Over all design: 2 x 2 [+- licensor] & [+- gap]

~~Gap position:~~

1. ~~Subj gap~~
2. ~~Direct object (DO) gap~~
3. ~~Indirect object (IO) gap~~

~~3 x 2 x 2 = 12 conditions~~

Double gap:

1. [-subject gap] & [-object gap]
2. [+subject gap] & [-object gap]
3. [-subject gap] & [+object gap]
4. [+subject gap] & [+object gap]

2 x 2 x 2 x 2 = 16 conditions

Gap distance:

* Distance

1. Short modifier version
2. Medium modifier version
3. Long modifier version

* Gap type:

1. Direct object (DO) gap
2. Indirect object (IO) gap

3 x 2 x 2 x 2 = 24 conditions

Wh-islands:

1. Null-complementizer
2. That-complementizer
3. Wh-complementizer

3 x 2 x 2 = 12 conditions

Adjunct islands:

1. Object - no adjunct
2. Object - adjunct back
3. Object - adjunct front

3 x 2 x 2 = 12 conditions

Complex NP & RC islands + Subject constraints:

\*I know who the painting that depicted \_\_\_\_ fetched a high price at auction.

1. Object
2. that-RC/Object
3. wh-RC/Object
4. Prep/Object
5. Subject
6. that-RC/Subject
7. wh-RC/Subject
8. Prep/Subject

8 x 2 x 2 = 32 conditions

Coordinate structure islands:

Yes coordinate: within-clause coordinate, ATB-coordinate

No coordinate

Yes gap: one gap (okay), gap only for one obj (not okay), both gaps (for ATB only, okay)

No gap

Yes filler

No filler

WC\_coordinate/ATB\_coordiante/no\_coordinate x one\_gap/1st\_obj\_gap/2nd\_obj\_gap/both\_gaps/no\_gap x that/what

No\_coor: 2 x 2 = 4

WC\_coor: 2 x 2 = 4

ATB\_coor: 4 x 2 = 8

4+4+8 = 16 conditions

Left branch islands:

\*I know which John borrowed [ \_\_ book].

Gap position: object, modifier

Yes gap, no gap (modifier + obj)

Filler type: that/which/what

3 (fillers) x 2 (gap/no) x 2 (object gap/mod gap) = 12 conditions

Something kiddo would say?

Surprisal calculation & wh-licensing interaction effect:

([+wh-licensor], [-gap] - [-wh-licensor], [-gap]) - ([+wh-licensor], [+gap] - [-wh-licensor], [+gap])

Larger positive num larger negative num

More experiment metrics introduced in Ozaki et al. 2022:

Flip (a more precise definition of the wh-licensing interaction effect): does the presence/absence of a gap flip the surprisal of a filler?

Calculation on the critical region for local surprises: has to be on the filled gap for -gap positions, not the word after.

Keep the global surprisal measurement.

Maybe include clefting also?