CORRECTION

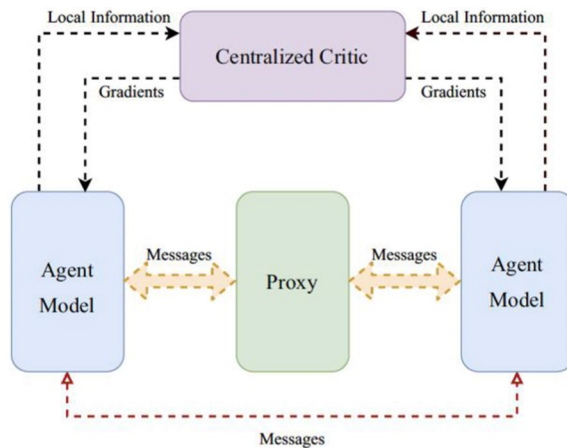# Correction: A survey of multi-agent deep reinforcement learning with communication

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https://doi.org/10.1007/s10458-023-09633-6.

In Section 3 Learning tasks with communication in MADRL (Page 12 of 48), the following figure was wrongly included in the article, where the figure should not have been used. The reader should ignore this figure in the original paper.

Procedure 1   A guideline of Comm-MADRL systems

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The wrong figure shall be replaced by the following pseudocode procedure:

Procedure 1 A guideline of Comm-MADRL systems

Require: N reinforcement learning agents
 1: Set goals for reinforcement learning agents   ▷ Dimension 1
 2: Set possible communication constraints   ▷ Dimension 2
 3: Set the type of communicatees   ▷ Dimension 3
 4: **for** episode = 1,2,... **do**
 5:    **for** every environment step **do**
 6:      Decide with whom and whether to communicate   ▷ Dimension 4
 7:      Decide which piece of information to share   ▷ Dimension 5
 8:      Combine received information shared from others   ▷ Dimension 6
 9:      Integrate messages into agents' internal models   ▷ Dimension 7
10:      Select actions based on communication
11:      Perform in the environment (and store experiences)
12:    **end for**
13:    **if** training is enablled **then**
14:      Update agents' policies, value function, and communication processes   ▷ Dimensions 8 & 9
15:    **end if**
16: **end for**

Procedure 1   A guideline of Comm-MADRL systems. The guideline positions dimensions where communication influences interaction with the environment and training phases.