# An 'incremental verification task' for scalar implicatures

### **STRUCTURE**

- exp consists of two training trials, and six experimental trials
  - in <u>training trials</u>, when subjects press a "wrong" button, they will be notified by an alert box
  - training is the same for all subjects
  - experimental trials have two critical trials and four positional controls
  - experimental trials are in randomized order, and each item is randomly drawn from three sentence/picture variants (using different content words and picture elements), with the following exceptions:
    - different variants must be presented for the critical trials;
    - the critical trials must be separated by at least two control trials;

#### **MATERIALS**

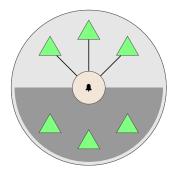
- on the top of each screen display the instruction question: "Is the sentence a good description of the picture?"
- below that present the sentence to be rated (see table below)
- below that show the (partially revealed picture)
  - · sentences and pictures are presented at the same time; sentence is visible throughout
- · below the picture are three buttons with labels "good", "bad", and "more info"
  - the button "more info" should disappear on the last picture in a sequence; here subjects must make a judgement
- The three variants of all picture/sentence pairs differ in the value for X and Y in the sentence frames in the table below:
  - Variant 1: X = scissors (careful: requires plural predicate "are" instead of "is"); Y = circles
  - Variant 2: X = letter; Y = rectangles
  - Variant 3: X = bell; Y = triangles

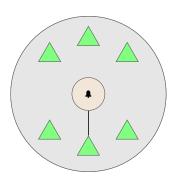
#### **Pictures & Notation**

Pictures contain one object with six connections around it. Pictures with partially revealed connections are referred to by pairs of numbers: (x, y) where

- x is the number of connections known to be present
- y is the number of connections known to be absent.

The following are two examples of (3,0) and (1,5) pictures.





type	sentence	sequence	critical	reading
training 1	The X is not connected to any of the Ys.	(0,0) - (0,2) - (0,3) - (0,6)	true on 4	control
training 2	The X is connected to at most two of the Ys.	(0,0) - (2,0) - (3,0)	false on 3	control
critical	The X is connected to some of the Ys.	(0,0) - (3,0) - (4,0) - (6,0)	true on 2 false on 4	literal pragmatic
control 1	The X is not connected to more than 3 of the Ys.	(0,0) - (2,0) - (3,0) - (3,3)	true on 4	control
control 2	The X is connected to more than half of the Ys.	(0,0) - (0,2) - (0,3) - (1,5)	false on 3	control
control 3	There are no connections from the Ys to the X.	(0,0) - (2,0) - (3,0) - (3,3)	false on 1	control
control 4	There are more than three Ys.	(0,0) - (1,0) - (3,0) - (3,3)	true on 0	control

## **ENCODING OF RESULTS**

• output for each trial a single number n = -4, ..., -1, 1, ..., 4, where n = 3 for instance is a "good" judgement at position 3 and -2 is a "bad" judgement at position 2 in the sequence