



Conceptual Dependency

- ATRANS – abstract transfer (give)
 - PTRANS – physical transfer (move)
 - PROPEL – application of force (push)
 - MTRANS – mental transfer (tell)
 - MBUILD – construct new information (think)
 - SPEAK – utter a sound (say)
 - ATTEND – focus on a stimulus (watch)
 - MOVE – move a body part (kick)
 - GRASP – grasp an object (clutch)
 - INGEST – ingest something (eat, inject)
 - EXPEL – expel something (spit)
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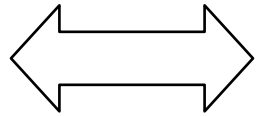


Primitive Things

- PP – Real world objects (people, things)
 - ACT – Real world actions (eat, give)
 - PA – Attributes of objects (size, health)
 - AA – Attributes of actions
 - T – Times
 - LOC – Locations
- 



Connections



- link actors to actions



- dependencies

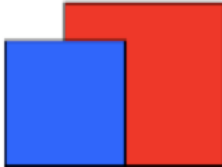


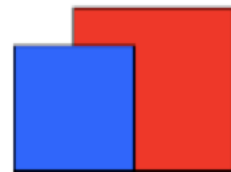
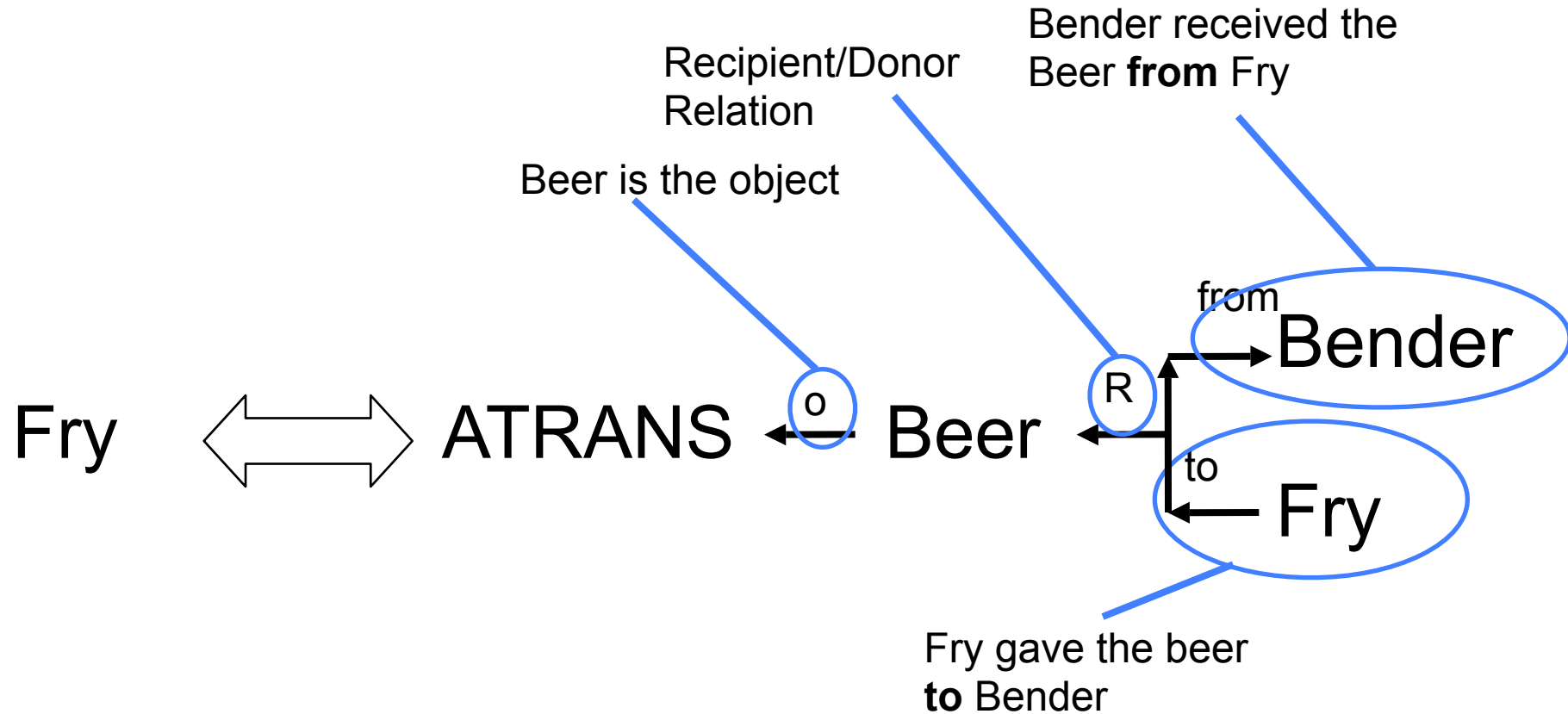
- conditionals





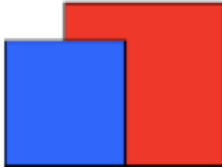
Fry gives Bender the beer.





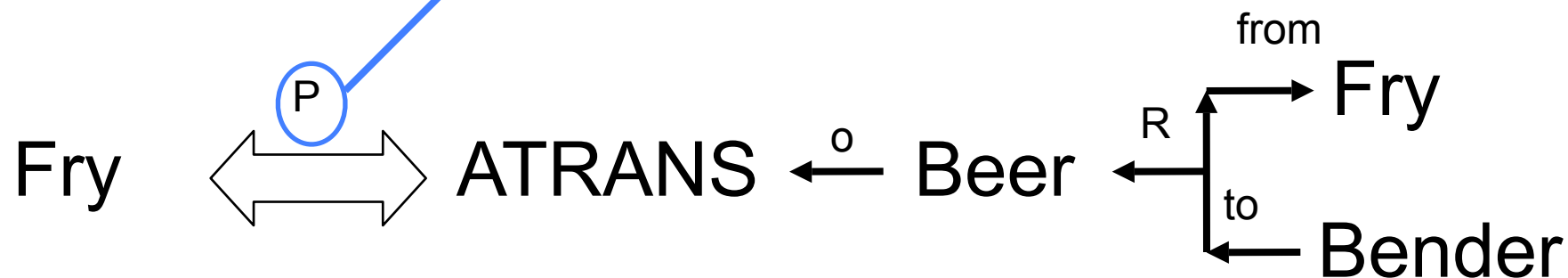


Fry gave Bender the beer.



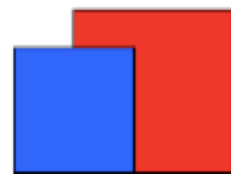


Past tense (P)



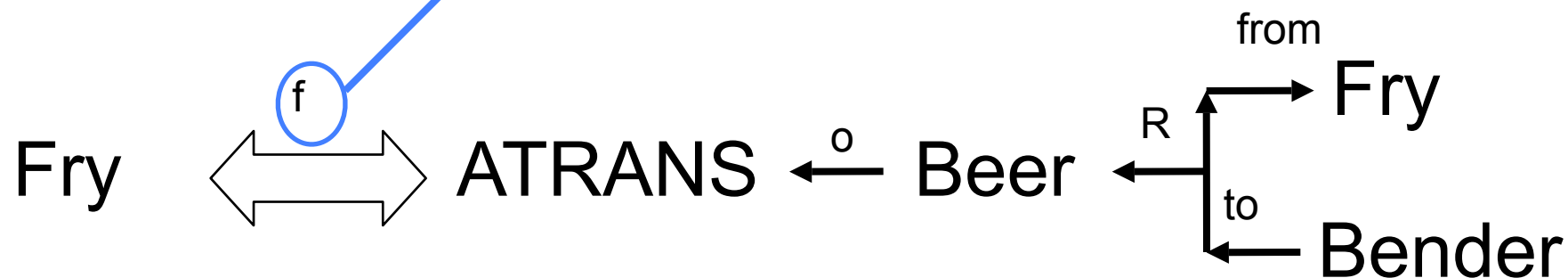


Fry will give Bender the beer.



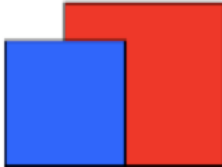


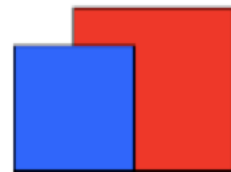
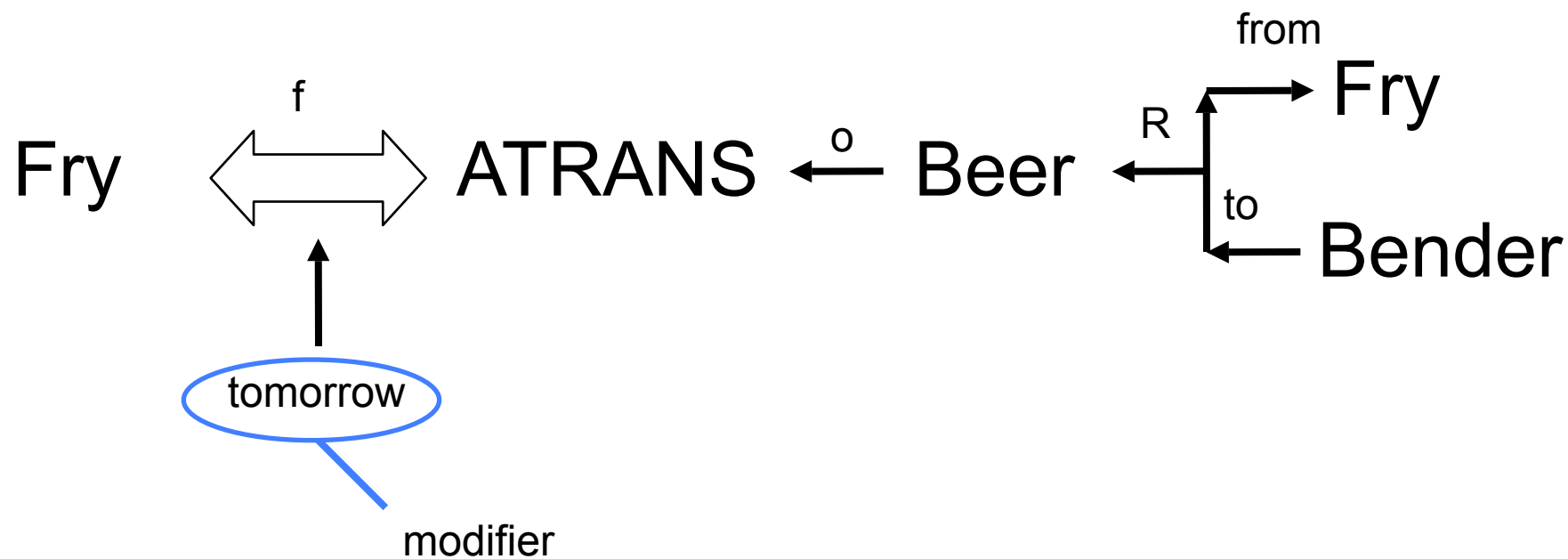
Future tense (f)





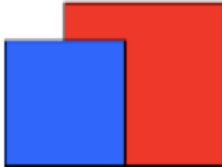
Fry will give Bender the beer
tomorrow.





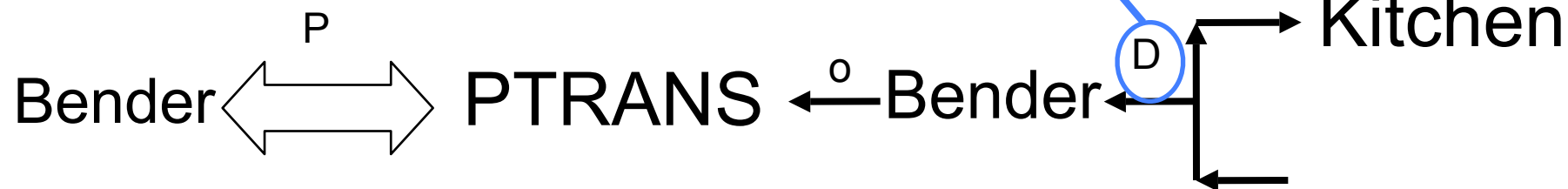


Bender went to the kitchen.



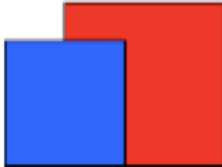


Change in location





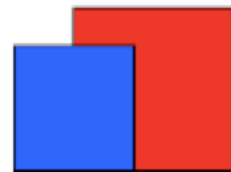
Zoidberg ate a shoe.





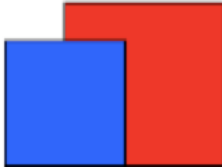
Zoidberg $\overset{P}{\longleftrightarrow}$ INGEST $\overset{o}{\leftarrow}$ shoe

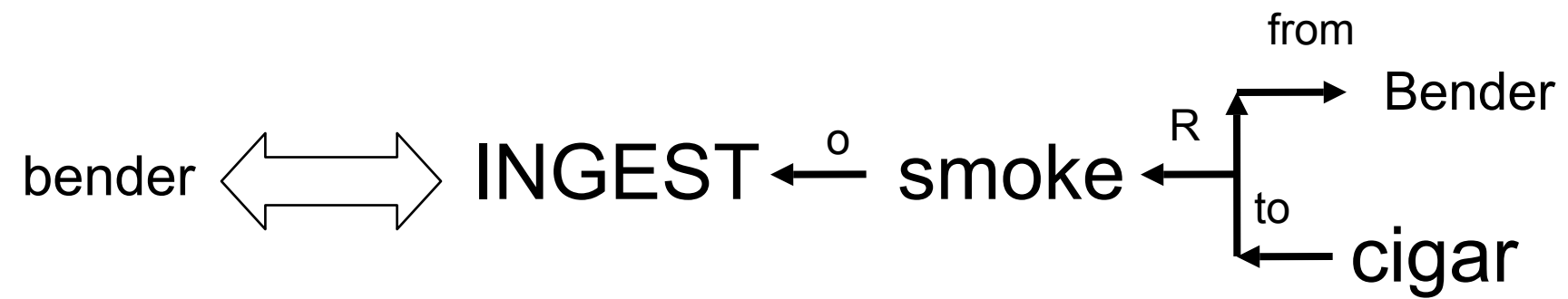
Zoidberg $\overset{P}{\longleftrightarrow}$ INGEST $\overset{o}{\leftarrow}$ shoe $\overset{R}{\leftarrow}$ $\begin{cases} \text{from} & \text{Zoidberg} \\ \text{to} & \text{dumpster} \end{cases}$





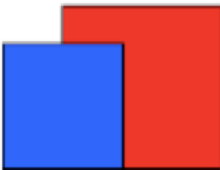
Bender smoked the cigar.

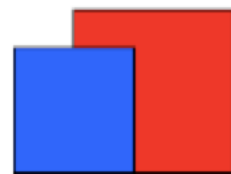
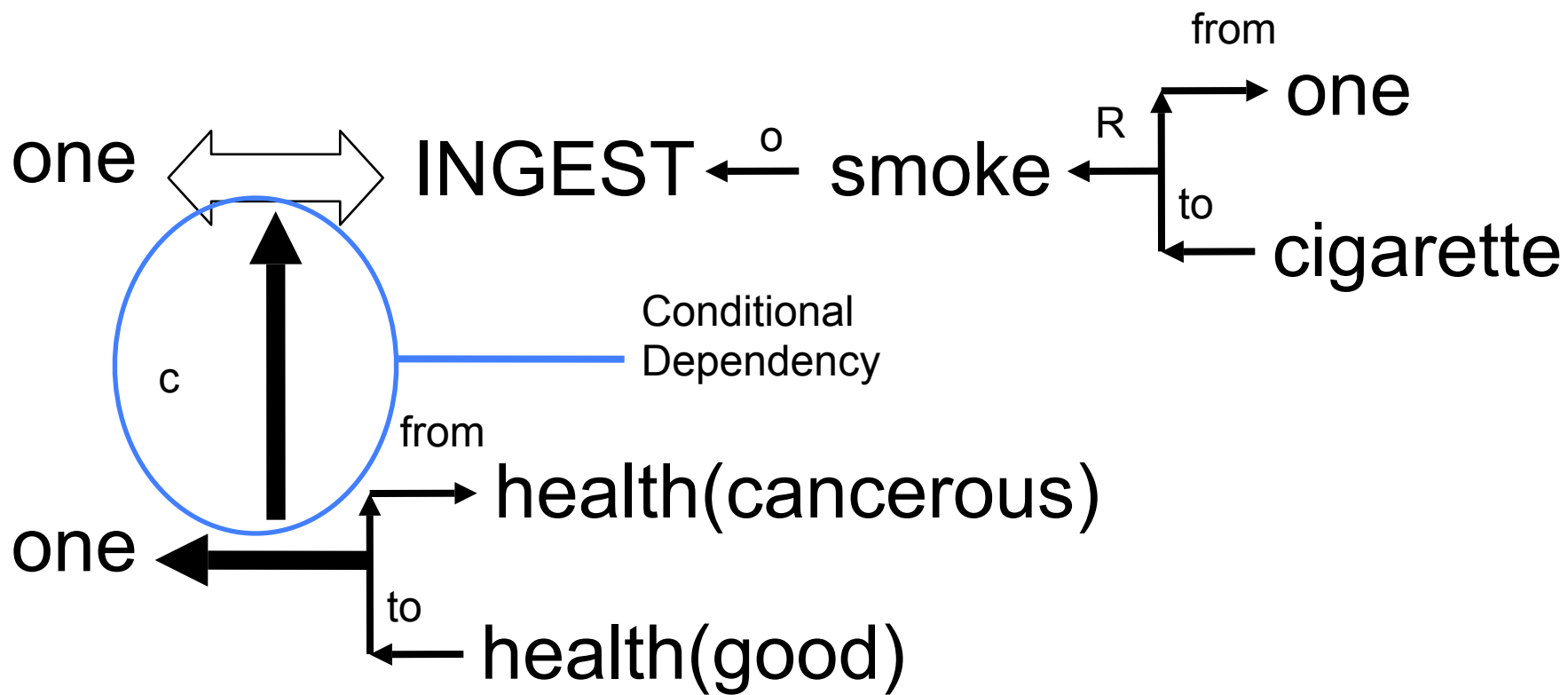






Smoking can give you cancer.

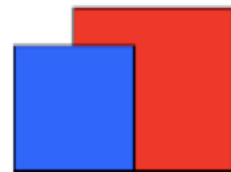
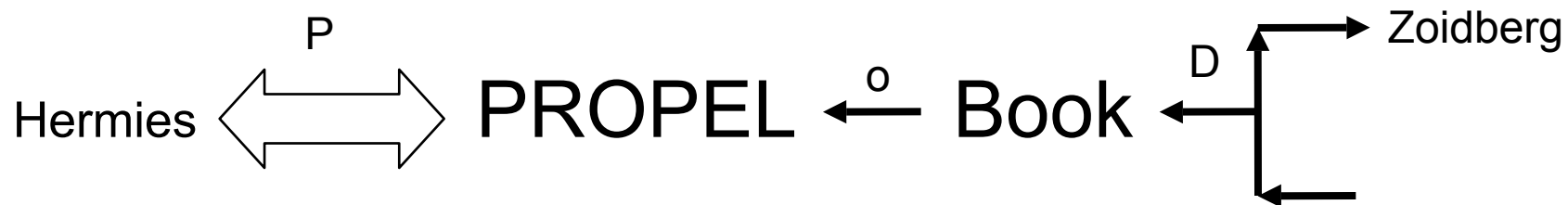


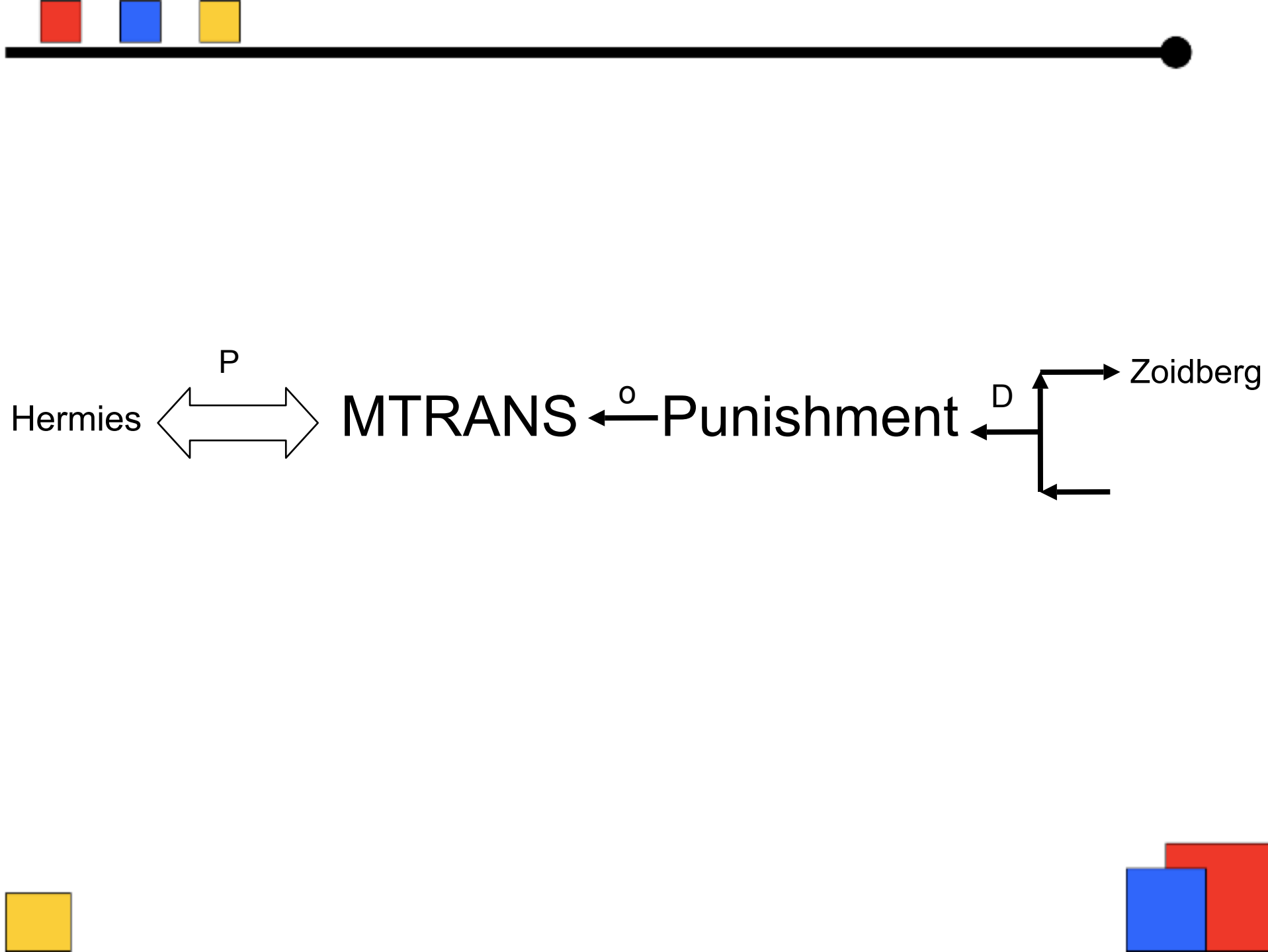




Hermies threw the book at
Zoidberg.









Fry told Leila that he gave
Bender the beer.



