly is, that the logistic analysis occupies itself with the logical relation of a construction of language, whereas the signific analysis considers primarily the psychological effect resulting from an act of language.

It might be possible to conduct this signific analysis in a more systematic way than has been done before. Ample room would have to be reserved for the experimental and statistical methods next to the introspective analysis of the subconscious elements. Through this investigation the usefulness of language as a means of understanding can benefit.

### **SIGNIFIC PHILOSOPHY**

But significs comprises more than analysis of language, and even synthesis of language. It ought to be directed to a deeper insight in the relation between word and psychological contents. A signific philosophy may be planned which might considerably influence the

social and mental condition of mankind in times to come. This is meant in the sense that mankind might be made to feel and behave more as one single community.

### **THE END OF SIGNIFICS**

This dream of the significists did not come true. Significs itself nearly disappeared after Mannoury's death in 1956. Significs didn't have a showpiece like logic, as the logical empiricists had. After the pioneering works of Gödel and Carnap, logic extended to semantics and pragmatics and has been merged with linguistics and information theory in the last decades.

The signific movement would have been more successful, if it could have joined developments in experimental psychology or sociolinguistics. Of course, significists were right to emphasize the importance of language as a means to influence people, and in their criticism of a purely formal analysis of language.

To correct logical empiricist limitations, significists however had to complete their introspective psychology with genuine empirical research (and maybe logic).