Category learning experiment: PLY75
Participant Number: 101
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

If the lines are very thick sort into category A.
If the colours blend together also sort into category A.
If there are lots of thinner black lines then sort into category B.
If the colours are repeated many times then sort into category B.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐The size of the nucleus ☒The shade of the nucleus
☐Features of the cell wall ☒Other - If other please state:
☐Not sure Pattern and width of lines

How sure are you that your system was the best one possible?

Not at all				Certain
0	①1	2	3	4

What percentage of the cells did you consistently misclassify with this strategy?

50%

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

for Category A

• Any slide that is zoomed in, looks like a circle which transcends from black to grey, or looks like a circle with different shades but no distinct features of lines.

Distinguishing between A&B

• A has thicker lines. A's lines are usually vertical, or skew slightly to the left (anti-clockwise).

• B has thin lines and tend to either be almost horizontal or at a large angle away from the vertical in a clockwise motion.

• Usually the thickness of the lines overpowers the angle at which the lines orientate (for the lines that are slightly to the right (clockwise)). But if the lines are vertical or skew to the left then they are almost always A.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

~~thickness of lines~~

☐ The size of the nucleus
☐ Features of the cell wall
☐ Not sure

☑ The shade of the nucleus
☑ Other - If other please state:
Thickness of lines & orientation.

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	3 ✓	4

What percentage of the cells did you consistently misclassify with this strategy?

5 - 10 %

Category learning experiment: PLY75
Participant Number: 103
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

If the lines are thicker you need to refer to ~~stb~~ category A (button C). If the cells are more zoomed, blurred you need to put them in category (A). If the ~~lines~~ cells are more bright, more lines, smaller gaps between lines push the button M.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑The size of the nucleus
☐Features of the cell wall
☐Not sure

☑The shade of the nucleus
☐Other - If other please state:

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	②	3	4

What percentage of the cells did you consistently misclassify with this strategy? 30%

Category learning experiment: PLY75
Participant Number: 104
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

The circles with a majority of light went in A

On what features of the stimulus did you base your decisions? Select as many as appropriate.

□The size of the nucleus

□Features of the cell wall

□Not sure

☑The shade of the nucleus

□Other - If other please state:

How sure are you that your system was the best one possible?

Not at all				Certain
0	(1)	2	3	4

What percentage of the cells did you consistently misclassify with this strategy?

40%.

Category learning experiment: PLY75
Participant Number: 105
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

Place each different circle into either category A or B. you will hear a sound to tell you if you were right or wrong.
you memory to replicate correct outcomes.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐The size of the nucleus ☐Features of the cell wall ☐Not sure	☐The shade of the nucleus ☑Other - If other please state: size of stripes , memory

How sure are you that your system was the best one possible?

Not at all				Certain
0	(1)	2	3	4

What percentage of the cells did you consistently misclassify with this strategy?

?

Category learning experiment: PLY75
Participant Number: 106
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

Press C (category A) for pictures of cells which were pmuch more zoomed in, for example only showing 3-4 lines or less.
Press m (category B) for pictures of cells which had many more in the picture (over 4) and which seemed thinner + longer.

On what features of the stimulus did you base your decisions? Select as many as appropriate. th thiness of the lines, gaps between lines

☐The size of the nucleus ☐Features of the cell wall ☐Not sure	☐The shade of the nucleus ☐Other - If other please state:

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	(2)	3	4

What percentage of the cells did you consistently misclassify with this strategy?
a good 30-40% percentage.

Category learning experiment: PLY75
Participant Number: 107
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

The ones with a faded colour were category A.

Category B cells had strips facing towards the right.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐The size of the nucleus	☑The shade of the nucleus
☐Features of the cell wall	☑Other - If other please state:
☐Not sure	Direction of ~~shape~~ strips of colour

How sure are you that your system was the best one possible?

Not at all				Certain
0	①	2	3	4

What percentage of the cells did you consistently misclassify with this strategy?

10%

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

The cells which have thin dark lines should be catergorised into group B. unless the lines pass a certain angel ①

The zoomed in cell, thick lines are often group A unless past an angel of θ

All cells past ① this angle should catergorised in A.

All cells passed θ should be in B.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

Angle and thickness of lines

☐The size of the nucleus	☑The shade of the nucleus
☑Features of the cell wall	☐Other - If other please state:
☐Not sure	

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	(2)	3	4

What percentage of the cells did you consistently misclassify with this strategy?

15%.

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

The cells with more, thinner (3+) black lines tended to be B, whereas the cells with thicker/blurred lines went to point A. On the 3rd + 4th go the same still applies except the cells w/ 3 lines facing horizontally would belong to group A. Additionally 1 with only 2 lines nearer to the bottom right of the cell belonged in Group B.
It was very hard!

On what features of the stimulus did you base your decisions? Select as many as appropriate. The 'direction' on the lines, How many lines, How blurred the lines seemed.

☑ The size of the nucleus	☑ The shade of the nucleus
☐ Features of the cell wall	☐ Other - If other please state:
☐ Not sure	

How sure are you that your system was the best one possible?

Not at all				Certain
(0)	1	2	3	4

What percentage of the cells did you consistently misclassify with this strategy?

40%

Category learning experiment: PLY75
Participant Number: 110
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

I started my organising the cells based on their colour. I used whether they were "striped" or a gradient as a deciding factor. I also considered which direction the "stripes" were on the cells. I also considered ask how zoomed in the pattern on the cell appeared to be.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐ The size of the nucleus
☑ Features of the cell wall
☐ Not sure

☑ The shade of the nucleus
☐ Other - If other please state:

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	(3)	4

What percentage of the cells did you consistently misclassify with this strategy?

20%

Category learning experiment: PLY75
Participant Number: 111
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

Circles with lots of lines – M.
no/blurry lines – C.

M ↑ / →C

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑Number of bars	☑Orientation of bars
☑Previous stimulus	☐Other - If other please state:
☐Not sure	

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	(3)	4

What percentage of the stimuli did you consistently misclassify with this strategy?

10 %

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

To start with I looked at the 3D effect. Some appeared blurry and more zoomed in = category A. Those that appeared to have a 3D effect category B. Although this system seemed incorrect near end.
I then tried focusing on lines and black space, although this also seemed to fit for some but not all.
Consequently I looked at direction the lines were facing but again this was not consistent. It seemed to be a number of factors rather than one.

On what features of the stimulus did you base your decisions? Select as many as appropriate.
Lines, space, direction, "blurry-ness"

- ☑ Number of bars
- ☐ Previous stimulus
- ☐ Not sure

- ☑ Orientation of bars
- ☑ Other - If other please state:
  blurry or not

How sure are you that your system was the best one possible?

Not at all				Certain
(0)	1	2	3	4

What percentage of the stimuli did you consistently misclassify with this strategy?

60 %

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

1 — First notice the thickness of the darkest line, if it is thin press M, and if it is thick press C.

② - if, the darkest line is in the middle not thick and not thin, and it is more facing to the right side ② press M if it is facing mostly up but slightly towards the right press C

③ Towards the Second break thickness become meaningless, the direction at which the line is facing is more important than the thickness. Unless the shadow is very thick and light then always press C.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐Number of bars	☐Orientation of bars
☑Previous stimulus	☐Other - If other please state:
☐Not sure	

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	3	(4)

What percentage of the stimuli did you consistently misclassify with this strategy?

30%.

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

Category A - put in the pictures where lines were very blurry and hardly recognisable and also where lines slanted from bottom right to top left (\).

Category B - put in pictures where line slants from bottom left to top right (⁄) or in between this. Any really blurry ones put in category A instead.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑Number of bars	☑Orientation of bars
☐Previous stimulus	☑Other - If other please state:
☐Not sure	Blurriness

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	(3)	4

What percentage of the stimuli did you consistently misclassify with this strategy?

10-20% ?

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

The one that has more than 3 bars are Category B.

Less than ~~3~~ 4 bars are usually Category A.

Some bars that have 3 of it and in a parallel way is A, the other ways (directions) are B.

Some of the stimuli should be memorized.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑Number of bars

☑Previous stimulus

☑Not sure

☑Orientation of bars

☐Other - If other please state:

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	③	4

What percentage of the stimuli did you consistently misclassify with this strategy?

30%.

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

① The shading areas. If it is really clear into bars, then put it into category B.

② The orientation of bars. Those bars which point out to the left side all ~~belong~~ belong to Category B.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑Number of bars	☑Orientation of bars
☑Previous stimulus	☐Other - If other please state:
☐Not sure	clour, shade area

How sure are you that your system was the best one possible?

Not at all				Certain
	✓			
0	1	2	3	4

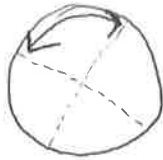**What percentage of the stimuli did you consistently misclassify with this strategy?**

60%.

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

-Pay attention at all times

-try not to confuse yourself because then you may repeatedly put two similar looking stimuli in the incorrect category.

-focus on the angle that the bars are at

On what features of the stimulus did you base your decisions? Select as many as appropriate.

□Number of bars
☑Previous stimulus
□Not sure

☑Orientation of bars
□Other - If other please state:

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	(2)	3	4

What percentage of the stimuli did you consistently misclassify with this strategy?

about ~~80%~~ 20%.

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

Category A

∘ ½, 1, 2 or 2½ black bars

∘ with the bars pointing anywhere between :

Category B

∘ 3+ bars

∘ bars pointing anywhere between:

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑Number of bars	☑Orientation of bars
☐Previous stimulus	☐Other - If other please state:
☐Not sure	

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	③	4

What percentage of the stimuli did you consistently misclassify with this strategy?
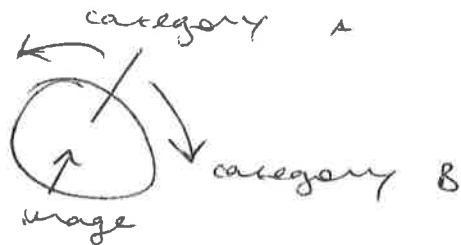
not sure

Category learning experiment: PLY75
Participant Number: 119
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

↟ Category A is the one with less stripes and is usually horizontal.

category B is the one with more stripes and is usually vertical or like this →/

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑ Number of bars   ☑ Orientation of bars
☑ Previous stimulus   ☐ Other - If other please state:
☐ Not sure

How sure are you that your system was the best one possible?

Not at all				Certain
0	(1)	2	3	4

What percentage of the stimuli did you consistently misclassify with this strategy?

20%.

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

stimuli with lines pointing diagonally left group M
stimuli with full lines M
stimuli with only one line (looks like a moon) C
stimuli with lines pointing diagonally right or
straight down C

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑Number of bars
☐Previous stimulus
☐Not sure

☑Orientation of bars
☐Other - If other please state:

How sure are you that your system was the best one possible?

Not at all			Certain
0	(1)	2	3	4

What percentage of the stimuli did you consistently misclassify with this strategy?

20 / ?

Category learning experiment: PLY75
Participant Number: 121
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

The gratings appear basically as white / black striped lines. When the lines are diagonal from bottom left to top right I put them into category B and when from bottom right to top left I put them into category A. Also if the grating appeared close → A ; far = category B

category A

category B

image

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑Number of bars
☐Previous stimulus
☐Not sure

☑Orientation of bars
☐Other - If other please state:

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	3	4

What percentage of the stimuli did you consistently misclassify with this strategy?

15%

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

- when there are numerous lines (more than 3) place it in Category B.
- Put it in category B if the lines are facing right.
- If the lines are vertical, put it in category A
- If the lines are much larger / zoomed in, put it in category A.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑Number of bars ☐Previous stimulus ☐Not sure	☑Orientation of bars ☐Other - If other please state:

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	(3)	4

What percentage of the stimuli did you consistently misclassify with this strategy?

10%

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

Category A = blurry / faded out lines.
Few lines.
Lines facing left to right downwards diagonal e.g.

Category B = Sharper, clearer lines.
Many lines.
Lines facing left to right upwards diagonal e.g.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑Number of bars	☑Orientation of bars
☑Previous stimulus	☐Other - If other please state:
☐Not sure	

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	(3)	4

What percentage of the stimuli did you consistently misclassify with this strategy?

30 %

Category learning experiment: PLY75
Participant Number: 124
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

Category A is determined by spaced out more blurred gradients with fewer black lines lines. Category B is determined by more lines and more defined lines that are less blurred and with shorter Spaces between them. You can view it as images (gradients) in Cat. A as highly zoomed in areas relation of the zoomed out image that is Cat. B.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑ Number of bars
☐ Previous stimulus
☐ Not sure

☐ Orientation of bars
☑ Other - If other please state: blurred /defined.

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	③	4

What percentage of the stimuli did you consistently misclassify with this strategy? 5% ish?

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

If the lines were facing to the right and equal then more likely 'M'. If unequal and random widths 'C'.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐The size of the nucleus   ☑The shade of the nucleus
☐Features of the cell wall   ☐Other - If other please state:
☐Not sure

How sure are you that your system was the best one possible?

Not at all				Certain
(0)	1	2	3	4

What percentage of the cells did you consistently misclassify with this strategy?

50%.

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

Category A:
° Comparing to a clock,
- If the lines are pointing from 11 to 1
- if the lines are pointing after 1, there has to be ~~out~~ 2 or lesser black lines

Category B:
° Comparing to a clock,
- if the lines are pointing after 1 and 3 or more black lines.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐ The size of the nucleus
☐ Features of the cell wall
☐ Not sure

☑ The shade of the nucleus
☑ Other - If other please state: direction

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	③	4

What percentage of the cells did you consistently misclassify with this strategy?

10 - 20% ?

Category learning experiment: PLY75
Participant Number: ~~112~~ 127
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

Look to see if the lines were blurred /clear and what orientation they were. If lines were clear and orientated towards the right they were category S, if the lines were blurry and ~~fo~~ orientated towards the left /just of centre to the right, they were category ~~S~~ A.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐ The size of the nucleus ☐ Features of the cell wall ☐ Not sure	☑ The shade of the nucleus ☑ Other - If other please state: orientation of lines

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	③	4

What percentage of the cells did you consistently misclassify with this strategy?

10 - ~~28~~ 20%

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

Generally Category B is ~~genrae~~ when there are lots of lines (more than 3¾) tilted to the right.

e.g. (image) category A but (image) category B

Category A includes when there a fewer lines and tilted to the left. e.g. (image)

As a rule:

If there are 2 or less lines it is category A.

When there are 3 or more lines it depends on the tilt as to which category it belongs to.
- If it is vertical or left = Category A.
- Tilted to the right: Category B.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐The size of the nucleus	☐The shade of the nucleus
☐Features of the cell wall	☑Other - If other please state: (possible the shade?)
☐Not sure	The lines across.

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	③	4

What percentage of the cells did you consistently misclassify with this strategy?

20%

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

The lines facing diagonally left upwards are usually M and the ones with lines that are almost vertical or zoomed in /blurry are usually category C. For example:
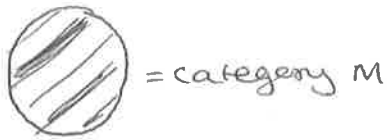
= category M

= category C

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐ The size of the nucleus
☐ Features of the cell wall
☐ Not sure

☑ The shade of the nucleus
☑ Other - If other please state:
  The direction of the lines

How sure are you that your system was the best one possible?

Not at all				Certain
0	(1)	2	3	4

What percentage of the cells did you consistently misclassify with this strategy? 40%

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

If the stripes are narrow and there are many of them, they belong to category B. Also in category B is if the stripes face more horizontal. If ~~you~~ the stripes and shades are in between narrow + thick, see whether they are horizontal or not. If so = category B.

In category A, the shades will be almost just two-tone, so it will go from white to black only in the circle, that's category A.

If the stripes face vertical and are more upright, this is also in category A.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐ The size of the nucleus
☑ Features of the cell wall
☐ Not sure

☑ The shade of the nucleus
☑ Other - If other please state:
which way the stripes were facing.

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	(3)	4

What percentage of the cells did you consistently misclassify with this strategy?

30%

Category learning experiment: PLY75
Participant Number: 204
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

If the picture appears "zoomed in" ie one or two stripes of white - it is category A.

If the white stripes are facing past 1 oclock on a clock then it is category B as long as it does not appear "zoomed in".

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐The size of the nucleus	☐The shade of the nucleus
☐Features of the cell wall	☐Other - If other please state: I did not ever recognise the shape! Ie established "Zoomed in" was category A and the direction of the stripes for the rest
☐Not sure	

How sure are you that your system was the best one possible?

Not at all				Certain
(0)	1	2	3	4

What percentage of the cells did you consistently misclassify with this strategy?

10%

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

- Start guessing
- Listen to the sounds.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐The size of the nucleus	☐The shade of the nucleus
☐Features of the cell wall	☐Other - If other please state:
☑Not sure	

How sure are you that your system was the best one possible?

Not at all				Certain
0	(1)	2	3	4

What percentage of the cells did you consistently misclassify with this strategy?

50%

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

"beams" shown close up (2 in the cell) belong in category A (keyboard c) along with beams that are vertical or that go from the top left of the box to the bottom right. Gradients that are dark at the top left and light in the bottom right are also category A.

Several beams in a more horizontal pattern belong in category B, and there will be several 'beams' visible within the box

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑The size of the nucleus	☑The shade of the nucleus
☐Features of the cell wall	☐Other - If other please state:
☑Not sure	

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	(2)	3	4

What percentage of the cells did you consistently misclassify with this strategy? 20%

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

1. First go through them, try to find a pattern.
2. Then start observe, shade + direction of cell walls.
3. Repeatedly try to remember in which direction they went
4. Notice category A had thicker cell walls + went to the right
5. Notice category B had thinner cell walls + went to the left.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

- ☑ The size of the nucleus
- ☑ Features of the cell wall
- ☐ Not sure
- ☑ The shade of the nucleus
- ☑ Other - If other please state:
  Direction of lines in cell wall.

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	③	4

What percentage of the cells did you consistently misclassify with this strategy?

20%

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

- If the lines are horizontal & more zoomed out — category B
- If lines are more vertical & more zoomed in — category A

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐The size of the nucleus	☐The shade of the nucleus
☐Features of the cell wall	☐Other - If other please state:
☑Not sure	The direction the lines were in.

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	(2)	3	4

What percentage of the cells did you consistently misclassify with this strategy?

20%.

Category learning experiment: PLY75
Participant Number: 209
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the cells exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

The cells with fewer than, or 3 stripes should be categorised in group A and those with more than 6 stripes should be categorised group B. Those with a number of stripes between (ie. 4 to 6) should be categorised, ~~depending on their angle.~~ ~~Those whose stripes are vertical or almost~~ depending on the angle of the stripes. Those whose stripes are vertical or almost vertical should be categorised in group A. Those whose stripes are more horizontal should be categorised in group B.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐The size of the nucleus	☐The shade of the nucleus
☐Features of the cell wall	☐Other - If other please state: # Stripes
☑Not sure	

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	(2)	3	4

What percentage of the cells did you consistently misclassify with this strategy?

Not sure → around 10%?

Category learning experiment: PLY75
Participant Number: 211
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

First to just press whichever buttons then realise that the categories have the are consistently the same the whole way through. So start basing your decisions on orientation any bar goin from ⟨↖/⟩ put in cate (the C button category) then lines from (/↓) (⊖) place in the M button category But from this you then realise that if there are less bars and it appears more zoomed in then place in c button category and more /thinner bars place in m button category

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑ Number of bars
☐ Previous stimulus
☐ Not sure

☑ Orientation of bars
☐ Other - If other please state:

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	③	4

What percentage of the stimuli did you consistently misclassify with this strategy?

35%

(overall wrong 35% but when strategy was in play from the 75% to left only 5-10% wrong

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

there keep guessing the shapes shades, first and remember whether you got the categorization wrong or right for each specific shades. Because eventually the same shades will appear and you start getting the pattern.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐Number of bars   ☑Orientation of bars
☑Previous stimulus   ☑Other - If other please state:
☐Not sure   think thickness of the bars

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	③	4

What percentage of the stimuli did you consistently misclassify with this strategy?

10-20%

Category learning experiment: PLY75
Participant Number: 213
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

If the stimuli appears close up (few bars in the circle) and is vertically oriented or more to the left press "C" to sort the stimuli into category A.

If the stimuli appears further away (more bars) and is more oriented towards the right press "m" to sort the stimuli into category B.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑ Number of bars
☐ Previous stimulus
☐ Not sure

☑ Orientation of bars
☑ Other - If other please state: how close up the picture was.

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	③	4

What percentage of the stimuli did you consistently misclassify with this strategy? 20%

Category learning experiment: PLY75
Participant Number: 215
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

- Focus on the number of bars
- Bars with less than 6 were in category A and bars with over 6 were in category B
- However bars with 6 were either in A or B (from what I did)
- Also if bars were close together they were in A if for not B

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑ Number of bars   ☐ Orientation of bars
☐ Previous stimulus   ☑ Other - If other please state:
☐ Not sure   If one colour was dominent over the other

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	(2)	3	4

What percentage of the stimuli did you consistently misclassify with this strategy?

?

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

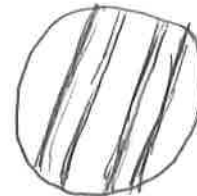The closer the bar is too the screen ie. the bigger, is category B - eg
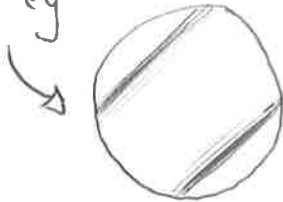
more than three bars = category A eg.
~~Also facing horizontal mean~~

If facing vertical or top part slightly to left or right or '12 o'clock' = category B eg

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑ Number of bars	☑ Orientation of bars
☐ Previous stimulus	☐ Other - If other please state:
☐ Not sure	

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	3	4

What percentage of the stimuli did you consistently misclassify with this strategy?

15% towards the end, more at the beginning

Category learning experiment: PLY75
Participant Number: 217
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

- We trial and error and try and recognise each picture and link it to the right category. You can use the orientation (what direction the bars go) to help but do not rely on this as not all bars heading to the right correspond with the right key

- as you practice try and remember what category each image belongs to, this becomes easier with replication

- do take a break between each block as this will help with alertness.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐Number of bars	☑Orientation of bars
☐Previous stimulus	☐Other - If other please state:
☐Not sure	

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	(2)	3	4

What percentage of the stimuli did you consistently misclassify with this strategy?

It did not tell me but consistently i would guess 30%

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

(1) First look at orientation of the bars. The more the bars were [circle] horizontal, the more likely the image belonged to category B. If the image was more [circle] vertical, the more likely is belonged to category A.

(2) More importantly, if the bars were "very few / very zoomed in", then no matter the orientation, the image belonged to category A. [circle]

(3) If the bars were "very zoomed out / many" then no matter the orientation, the image belonged to category B. [circle]

(*) Use rule (1) for more ambiguous situations

(*) Use rules (2) and (3) when the image is clearly one or the other category.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☒ Number of bars	☒ Orientation of bars
☐ Previous stimulus	☒ Other - If other please state:
☐ Not sure	how "zoomed" in the bars were

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	3	④

What percentage of the stimuli did you consistently misclassify with this strategy?

~~2 4~~ 1 - 2 %

Category learning experiment: PLY75
Participant Number: 220
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

Start of by completely guessing which one goes into which category. After a few Pay attention to how Zoomed in each image seems by comparison to the others you have seen. Attempt putting the more zoomed in images into each category until you hear the noise indicating the correct answer. Continue putting images that more zoomed in into that category and the more zoomed out into the other.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐Number of bars	☐Orientation of bars
☐Previous stimulus	☑Other - If other please state:
☐Not sure	How Zoomed in image was

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	③	4

What percentage of the stimuli did you consistently misclassify with this strategy?

25 %.

Category learning experiment: PLY75
Participant Number: 221
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

Looking at the direction may seem obvious to categorize them, however that is not entirely the way to be able to categorize them correctly. You will see the pattern after few stimulis which are repeated exactly the same. Afterwards you can know which orientations belongs to category A or B.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☐Number of bars ☑Previous stimulus ☐Not sure	☑Orientation of bars ☐Other - If other please state:

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	③	4

What percentage of the stimuli did you consistently misclassify with this strategy?

± 40%

Category learning experiment: PLY75
Participant Number: 222
STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

Category A stimuli consist of bars which slope ~~in a downward~~ diagonally downwards from the left-hand side of the screen ~~to~~ (to the right). ~~Bars~~ Bars should also be sorted into this category if the image is not entirely clear (e.g. bars are not visible / image is completely blurred / ~~too blurry~~ image is zoomed in so direction is not certain.

Conversely, stimuli should be categorised into B if the bars slope upwards from the left hand side of the screen to the right ~~up the~~

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑Number of bars	☑Orientation of bars
☐Previous stimulus	☑Other - If other please state:
☐Not sure	How clear the image was (zoom)

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	③	4

What percentage of the stimuli did you consistently misclassify with this strategy?

< 10%

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

Category A:
- bars orientated vertically or almost vertically.
- fewer bars

Category B:
- bars orientated horizontally
- more bars (greater number).

Sort the bars according to these criteria, if the bars are close up, vertical or few in number then sort them into A. If the bars are horizontal or greater in number then sort into B.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑ Number of bars ☐ Previous stimulus ☐ Not sure	☑ Orientation of bars ☐ Other - If other please state:

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	(3)	4

What percentage of the stimuli did you consistently misclassify with this strategy?

5%

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

Look a the number of black lines and anything between 1-3 is in category A. Also look at where the ~~2~~ last semicircle on the right is pointing toward, anything lower than a ~~straight line~~ normal straight line in the center is in category B.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

~~Number of lines~~ The ~~fill~~ of the ~~our~~ stimuli

- ☒ Number of bars
- ☐ Previous stimulus
- ☐ Not sure

- ☒ Orientation of bars
- ☒ Other - If other please state:
  Combination of number bars and their orientation

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	3	④

What percentage of the stimuli did you consistently misclassify with this strategy?

20%

Category learning experiment: PLY75

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

- Stimuli is in category A if lines are vertical or nearly vertical
- Stimuli is in category B if lines are horizontal
- In addition, stimuli is most likely to be in category A if the picture of lines (stimuli) is blurred or if there are less lines / lines are further apart
- Stimuli for category B needs to be horizontal and in addition, lines are most likely to be closer together / there are more lines

On what features of the stimulus did you base your decisions? Select as many as appropriate.

- ☑ Number of bars
- ☐ Previous stimulus
- ☐ Not sure

- ☑ Orientation of bars
- ☐ Other - If other please state:

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	2	3	(4)

What percentage of the stimuli did you consistently misclassify with this strategy?

2-5% with blocks 2, 3 and 4

Category learning experiment: PLY75

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

2 or 'less definitive' lines = A.
3 or more ~~on~~ fully exposed lines (white on either side) goes into B.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑Number of bars	☐Orientation of bars
☑Previous stimulus	☐Other - If other please state:
☑Not sure	

How sure are you that your system was the best one possible?

Not at all				Certain
(0)	1	2	3	4

What percentage of the stimuli did you consistently misclassify with this strategy?

60%

Category learning experiment: PLY75

Participant Number: ~~111~~ 233

STRATEGY QUESTIONNAIRE

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

If they are any bars that are particularly thick or very close to the equator of the ball press A. If any of the bars are a middle thickness with their orientation going from top right to bottom left press B.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑ Number of bars
☐ Previous stimulus
☐ Not sure

☑ Orientation of bars
☑ Other - If other please state:
   thickness of bars

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	②(2)	3	4

What percentage of the stimuli did you consistently misclassify with this strategy?

30%

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

Any stimuli with only a few black bars (2 or less) goes into category A. Also any stimuli with the bars travelling from NW to SE \ or vertical go into category A.
All other busier looking stimuli with numerous black bars fall under category B.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑Number of bars   ☑Orientation of bars
☐Previous stimulus   ☐Other - If other please state:
☐Not sure

How sure are you that your system was the best one possible?

Not at all				Certain
0	①	2	3	4

What percentage of the stimuli did you consistently misclassify with this strategy?
5%.   NOT MANY TOWARDS THE END BUT IT TOOK ME A WHILE TO THINK OF A STRATEGY. MORE OF A GUESSING GAME AT THE BEGGINNING.

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

the stimuli in category B tend to have more bars, and they are usually angled right, though a few do not follow this pattern. stimuli in category A are sometimes more close-up and there are fewer bars. mostly these are angled right also but a couple are nearly horizontal and are lean to the left a little. also sometimes they appear to follow a pattern in the order they appear in - per category B sometimes there is a stimuli with several bars that lean right and another one appears which always precedes this one which leans in the same direction but has a few more bars.

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑Number of bars	☑Orientation of bars
☐Previous stimulus	☐Other - If other please state:
☐Not sure	

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	②	3	4

What percentage of the stimuli did you consistently misclassify with this strategy?

About 30% ?

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

- The lines tilled straight or to the left are in category B
- The lines tilled right are category A
- Very close up lines are category B

On what features of the stimulus did you base your decisions? Select as many as appropriate.

- ☐ Number of bars
- ☐ Previous stimulus
- ☐ Not sure

- ☑ Orientation of bars
- ☑ Other - If other please state:
  How close up the bar was

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	(2)	3	4

What percentage of the stimuli did you consistently misclassify with this strategy?

30 %

Imagine that another person was asked to sort the stimuli exactly as you did. What instructions would you give them so that they could exactly copy you? Please try to be as precise as possible.

Generally, The more zoomed in ones were category A
If there were a lot of lines it was Category B

Also depends on angle the lines are pointing at:
　　more upright = category A
　　more horizontal = category B

e.g

On what features of the stimulus did you base your decisions? Select as many as appropriate.

☑ Number of bars　　　　　　　　☑ Orientation of bars
☐ Previous stimulus　　　　　　　☐ Other - If other please state:
☐ Not sure

How sure are you that your system was the best one possible?

Not at all				Certain
0	1	(2)	3	4

What percentage of the stimuli did you consistently misclassify with this strategy?

20%