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Sound reasoning (literally): prospects and challenges of current acoustic logics.
(English summary)

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This is an interesting and somewhat surprising paper. After describing with some detail Pietarinen's proposal of a non-visual logic, broadly based in Charles S. Peirce's diagrammatical logic, the author tries to investigate whether a non-visual logic could accomplish tasks comparable in their expressive power with that of common propositional logic. As the author acknowledges, "this endeavour is very speculative, but its potential spoils are considerable", and he adds: "So, even though the exploration into non-visual logics inaugurated by Pietarinen taxes the limits of the imagination, it points to an exciting research program." In a bid to attract discussants and trigger an incremental advance, the author calls attention to a flaw or drawback in Pietarinen's proposal: it cannot portray double-negation without thereby portraying a contradiction. The paper has the following sections: (1) Introduction; (2) Pietarinen's abductive approach; (3) Basic building blocks; (4) An unexpected feature; (5) Conclusion.

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