al space, without Pablo Picasso, *Les Demoiselles d'Avignon* would have remained forever immersed in the infinite sea of creative potentiality (*2*).

To understand the difference between these two dynamical regimes, imagine the space of ideas as a "conceptual space" in which each location represents a particular idea. Similar ideas are represented at neighboring locations. The solutions to a given problem might be concentrated in a few spatial regions ("conceptual basins") separated by thick "walls" of inconsistent (nonsolution) ideas. A usual idea search that requires logical consistency at each step will therefore rarely be able to escape the conceptual basin in which the search has started: It will keep bumping on the "inconsistency walls" that delimit the basin.

The templates are (as Hollenberg alluded to in his letter) similar to cluster algorithms (*3, 4*) that facilitate global, directed (rather than local, random) jumps between different conceptual basins. This is achieved by forcing the concept dynamics to pass at intermediate stages through the "walls" of inconsistent logic. These methods are not suited for problems in which there are no such basins and walls and where the solution is just a unique, singular point (*5*).

We maintain that our findings require a reappraisal of the human relation to creativity: According to the Webster dictionary (*6*), the words "creative" and "mechanical" are antonyms ("creative evolution is evolution that is a creative rather than a mechanical, explicable process"). Yet our human judges systematically gave high creativity grades to the output of a mechanical computer procedure, showing that there is a clash between what humans declaratively define (*6*) as creative and the operative definitions that humans actually apply in practice.

Contrary to the central issue raised by Hollenberg, the similarity we drew between the creativity of structured groups and that of individuals merely exemplified the deficiency of unstructured methods in enhancing creativity. However, this issue was only remotely related to our main focus on human incapability to outperform a template-based, idea-generating computerized routine.

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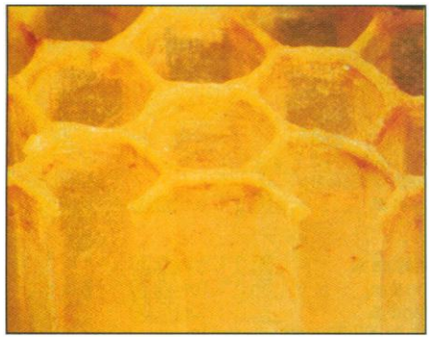
A Comb-Wide Web

Honeybees as master engineers—the proof is in the honeycomb. A mathematical proof by Thomas Hales, reported in Dana Mackenzie's News of the Week article "Proving the perfection of the honeycomb" (27 Aug., p. 1338), shows that honeybees make optimal use of wax and space in the construction of their combs. Such calculations are based on the geometry of the comb cells and hence take into account only the wax in the thin walls of the cells. However, about 30% (in some cases up to 50%) of the total wax mass of a comb is contained in the relatively thick rims found

around the upper edges of each open cell (1). These rims constitute another optimally adapted structure—a superficial "net" that extends over the entire comb and transmits vibrations across its face. Vibrations are produced by a honeybee dancer during her "waggle dance," the famous behavioral phenomenon by which bees inform their nestmates about the location of food sources. We found that these vibrations are carried exclusively by the net spread across the surface of the cells. The resonant properties of the comb as a whole are such that two frequency bands at around 15 hertz and 260 hertz are optimally transmitted and even amplified (*2*). These two frequencies are precisely those produced by the honeybee dancer during the waggle phase of her dance. Honeycombs are not only optimally engineered in terms of minimal wax use for maximum space, they are also perfectly engineered for communication purposes.



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CORRECTIONS AND CLARIFICATIONS

In the Nota Bene "Whirling dervishes" (*Science*'s Compass, 12 Nov., p. 1311), the work described was performed in the laboratory of Nobutaka Hirokawa. The full references are as follows. Reference 1: Y. Okada, S. Nonaka, Y. Tanaka, Y. Saijoh, H. Hamada, N. Hirokawa, *Mol. Cell* **4**, 459 (1999). Reference 2: S. Nonaka, Y. Tanaka, Y. Okada. S. Takeda, A. Harada, Y. Kanai, M. Kido, N. Hirokawa, *Cell* **95**, 829 (1998); S. Takeda, Y. Yonekawa, Y. Tanaka, Y. Okada, S. Nonaka, N. Hirokawa, *J. Cell Biol.* **145**, 825 (1999).

The fourth sentence of the report "Sexual transmission and propagation of SIV and HIV in resting and activated $CD4^+$ T cells" by Z.-Q. Zhang *et al.* (12 Nov., p. 1353) should not have included the words "monoclonal antibody." The sentence should have read as follows: "We inoculated 14 rhesus monkeys (*Macaca mulatta*) intravaginally with uncloned simian immunodeficiency virus (SIV) mac251, a dual tropic strain that replicates in cultured Mϕs or T cell lines (*12, 13*)."

In the News of the Week article "First glimpse of a cosmic funnel" by Mark Sincell (29 Oct., p. 887), the high-resolution image of galaxy M87 was not obtained solely by the Very Long Baseline Array (VLBA), a telescope consisting of 10, not 16, electronically linked radio dishes. The image was obtained with VLBA and six other such telescopes on several continents that performed Very Long Baseline Interferometry (VLBI) together.

In Table 1 of the report "Four evolutionary strata on the human X chromosome" by Bruce T. Lahn and David C. Page (29 Oct., p. 964), in the column labeled "Protein divergence (%)," the entry for the gene pair *RPS4X/Y* should have been 8, not 18.

In the News of the Week article "Scientists strike back against creationism" by Bernice Wuethrich (22 Oct., p. 659), reference to the decision by the Kansas State Board of Education in the second paragraph should have read "...new statewide education standards that remove key aspects of evolutionary theory from curriculum requirements (*Science*, 20 August, p. 1186)."

In the This Week in *Science* item "Out of Asia, too" (15 Oct. , p. 375), the age stated for the middle Eocene should have been 40 to 45 million years ago.

In note 7 of the report "Precisely localized LTD in the neocortex revealed by infrared-guided laser stimulation" by H.-U. Dodt *et al.* (1 Oct., p. 110), the Web address should have read www.sciencemag.org/feature/data/1042873.shl

In the Random Samples item "Requiem for the Mozart effect?" (6 Aug., p. 827), Lois Hetland was quoted as saying that 26 of 27 studies on the "Mozart effect" she analyzed had demonstrated a positive effect. She has since amended that number to 21 of 27.

In Rush Holt's Editorial "A responsible energy future" (*Science*'s Compass, 30 July, p. 662), the word "decade" in the first sentence of the fourth paragraph should have read "decades."

In the Random Samples item "A man of science" (23 April, p. 583), Samuel F. B. Morse should not have been listed as one of Benjamin Franklin's "intellectual companions." Morse was born in 1791, a year after Franklin died.