Primitive and Derived Atoms

- A primitive atom is an atom that is defined using facts.
- A derived atom is an atom that is defined using rules.
- Typically, the designer writes axioms for the derived atoms and then expects a user to specify which primitive atoms are true.

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- What if the world changes to make a no longer true?
  What happens to b?

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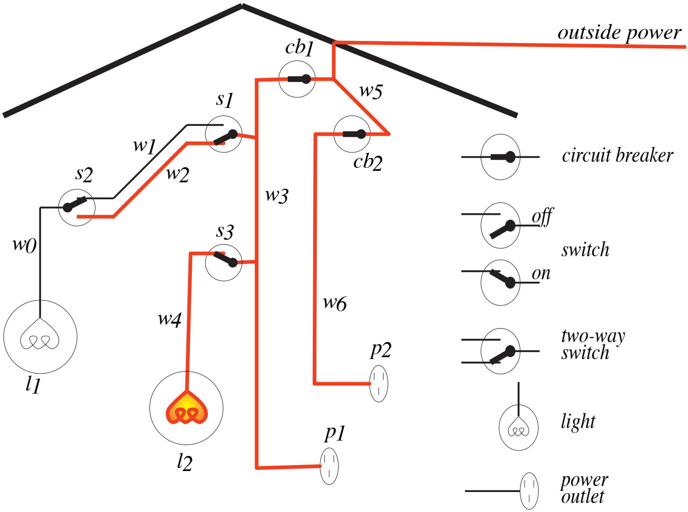
- If the model is manipulated to make an atom true or false, the clauses for that atom are replaced by the atomic fact or are removed.

Electrical Environment



Combining Evidential & Causal Reasoning

$$lit\_l_1 \leftrightarrow (up\_s_1 \leftrightarrow up\_s_2) \quad (1)$$

is logically equivalent to

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- An evidential model

$$up\_s_1 \leftarrow lit\_l_1 \wedge up\_s_2.$$

$$up\_s_1 \leftarrow \sim lit\_l_1 \wedge \sim up\_s_2$$

can be used to answer questions about whether s_1 is up based on the position of s_2 and whether l_1 is lit.
It does not accurately predict the effect of interventions.