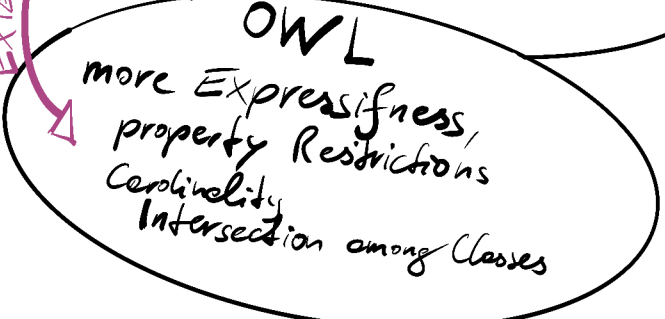
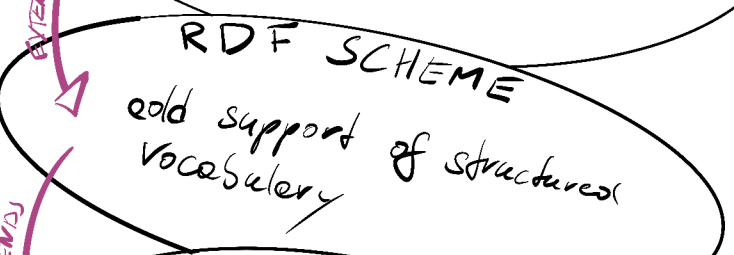
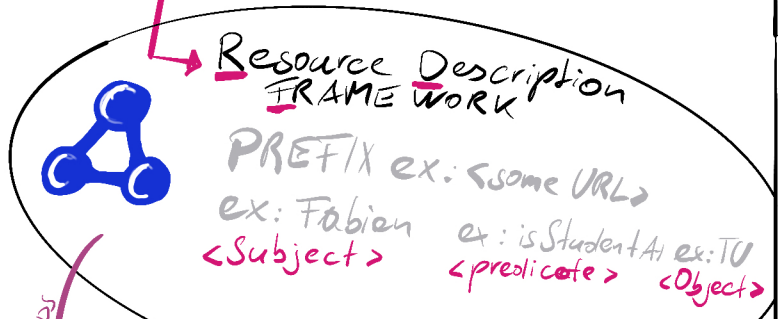
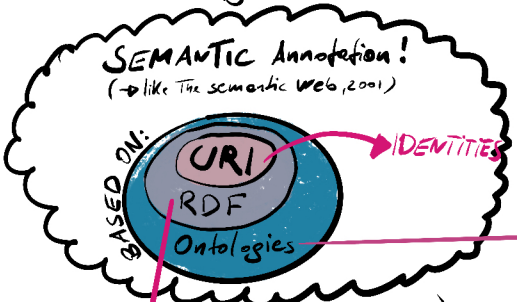


Devices need to speak the same language & have a common understanding **BECAUSE!**

How?



# DATA MODELS & STANDARDS

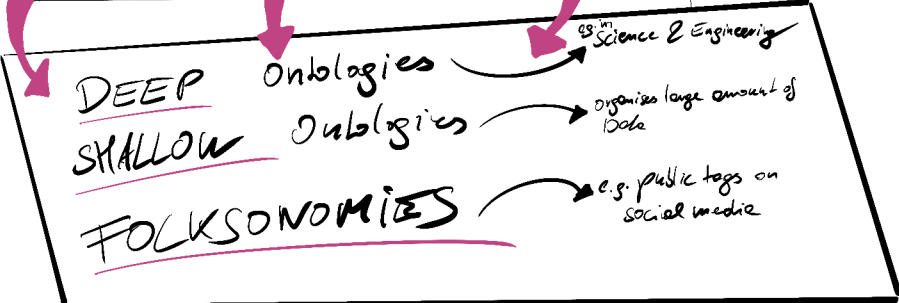
"a model of the world with vocabulary relevant to that domain"

## Tradeoffs

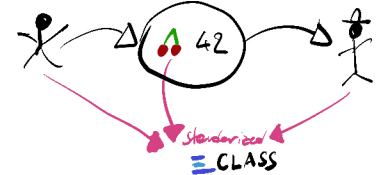
Ontology Development/Maintenance **v.s.** Completeness

Complexity **v.s.** Explainability

Performance **v.s.** Expressivity



Sender & receiver refer to same semantic model of characteristic

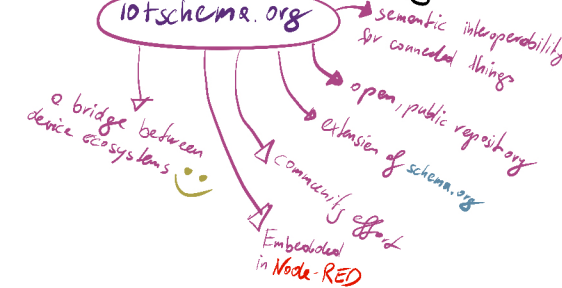


## IOT DATA Models

- Web of Things
- AWS IoT Graph Data Model
- Alibaba Things Specification
- Web Things

Revolve around Similar Things

Common semantic Layer:



Different domains/application require different languages and vocabulary