

1096-03-1129

Dan E Willard* (dew@cs.albany.edu), Room Li67A, Computer Science Department, University at Albany, 1400 Washington Avenue, Albany, NY 12222. *An Epistemological Summary of the Significance of Self-Justifying Axiom Systems.*

We have published a series of papers, since 2001, about generalizations and boundary-case exceptions for the Second Incompleteness Theorem, including four papers in the JSL and two in APAL. The current talk and the accompanying report, at the web site <http://arxiv.org/abs/1307.0150>, shall offer a summary of this subject, accessible to a broad audience with a diverse range of backgrounds.

It is evident that the Second Incompleteness Theorem is a widely encompassing result that has many generalizations. It clearly allows for the existence of exceptions to it only under formalisms that contain some type of weakness, that allows them to escape its scope. These exceptions are, nevertheless, of interest because it is problematic to explain how human beings are able to gather the necessary psychological drive and motivation to cogitate without using, at least, some non-orthodox notion of self consistency. The current talk (as well as the reports listed in the preceding paragraph) will provide a summary, comprehensible to a broad audience, about the types of partial boundary-case exceptions that the Second Incompleteness Theorem permits to feasibly exist. (Received September 15, 2013)