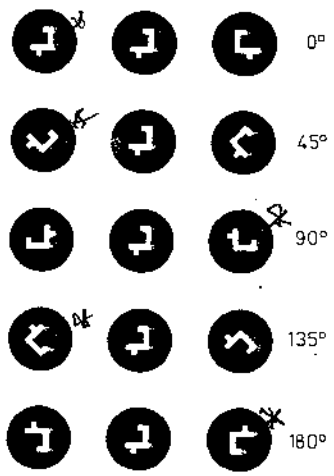


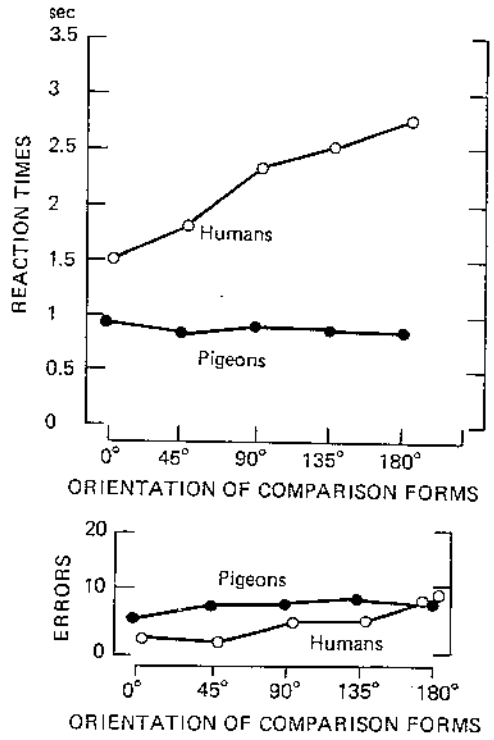
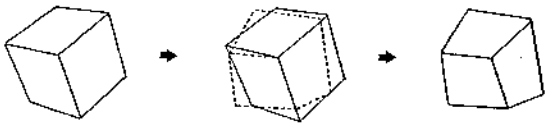


FIG. 2.8. Examples of the stimuli used by Hollard and Delius (1982) in a study of mental rotation (left-hand side). Each row depicts a different test orientation, with the sample presented in the centre column and the two test stimuli in the side columns. In these examples the test stimuli in the left-hand column are rotations of the sample, whereas in the right-hand column they are rotated mirror-reversals of the sample. The right-hand panel shows the reaction times for humans and pigeons on this task for various degrees of rotation of the test stimuli. The percentage of trials on which an error was made by humans and pigeons is shown in the lower portion of this panel (from Delius, 1985)



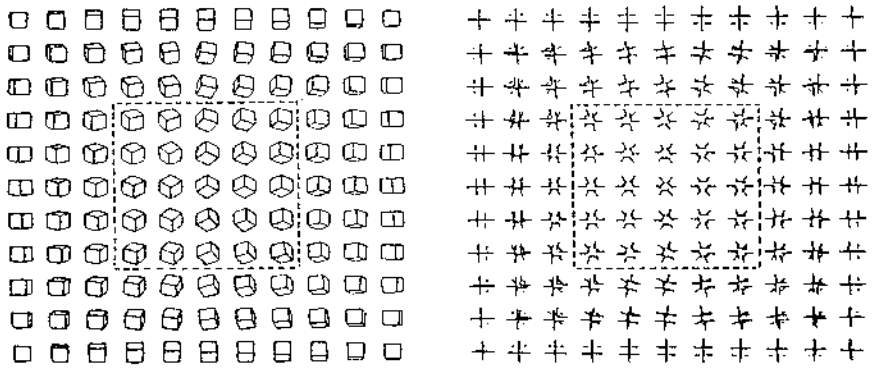


Figure 8.5 (Top) Derivation of a negative pattern by random distortion of a positive pattern. (Bottom left) A sample of 21 out of 9,261 projections of a cube. When pigeons were trained on the centermost projection, they generalized to only those other projections enclosed within the dotted line. (Bottom right) A set of abstract patterns of the same mathematical complexity as the set of cube projections. Pigeons trained on these patterns generalized as widely. Source: Cerella 1977.

EXPERIMENT	SUBJECTS	STIMULUS PAIRS	# of DISTRACTORS
1a.	pigeons	○ Q △ △	0, 2, 4, 7
1b.	"	S $ □ ⊔	"
1c.	"	○ Q △ △	0, 2, 8, 26
1d.	"	○ Q	"
2a.	humans	○ Q △ △	"
2b.	"		"
3.	pigeons	○ Q △ △ S $ □ ⊔	31
4.	humans		31

Figure 1. A summary of the experimental procedures. The square stimuli were 4×4 mm on the display screen; the other stimuli are drawn to scale.

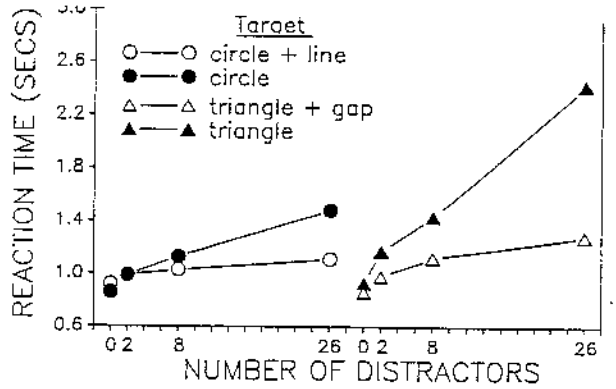


Figure 6. Experiment 2, Condition 2A: Mean reaction times to the target as a function of display size for human subjects run on the location task with circle and triangle pairs.