

the non-absoluteness of mathematical proofs

Ultimately, mathematical proofs for the foundations of a numerical system establish nothing more than internal, mathematical consistency. In fact, many of the statements within mathematical proofs for the foundations of revised arithmetic are characteristic of and true for revised arithmetic exclusively. This situation is essentially self-justified or circular logic. Nevertheless, the converse is also true for conventional arithmetic, its proofs having the same limitations.

The principle to be cognizant of in the comparison of the two distinct, numerical systems at hand is their incompatibility although conversion/translation between them is possible.

Paradoxically:

By the arithmetic of the conventional system, the conventional system can be proven as valid and the revised system can be invalidated.

By the arithmetic of the revised system, the revised system can be proven as valid and the conventional system can be invalidated.

Consequently, unerred mathematical proofs for either system can only be tentatively accepted to a limited extent. All mathematical proofs against the basic validity of either system must be invalid or erred somehow because they are not, in of themselves, capable of the needed scope and value judgments to decide the comparative, holistic advantages and disadvantages of two distinct, isomorphic systems.
