## The Nature of Reflexive Paradoxes: Part I

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It has been widely recognized that Thomson's "small theorem" [5] is of central importance in understanding the reflexive paradoxes. Several authors (e.g., Herzberger [2], Martin [3], and Goldstein [1]) have exploited it and variations in it in different ways. The purpose of this paper, however, is to show that the formal and philosophical consequences of the theorem are so extensive that they force a general reappraisal of the paradoxes as such. The concern here is to bring out some of these consequences. In Part I there is no intention to promote a particular solution, though in Part II a generalization of Frege's solution is developed. Here, however, the interest is in the general conditions which must be satisfied by any reflexive paradox and any proposed solution. Some of the results which are arrived at are already well known, but they are presented here as interconnected conclusions within a general theory of paradoxicality which arises naturally from Thomson's theorem.

The analysis is carried out entirely in terms of classical two-valued logic since part of the purpose is to discover what can and cannot be done to block the occurrence of reflexive contradictions in a language based on standard quantification theory. We do not want to deny that there are other and perhaps better ways of handling the paradoxes than those which are available in standard two-valued logic, and nothing we say is incompatible with, say,

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