

Real-World Programming with Process and Object Data



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@nzmyachie

**If we spend 1M dollar in our research project,
that 1M should all be transformed into
laboratory journals and data**

Annual science and technology budget

Japan: 4,200,000,000,000 JPY

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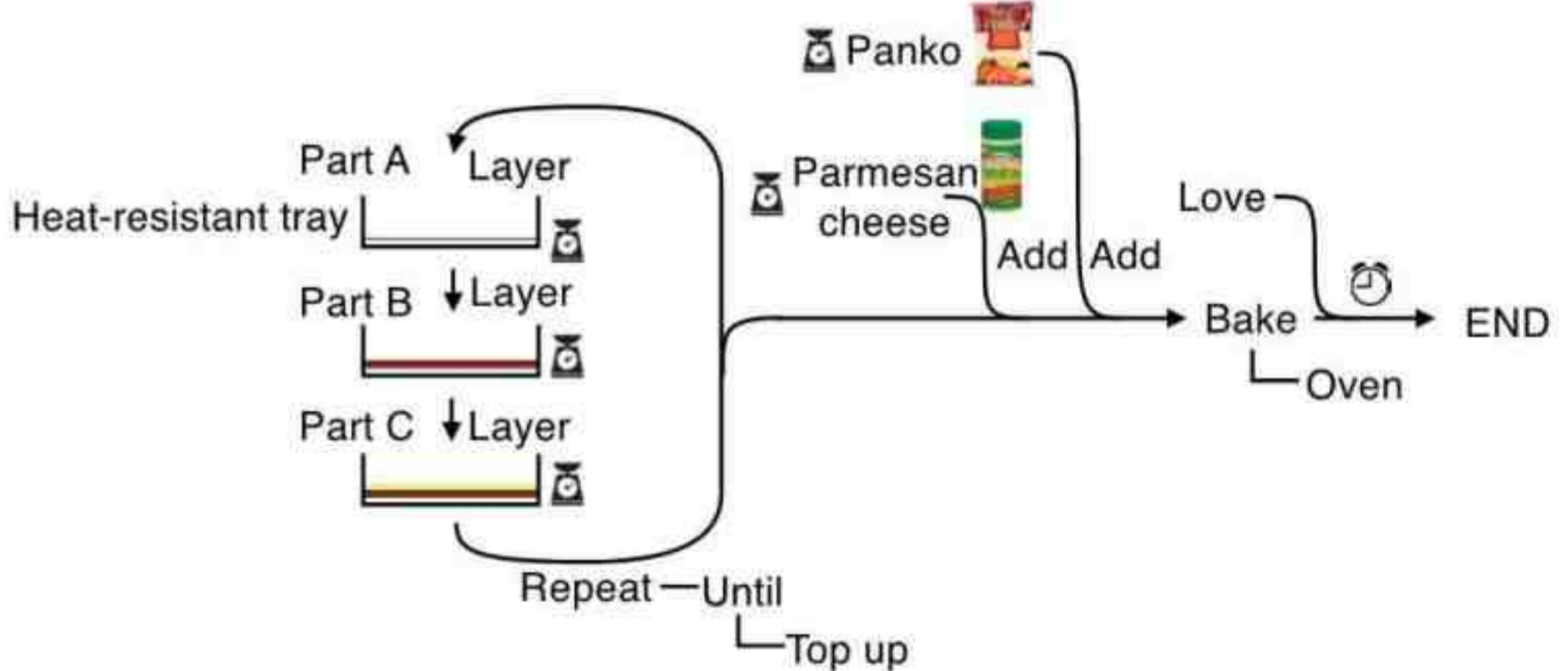
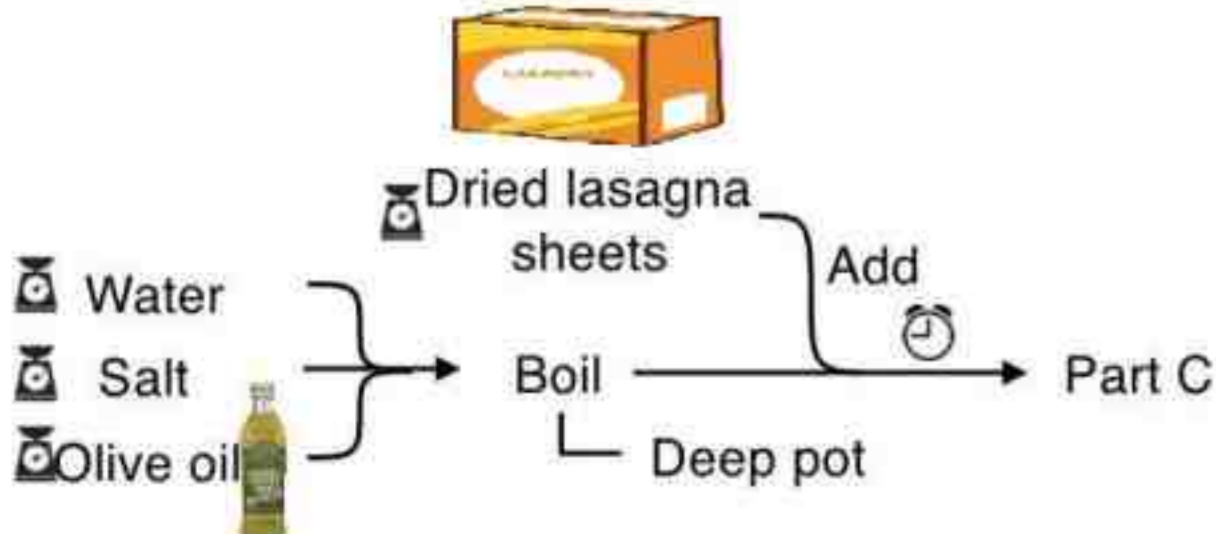
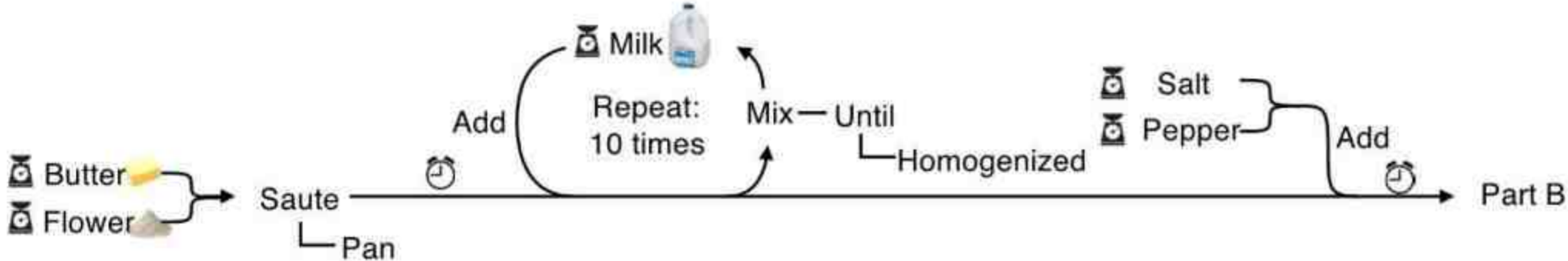
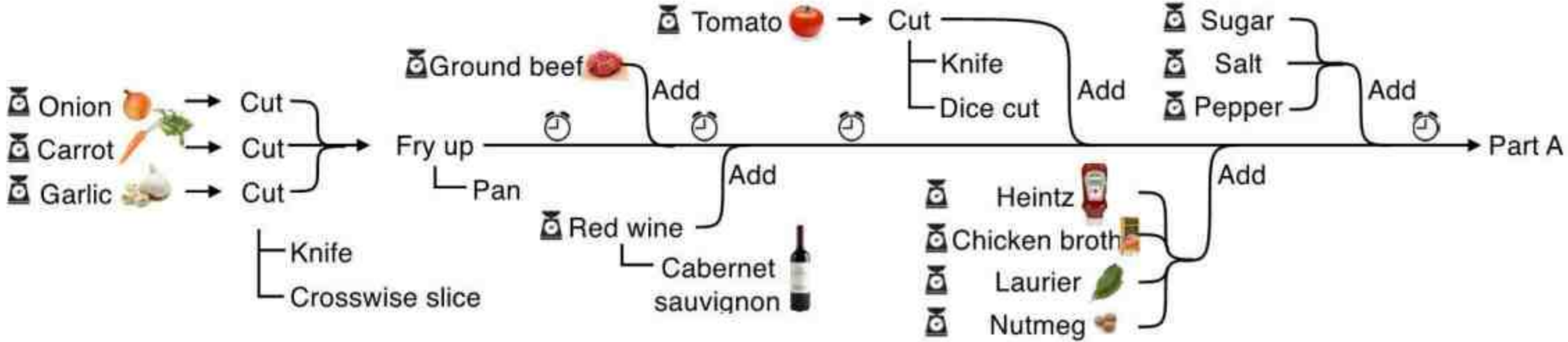
US: 124,000,000,000 USD

NIH NLM (2018): 373,000,000 USD

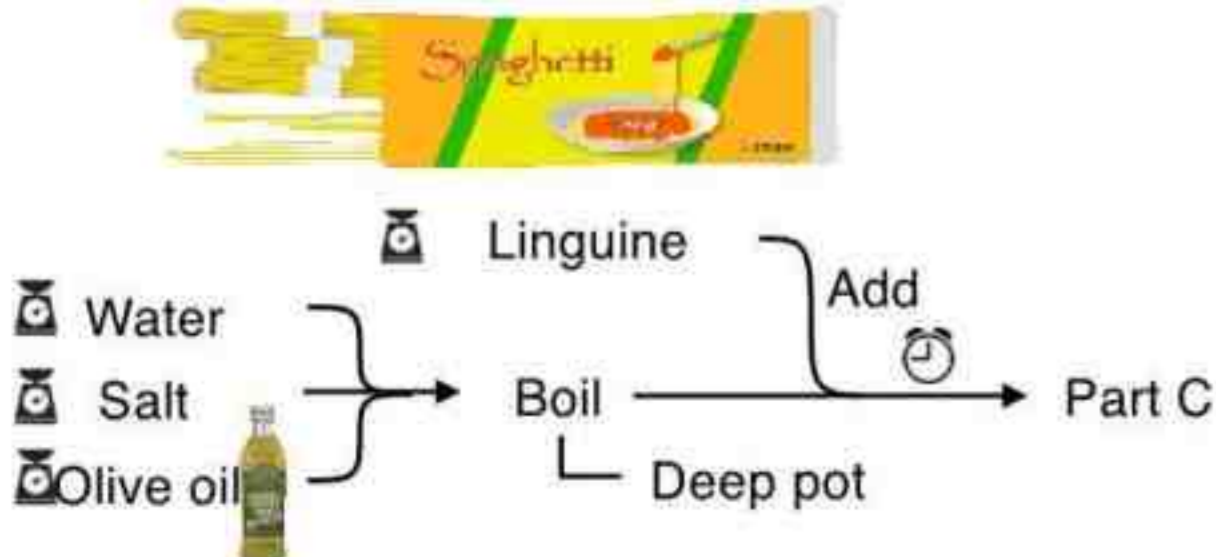
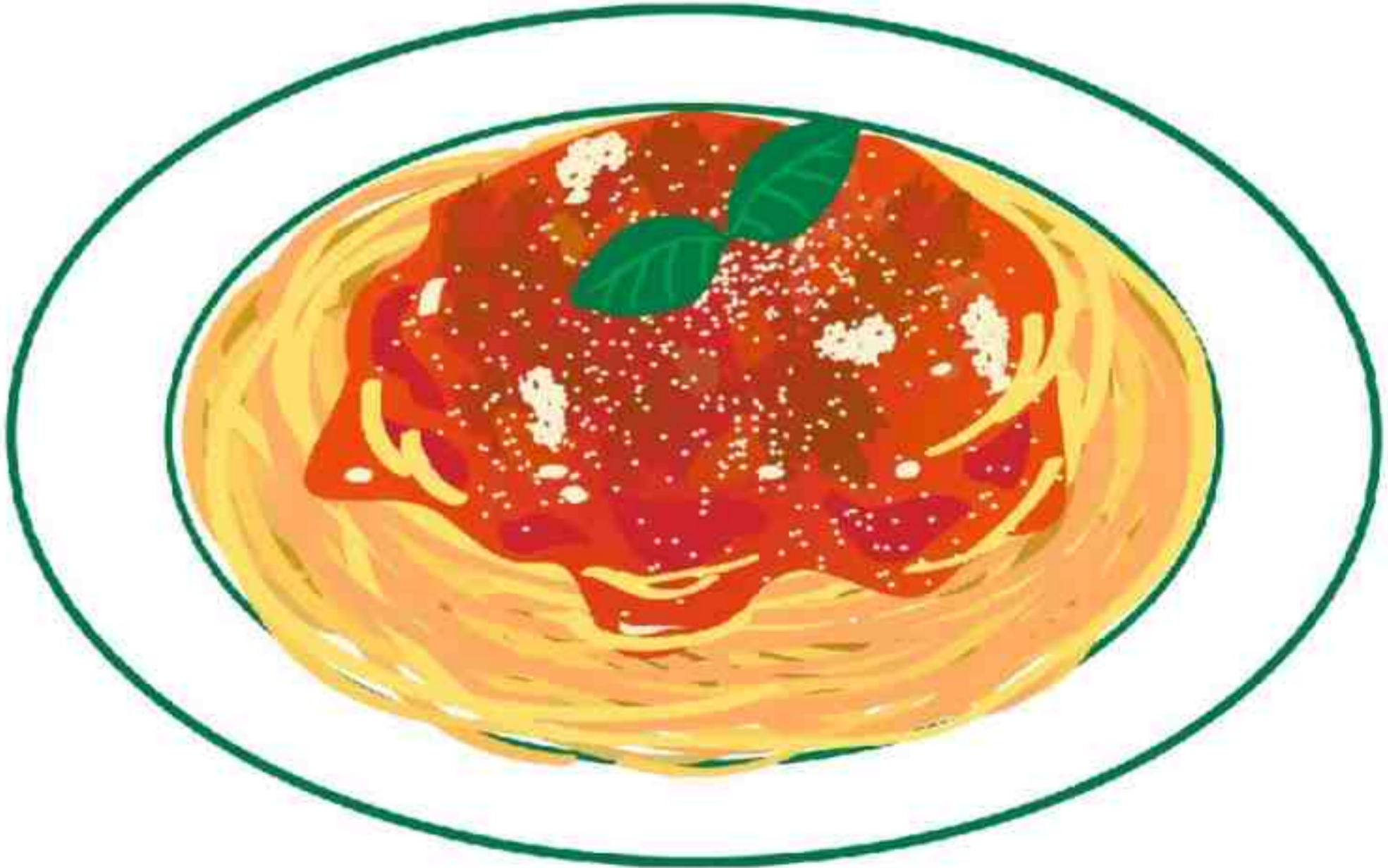
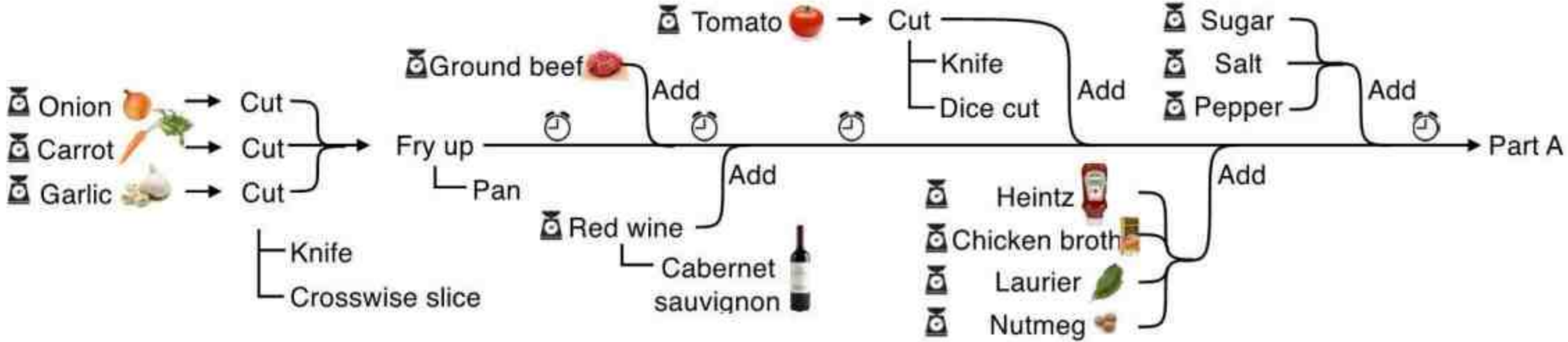
Object data

Process data

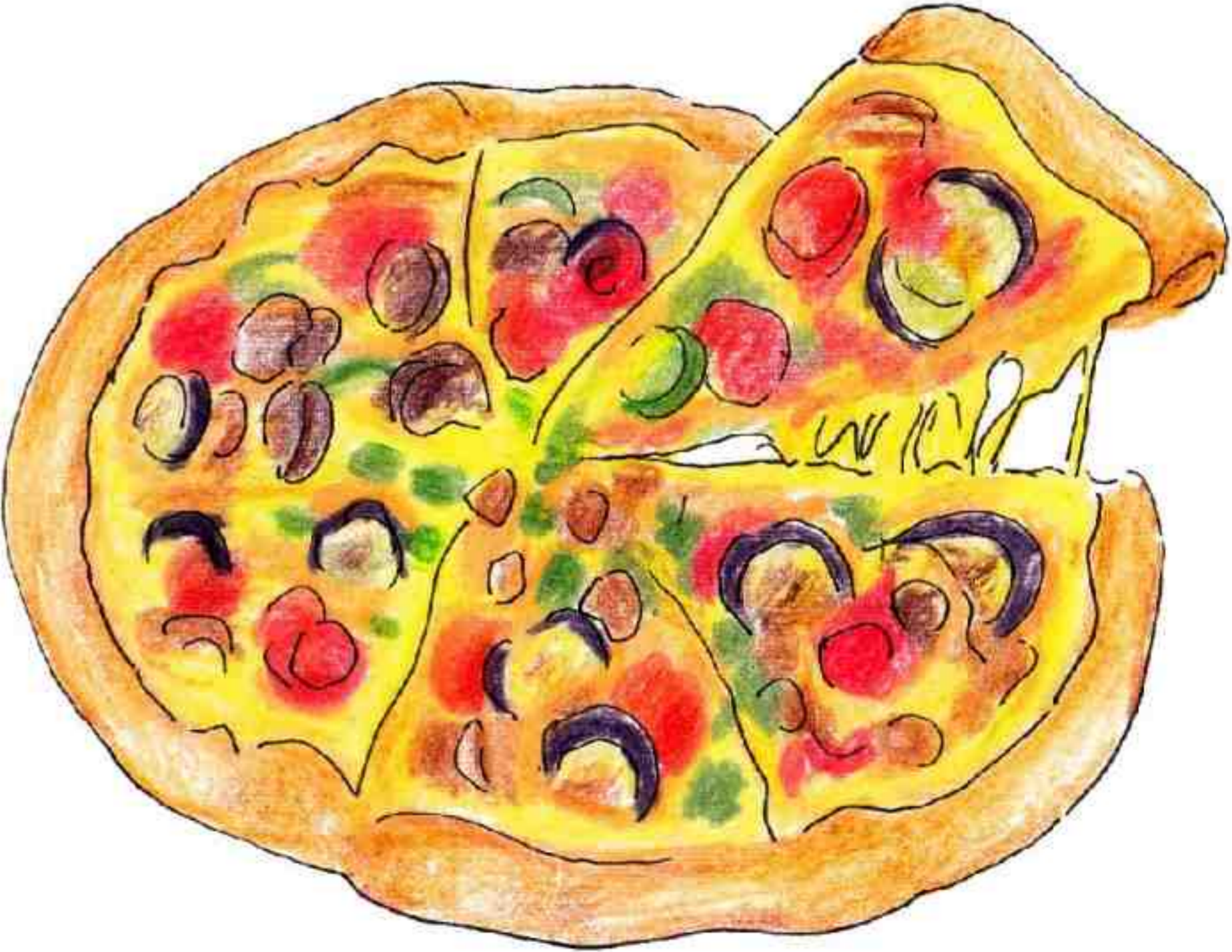
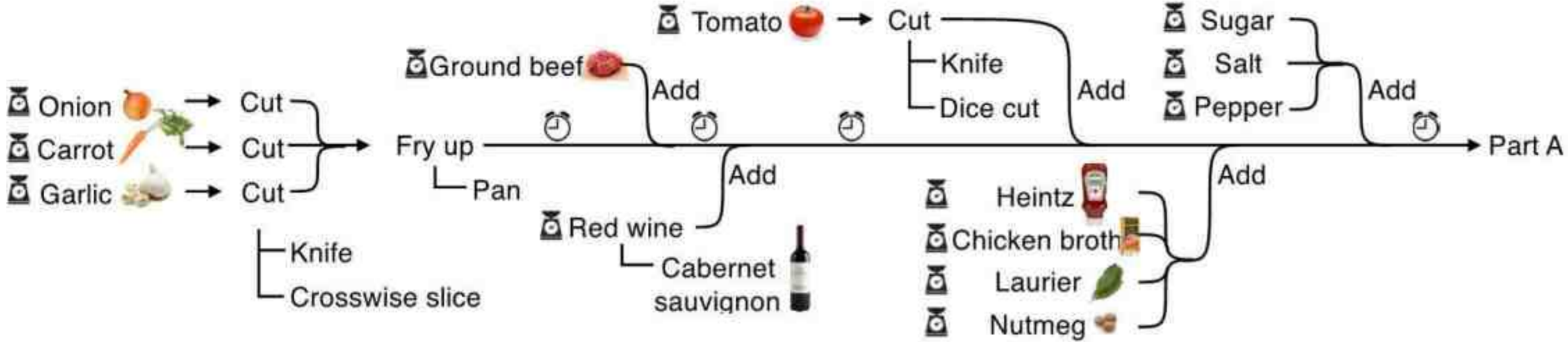
Process knowledge with a semantics



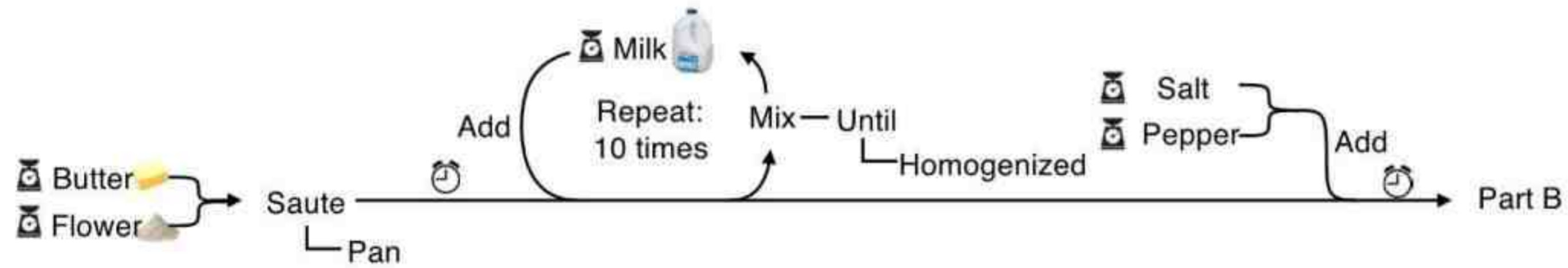
Process knowledge with a semantics



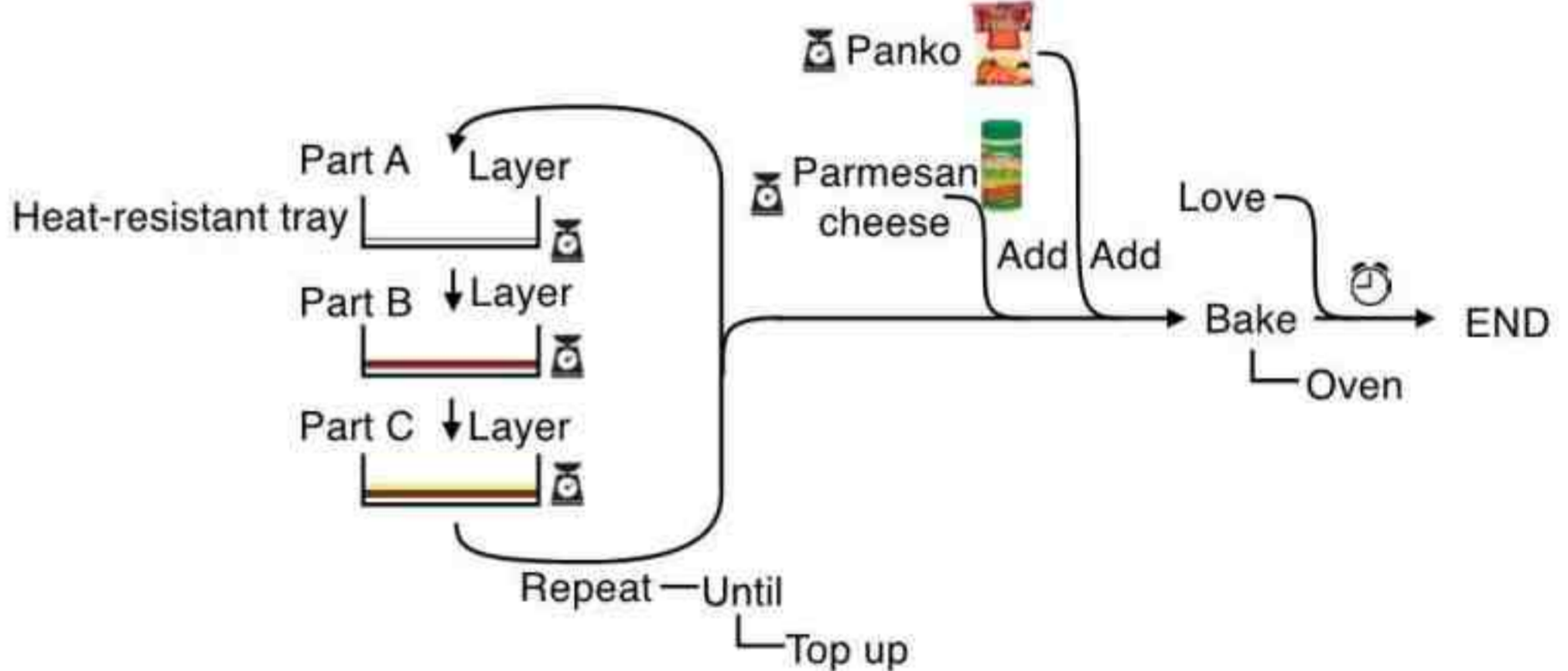
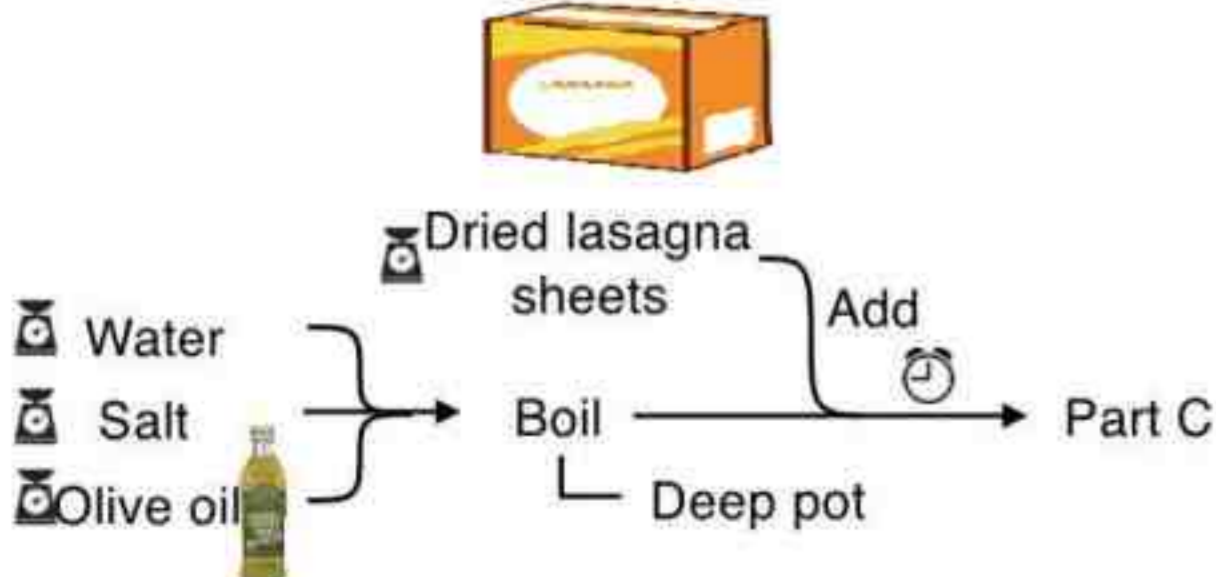
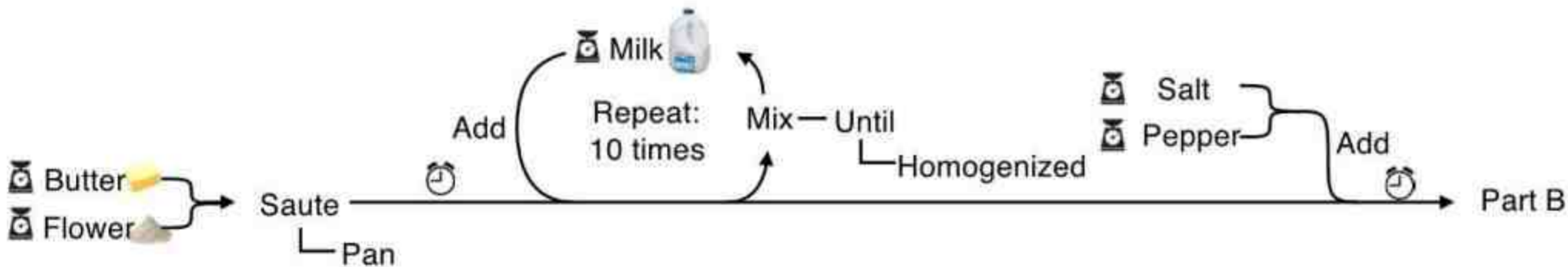
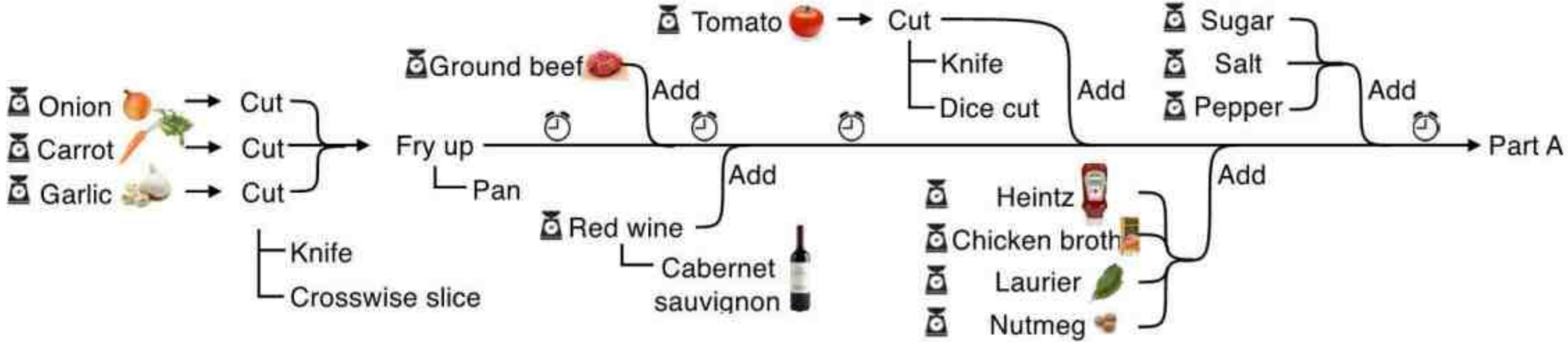
Process knowledge with a semantics



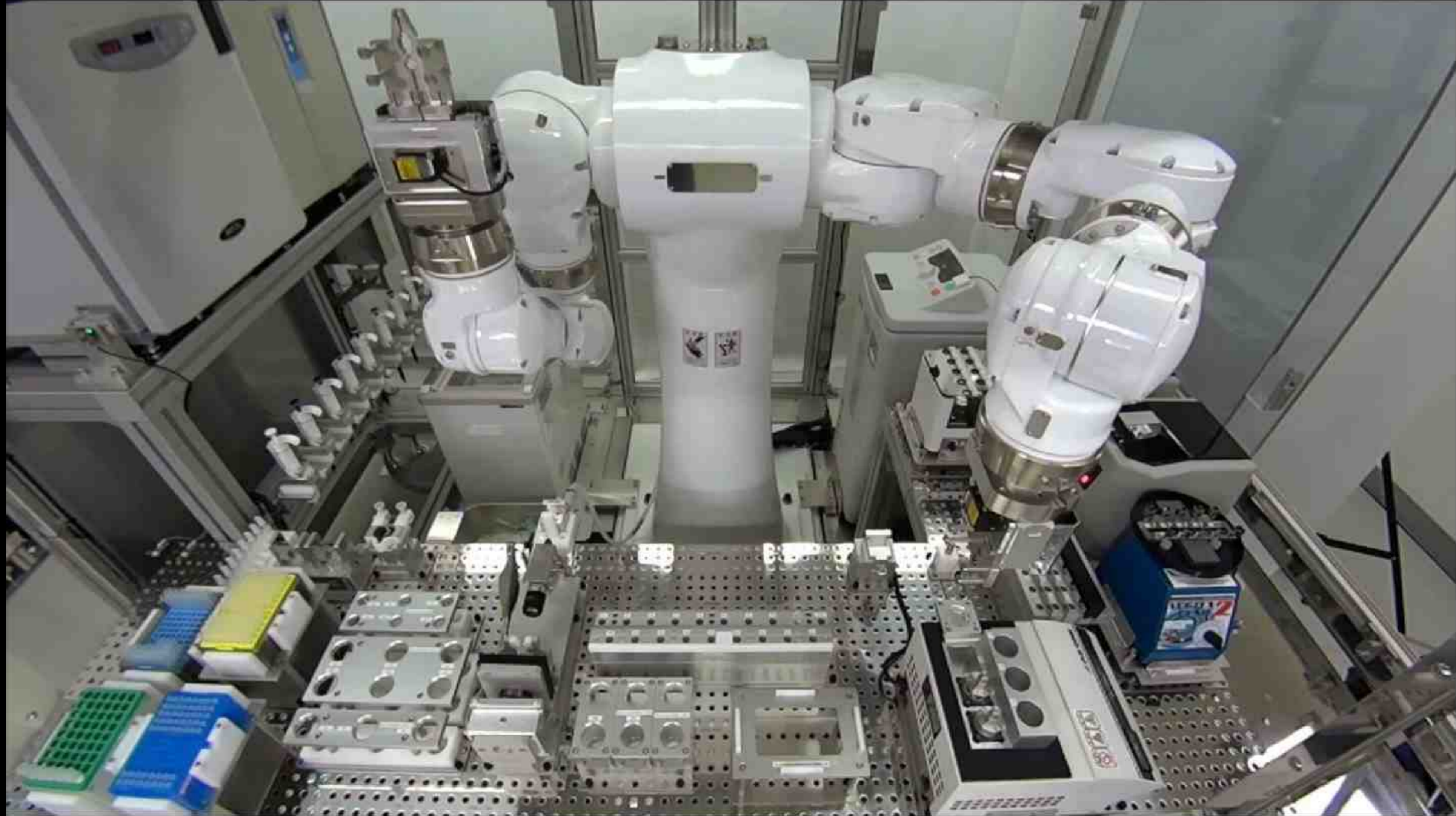
Process knowledge with a semantics



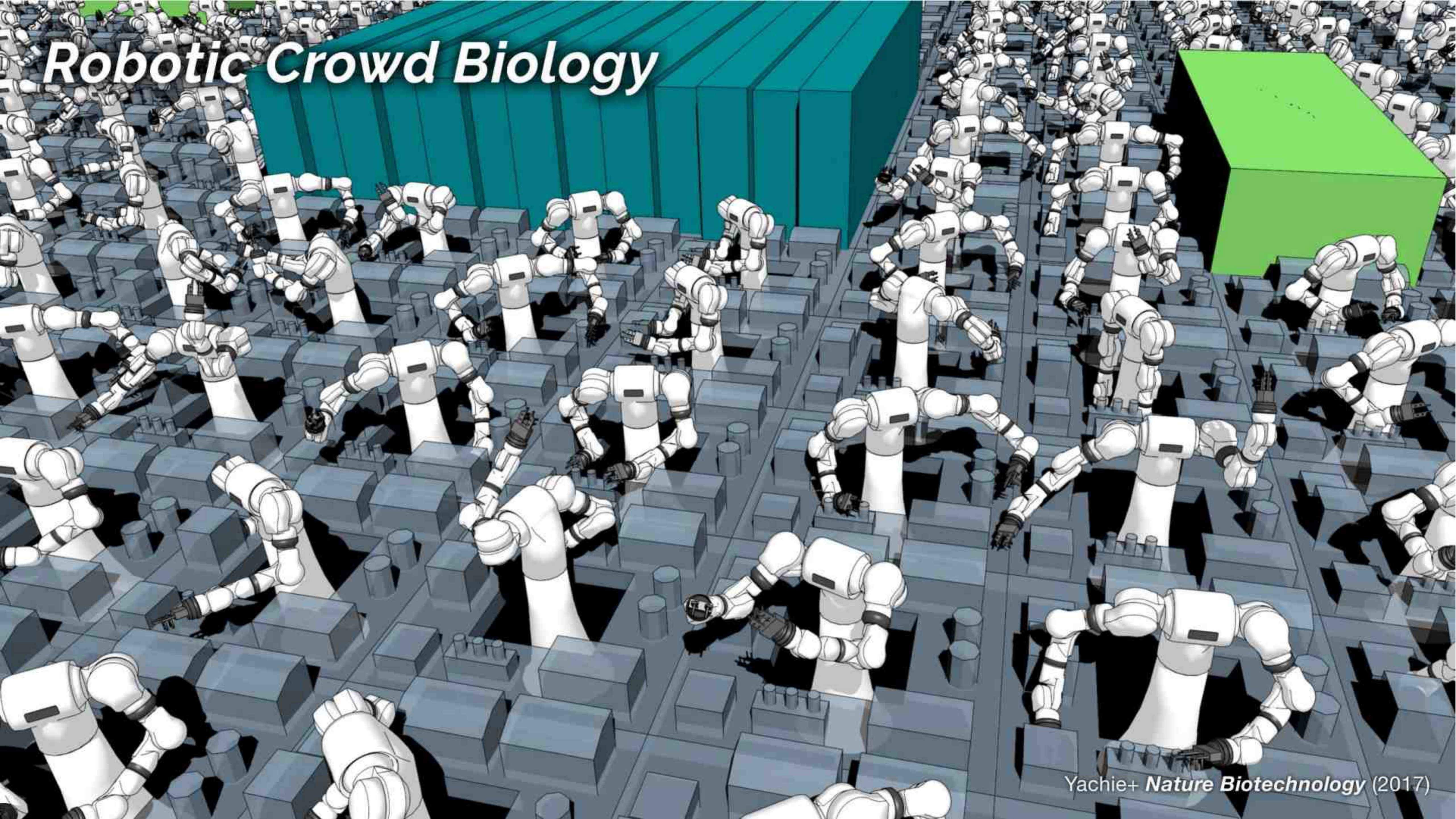
Process knowledge with a semantics

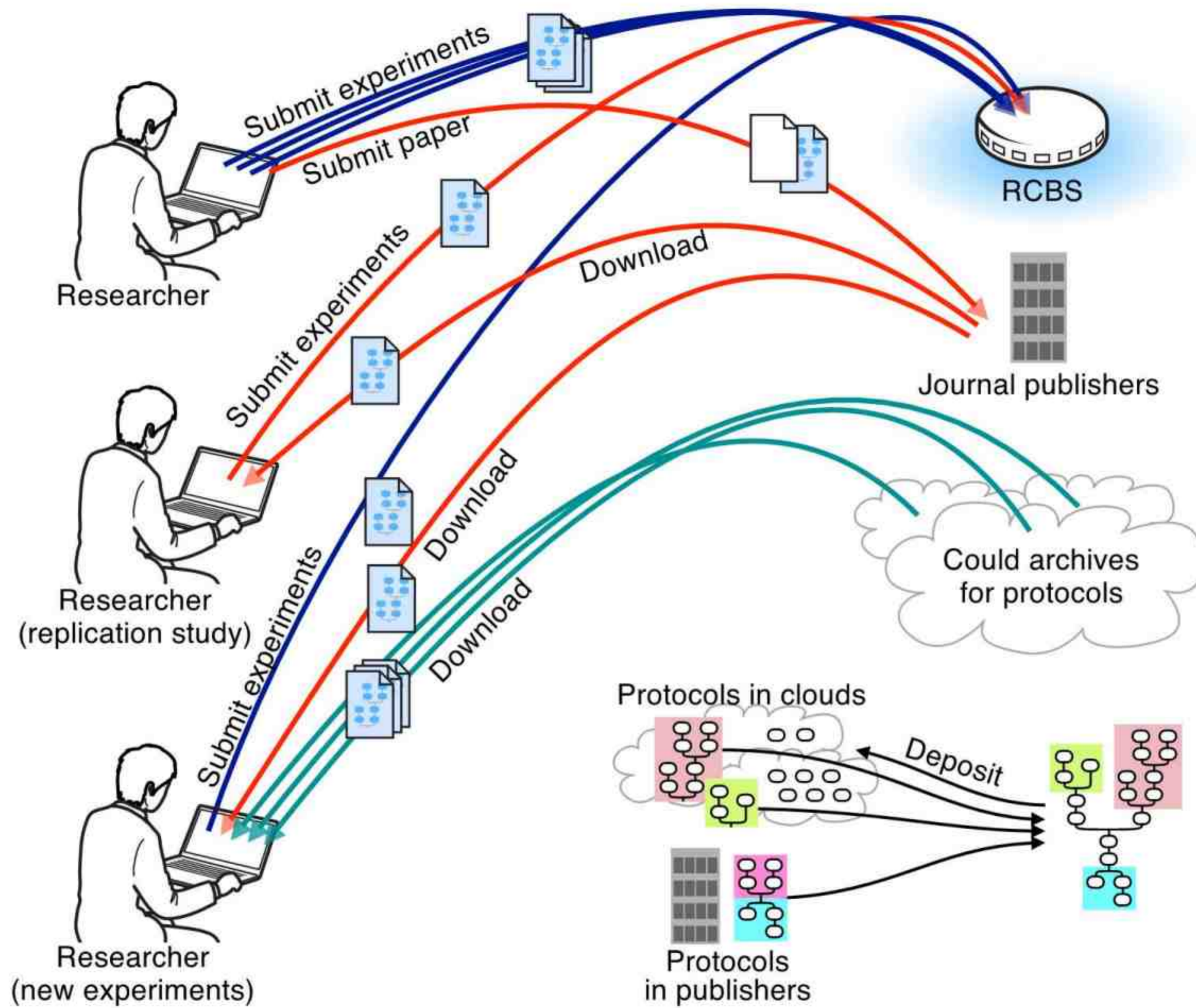


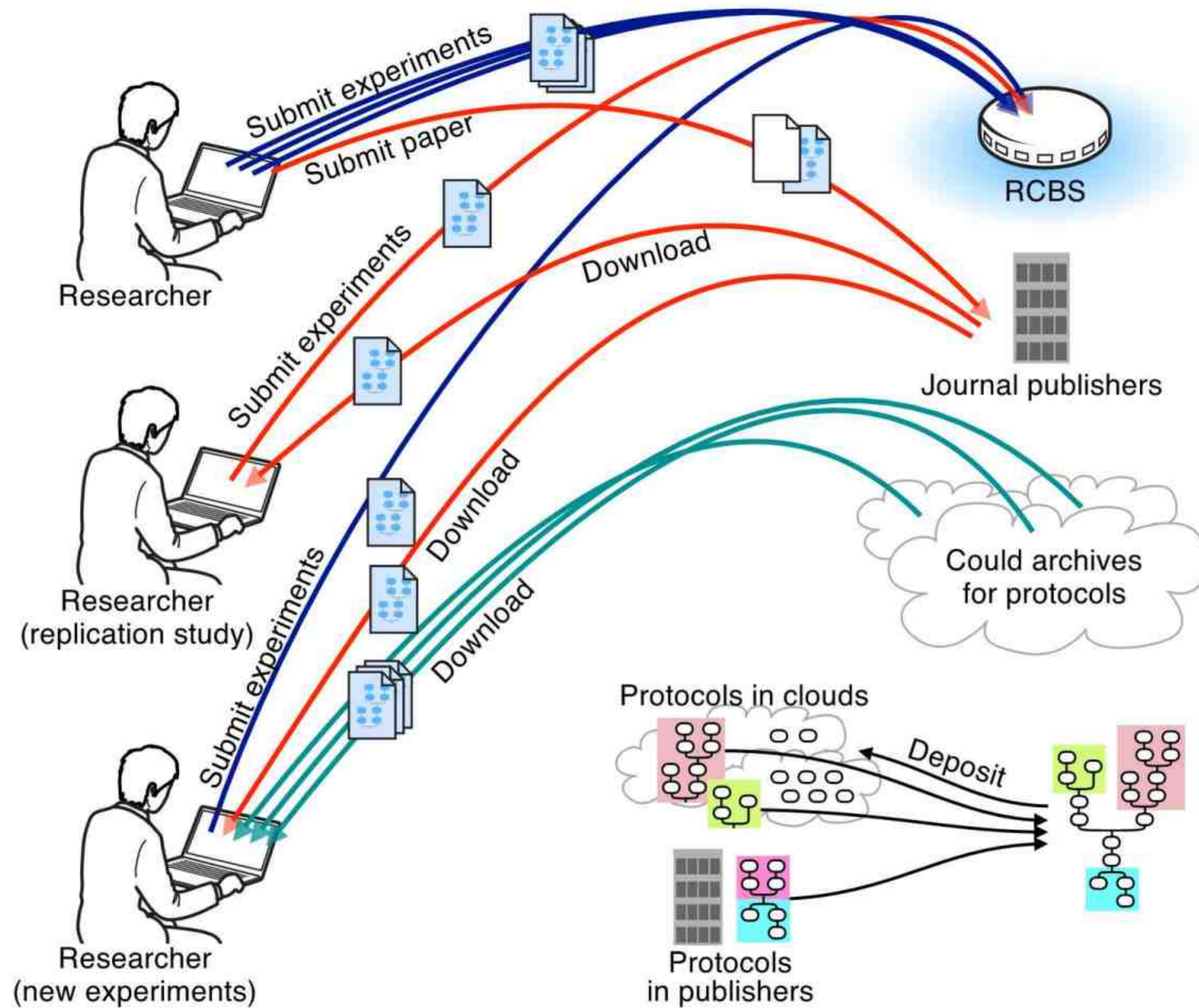
LabDroid Maholo



Robotic Crowd Biology







They “clicked” the world

NETFLIX

amazon

Google

Uber

facebook



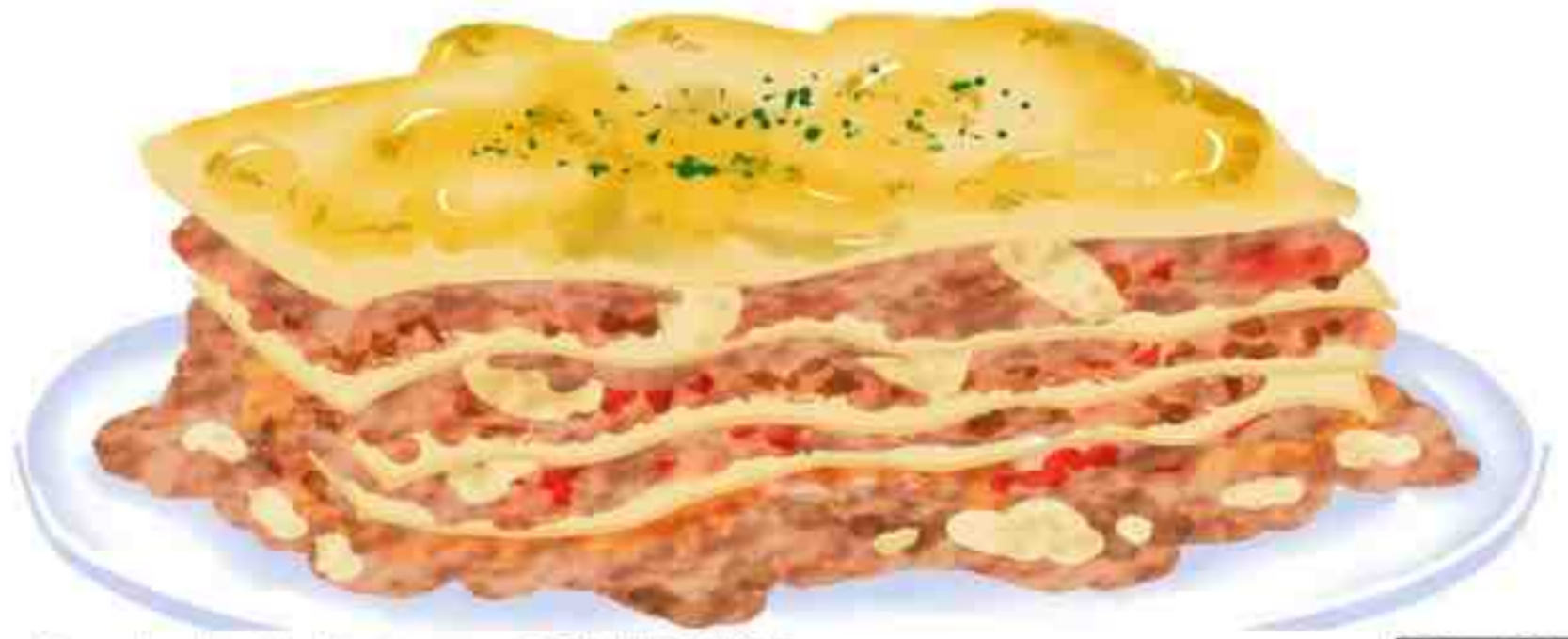
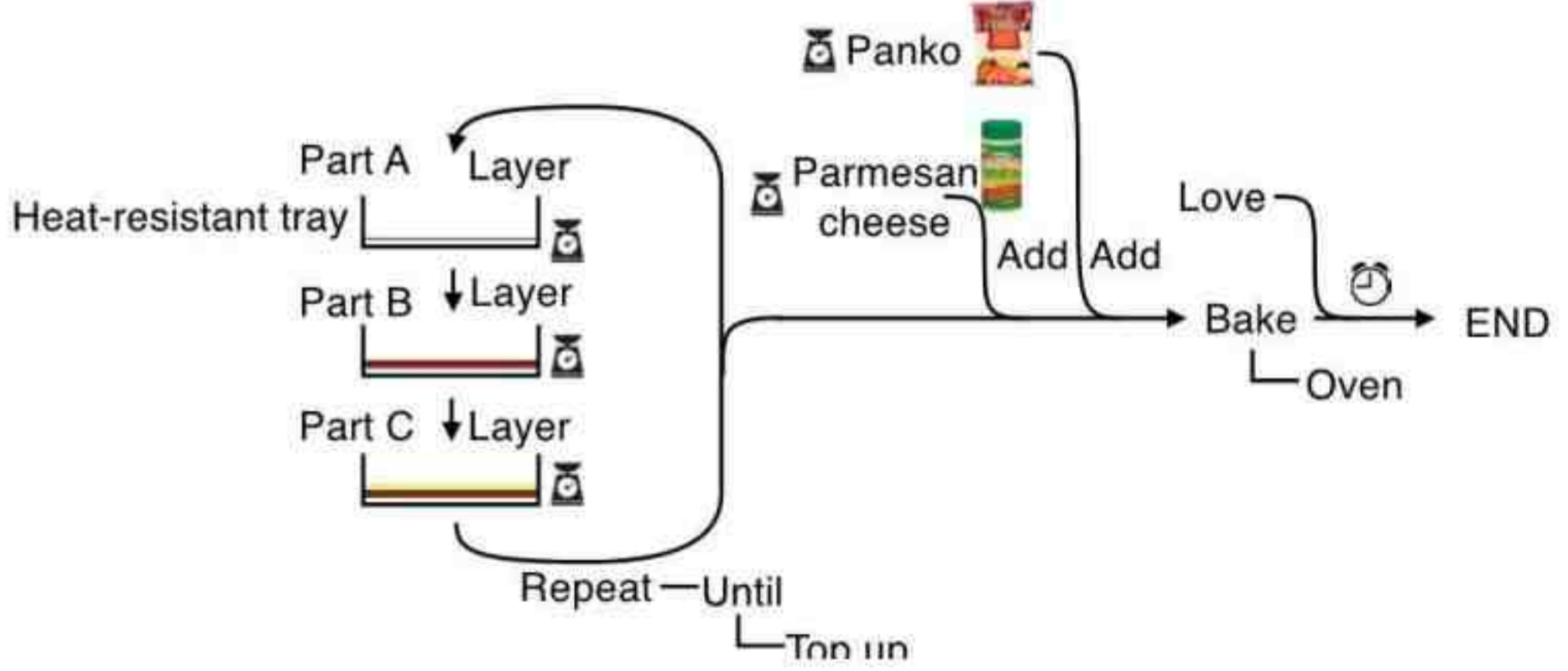
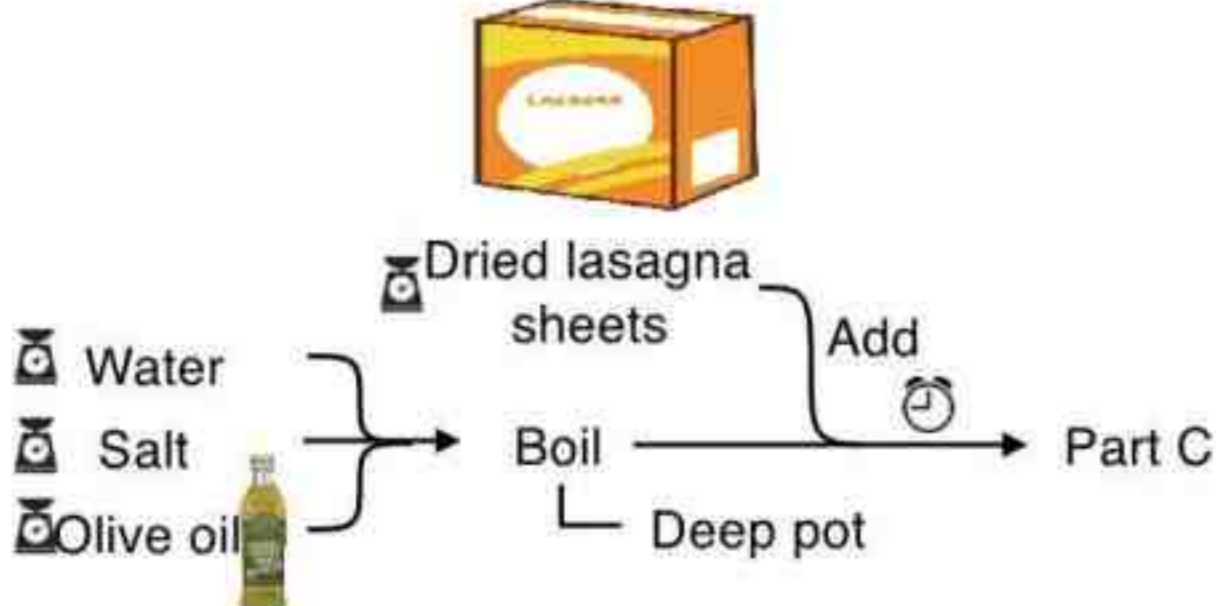
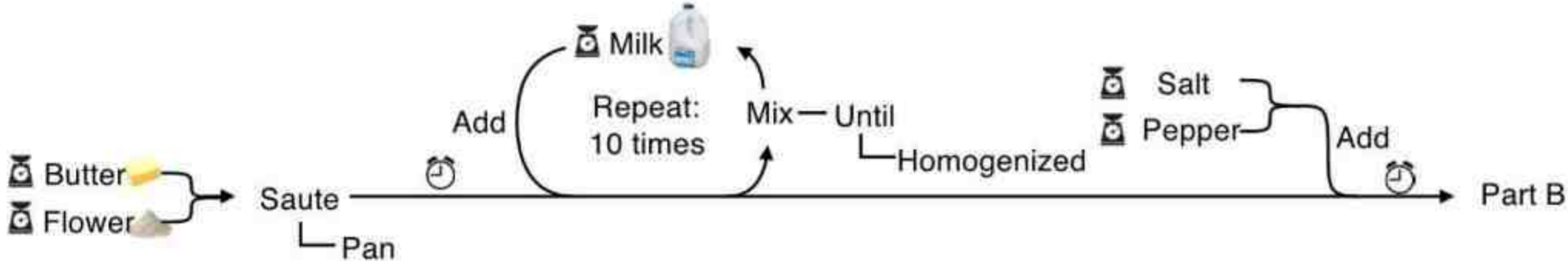
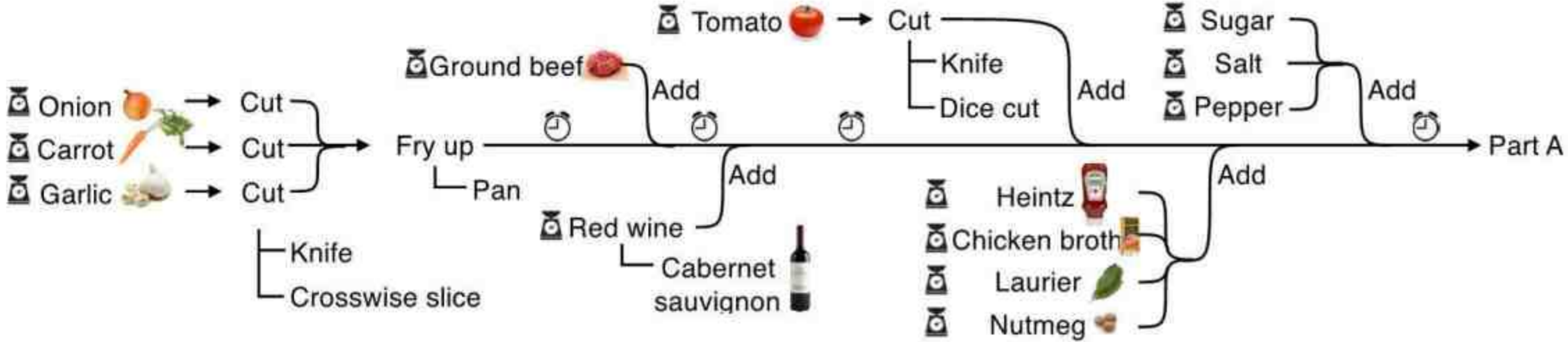
“Click”

“Click”





Process knowledge with a semantics



Google

Object data



Process data

