

Addendum to “Choiceless Polynomial Time”

Andreas Blass*
Mathematics Department
University of Michigan
Ann Arbor, MI 48109–1109, U.S.A.
ablass@umich.edu

Yuri Gurevich
Microsoft Research
One Microsoft Way
Redmond, WA 98052, U.S.A.

Saharon Shelah[†]
Mathematics Department
Hebrew University
Jerusalem 91904, Israel
and
Mathematics Department
Rutgers University
New Brunswick, NJ 08903, U.S.A.

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On page 145 of [2], the next to last paragraph of Section 1 contains the statements that “it appears that the generic machine model [of [1]] is equivalent to ours,” that simulation of generic machines by ours is straightforward, and that “the simulation in the reverse direction, it seems, can be carried

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out using the ... constructions of Section 9 of the present paper.” Further work has shown that the “it appears” and “it seems” were crucial. In fact, the reverse simulation requires a strengthening of the generic machine model. Details about this and related issues are presented in [3].

References

- [1] Serge Abiteboul and Victor Vianu, “Generic computation and its complexity,” *Proc. 23rd ACM Symposium on the Theory of Computing* (1991) 209–219.
- [2] Andreas Blass, Yuri Gurevich, and Saharon Shelah, “Choiceless Polynomial Time,” *Ann. Pure Appl. Logic* 100 (1999) 141–187.
- [3] Andreas Blass, Yuri Gurevich, and Jan Van den Bussche, “Abstract state machines and computationally complete query languages,” *Abstract State Machines, Theory and Applications*, eds. Y. Gurevich, P. W. Kutter, M. Odersky, and L. Thiele, Springer-Verlag, Lecture Notes in Computer Science 1912 (2000) 22–33. Also available as Microsoft Research Tech Report MSR-TR-99-95.