TABLE I
Mean Proportions of Oddity Responses

Group	Dimension Tested					
	Shade	Number	Location	Dot	Slope	Total
C	.11	.09	.08	.10	.05	.42
R	.06	.11	.05	.11	.06	.39
O	.21	.26	.02	.09	.10	.68
Average	.13	.15	.05	.10	.07	

first block of the criterion run) which corresponded to each oddity sequence. Table 1 displays the mean proportions obtained by instruction group and oddity sequence (dimension tested). An analysis of variance on these scores revealed significant difference due to instructions ($p < .001$) and dimensions tested ($p < .001$) as well as the significance of the interaction of these terms suggested in Table 1 ($p < .01$). Clearly, a higher degree of oddity type response sequences is shown under oddity instructions. Moreover, this tendency seems to be greatest for the shading and number dimensions. The variable of problems was not significant as a main effect but did interact with instructions ($p < .01$) and dimensions ($p < .05$). These terms seem to reflect a strong tendency for Ss in Group O to give very high scores for shading and number when these were relevant dimensions, and a slight tendency for all groups to give higher scores on the dimension which was relevant. This finding may be interpreted as being caused by the inclusion of the first block of the criterion run and by the small tendency of some Ss to make an error after presumably discovering the solution.

In order to obtain a rough estimate of the actual proportions of oddity hypotheses entertained by Ss, the total number of oddity response sequences was subdivided on the basis of whether or not the corresponding dimension remained at the same level on all three trials of the block. When this condition did obtain (call it LS), it may be that the S was responding to a particular aspect of the stimuli per se rather than to oddity. The other total (LD), when corrected for chance, should give a better estimate of the proportion of oddity hypotheses. The resulting totals (excluding the criterion run) with LD given first were: Group C, 57-33; Group R, 48-39; and Group O, 106-39. These are based on total trial blocks of 308, 298, and 259, respectively. If all of the LS total were spurious and are subtracted from the total trial blocks, the application of the chance factor of 5/27 virtually eliminates all "true" oddity hypotheses from Groups C and R while still yielding about 30% oddity hypotheses in Group O. While these estimates are admittedly gross, they do seem to support the contention that the oddity principle was tried much more often under oddity instructions.

Both the oddity problem and the method of analysis, with refinements, seem well suited to the analysis of hypothesis behavior in humans.

References

- Levine, M. A model of hypothesis behavior in discrimination learning set. *Psychol. Rev.*, 1960, 67, 207-223.
 Levine, M. Mediating processes in humans at the outset of discrimination learning. *Psychol. Rev.*, 1963, 70, 254-277.

Note

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Comment on Burstein by J. W. Moore

Recent reports by Burstein (1965) and Spence & Platt (1965) point up one area where cross-laboratory comparisons of results from human eyelid conditioning can be facilitated. This is in specification of the intensity of an airpuff UCS. Some laboratories customarily measure static air pressure in psi; others prefer measurement with the more sensitive mercury (Hg) manometer. The conversion from psi to mm Hg is $760 \text{ mm Hg} = 14.696 \text{ psi}$, i. e., 1 psi of pressure equals approximately 51 mm Hg in a 1/4 in manometer. We suggest that, as a courtesy, investigators use the conversion formula and specify UCS intensity both ways.

References

- Burstein, K. R. The influence of UCS upon the acquisition of the conditioned eyelid response. *Psychon. Sci.*, 1965, 2, 303-304.
 Spence, K. W. & Platt, J. R. UCS intensity and performance in eyelid conditioning. Technical Report No. 2, Nonr 375 (19), 1965.