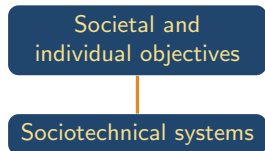


Consent as a Foundation for Responsible Autonomy

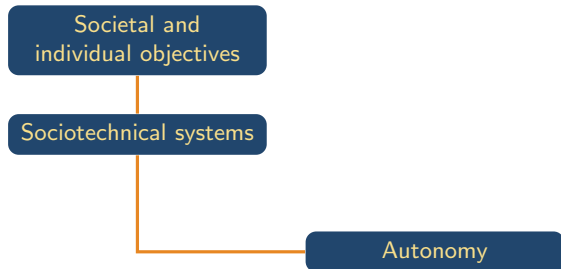
Munindar P. Singh
North Carolina State University
singh@ncsu.edu

AAAI 2022 Blue Sky

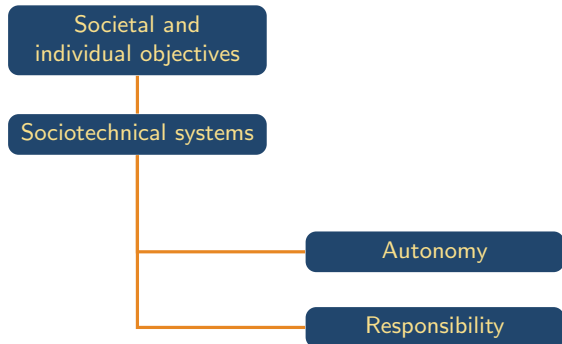
Consent for AI: A Foundation for Governance



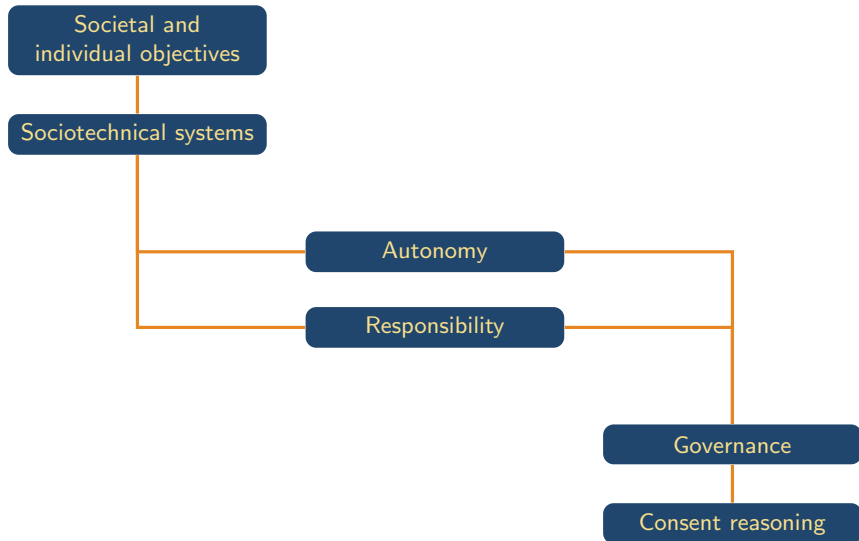
Consent for AI: A Foundation for Governance

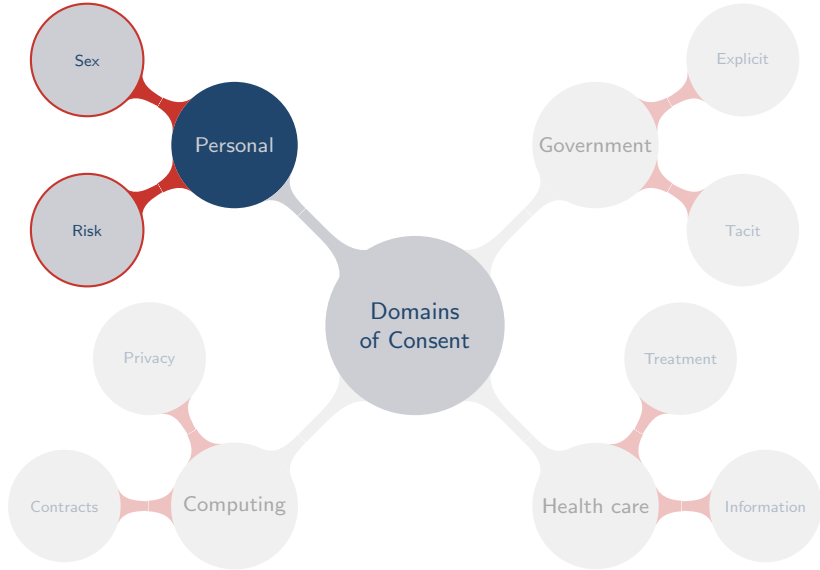


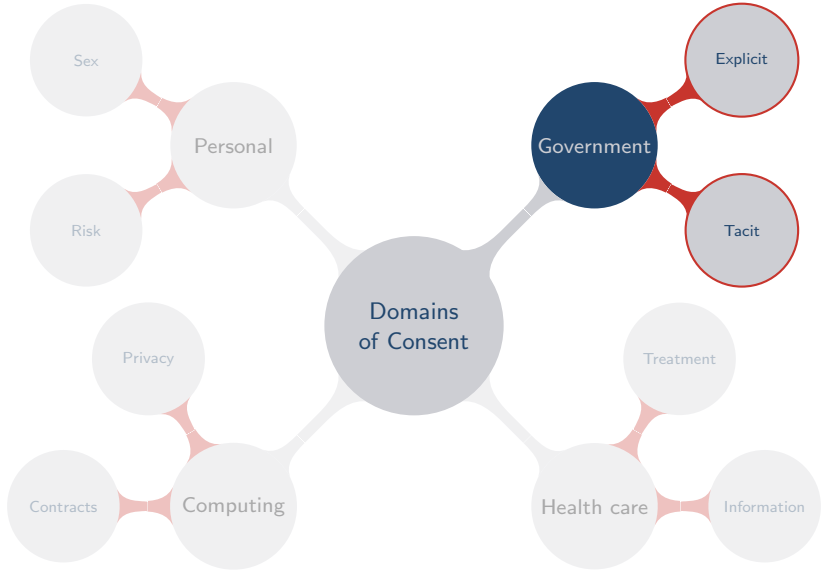
Consent for AI: A Foundation for Governance

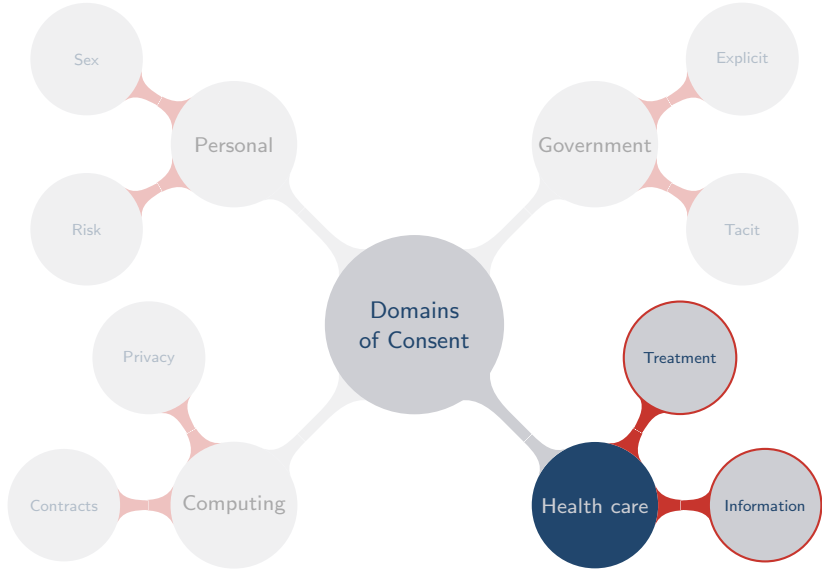


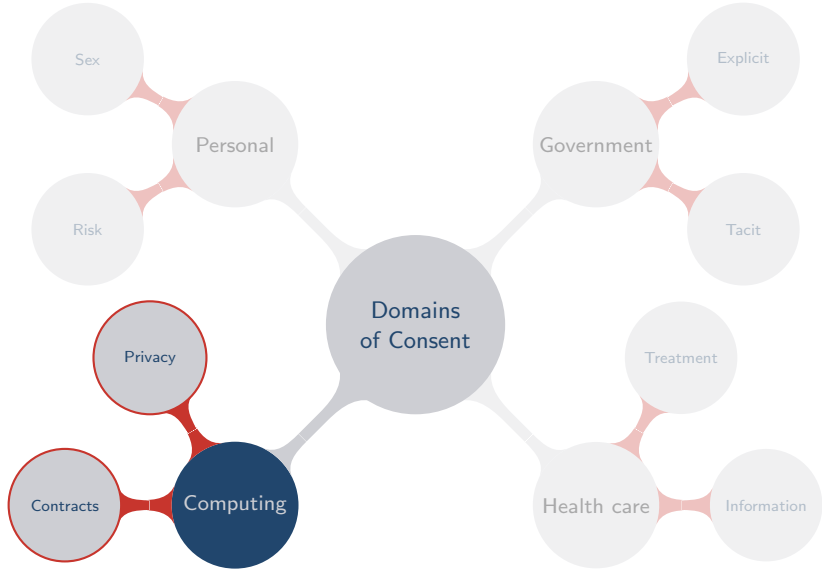
Consent for AI: A Foundation for Governance

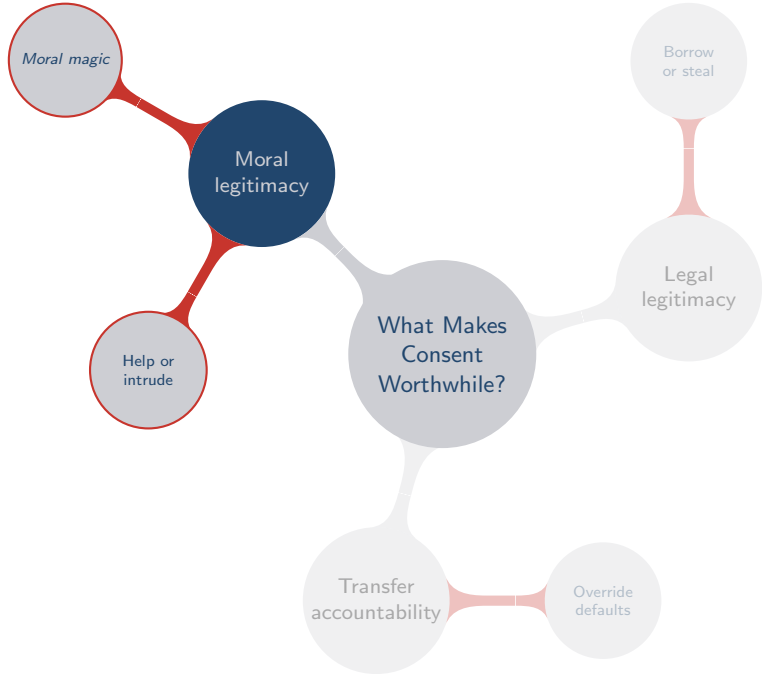


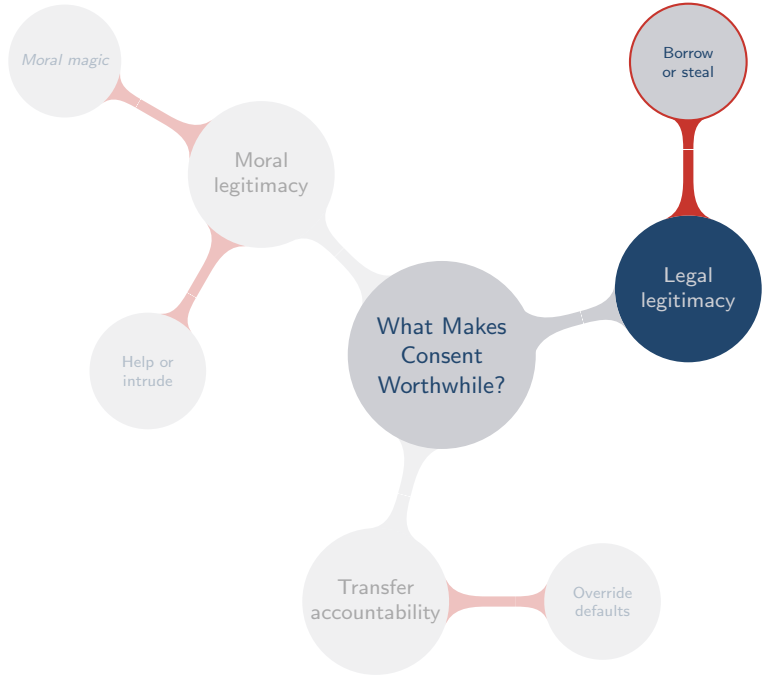


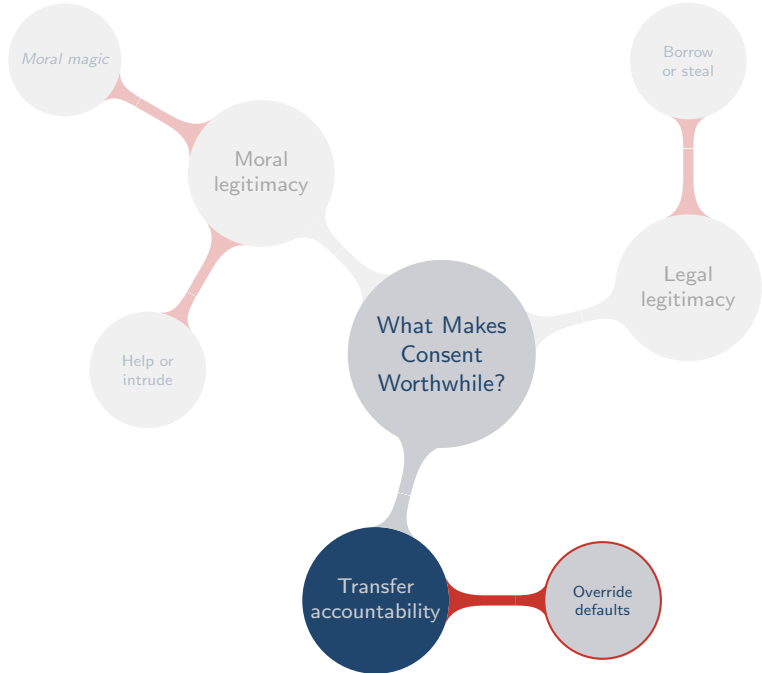












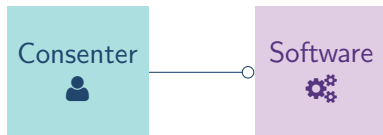
Parties to Consent

Traditionally



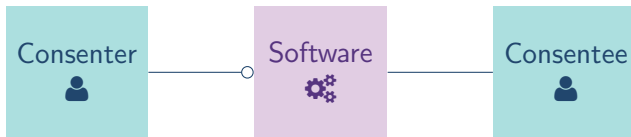
Parties to Consent

In computing, apparently



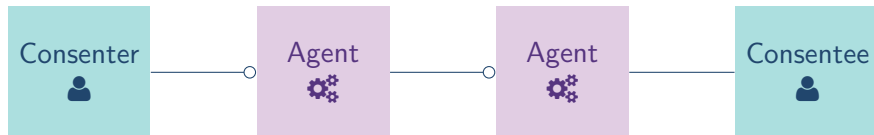
Parties to Consent

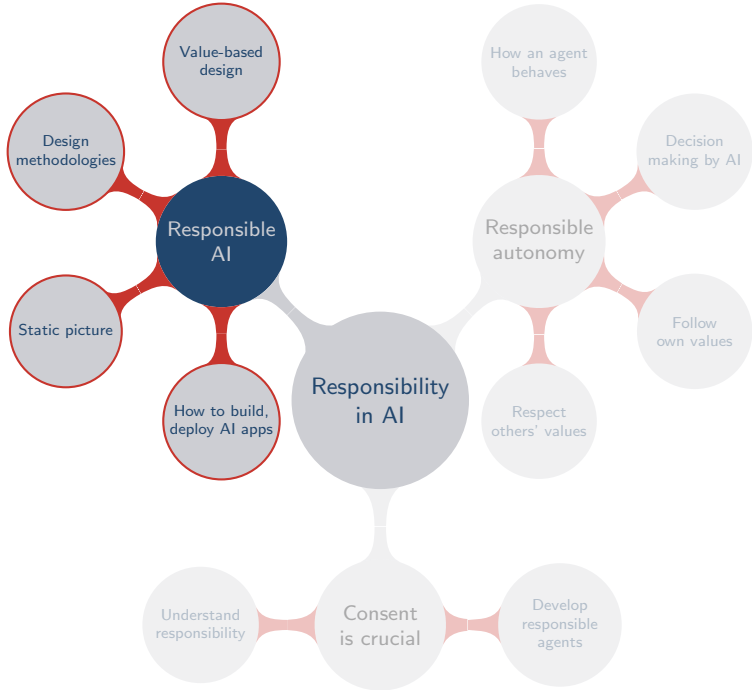
In computing, actually

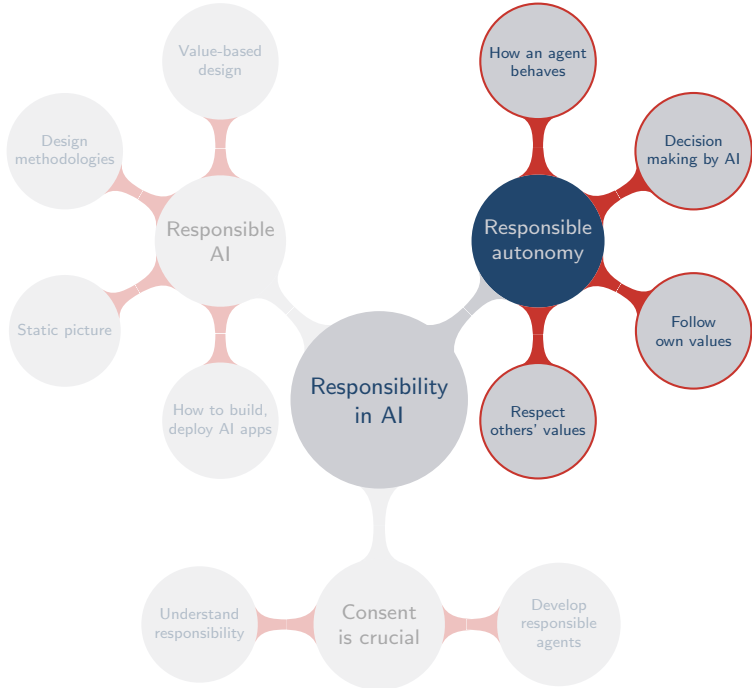


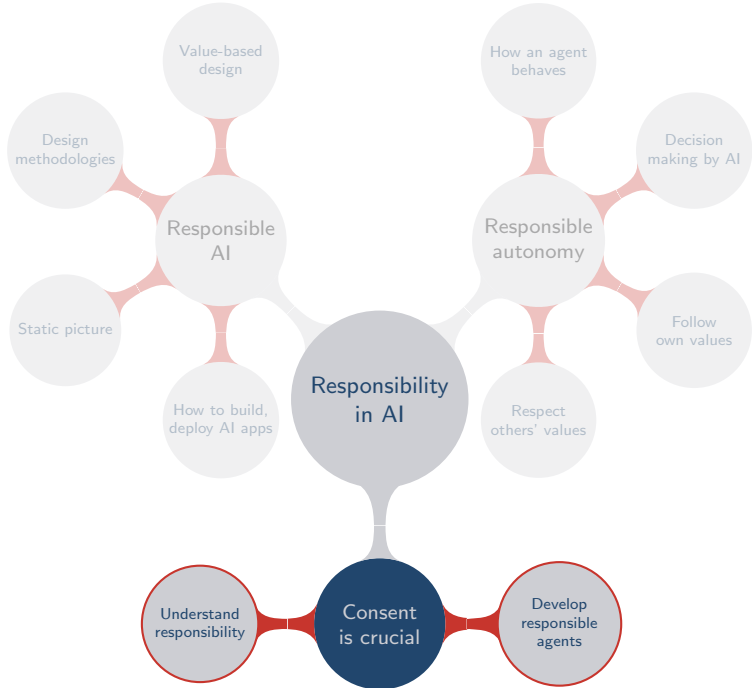
Parties to Consent

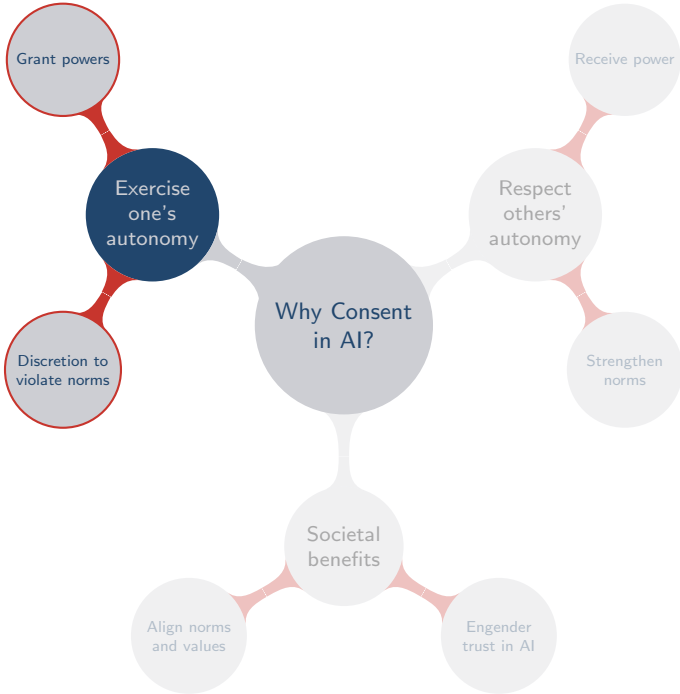
With AI agents, user to agent and agent to agent

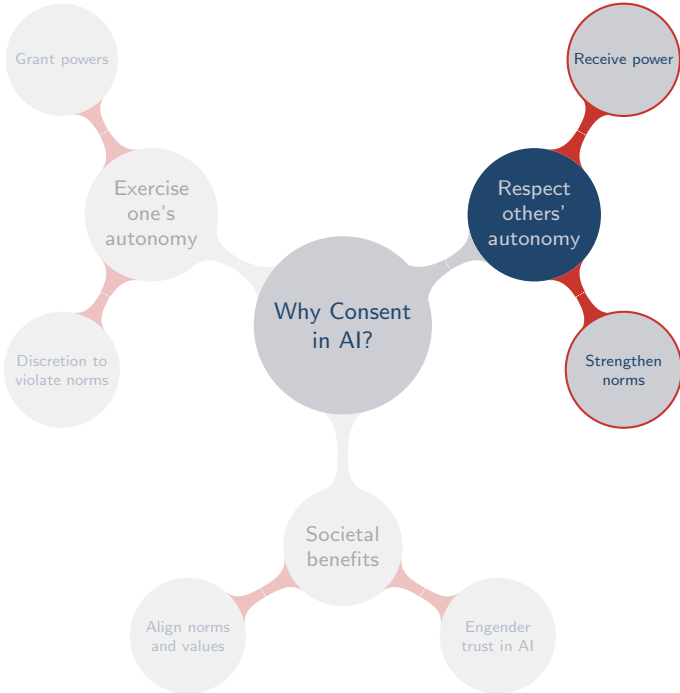


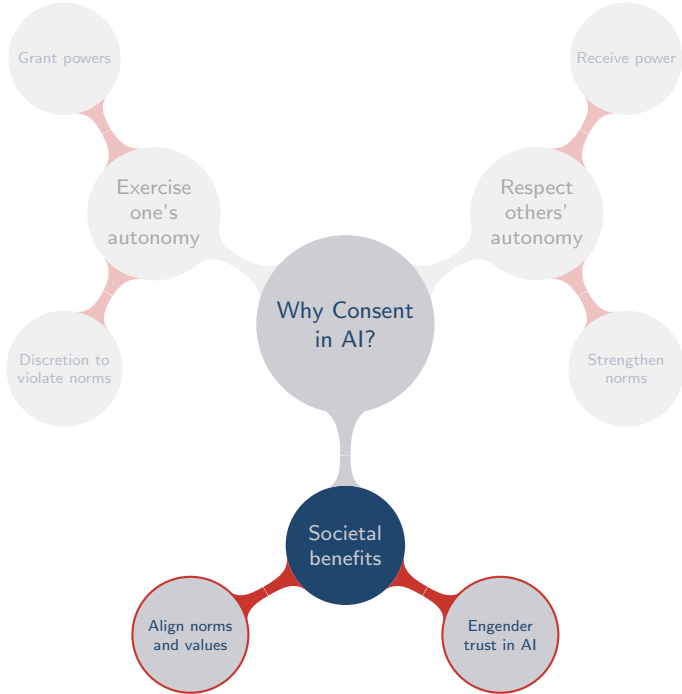


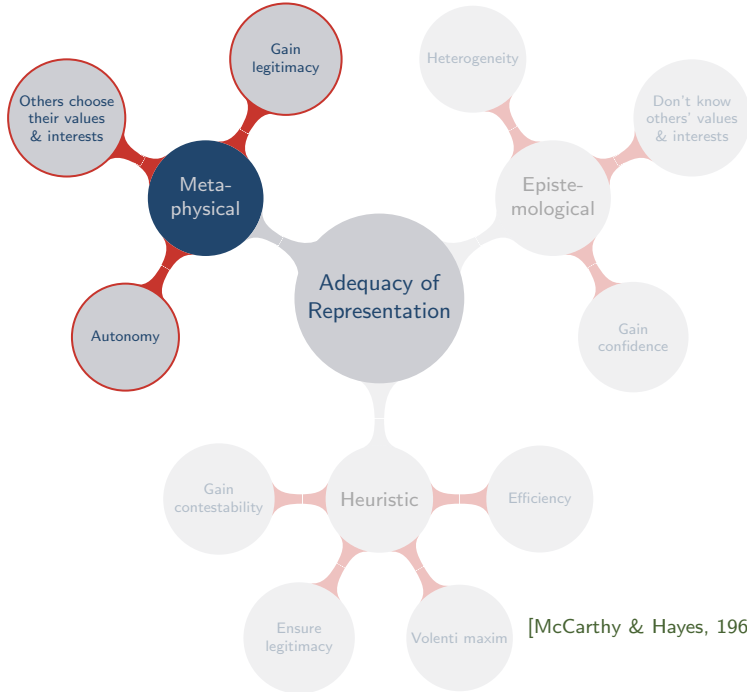




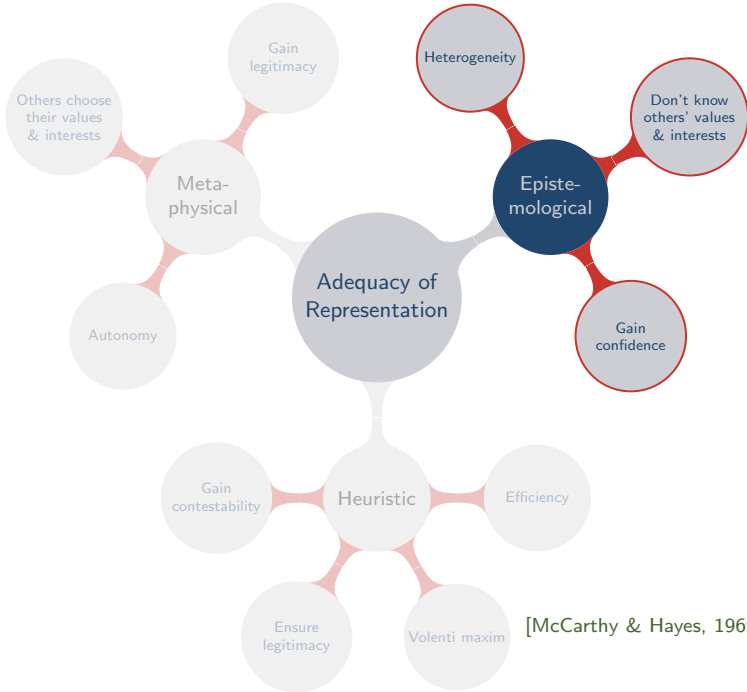




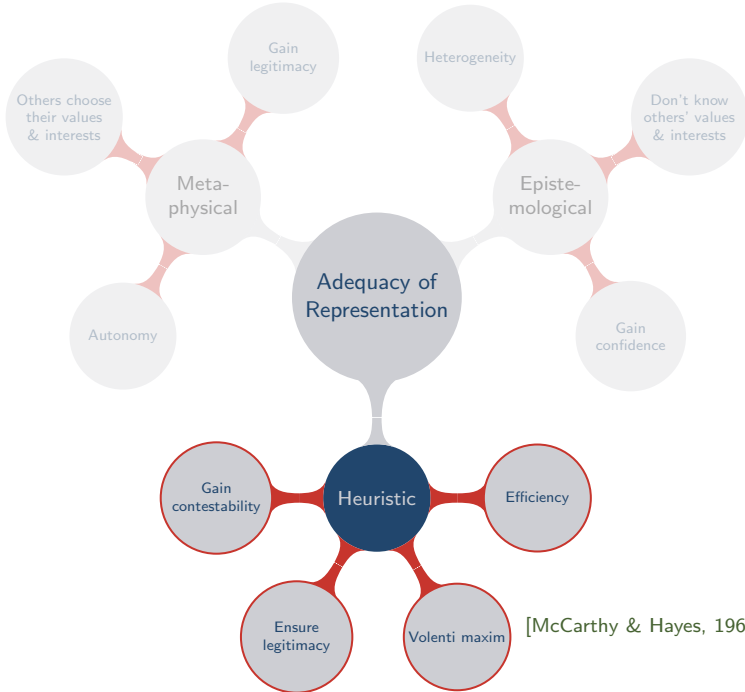




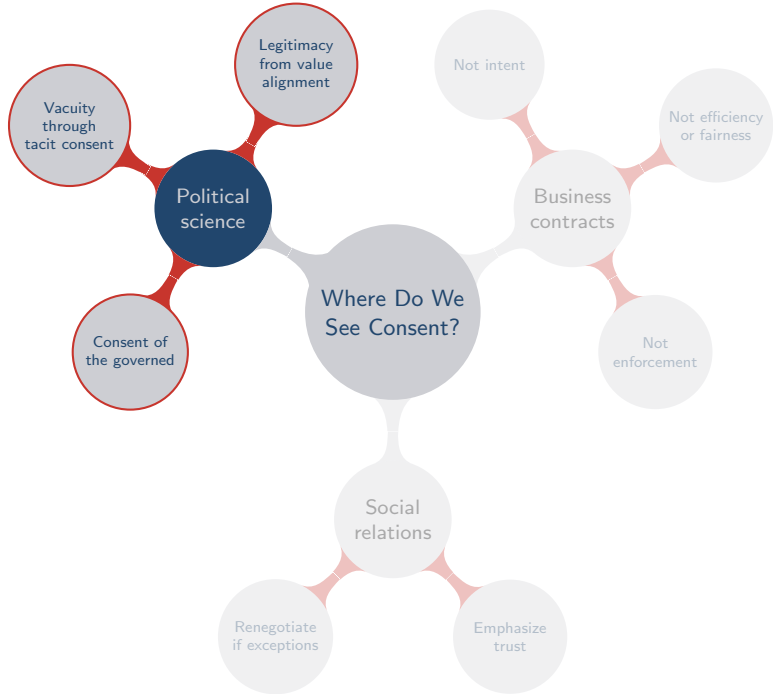
[McCarthy & Hayes, 1969]

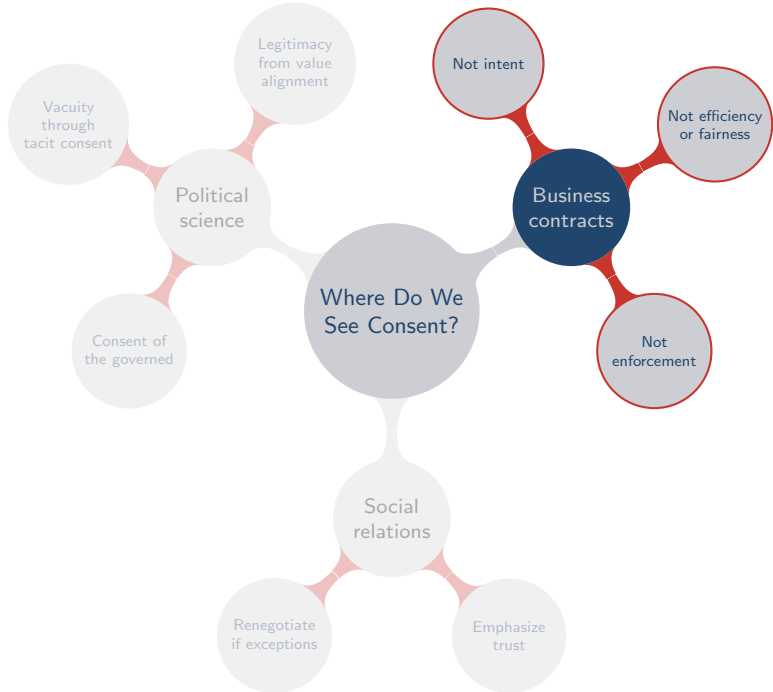


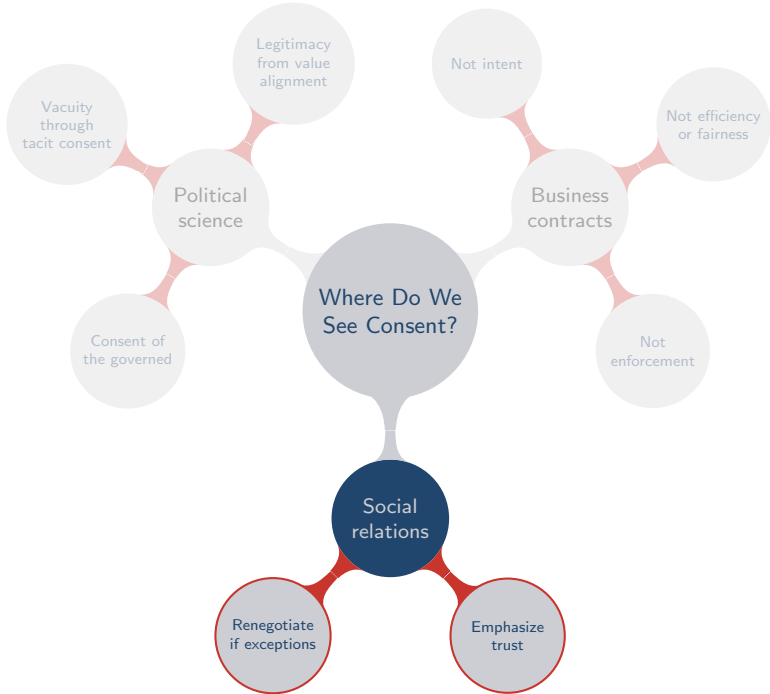
[McCarthy & Hayes, 1969]

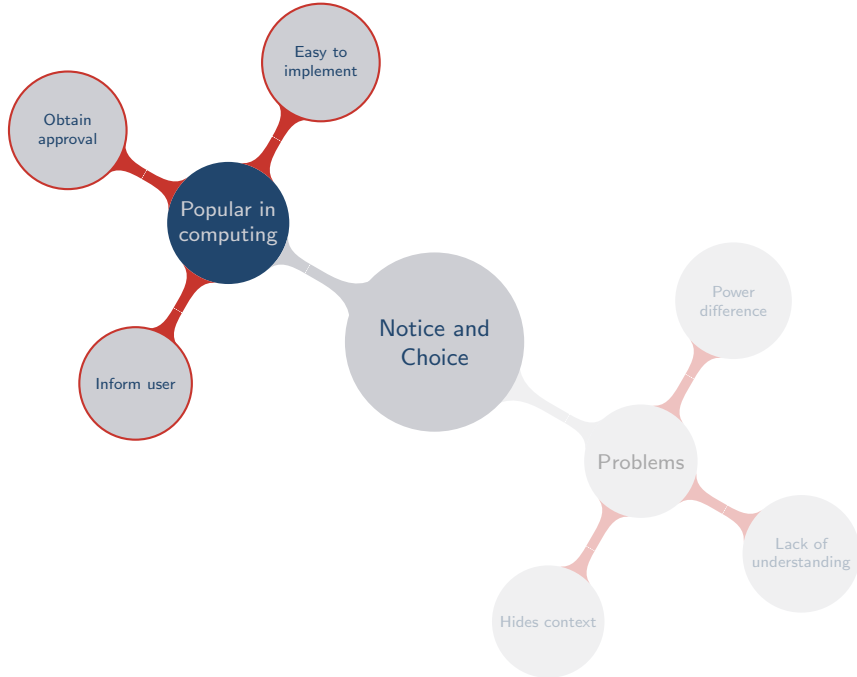


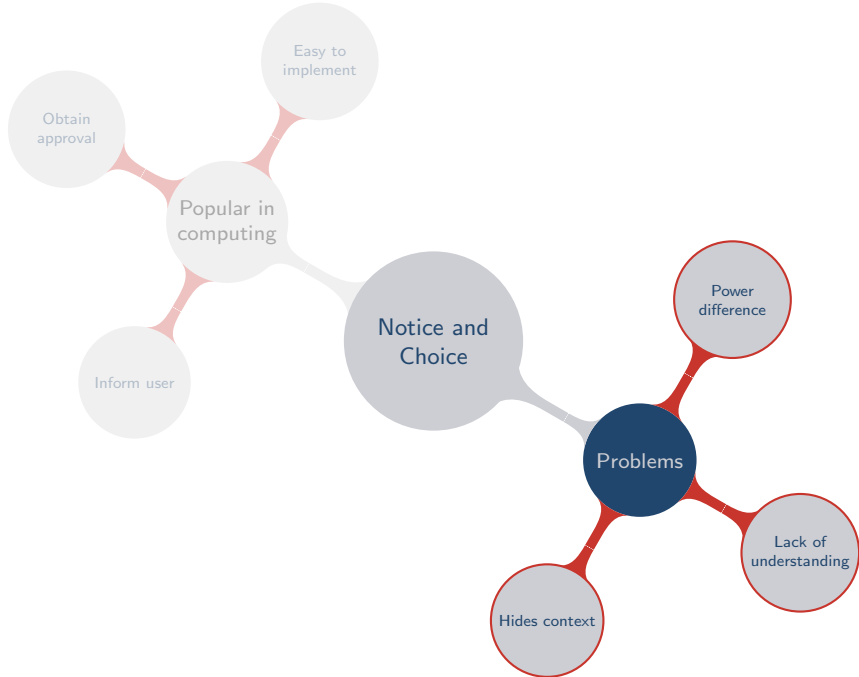
[McCarthy & Hayes, 1969]

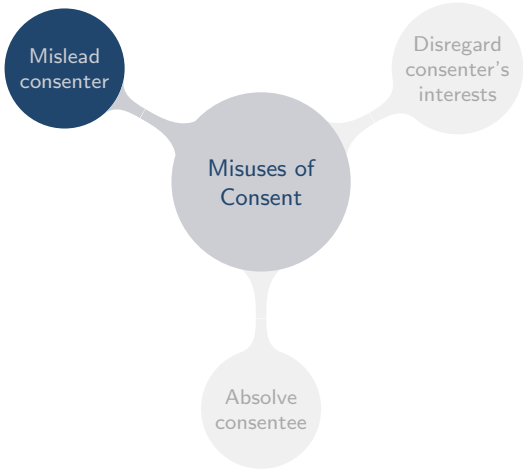


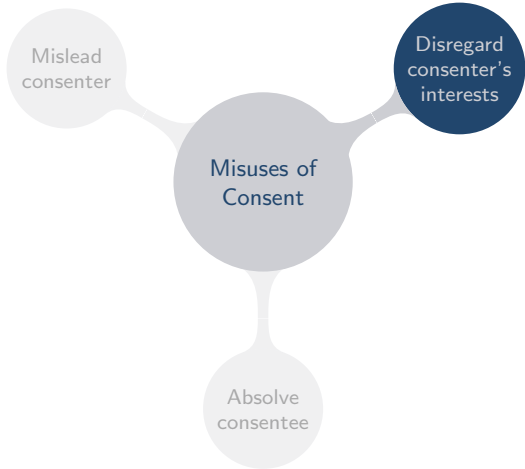


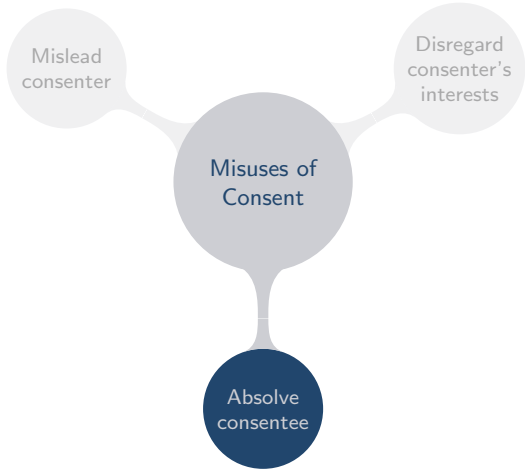


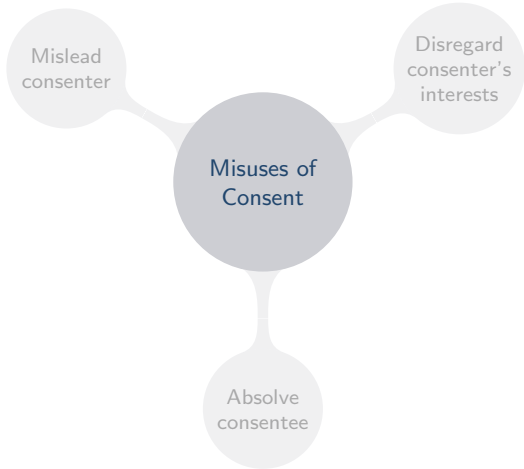




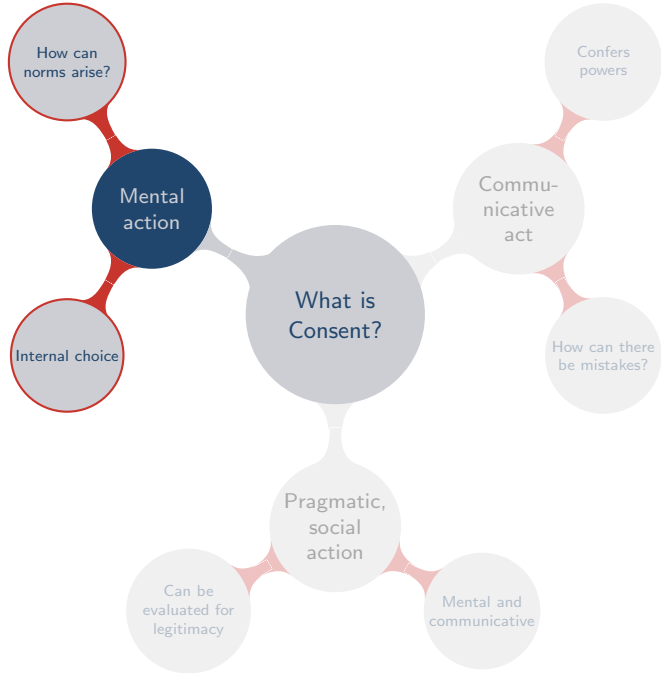


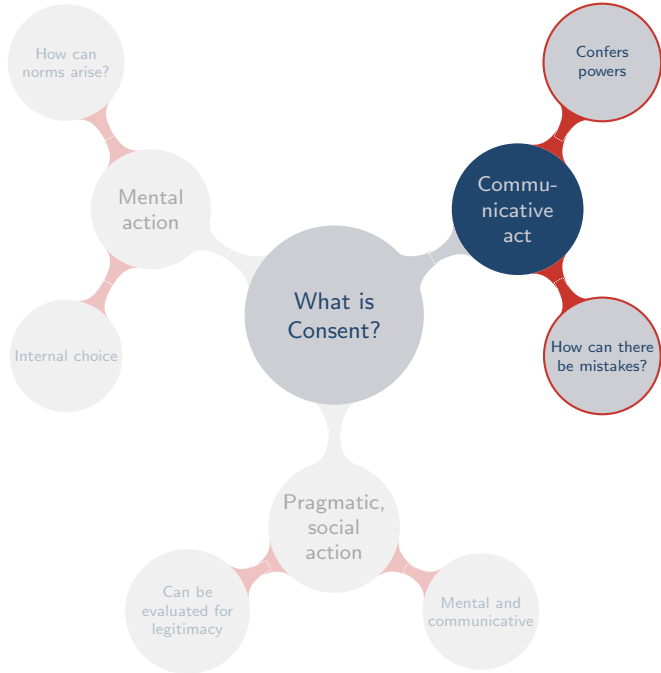


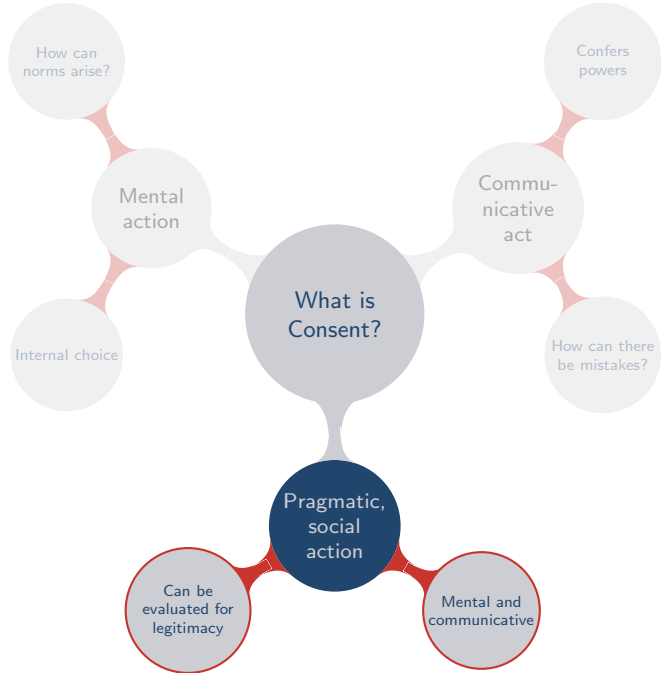


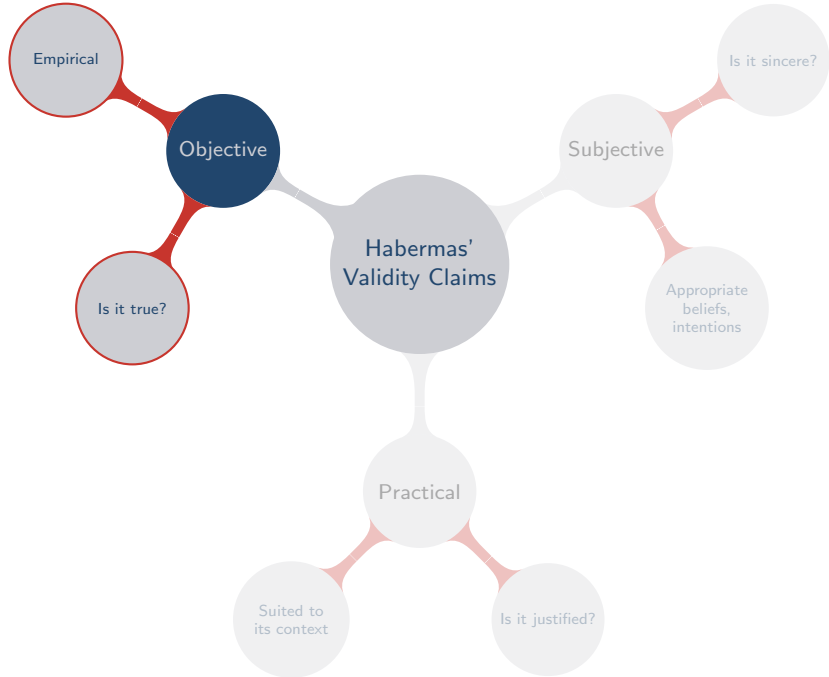


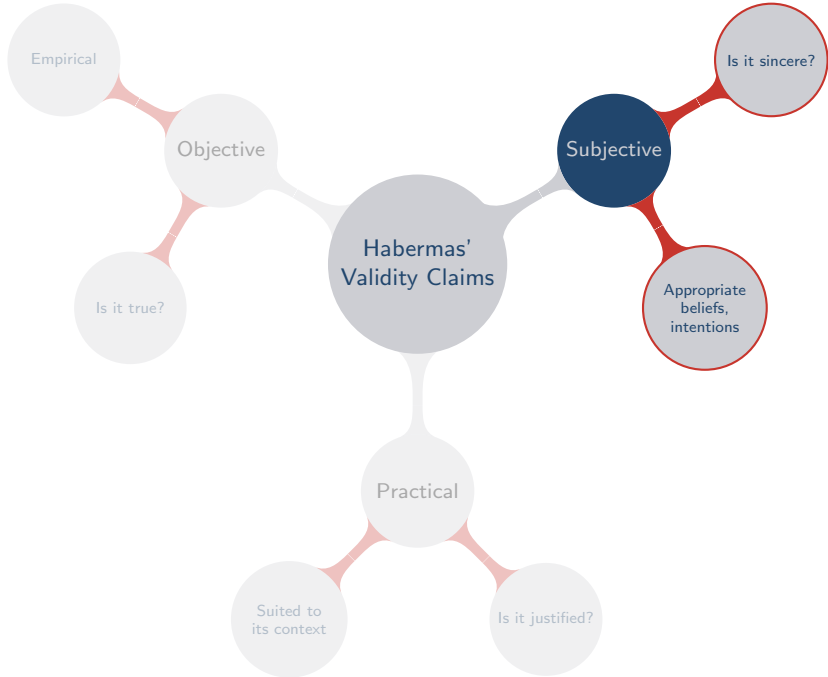
Just a means to be irresponsible

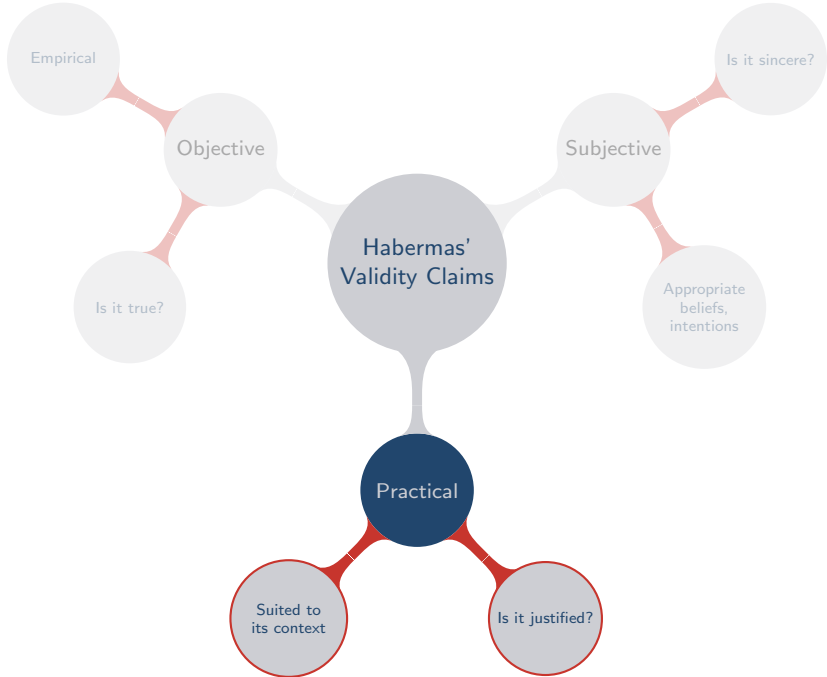






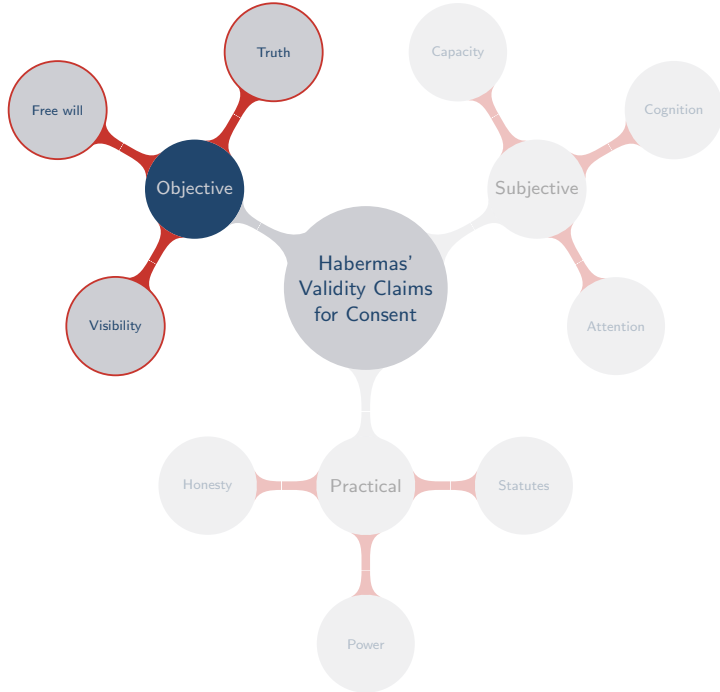


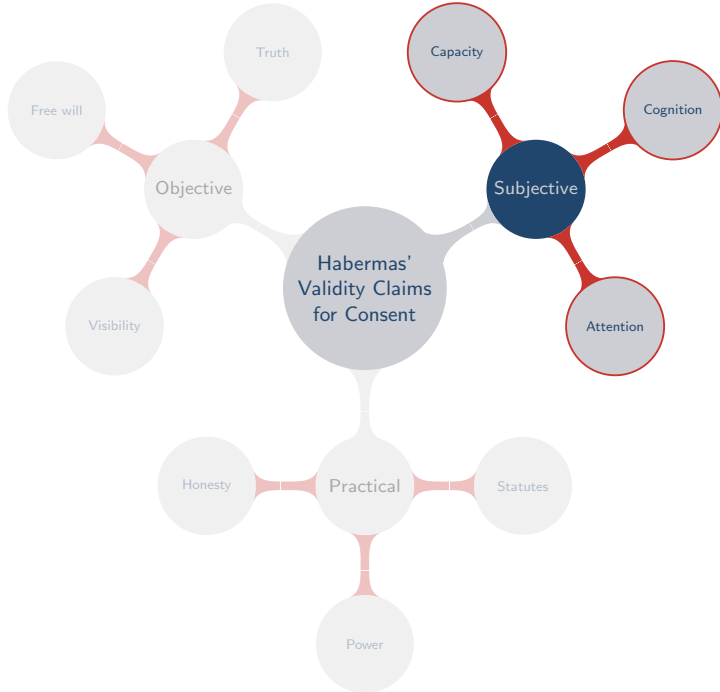


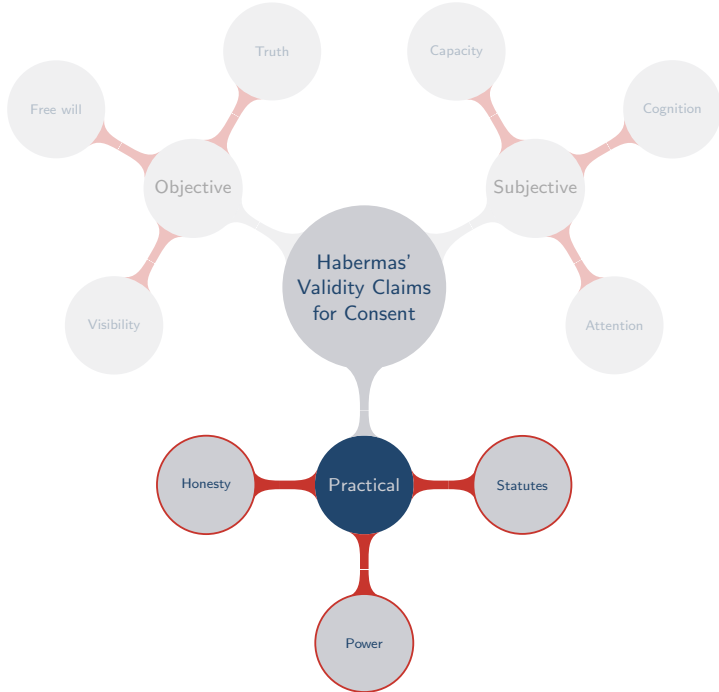


Criteria for Valid Consent

Criterion	Meaning
Visibility	Consent is observable, i.e., a communication
Free Will	Consenter acts without being coerced
Truth	Consenter's beliefs are true and complete
Capacity	Consenter is mentally fit
Cognition	Consenter believes and intends to
Attention	Consenter exercises mental faculties
Statutes	Consenter meets statutory criteria, e.g., age
Power	Consenter is not subjugated by consentee
Honesty	Consentee does not mislead consenter

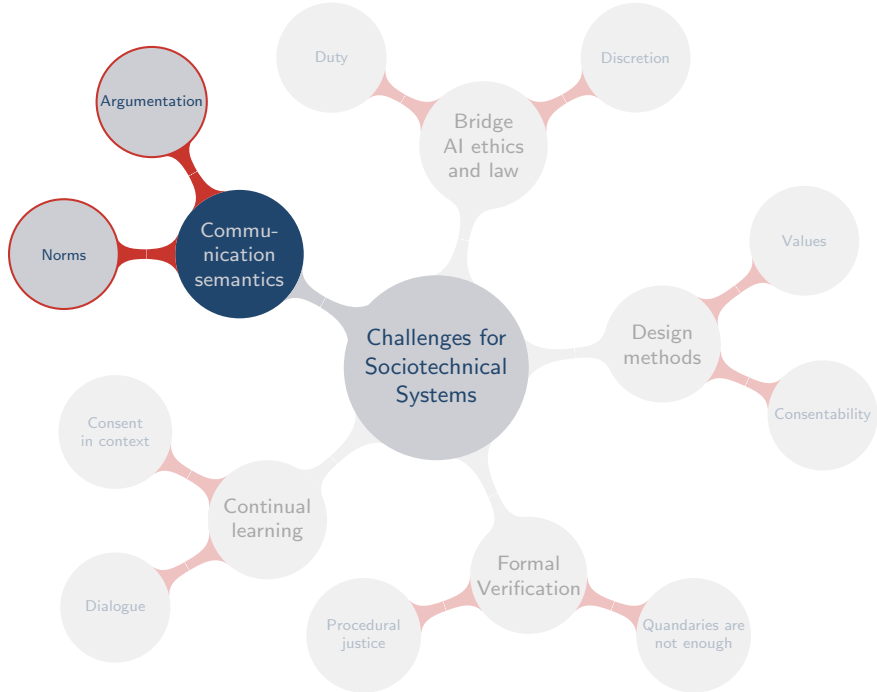


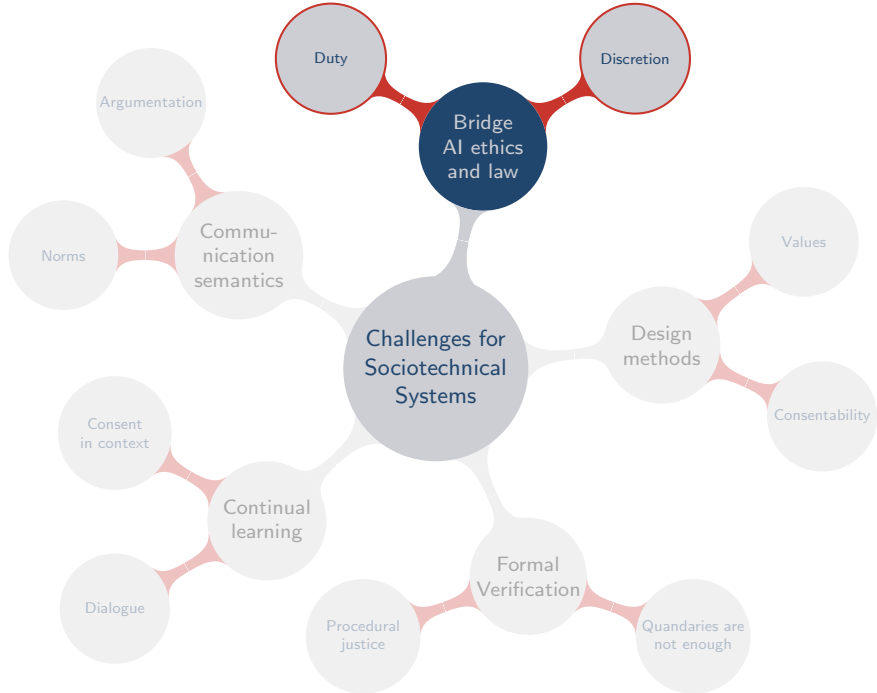


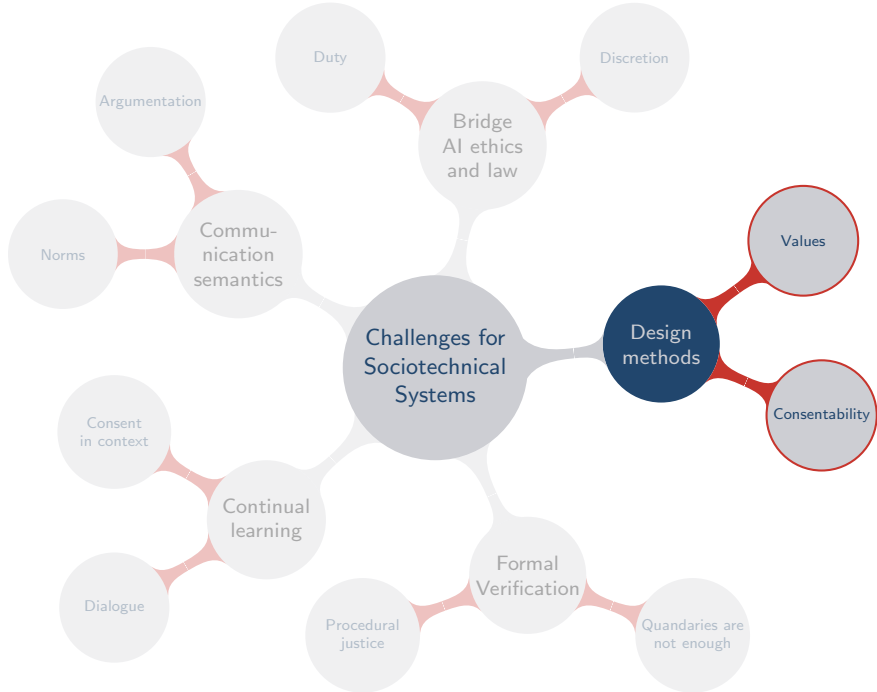


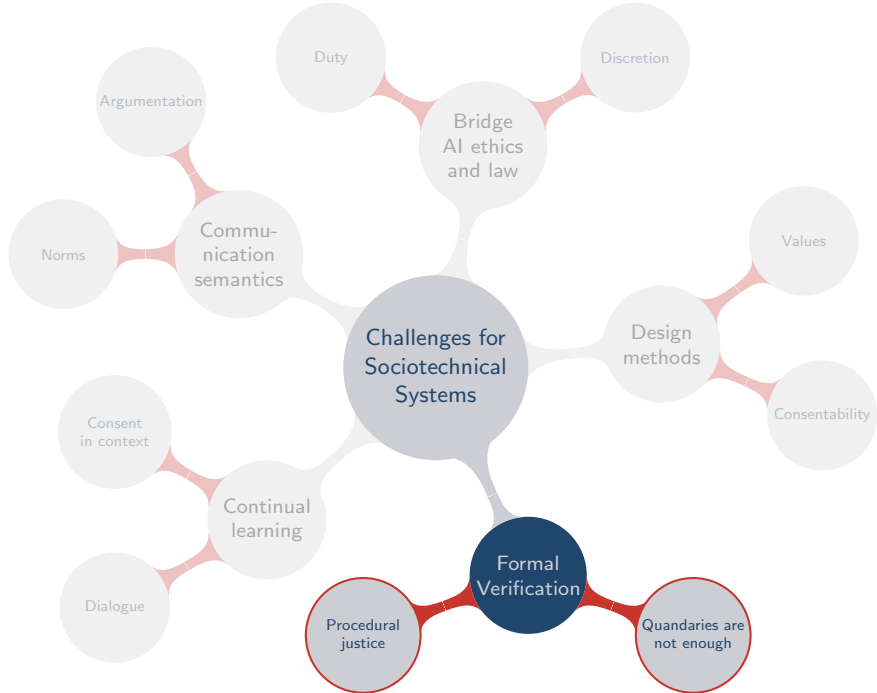
Criteria for Valid Consent

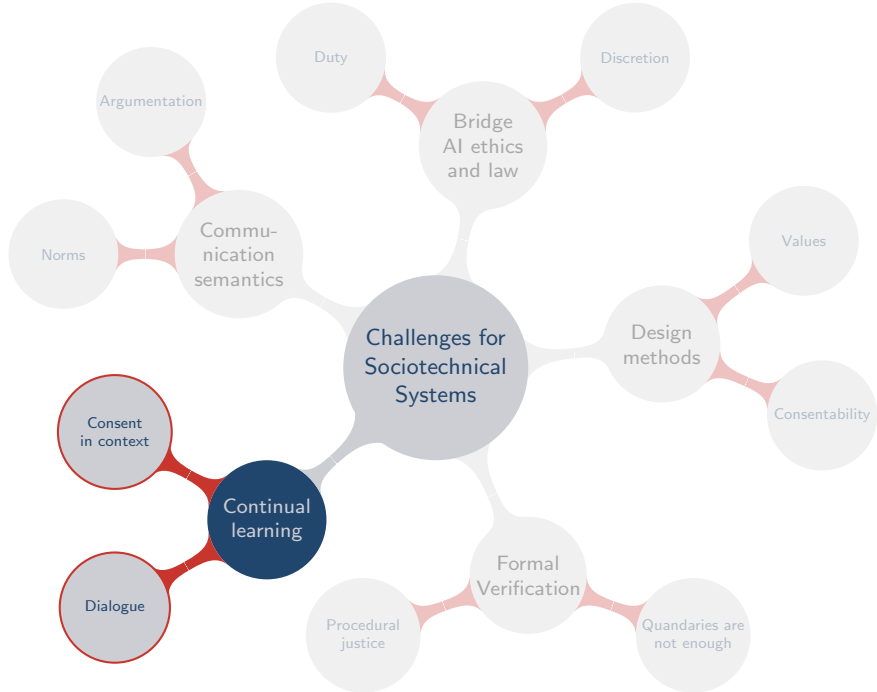
	Criterion	Meaning
Objective	Visibility	Consent is observable, i.e., a communication
	Free Will	Consenter acts without being coerced
	Truth	Consenter's beliefs are true and complete
Subjective	Capacity	Consenter is mentally fit
	Cognition	Consenter believes and intends to
	Attention	Consenter exercises mental faculties
Practical	Statutes	Consenter meets statutory criteria, e.g., age
	Power	Consenter is not subjugated by consentee
	Honesty	Consentee does not mislead consenter











Thanks

- ▶ US NSF grant IIS-2116751
- ▶ DoD (Science of Security Lablet) for support
- ▶ Nirav Ajmeri, Pradeep Murukannaiah, Amika Singh