# Schema Independent Relational Learning

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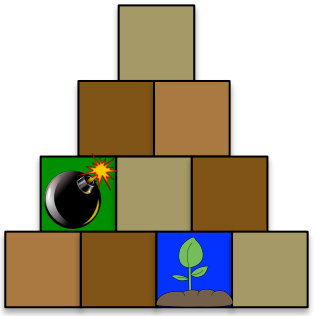
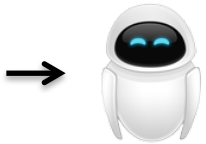
Mission: Find any sign of **life** on Earth.

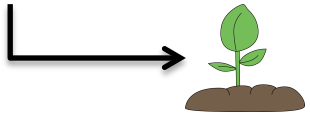


| boxes | | | |
|---|---|---|---|
| box | item | color | desc |
| 1 |  | green | solid |
| 2 |  | blue | wet |

The result of **current** learning algorithms depend on the schema.



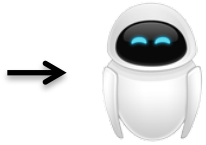
life(x) :- boxes(y,x,z,wet).



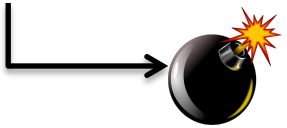
| contains | |
|---|---|
| box | item |
| 1 |  |
| 2 |  |

| color | |
|---|---|
| box | color |
| 1 | green |
| 2 | blue |

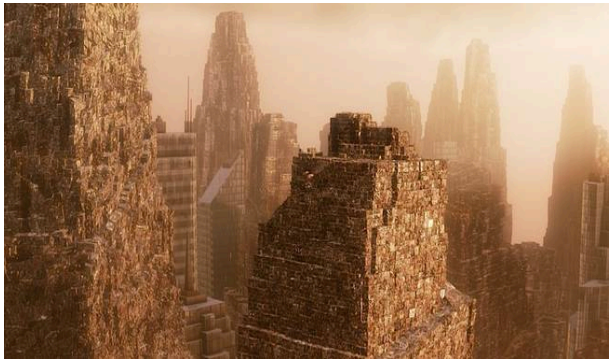
| description | |
|---|---|
| box | desc |
| 1 | solid |
| 2 | wet |



life(x) :- contains(y,x), color(y,green).



People represent same data using different schemas.



We want to learn same accurate answers over all possible schemas for the same information.

life(x) :- boxes(y,x,z,wet).

life(x) :- contains(y,x), color(y,z), description(y,wet).

**Castor**: schema independent, accurate and efficient. It leverages concepts of schema design.