

SCIENCE'S COMPASS

perimental research, however, Brannon and Terrace should be congratulated for providing a broad and technically sound basis for exploring these and similar questions.

Philip L. Stocklin

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References and Notes

1. P. L. Stocklin and B. F. Stocklin, *T.-I.-T. (Tower Int. Technomed.) J. Life Sci.* 9, 29 (1979); measurements establishing the existence of such waves were made in the mid-1980s.

Response

In our report, we reasoned that rhesus monkeys used the numerosity of each stimulus to determine its order in a four- or two-response sequence. We showed that monkeys trained to order the numerosities 1 to 4 could extrapolate that rule and order pairs of the novel numerosities 5 through 9 when tested with trial-unique exemplars in unreinforced trials. We concluded that their ability to order numerosities in which they have no experimental history provides evidence that they represent numerosity on an ordinal scale.

Stocklin states that the rhesus monkeys may in fact recognize systematic differences in complexity rather than numerosity per se. He suggests that some variable other than numerosity might vary in complex-

ity and increase monotonically, allowing an alternative basis for ordering the stimuli.

It is impossible for us to refute this possibility entirely. There are an infinite number of alternative dimensions that would each need to be tested empirically. A particular definition for complexity would need to be embraced, and stimuli that dissociated number and complexity would need to be created and tested. We did, however, conduct a post hoc analysis of our data and did not find any performance difference for stimulus sets that had particularly complex elements in the exemplars of the numerosity 1 as compared with the larger numerosities.

Since our report was published, we have conducted the parallel experiment with human adults using the same task and stimuli. We instructed the human subjects to choose the smaller of two numerosity stimuli and to respond as rapidly as possible while completing most of the trials correctly. The results indicated that, although the human subjects' mean accuracy was considerably higher than that of the monkeys, the accuracy and latency of responding for human subjects varied as a function of the numerical disparity between the two stimuli, just as it did for the monkeys. In fact, the reaction time func-

tions were completely overlapping for humans and monkeys, which suggests that humans and monkeys are using a similar or identical numerical comparison process.

Elizabeth M. Brannon

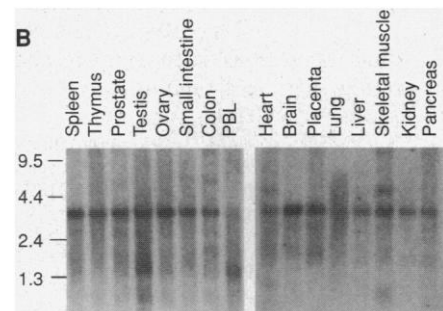
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CORRECTIONS AND CLARIFICATIONS

Figure 1B (p. 544) in the report "Prevention of constitutive TNF receptor 1 signaling by silencer of death domains" by Y. Jiang *et al.* (22 Jan., p. 543) was incorrect. The correct figure appears below.



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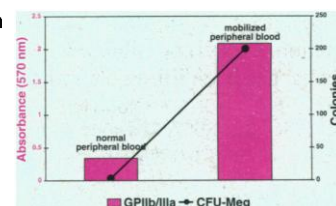
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