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Title: Internal negation and sortal quantification.

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The article proposes a logical analysis of sentences of the form 'S is non-P'. In a brief historical introduction (pp. 193-194), the Aristotelian notions of indefinite noun and indefinite verb (as well as the scholastic notion of negatio infinitans) are mentioned, although the author is not interested in the diversification of sentence forms that find a place in the Aristotelian-scholastic treatment of negation. In particular, the text is only devoted to the analysis of sentences with negation in predicate position (for example, 'All logicians are non-smokers'), whereas the analysis of sentences with negation in subject position (for example, 'Some non-stones are wise') is neglected. On the other hand, the author highlights the notion of contrariety as central to his proposal, since he understands internal negation as a contrary-forming kind of negation (pp. 194-197).

The contrary-forming power of internal negation in predicate position is captured here in terms of a restriction of the quantifier's range (pp. 196-197), and this is the reason why the author chooses the apparatus of sortal quantification for the logical analysis of internally negated sentences. Now, since negation of a sortal is not a sortal, the author takes care to distinguish standard negation from internal negation (p. 198), although the latter is eventually defined in terms of the former, with the help of a higher sortal to which both P and non-P are subordinated. A sentence with a negated predicate-term is thus analysed as a conjunction of three sortally quantified sentences, where internal negation does not play a role anymore (p. 199). Contradictory-forming cases of negatio infinitans ('This is a stone'/'This is a non-stone') lie beyond this framework, since 'here the negation of a sortal means an external negation' (p. 197).

The final sections take *Prior Analytics* I, 46 as the inspiration for a 'square of opposition' among the four structures which result from combining the pair affirmation/external negation with the pair internally negated/non-negated term. The square is first exemplified with sentences having a singular subject-term: 'John is a smoker', 'John is a non-smoker', 'John is not a smoker', 'John is not a non-smoker', among which the relations are used to analyse 'the relation between the internal and external negation' (p. 199). But when the author moves to examples with quantified subject-terms (p. 200), some complications arise due to the interplay between the scopes of quantifier and negation. The author takes the universal negative 'All logicians are not non-smokers' to be the contradictory of the universal affirmative 'All logicians are non-smokers', because the former is assumed to be equivalent to the strictly external negation of the latter: 'Not-(All logicians are non-smokers)'. That is, a universal negative is made equivalent to the negation of a universal affirmative. From these assumptions, the corresponding laws of opposition are shown to hold, in a closing section where (again) term negation plays no role (pp. 201-202).

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