and foremost, it is essential to appreciate the fundamental differences between "professional scientists" and physician-scientists, not only in terms of training and responsibilities, but in terms of the balance of research carried out by each group. For example, the vast majority of physician-scientists have significant clinical responsibilities *in addition* to teaching and administrative roles, each of which is an integral part of academics. Further, although "professional scientists" are indeed making substantial contributions to biomedical research, they constitute a distinct minority of those performing disease-oriented research. The majority of "professional scientists" ask important basic research questions, but rarely translate this work to clinical situations. Assuredly, without a sound understanding of clinical issues (that is, clinical training), how does one ask the appropriate questions? Until we all appreciate these issues, misunderstanding about physician-scientists will continue.

Notwithstanding, this discourse raises a number of central issues regarding the role of the physician-scientist. Perhaps the most critical is the following: Is the physician-scientist template essential, or even important, for biomedical research? If we look at past history, major advances in understanding the pathogenesis of disease as well as implementation of therapies targeted at specific diseases have stemmed in large part from disease-oriented research performed by physician-scientists. It would be highly desirable to develop meaningful partnerships among all types of investigators, including physician-scientists, basic scientists, and clinicians; currently, however, because of the very nature of the infrastructure of biomedical research, this rarely occurs. Once and for all, the leadership in science, academics, and the biomedical research community should address the question of whether the physician-scientist template is one worth preserving. If it is, then it is time to invest. If it is not, then we will carry on with Darwinian evolution in biomedical research.

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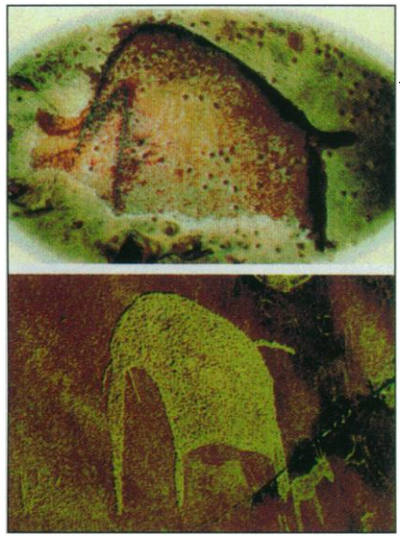
The "Proboscidian Concept"

The article "Restorers reveal 28,000-year-old artwork" by Michael Balter (News Focus, 19 Mar, p. 1835) points to the discovery of new cave paintings in the Grande Grotte at Arcy-sur-Cure, Burgundy, France. One of the presumably Gravettian paintings found in 1997 is a remarkable red-ochre–based mammoth (*1*). C. and D. Montchamp have since photographed an amazing engraved elephant executed by a San artist in the northwestern Namibian desert. The stylistic similarities between the Gravettian painting and the San engraving are quite astonishing (Fig. 1). Both have a hyperbolic dorsal line which lacks the cervico-dorsal disruption typical of mammoths and includes the upper tracing of a rigid, straight, sharp-pointed trunk, a pair of short tusks, a short, straight, horizontal tail, and a bulky body as tall as it is long.

They also differ from the pictures of the ventral-arched mammoths in several caves in southwestern France, which could be culturally related (*2*). While the resemblance is irrelevant to either cultural affinities or chronological proximity, it nonetheless indicates that the Arcy and San artists were capable of similar mental projections of the "proboscidian concept." Despite the differences in technique and surface, and the considerable spatial and temporal distance between them, the two representations obey very similar stylistic conven-



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Stylistic conventions and recurrence of similarity. Mammoth from Arcy (top). Elephant from Namib (bottom) [color contrast and orientation changed to facilitate comparison].

tions, while illustrating different, but taxonomically related animals. The two proboscidian drawings are not simple; they are complex, with an extreme, almost "modern" style. Such long-term similarity extending perhaps 25,000 years suggests that *Homo sapiens sapiens* had developed capacities of synthesis and abstraction reflecting his mental development as early as the Upper Paleolithic. It is also further evidence that stylistic classification alone can be misleading.

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1. D. Baffier and M. Girard, *Les Cavernes d'Arcy-sur-Cure* (Maison des Roches, Paris, 1998).
2. M. Lorblanchet, *Les Grottes Ombes de la Prehistoire, Nouveaux Regards* (Errance, Paris, 1995).

CORRECTIONS AND CLARIFICATIONS

References 11 and 13 (p. 169) in the report "The role of Area 17 in visual imagery: Convergent evidence from PET and rTMS" by S. M. Kosslyn *et al.* (2 Apr., p. 167) contained errors. The second item in reference 11 should have read, "E. M. Wassermann and J. Grafman, *Trends Cognit. Sci.* **1**, 199 (1997); T. Paus, *ibid.*, p. 200...." The last item in reference 13 should have read, "V. Walsh and A. Cowey, *Trends Cognit. Sci.* **2**, 103 (1998)."

The caption for the figure accompanying the Perspective "Highly visible, curiously intangible" by G. A. Clark (Science's Compass, 26 Mar., p. 2029) should have read, "A matter of timing. Comparison of two models for the appearance of symbolic behavior in Europe. In the standard model, an 'explosion' of evidence for symbolism coincides with the Middle-Upper Paleolithic transition, 40,000 to 35,000 yr B.P. In the demographic compression model, change is much more gradual, with the sharp increase occurring only after 20,000 years B.P. (*12*). Inset: Two Levallois points from Boker Tachtit, a Middle-Upper Paleolithic transitional site in the Negev, Israel (14). The point on the left was made from a 'Middle Paleolithic' point core; that on the right was made from an 'Upper Paleolithic' blade core. Despite typological similarities, the technologies that produced them were very different."

The report "Loss of intraspecific aggression in the success of a widespread invasive social insect" by D. A. Holway *et al.* (30 Oct., p. 949) incorrectly stated (p. 951) that the loss of genetic variation in introduced populations of the red imported fire ant (*Solenopsis invicta*) was the result of inbreeding. It was the result of a population bottleneck during founding.