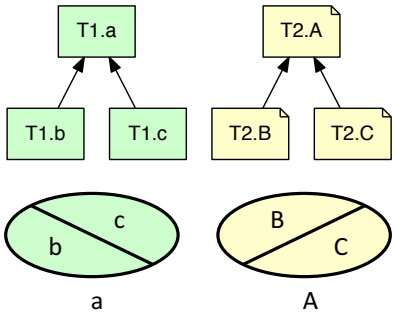
Underspecified TAP? Explore many *possible worlds*!

Want to resolve overlaps? Use *combined concepts* in "*zoom-in view*"

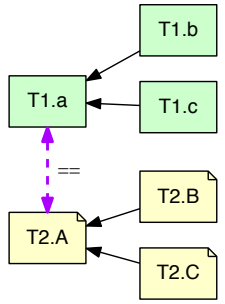
Taxonomy Alignment Problems (TAPs) can have many solutions, i.e., many *possible worlds* {W_1, … W_n}. To resolve *overlaps* in these worlds, employ a "zoom-in view" (i.e., the *combined concept* option "`-e mncb`").

- **Congruent solutions** ("perfect matches", **0 new names**, no overlaps)
- **"In-between" solutions** (common in practice: not every region/possible new names actually exists; here: **1 new name**)
- **"Finest resolution"** (but often least desirable and indication of bugs in the TAP: many overlaps & new names; here: **4 new names**)



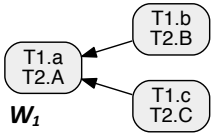
Input Taxonomies

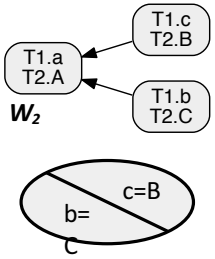
… often are **partitions**: i.e., siblings are **disjoint** and parents **covered** by their children



Underspecified TAP

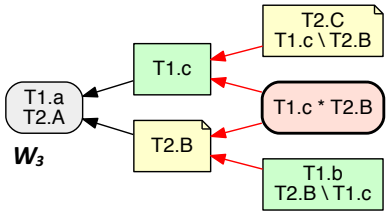
(Taxonomy Alignment Problem)
includes **articulations** between concepts

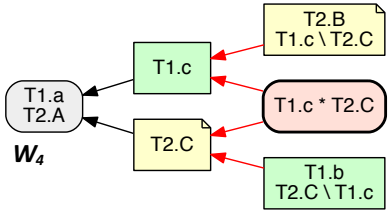




Congruent solutions (2)

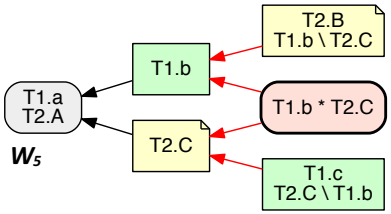
input taxonomies are isomorphic, i.e., **permutations** of each other

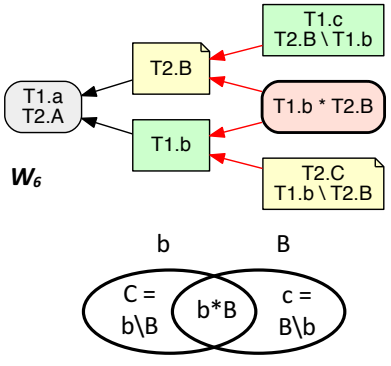


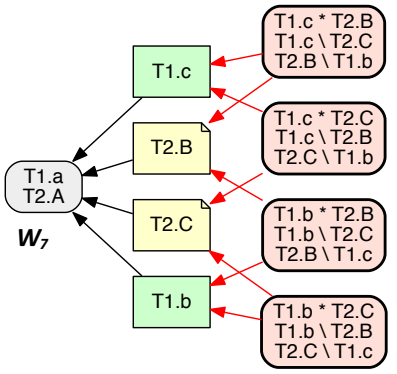


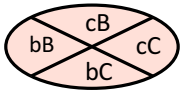
"Intermediate" solutions (4)

sometimes (like here) **solutions** are isomorphic, i.e., permutations of each other; fewer new names









"Finest" solution (1)

most complex PWs, with many new names; rarely the "real" solution(s)