Table 1. Scores for learning and transfer-of-learning on each of two visual pattern discrimination problems, A and B.

Problem	Trials for:		Percentage of saving in relearning
	Primary learning	Transfer	
	Irish		
A	880	20	98
B	80	0	100
	Norbert I		
A	380	120	68
B	260	40	85
	Norbert II		
A	40	40	0
B	300	320	−7
	Oswald		
A	1500	600	60
B	1700	280	84
	Tat II		
A	340	120	65
B	60	20	67
	Bozo		
A	520	0	100
B	200	20	90
	Gloria		
A	400	340	15
B	360	340	6
	Lulu		
A	1200	1060	12
B	400	420	−5

ed as "correct"—that is, it would yield a reward. The patterns of each pair were equated as to the total areas of black and white surfaces, so that luminous reflectance was balanced. The animals were trained and tested on problem A before going on to problem B. After achieving criterion performance on transfer-testing for the first problem, the animals were given additional trials in order to expose each cerebral hemisphere to equal amounts of direct experience with the problem. By thus assuring equivalent training for the two hemispheres, generalization effects from one problem to the next were thereby balanced for the two brain halves.

The scores of training and transfer-testing for each animal are presented in Table 1. The set of 20 trials in which criterion performance was achieved is excluded; thus, a score of "0" indicates that performance at criterion level or better was attained during the very first set of 20 trials. The percentage saving of learning is derived by dividing the difference between the scores for primary learning and learning on transfer-testing by the score for primary learning, and multiplying by 100. A minus value indicates that a greater number of trials was required for relearning than for primary acquisition. The degree of transfer-of-training is schematically correlated with the type of commissural lesion in Fig. 1.

Complete transection of the forebrain commissures virtually abolished interocular transfer of the pattern discrimination tasks, as seen in animal Lulu. Division of a 1-cm segment of splenium (24 percent of corpus callosum) combined with division of the anterior commissure likewise eliminated interocular transfer in Gloria. On the other hand, the intact splenium alone (Bozo) sustained pattern transfer-of-training at a high level. The anterior commissure, by itself, also supported visual transfer, though at a reduced level (Oswald and Tat II). Other than the splenium and anterior commissure, the remaining sectors of the interhemispheric pathways did not contribute to transfer of pattern discrimination learning (see particularly Gloria). It seems clear, then, that of the fiber bundles of the forebrain commissures, it is splenium and anterior commissure that participate in visual transfer. Of the two, the splenium appears the more potent in information transmission, since in isolation it supported a higher level of transfer of pattern discrimination learning than did the anterior commissure alone.

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References and Notes

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Stereopsis Suppression: Addendum

In correspondence with Lloyd Kaufman, of the Sperry Rand Research Center, who was trying to replicate my recent demonstration of loss of stereoscopic depth perception during the contralateral suppression of one eye's view [*Science* **145**, 1334 (1964)], it appeared that following the published specifications produced stereograms which would display the stereopsis loss only unreliably and within very narrow fixation limits.

Although we have not been able to pinpoint the missing factors, Kaufman and Colin Pitblado (also at Sperry Rand) have devised a somewhat different stereogram which offers a much more reliable replication of the stereopsis-loss phenomenon, and which is far less dependent on maintenance of fixation.

Each eye's view contains an outer circle of 3-degree diameter and an inner circle of 2 degrees, with a horizontal disparity between the inner circles of approximately 10 minutes of visual angle. The area within the 3-degree circle in one view (preferably the dominant eye's view) is filled with vertical stripes, and the corresponding area in the other view is filled with horizontal stripes. If the pattern containing the horizontal stripes is viewed through a filter which reduces the illumination by about 70 percent (a reduction which fails to affect a control stereogram from which both sets of stripes were omitted), that view is suppressed for seconds at a time, and during such periods stereodepth is clearly lost. This held true even for those observers who had failed completely to obtain this loss of stereodepth with attempted reproductions of the original stimuli.

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