

Sun-Joo Shin. *The Logical Status of Diagrams*. Cambridge/New York, Cambridge University Press, 1995.

Reviewed by

GEORGE ENGLEBRETSSEN

Bishop's University
Lennoxville, Quebec
Canada, J1M 1Z7

2nd grade teacher: Genny, you must try not to use your fingers when you count.

9th grade teacher: Genny, remember the triangle you drew is just a crude picture of a real triangle. Real triangles can't actually be seen. Geometry is in the mind — not the eyes!

College logic instructor: Now, keep in mind, Genny, that these Venn diagrams are nothing more than heuristic devices, visual aids to the understanding. When you have mastered the techniques of formal inference you can dispense with diagrammatic crutches.

Friend: Genny, I can't believe you're still wearing that old watch; analogue is, like, so passé.

Supervisor, engineering firm: Genny, work up a flow chart for the new computer programme and attach a wiring diagram for the next console line. When you finish, drive over to Mr. Peirce's office for our meeting. Use this map to get there.

In spite of the fact that charts, maps, family trees, and diagrams of all sort are a common part of our daily lives, mathematicians and logicians have generally denigrated the use of visual devices. Genuine formal reasoning, so the claim goes, takes place in the head. Pictures may help the novice to get the right idea, but they are really incidental to the process. Most particularly, they say, such devices could never serve as a medium for reasoning *per se*. A diagram is never to be taken as a proof.

This general prejudice against diagrammatic methods of proof is fairly recent (at least among mathematical logicians). There is good textual evidence that Aristotle made use of some form of diagrams in his original account of syllogistic, as witness his use of (Greek equivalents of) such