

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 τ is some D_A , it follows by definition that $m \sim_a n$ for all $a \in A$. Hence $mQ_a n$ for all $a \in A$, and thus $mQ_{D_A} n$.”

with

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

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

with

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