make it is possible. (But that's not how it is)"⁵ It is also difficult to agree with subsequent readings, which we can find in chapter five on pages 116 and 117. In the first it is suggested that there can exist a logical contradiction between a fact and a value. This is not true, for a logical contradiction is a relation which can exist only between sentences. The second reading is following: "... Wittgenstein adds the thought that any describable point of view cannot be a point of view which anyone must accept with logical necessity. Recalling the fact-reaction distinction, we can say that such necessity would obtain if a reaction were implied by a fact; then such a reaction would be a necessary reaction." However, I think that even if this were the case, we could not say that we accept a given point of view with logical necessity, for no fact is logically necessary. The necessity described by Bremer is a relative necessity, but in the *Tractatus* Wittgenstein rejected the existence of such necessity: "A necessity for one thing to happen because another has happened does not exist. There is only logical necessity." (6.37)⁶

The mistakes in interpretation mentioned above are not crucial for the evaluation of this book. The author competently discusses and explains the philosopher's views, whereas a comparison of his thoughts with other conceptions of religion allows the reader to understand better what Wittgenstein regarded as essential for religion and which approaches to it he rejected.

Jan WAWRZYNIAK

Józef BREMER, *Elementy logiki* [The Elements of Logic], IGNATIANUM – WAM, Kraków 2002, pp. 211.

The Elements of Logic is conceived as an academic textbook that includes mainly material for a basic course in logic for students. Based on his own reflections as well as national and foreign literature on the subject (authors such as K. Ajdukiewicz, J. Łukasiewicz, T. Kotarbiński, G. Frege, L. Wittgenstein). Dr. Józef Bremer, S.J., presents in the following four chapters systematized knowledge of the problems embraced by the titles of each part of the book.

The main aim of the author is the presentation of the problem of deductive reasoning. Another aim of this book is not only to teach how to formalize, but also to show why we generally do formalize. *The Elements of Logic* is a successful attempt to answer this question.

Chapter I contains material related to logic and its understanding. In this chapter the author presents some texts on the historical development of the question: "what is logic about?" He also presents short texts on three related sciences: syntax, semantics and pragmatics.

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⁵ Ibidem, p. 623.

⁶ L. Wittgenstein Tractatus Logico-Philosophicus, London 1933.

The second chapter of this work contains analysis of such themes as: the logic of names, the logic of categorical statements (sentences or propositions) and the logic of inference. Here, for the first time, we read about the division between traditional (Aristotelian) logic and modern, mathematical logic. The author maintains this division throughout the rest of the book.

Chapter III is a discussion of the differences between the Fregean and Aristotelian understanding of proposition. This difference became the source of modern logic.

The essential problem of Chapter IV is how best to analyse some forms of non-deductive reasoning (induction, reduction, reasoning by analogy, reasoning *a fortiori*). Bremer also discusses the clarity of expression and abilities to convince.

The book contains a foreword written by Jan Woleński, a summary in English and a very helpful index of names.

As the author mentions, his book differs from standard introductory logic texts mainly in two points:

- He views traditional logic not only as an insignificant part of, or as the first stage of modern logic, but also as an essential step in the development of modern logic.
- Traditional logic is rooted in philosophy, while contemporary logic is rooted in philosophy and in modern sciences (mathematics, linguistics, etc.) The author wants to give a basic presentation of the two-way links between logic and philosophy and between logic and the work of modern sciences.

The book is written in an intelligible style and constitutes a compendium of knowledge related to the elements of logic in the field of practical logic (logica utens). Students of the humanities will find the theoretical and mathematical material included in this book particularly helpful.

Studying intensely only right before an exam usually brings poor results because the new terminology, specialist terms, notions, and definitions need getting use to gradually. Examples of each problem can help us master the material. Using his own didactic experience with the students of the University School of Philosophy and of Education "Ignatianum" in Krakow, the author, especially in Chapter III, discusses several problems thoroughly. These exercises should be worked through for a better understanding of the lecture and to acquire at least a basic skill in this field. I would suggest including questions after each block of material throughout the text. They could help make learning easier. I would also recommend including new questions that the students could solve on their own. As the author states that such a collection of exercises is in preparation, I think that it could be added to The Elements of Logic as an appendix. However, we should note that even the most complete teaching aid cannot substitute for actually participating in course lectures, practical exercises and the student's own work.