

**Table 1** Proposed dimensions and associated research questions

Key components	Target questions	Dimensions	Index
Problem settings	What kind of behaviors are desired to emerge with communication?	Controlled goals	①
	How to fulfill realistic requirements?	Communication constraints	②
	Which type of agents to communicate with?	Communicatee type	③
Communication processes	When and how to build communication links among agents?	Communication policy	④
	Which piece of information to share?	Communicated messages	⑤
	How to combine received messages?	Message combination	⑥
	How to integrate combined messages into learning models?	Inner integration	⑦
	How to train and improve communication?	Learning methods	⑧
Training processes	How to utilize collected experience from agents?	Training Schemes	⑨