After the publication of our original abstract, two reports have appeared on the use of topical anesthetics on the glans penis of rats, resulting in a loss of intromission and apparently incomplete erection. One report (*17*) indicated no loss of sexual arousal; the other (*18*) indicated a decline in arousal as the test proceeded. We have tried a topical anesthetic (5 percent lidocaine ointment, *19*) on one additional intact male and produced, in three tests, disorientation in mounting lasting 26 to 30 minutes, after which the male achieved intromission. Full erection was observed during the period of disorientation. In three control tests with blank ointment, intromission occurred after 5 to 8 minutes. In two additional tests, when a solution of 2 percent tetracaine hydrochloride (*20*) was sprayed on the penis, disorientation and failure to achieve intromission persisted for 37 minutes when the observations were terminated. Experiments such as these are limited by the fact that anesthesia wears off during the course of the test, so that sensory feedback is delayed, not necessarily reduced. Also, the tests in rats were not continued, and a feedback process of the kind found in our cats was not detected.

In summary, long-lasting desensitization of the glans penis causes disorientation in mounting behavior which precludes intromission. This, in turn, causes further decrements in sensory feedback which leads to a pronounced seasonal decline in sexual arousal. In this last aspect our results are in agreement with Beach's theory as stated in the introduction, although the specificity of the sensory mechanism remains unanswered.

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Imagery; Effect of a Concealed Stimulus

Eagle, Wolitsky, and Klein [*Science* **151**, 837 (1966)] showed subjects the black silhouette of a tree containing as part of its outline the shape of a (white) duck. Previous studies of the perception of figure and ground would lead one to expect that a subject could see either the tree-trunk or the duck at any moment in time, but not both. None of the subjects in this experiment reported seeing the duck. Nevertheless, when they were asked to close their eyes and imagine a nature scene immediately after viewing the picture, 69 percent reported duck-related items in their images, as compared with 50 percent (a small but significant difference) of the control subjects, who had been shown a similar tree without a duck outline. The authors conclude that some of the subjects were able to recognize the duck and the tree simultaneously; only one of these perceptions entered awareness, but the other was able to influence the freer activity of imaging.

An alternative explanation for this surprising result is that, when asked to close their eyes and "image," some of the subjects saw a negative afterimage of the black tree, an image consisting in part of a dark duck. Since a weak afterimage would be hard to distinguish from a spontaneous "image," it could be reported as part of the imaged nature scene even without the subject's becoming aware of its connection with the tree he had just seen. This explanation would avoid the authors' conclusion that both sides of a contour can be perceived or registered as figural simultaneously.

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. . . In examining the figures of the two tree stumps, it seems to me that the figure with the duck is characterized by a "roundness," in the configuration of the extended branch and the side of the stump. On the other hand, the control figure is characterized by a roundness which is abruptly terminated, as the eye sweeps through the figure from top center, along the curved branch, to the base of the stump and then straight up. It is reasonable, I suggest, to postulate that this abrupt configuration is such as to induce less imagery of nature than the other more rounded configuration. All the responses which the authors found to be duck-related might also be found to be roundness-related. . . .

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Relative Heart Weight in Porpoises

Ridgway and Johnston [*Science* **151**, 456 (1966)] compare the blood volumes, hemoglobin concentrations, packed cell volumes, and relative heart weights (percent of body weight) in three genera of porpoises. The data can be interpreted as indicating a relation between the relative heart weight (W) and the red cell volume. It might be argued that the relative heart weight is correlated with the ability to supply oxygen. This in turn is related to the red cell volume (if the heart rate, hemoglobin concentration per cell, and oxygen binding per unit of hemoglobin are approximately the same in three genera). The relationship would be of the form:

$$W = V_b \cdot V_p \cdot K, \qquad (1)$$

where V_b is the total blood volume, V_p, the packed cell volume, and K a constant. The results with Ridgway and Johnston's data are shown in Table 1, second column, the blood volume being expressed in milliliters