



Preface

In what *safe and consistent* way can we deal with inconsistencies in a given formal or informal system? There are indeed too many situations in which we are confronted with inconsistencies in practice in the face of which many appear to be blind.

The problem was informally analyzed for the first time by Jan Łukasiewicz in his famous book *O zasadzie sprzeczności u Arystotelesa* (*On the Principle of Contradiction in Aristotle*), 1910. Independently, in the framework of syllogistics it was treated at the same time by V. L. Vasiliev. After some time of preliminary discussions on different occasions, the problem was finally treated and solved in quite a satisfactory and ingenious way by Stanisław Jaśkowski in his famous 1948 lecture published as a paper “A Propositional Calculus for Inconsistent Deductive Systems” (for a new critical edition cf. pp. 35–56 in this volume). In the next decade two other pioneer approaches were introduced by Latin American scholars: a very influential Brazilian approach by Newton C. A. da Costa and also well-known, but not so influential, logic of antinomies of Florencio Asenjo (Argentina, next USA). The reader can find more information about these memorable events in documents and papers collected in the present Proceedings Overture as well as in historical papers published in the present volume.

1. As a matter of fact, in 1948 Jaśkowski initiated an investigation into a new type of logic, usually named **paraconsistent** logic (notice that for reasons explained later, in the third issue of this Proceedings, we prefer to call them **parainconsistent** ones). In the subsequent half — century, paraconsistent logic reached the maturity it enjoys today, and found numerous applications.

In this period at least six schools of paraconsistent logic emerged: the original Polish, or modal, approach (with two closely connected American modal approaches — the first, introduced by N. Rescher and R. Brandom and the second, with roots in non-monotonic logic for Artificial Intelligence introduced by D. McDermott), the second — Brazilian, or many-valued, approach introduced by Newton C. A. da Costa and chiefly developed by him with his co-workers. Next, the third school emerged in the 60’s and the 70’s of the 20th century among relevant logicians, whereas the fourth school, the



Flemish School of Adaptive Logics, was started in 1980 with papers of Diderik Batens. The fifth school is the Australian, post-Hegelian “dialethism” of late Richard Routley (next Sylvan, 1935–1996) and Graham Priest, whereas the last, sixth school collects all other approaches.

2. It is a fairly rare custom to organize Symposia to commemorate remarkable scientific events rather than celebrate the achievements of particular scholars and thinkers. The Department of Logic of Nicholas Copernicus University of Toruń took this path organizing Memorial Symposium **Parainconsistent Logic, Logical Philosophy, Informatics and Mathematics** on the occasion of the 50th anniversary of Stanisław Jaśkowski’s seminal talk. The Symposium was held at Toruń University, since Wednesday July 15th till Saturday, 18th July 1998.

It was a quite successful Symposium. 74 participants from 13 countries (Argentina, Australia, Belgium, Brazil, Germany, Israel, Italy Japan, Poland, Russia, Sweden, Ukraine and USA) took part in it, offering 55 lectures. More than forty of them are collected in the present three — volume Proceedings of the Symposium, LLP 7–LLP 9.

3. Let me note that the first four schools of paraconsistent logic were present at the Symposium. Because of the lack of Robert Meyer’s paper in the present Proceedings only the first three are represented. The division of the material among the three volumes reflects this state of affairs. The first volume, LLP 7, contains Preliminaria, Symposium Overture, the special section devoted to the Brazilian and some other many-valued approaches to paraconsistency and two small sections concerning the prehistory of paraconsistency and its philosophy. The second volume, LLP 8, contains a section devoted to Flemish adaptive approach to paraconsistency and several papers concerning various logics connected with paraconsistent ones. In the third volume, LLP 9, the reader will find a section on Polish approach to parainconsistency plus some other papers concerning logic with applications to informatics, and a section devoted to belief revision and methodology of science with the paraconsistent perspective in mind. By such organization of the material we are following the old Polish custom: guests go first.

4. Finally, the Editors would like to thank all the speakers and participants who contributed to the success of the Symposium. The reader will find that the subject of paraconsistent logic and philosophy is quite a fresh and nice combination of fine logic with deep philosophy. Enjoy!

Editors