

INTRODUCTION

This special number of "Logique et Analyse" offers to one of the chapters of the "Centre Belge de Recherche de Logique" the occasion to express its specific interests. During the last ten years indeed, at the State University of Ghent, a group of people has been active, characterised by the following interests:

a) they are of the opinion that the multiplicity of calculi we are confronted with in formal logic, only deserve the name of "logic" when they have received interpretations.

b) looking for these interpretations they are convinced that the formal sciences should use as their foundations the empirical sciences concerned with the activity of reasoning.

c) these empirical sciences can not perform this task however, if they are not becoming themselves formalised by means of logical techniques.

These three shared convictions make this group believe that formal linguistics, formal psychology, eventually formal sociology must and can be used to interpret logical calculi, and select those among them that are best adapted to specific tasks.

One might even say more: realising that communication and cognition are everywhere present among living systems they are convinced that theoretical biology should not only be a field in which logic is to be applied, but should also become a criterion guiding the development of logical systems.

Having come to these conclusions, they wanted to study collectively and in detail a specific topic in the study of which this common conviction could be applied and tested. They chose the study of one centrally important logical constant: negation, hoping that their specific point of view would express itself in its analysis. This hope has been realised, even though the difficulties of the undertaking have been far greater than they appeared at the beginning. This collection is not the final word on negation. It only aspires to point out the common

contribution of various sciences to the study of the central theme.

Some of the contributors having gone so far in their interdisciplinary approach, did even believe that inductive or deductive metaphysics or ontology, in so far as they could be clearly expressed, had a positive function in the interpretation and selection of logics. This belief was not shared by all of them.

In order to increase their information, they invited various foreign scientists to participate in their undertaking. The psychologists Wason and Fryda, the psycholinguist Bresson, and the philosopher Toms all helped the Ghent chapter of the "Centre" to realise part of its aims. Wason's and Toms' contributions are present here. The influence of Bresson's and Fryda's talks is visible at various places. One paper written by *J. Krecht* presented for publication to "Logique et Analyse" has been included because of the fact that it was concerned with similar topics, even though its author was not connected with the project.

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