

Technical report 24-029a

Entanglement definitions for tethered robots: Exploration and analysis – supplemental material*

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*This report can also be downloaded via https://pub.bartdeschutter.org/abs/24_029a.html

Entanglement Definitions for Tethered Robots: Exploration and Analysis – Supplemental Material

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Abstract

This document contains supplementary material for the paper “Entanglement definitions for tethered robots: Exploration and analysis” by G. Battocletti, D. Boskos, D. Tolić, I. Palunko, and B. De Schutter, *IEEE Access*, vol. 12, pp. 178153-178170, Nov. 2024.

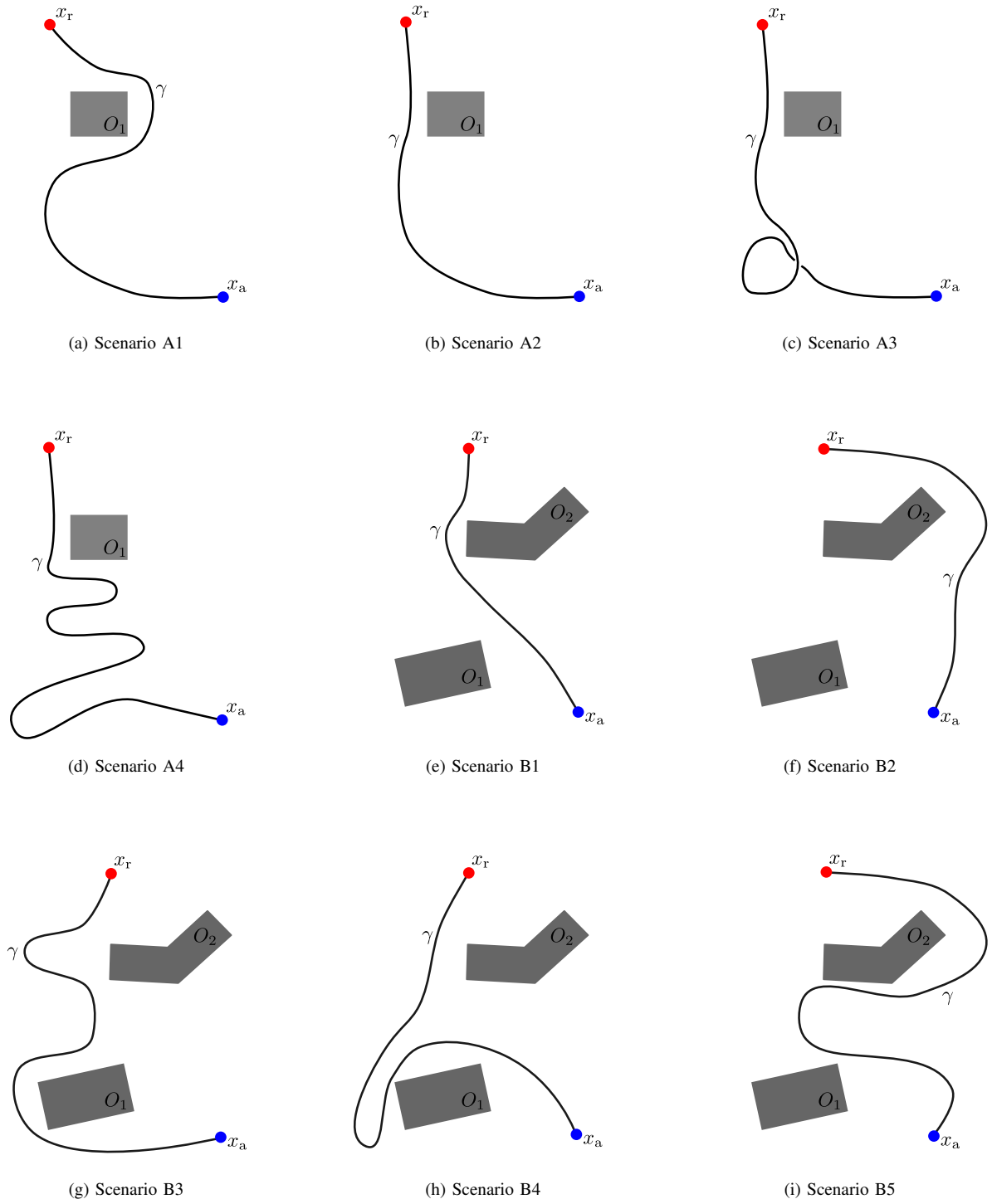
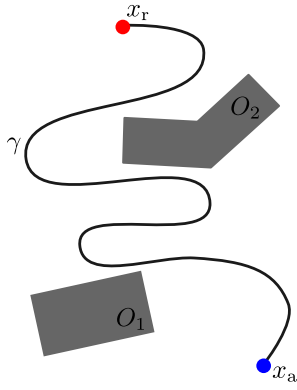
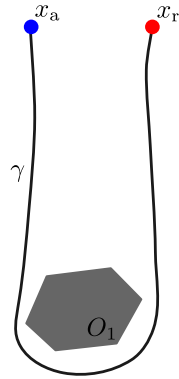


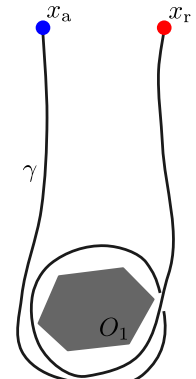
Fig. 1. Validation scenarios (part 1).



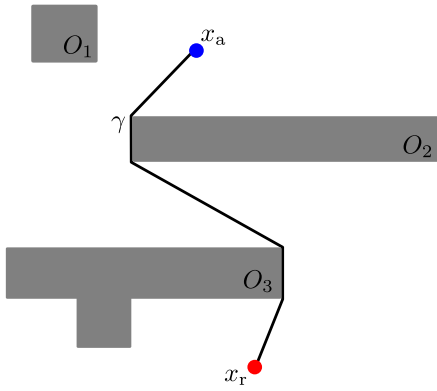
(a) Scenario B6



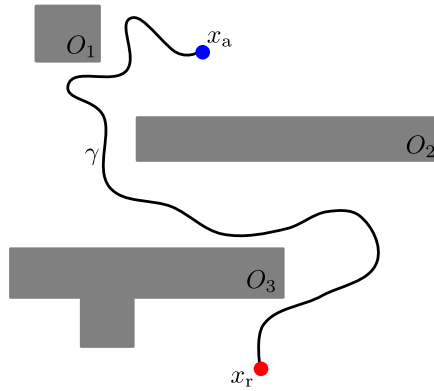
(b) Scenario C1



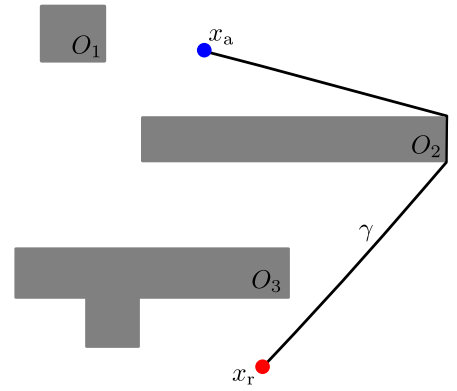
(c) Scenario C2



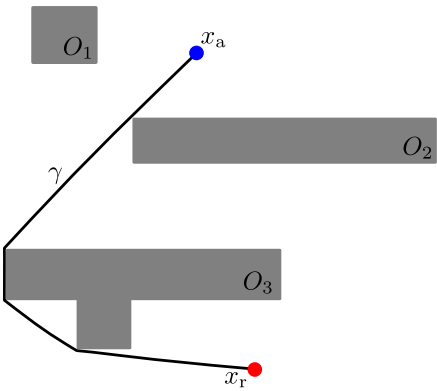
(d) Scenario D1



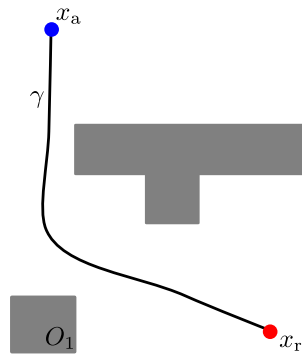
(e) Scenario D2



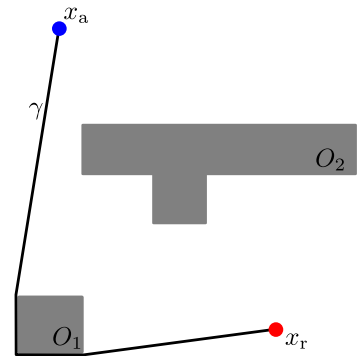
(f) Scenario D3



(g) Scenario D4

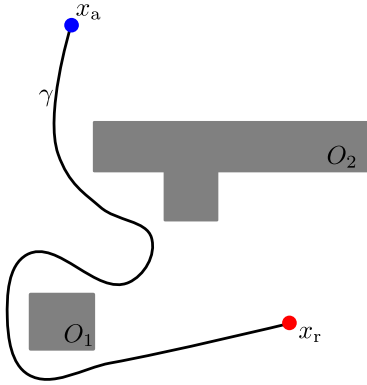


(h) Scenario E1

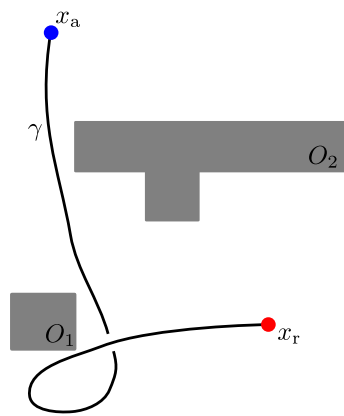


(i) Scenario E2

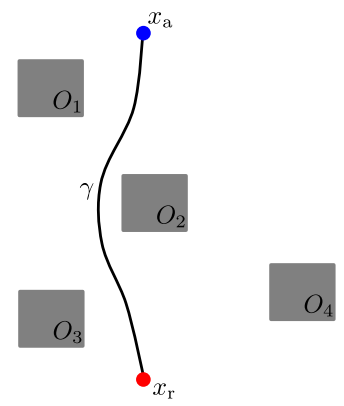
Fig. 2. Validation scenarios (part 2).



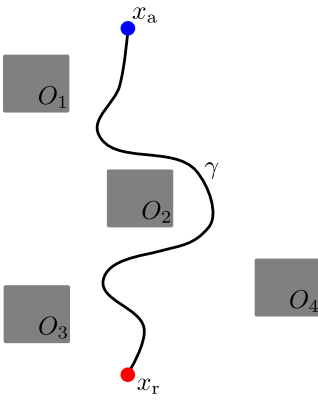
(a) Scenario E3



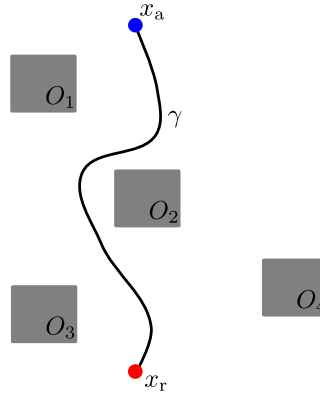
(b) Scenario E4



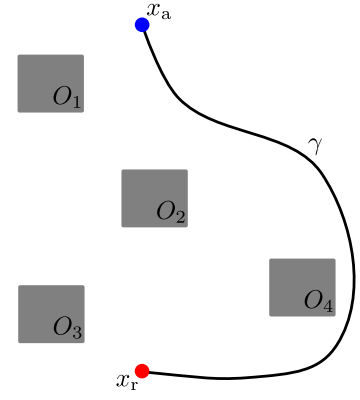
(c) Scenario F1



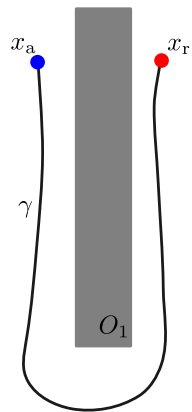
(d) Scenario F2



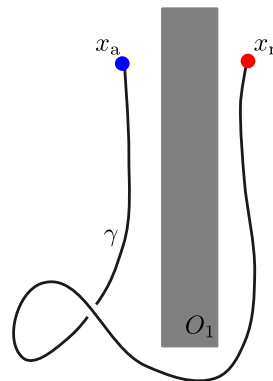
(e) Scenario F3



(f) Scenario F4



(g) Scenario G1



(h) Scenario G2

Fig. 3. Validation scenarios (part 3).

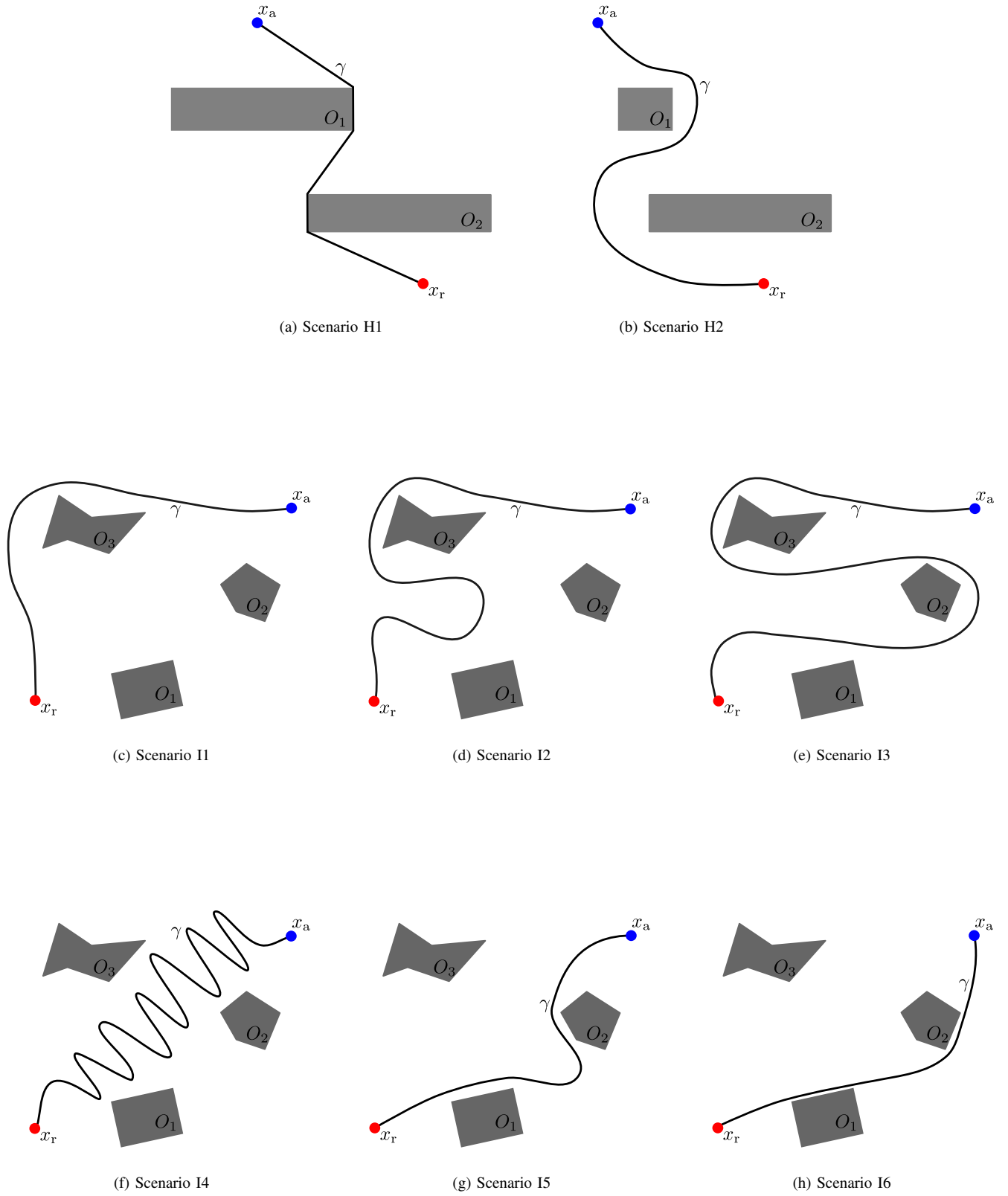


Fig. 4. Validation scenarios (part 4).

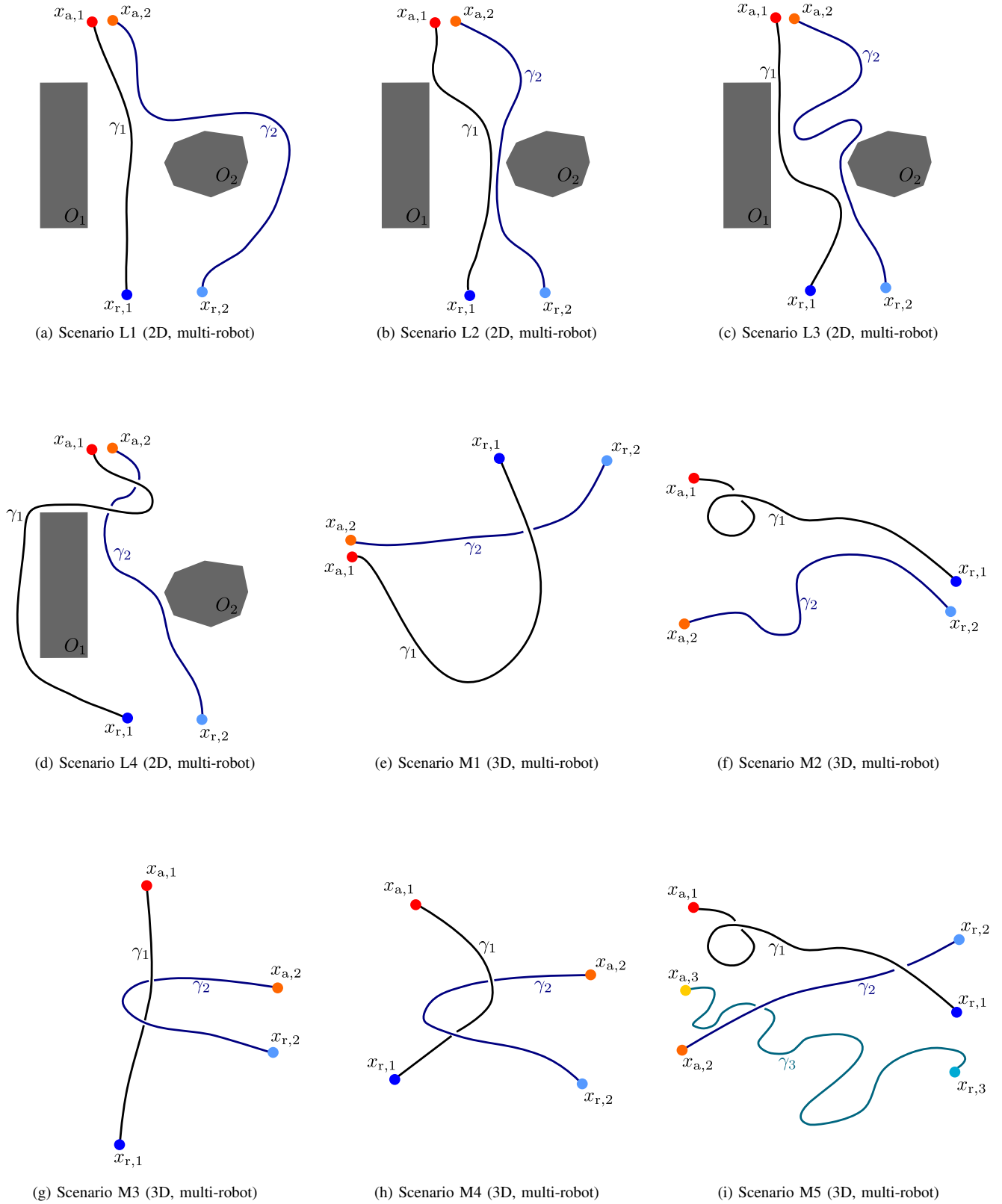


Fig. 5. Validation scenarios (part 5).

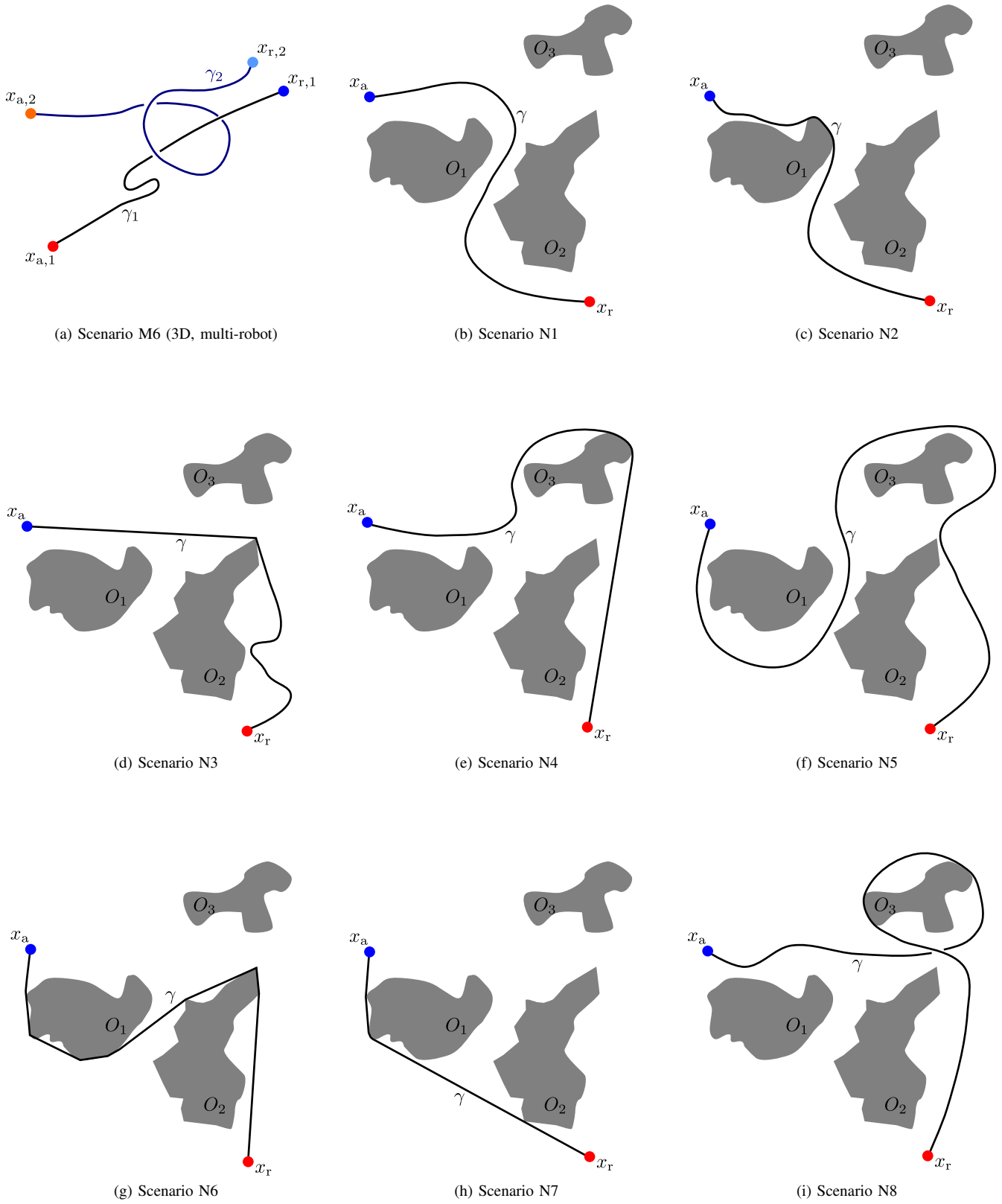


Fig. 6. Validation scenarios (part 6).

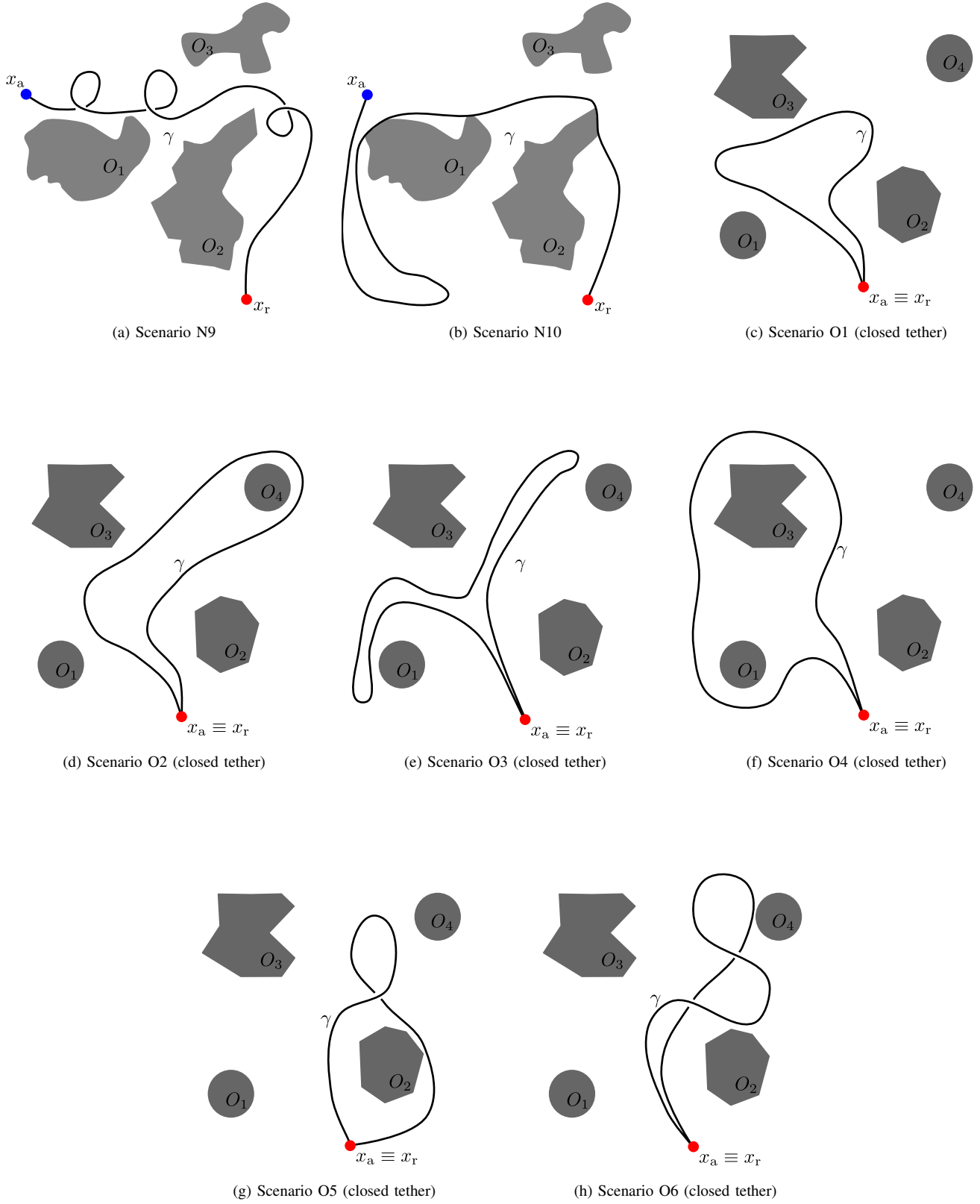


Fig. 7. Validation scenarios (part 7).

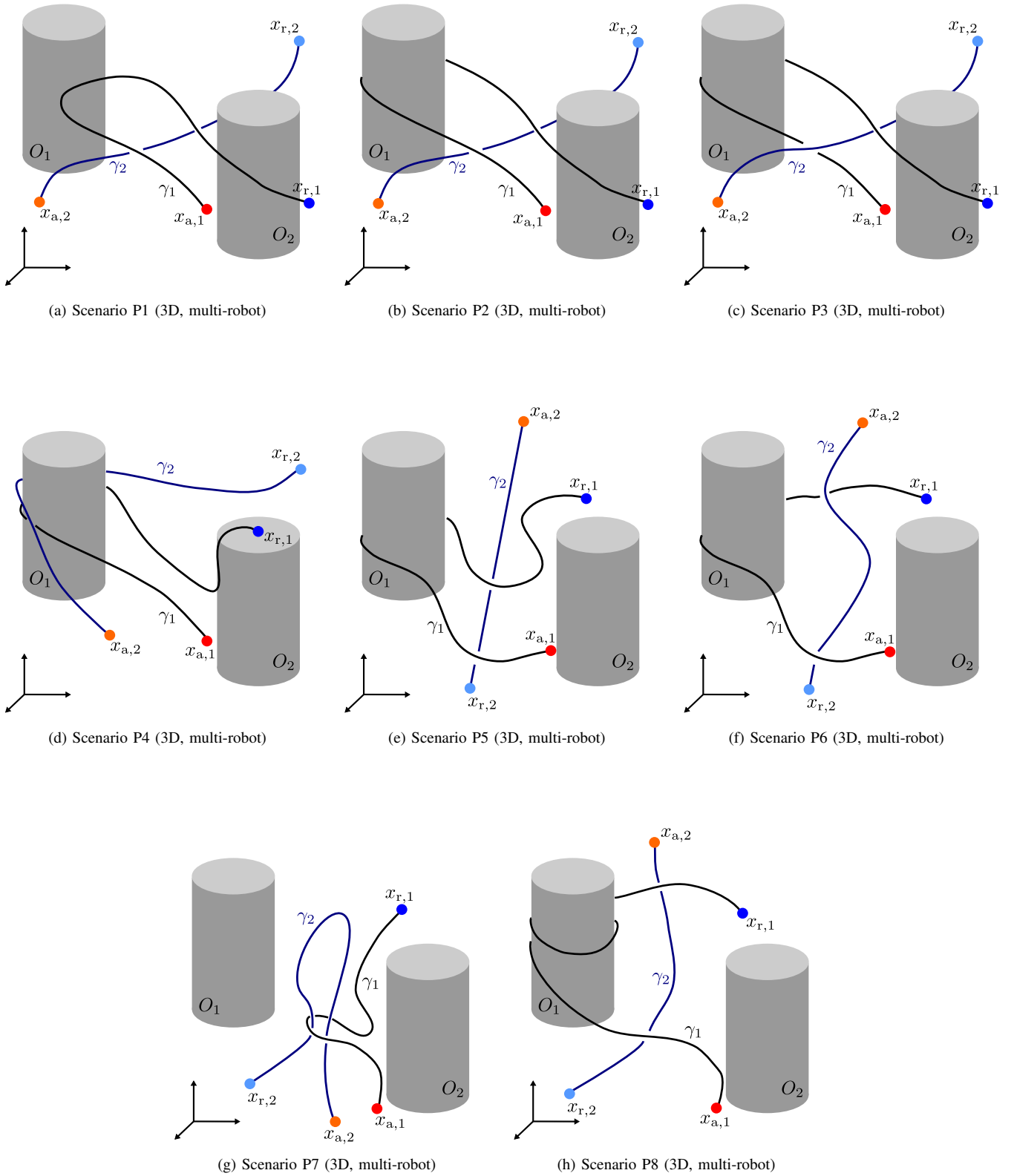


Fig. 8. Validation scenarios (part 8).