Public Announcement Logic with Distributed Knowledge: Expressivity, Completeness and Complexity

Corrections and improvements

December 7, 2017

- **Page 146.** The definition of *trans-bisimulation* can be simplified by merging the clauses (zig$_a$) and (zig$_A$) together to be for an arbitrary group of agents (the case for an agent can be treated as for a singleton group). To apply this change, some later proofs need to be updated accordingly.

- **Page 149.** In the last paragraph of the proof of Lemma 28, Replace:
  
  “Otherwise, if $\tau$ is some $D_A$, it follows by definition that $m \sim_a n$ for all $a \in A$. Hence $mQ_an$ for all $a \in A$, and thus $mQ_{D_A}n$.”

  with

  “Otherwise, if $\tau$ is some $D_A$ with $m \sim_{D_A} n$, it follows by the definition of folding that $mQ_an$ for all $a \in A$, and thus $mQ_{D_A}n$.”

- **Page 161.** In the proof of Theorem 38, Replace:
  
  “Otherwise, if $\tau$ is some $D_A$, it follows by definition that $mR_an$, and also $mQ_an$, for all $a \in A$; and thus $mQ_{D_A}n$.”

  with

  “Otherwise, if $\tau$ is some $D_A$ with $mR_{D_A}n$, it follows by definition of $Q^{AG}$ that $mQ_an$ for all $a \in A$; and thus $mQ_{D_A}n$.”