Exercise 4: x.y.z | [x,y].w Interference

[David Soloveichik]

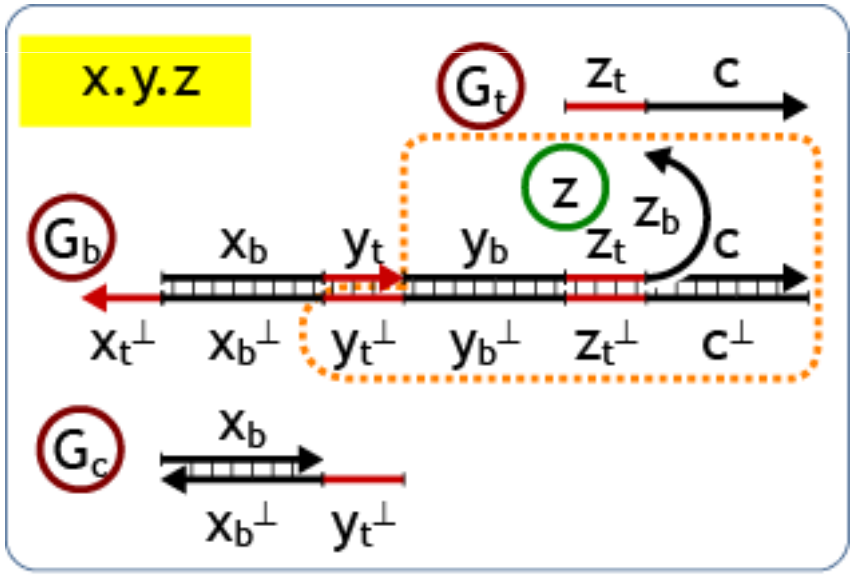
Consider curried gates without the a,b segments (example below): instead of releasing x_b,a and b,y_t segments, they would release x_b,y_t.

But that is exactly the strand r_1 of an [x,y].w gate: the strand that reverts the x input. This definitely causes an interference between x.y.z and [x,y].w.

Find a situation where the presence (x.y.z as below) or absence (x.y.z as in previous slide) of this interference causes different outcomes.

Hint: it changes outcome *probability*.

Note: the a,b segments prevent the interference.



c fresh; x_h,y_h generic
(without the a,b segments)