

Editorial

Our journal *Theoretical Computer Science* is changing in many ways. We hope that the new format will improve its readability: the amount of information on a single page will be the same as before, but from now on this will be offered on a larger page size. The number of volumes per year (and hence the number of pages) will be increased by fifty percent: this measure was prompted by the huge increase of the number of subject areas in computer science that are open to formal, mathematical or logic methods and the huge increase of the number of researchers at work.

Theoretical Computer Science will be, from now on, split into two parts A and B. Most of the previous editors and a few new ones will be a member of one of the two distinct Editorial Boards of *Theoretical Computer Science Part A* and *Theoretical Computer Science Part B*. Part A, subtitled 'Algorithms, Automata, Complexity and Games', is clearly devoted to the study of algorithms and their complexity. Part B, subtitled 'Logic, Semantics and Theory of Programming', is clearly devoted to formal methods to check properties of programs or implement formally described languages.

Of course, the borderline between the two parts is not clearly drawn and in many cases it will be difficult to decide whether a paper should be in Part A or B. Our idea is that Part A includes all the papers that are devoted to the analysis of algorithms using analytical, combinatorial or probabilistic methods. Certainly it will include the whole field of abstract complexity (i.e., all the results about the hierarchies that can be defined using Turing machines), the whole field of automata and language theory (including automata on infinite words and infinitary languages), the whole field of geometrical (graphic) applications and the whole field of measurement of system performance using statistical methods.

Part B will then contain all the papers that deal with semantics of sequential and parallel programming languages. All formal methods dealing with these problems will be published in Part B, including rewriting techniques, abstract data types, automatic theorem proving, new calculi such as SCP or CCS, Petri nets, new logic calculi and developments in categorical methods.

Authors are now kindly requested to indicate whether they prefer their paper to be considered as a submission to Part A or Part B. This indication can be implicit

when the paper is submitted to an editor who belongs to only one of the distinct Editorial Boards. Unless indicated otherwise, the submission will be considered as a contribution to that part of *Theoretical Computer Science* to which the Communicating Editor belongs.

Maybe *Theoretical Computer Science* is just a victim of its own success. When it was created in 1975, the field of theoretical computer science was a tiny one and almost no company's manager believed that theoretical (mathematical) methods or results could be of any use to his own firm. Things have now changed a lot and theoretical computer science appears as a major component of computer science which no company manager can disregard.

The hope of the Publisher and all the Editors, including myself, is that *Theoretical Computer Science* becomes a compulsory tool to whomever expects to advance the use of computers. We are confident that this will happen very soon.

M. NIVAT (*Editor-in-Chief*)