

# Neo-Fregeanism and the Burali-Forti Paradox

Ian Rumfitt  
All Souls

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This paper considers what form a neo-Fregean account of ordinal numbers might take. The natural abstraction principle for ordinals yields a contradiction (the Burali-Forti Paradox) when combined with impredicative second-order logic. I argue that the fault lies in the use of impredicative logic rather than in the abstraction principle per se. Focusing on a form of predicative logic which reflects a philosophical diagnosis of the source of the paradox, I consider how far Hale and Wright's neo-logicist programme in cardinal arithmetic can be carried out in that logic.