

Brouwer and Griss on intuitionistic negation

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1994

Modern Logic, vol. 4, no. 3 (July 1994), p. 256-265

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Griss points out that the change in meaning of negation requires that the theory of species also be revisited: the empty species can no longer be accepted since the criticism of Brouwerian negation can be applied to it, that is, it concerns hypothetical properties without any corresponding mental event.

[...]

Griss stresses the intuitionistic unacceptableness both of the attribution of nothing and of sterilization.

[...]

Griss proposes that each assertion expresses a non-empty species.

[...]

$A \rightarrow B$ can be asserted if B follow from A and A is true. Griss affirms that it is the “natural meaning of negation.”

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let α again be a mathematical assertion such that we do not know of a method of proving either its absurdity or the absurdity of its absurdity. Let the creative subject build the sequence a_1, a_2, \dots by choosing:

$a_n = 0$ as long as, in the course of choosing the a_n , the creating subject has experienced neither the truth, nor the absurdity of α ;

$a_{r+n} = 2^r$ if between the choice of a_{r-1} and that of a_r the creating subject has proved either that α is true or that it is absurd.

The sequence a_1, a_2, \dots is positively convergent; ρ is its limit.

[...]

On n'est pas forcé d'accepter la construction du nombre p , cette construction étant si subjective qu'on ne connaît ce nombre, à moins de s'informer à tout instant auprès de M. Brouwer du nombre de choix qu'il fait et s'il sait déjà ou non démontrer l'assertion x .