Public Announcements, Private Actions and Common Knowledge in S5 Structures Corrections and improvements

March 21, 2018

We lose the results in Sections 3.2 and 3.3. There is a mistake in the proof of Lemma 10, which leads to the failure of Lemma 11. As a result we did not have a proof for Theorems 12 and 16.

This does not mean Theorem 12 is completely wrong. In [1] it is proved that $\mathcal{PAC} \prec \mathcal{PARC}$ when there are at least three agents in the language. As far as I know it is so far an open problem whether this holds when the size of the set of agents is 2 (i.e., |AG| = 2).

It is still an open problem whether Theorem 16 holds (what is known is only for arbitrary Kripke models).

We have sorted out the above in [2].

References

- Louwe B. Kuijer. The expressivity of factual change in dynamic epistemic logic. The Review of Symbolic Logic, 10(2):208–221, 2013.
- [2] Yì N. Wáng and Thomas Ågotnes. Relativized common knowledge for dynamic epistemic logic. Journal of Applied Logic, 13(3):370–393, 2015.