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Title: *Elucidation of completeness of achievement stit logic of agency*

Abstract: The see-to-it-that (stit) logic of agency is proposed in Belnap-Perloff-Xu(2001). Among stit logics, deliberative stit (dstit) logic has been popular in connection to other operators, especially epistemic and dynamic modalities. In the model of dstit agency, the moment of action evaluation coincides with that of the action itself. We do not have to consider any tacit tense behind the notion of action in dstit. The very notion of tense, however, is essential in the conceptual analysis of agency: the moment of action must precede the moment of evaluation of the action. Achievement stit (astit) logic of agency reflects the insight to model the concept of action on branching time model to allow indeterminism of action for rooms of free will. This talk aims to illustrate the line of thought behind the completeness theorem of achievement stit logic of agency, so as to invite audience to investigate extensions and variations of astit.

Japanese Title and Abstract are as follows:

Title: 達成行為論理の完全性証明の説明

Abstract: Belnap-Perloff-Xu(2001)ではstit行為論理の背景となる哲学的洞察に基づく論理体系が提案されている。そのうちその後の研究が多くなされている(Olkhovikov-Wansing 2019) 熟考行為論理 (deliberative stit logic) では行為時点が行為の評価と同時点となっている。だが、より行為論へ適切に応用できる達成行為論理については後続研究がほとんどない。達成行為論理では、行為評価に先立つ時点で行為がなされるタイプの行為概念について、時制論理の樹状モデル上に行為様相にかかる真理条件を導入してモデル化することにより、行為論における非決定論の数理モデルを与えようとする。この論理を公理化した達成行為論理体系の完全性証明について、直観的な理解につながるように説明する。

参考文献

Belnap-Perloff-Xu, Facing the Future: Agents and Choices in Our Indeterminist World. Oxford UP, 2001.

G. K. Olkhovikov, H. Wansing, Inference as Doxastic Agency. Part I: The Basics of Justification Stit Logic. *Studia Logica* (2019) 107: 167-194, 1994.