Research Seminar

Final Presentation

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Artificial General Intelligence

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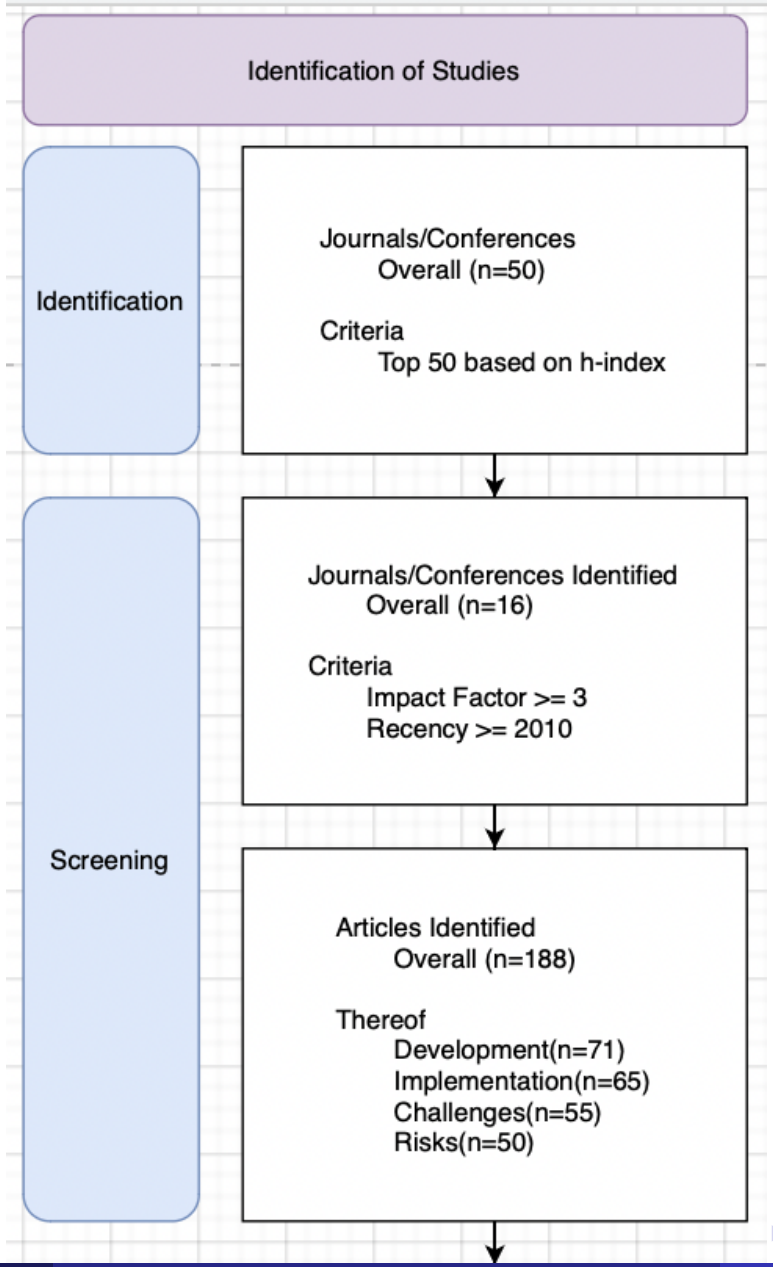
Research Question

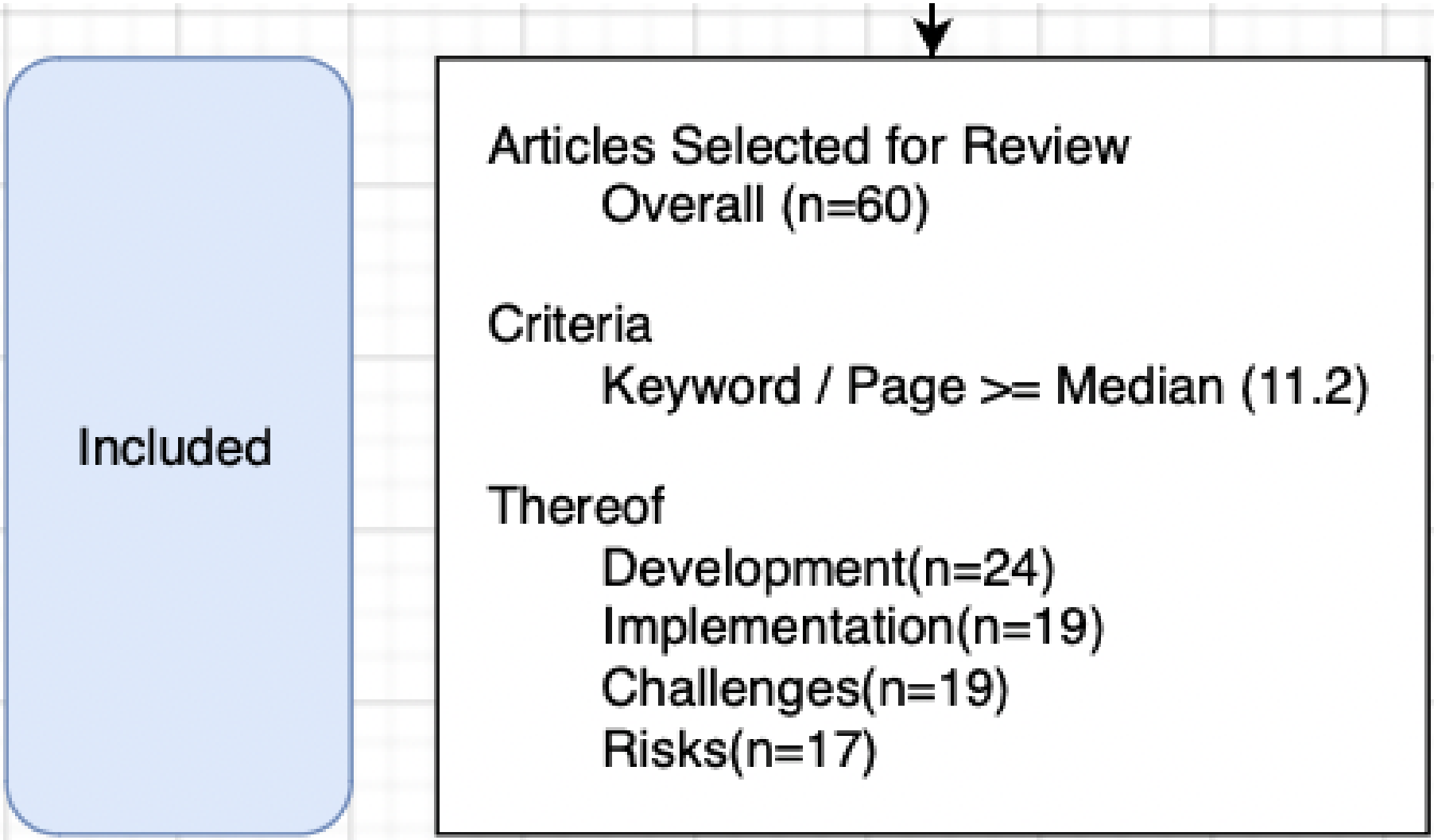
Artificial General Intelligence (AGI) is the term for a system that can do or learn to do any intellectual task at human-level performance. AGI is typically noted as strong AI compared to weak AI systems that excel in a narrow domain.

- Research Question: What is the current academic opinion on the development, implementation, challenges, and risks of AGI?

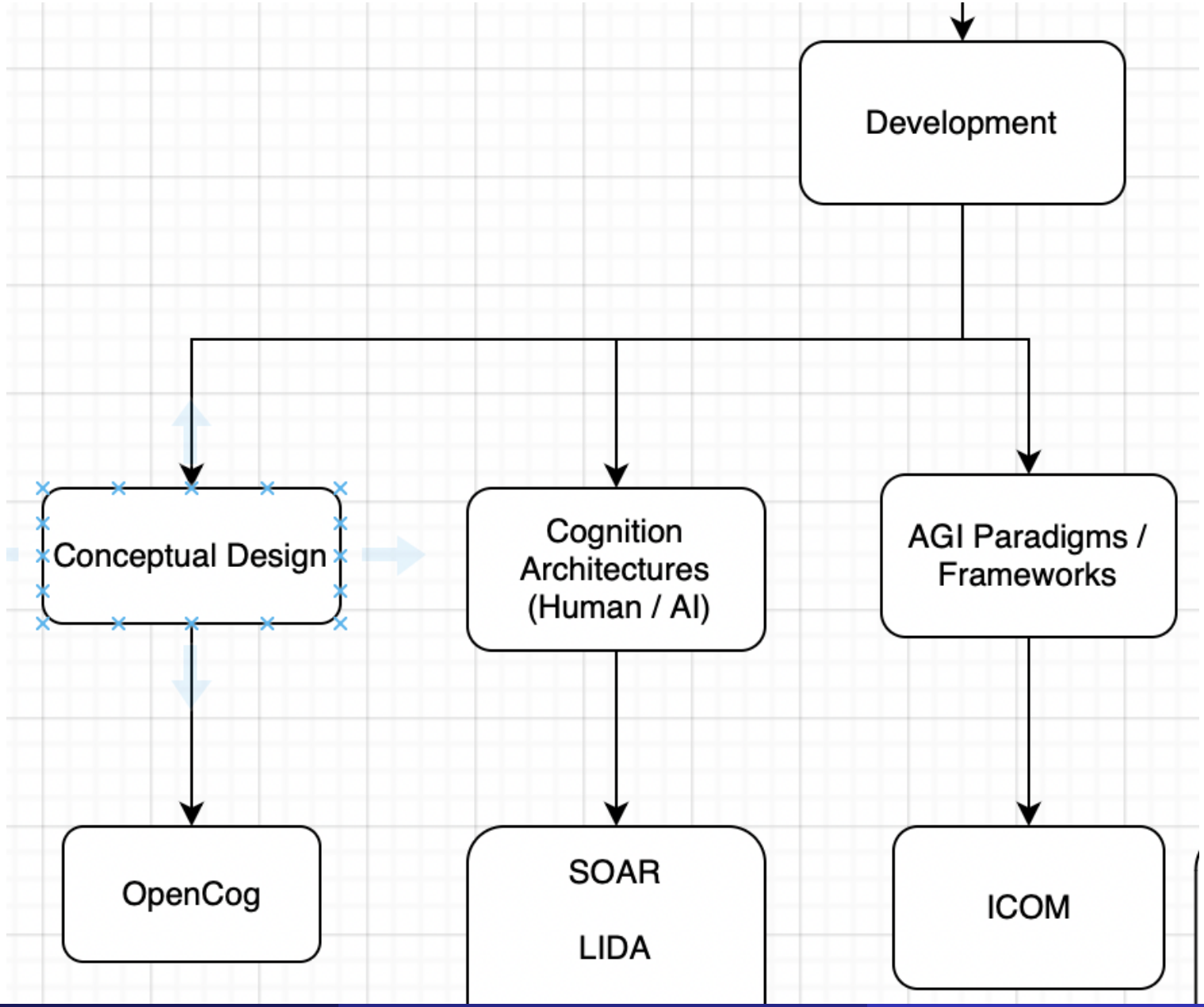
SLR Process


Identification of Studies
Identification
Journals/Conferences
Overall (n=50)
Criteria
Top 50 based on h-index
Screening
Journals/Conferences Identified
Overall (n=16)
Criteria
Impact Factor >= 3
Recency >= 2010
Articles Identified
Overall (n=188)
Thereof
Development(n=71)
Implementation(n=65)
Challenges(n=55)
Risks(n=50)

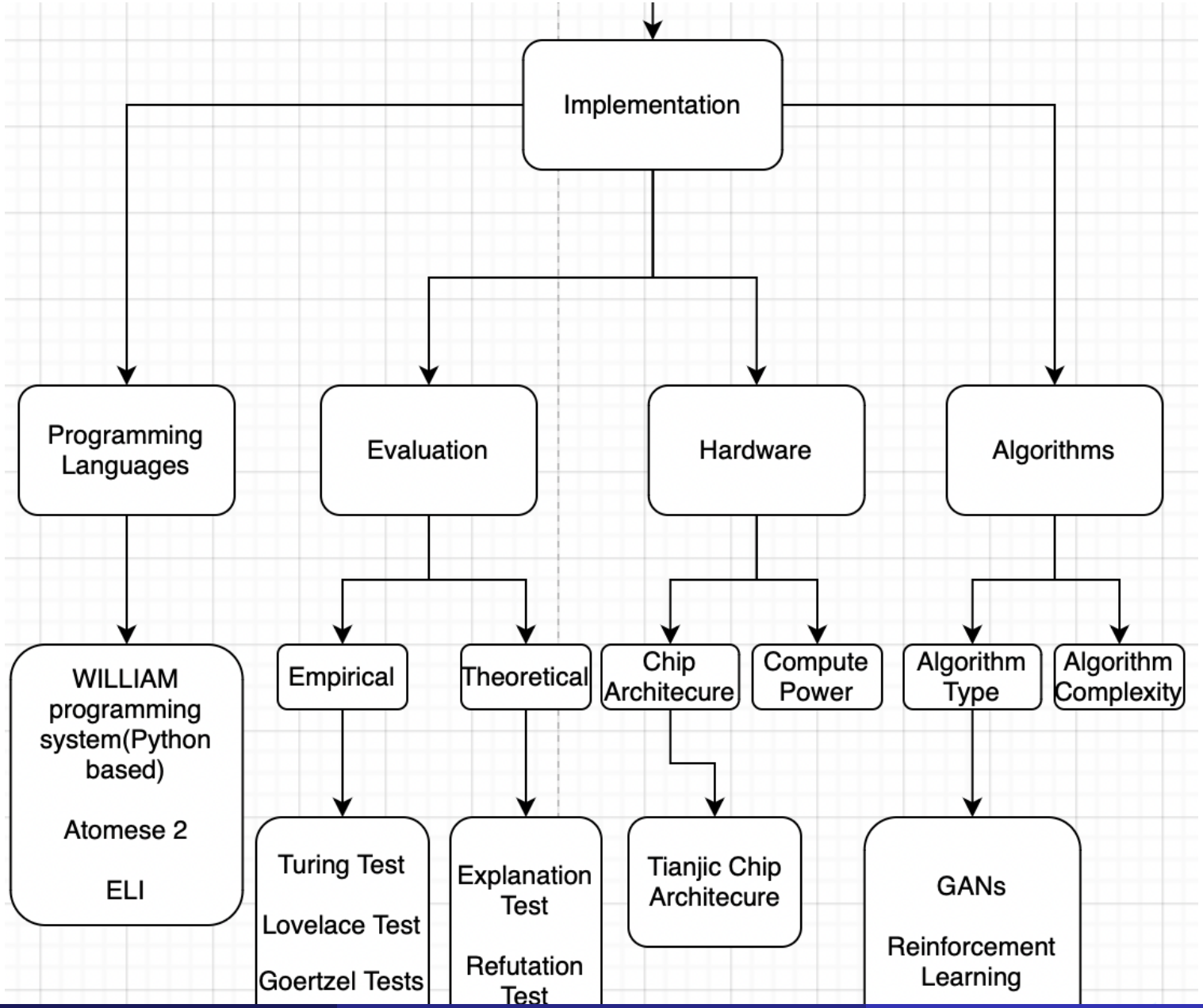
SLR Process


Included
Articles Selected for Review
Overall (n=60)
Criteria
Keyword / Page >= Median (11.2)
Thereof
Development(n=24)
Implementation(n=19)
Challenges(n=19)
Risks(n=17)

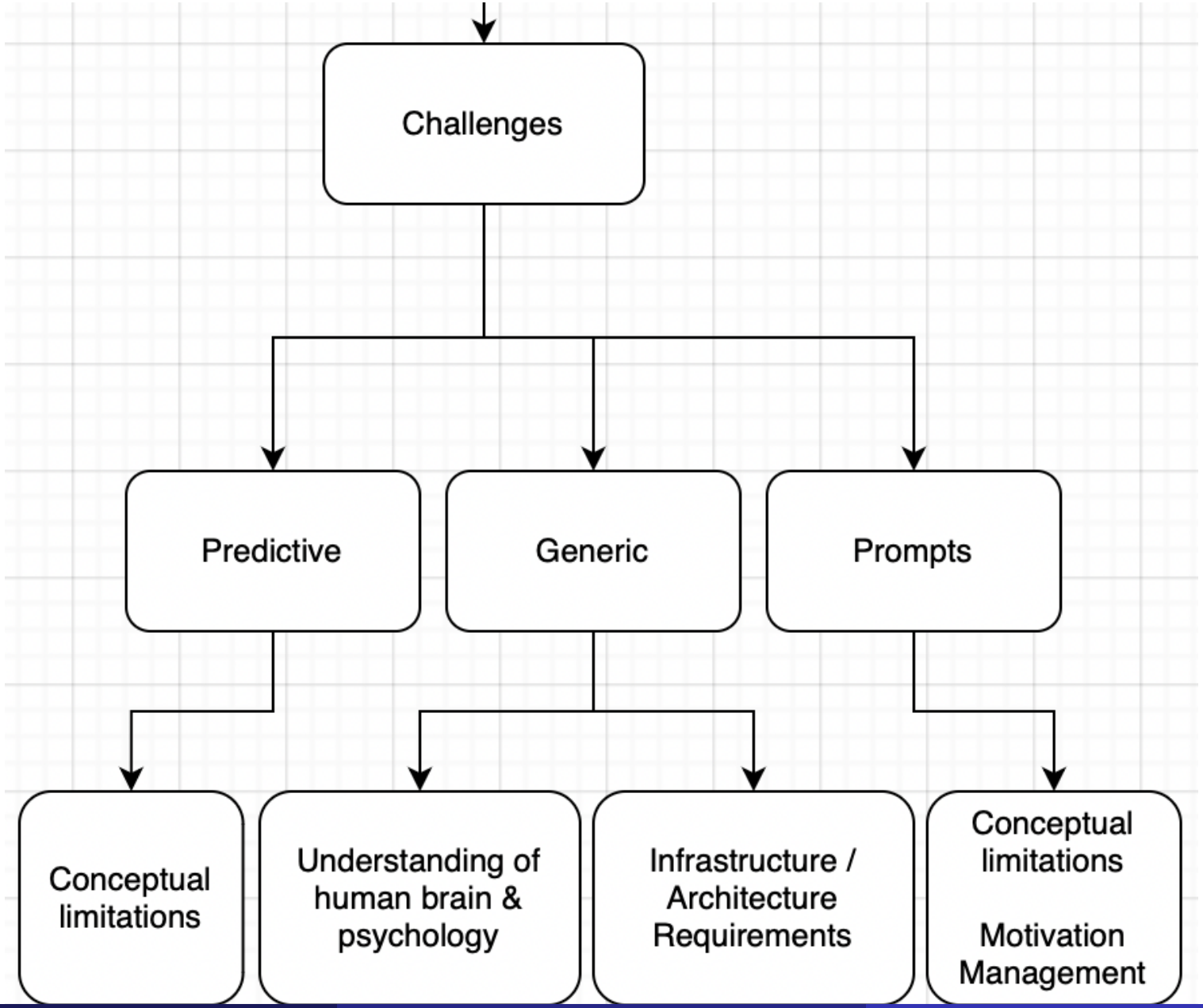
Development



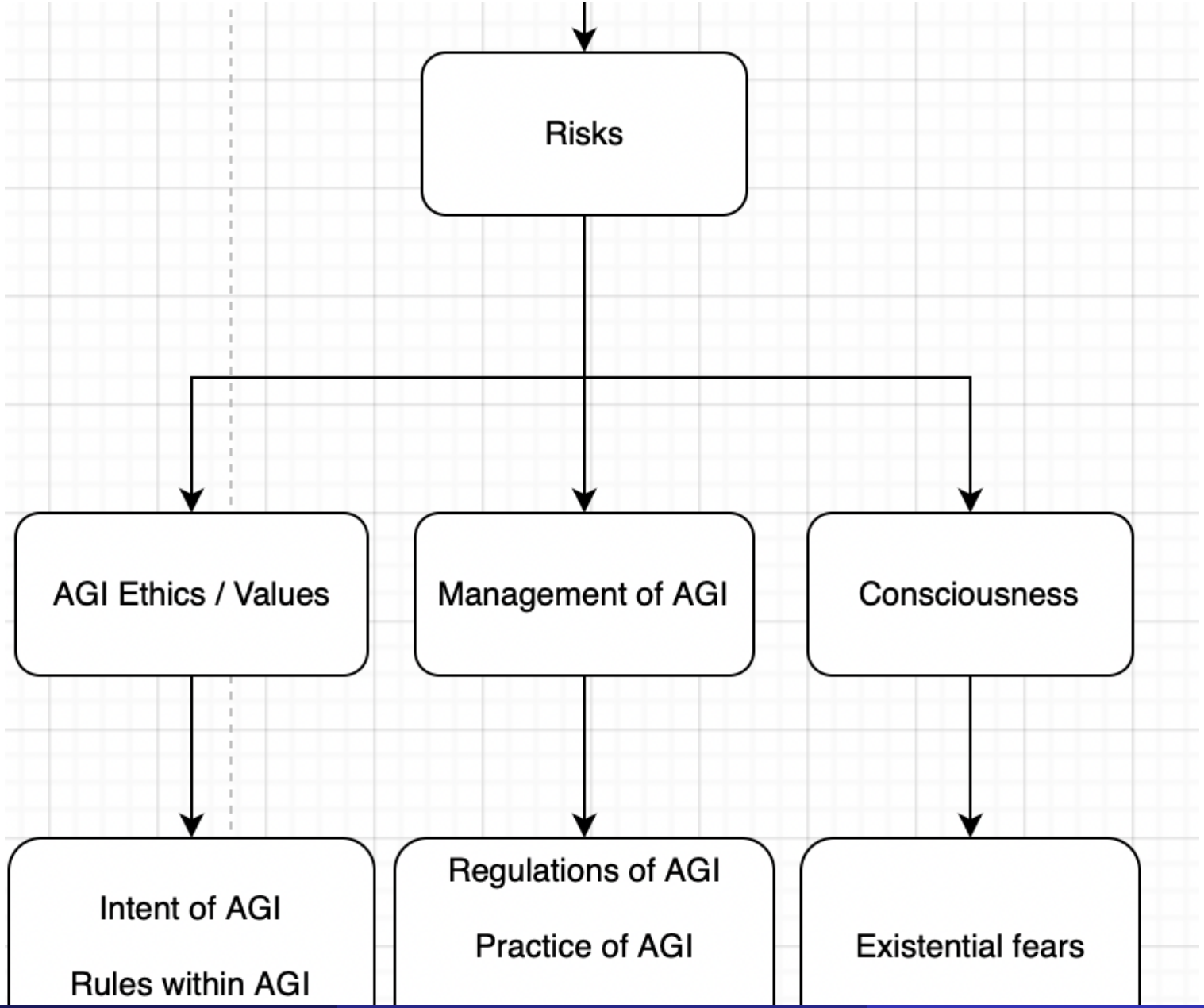
Implementation



Challenges


Challenges
Predictive
Generic
Prompts
Conceptual limitations
Understanding of human brain & psychology
Infrastructure / Architecture Requirements
Conceptual limitations
Motivation Management

Risks


Risks
AGI Ethics / Values
Management of AGI
Consciousness
Intent of AGI
Rules within AGI
Regulations of AGI
Practice of AGI
Existential fears

Summary

- Highly heterogeneous range of articles across all domains.
- Most promising approaches were analyzing how humans and AGI can learn from each other to improve these AI systems further.