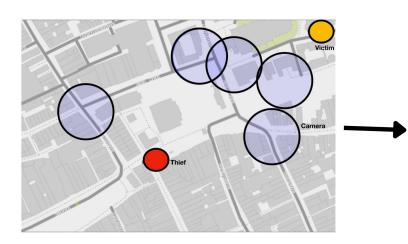




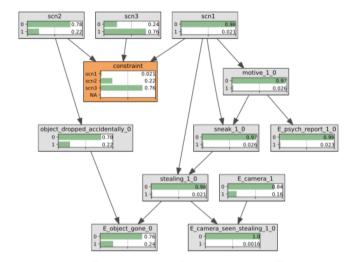
Designing a Rational Process for Hybrid Probabilistic Decision Making

Ludi van Leeuwen (RUG) **Supervisors**: Bart Verheij, Rineke Verbrugge (RUG), Silja Renooij (UU)

RQ: How should we reason with evidence in the real world? **Idea:** How should we reason with evidence in a simulation?



An agent-based simulation of a theft at Grote Markt in Groningen

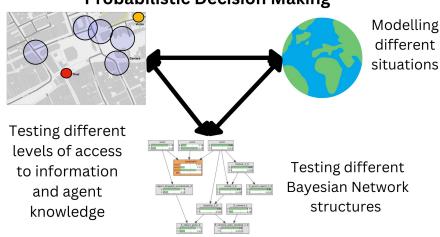


A Bayesian Network structure for representing the theft and reasoning with evidence about it

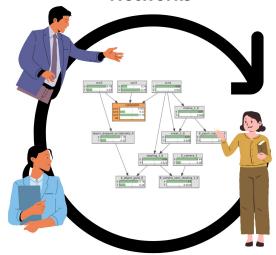
(van Leeuwen 2023)

Future Work

Exploring Different Cases of Probabilistic Decision Making



Designing a Hybrid Rational Process for Building Bayesian Networks



L. van Leeuwen, B. Verheij, R. Verbrugge, and S. Renooij, "Using Agent-Based Simulations to Evaluate Bayesian Networks for Criminal Scenarios," in ICAIL - International Conference on Artificial Intelligence and Law, June 19-23, 2023, Braga, Portugal, ACM, New York, NY, USA, 2023.

L. van Leeuwen, C. Steging, B. Verheij. Workshop on the Design of Responsible Hybrid Intelligence. in HHAI-WS 2023: Workshops at the Second International Conference on Hybrid Human-Artificial Intelligence (HHAI), June 26-27, 2023, Munich Germany. https://ceur-ws.org/Vol-3456/