Sex and the Beaked Whale

The 14 species of rare beaked whales (genus *Mesoplodon*) sport a wild variety of tusks—some jutting straight up, others curving like scimitar blades from the males' jaws. Scientists have long puzzled over the remarkable diversity. Now an analysis of the whales' DNA suggests that it's all about sex.

When conservation geneticist C. Scott Baker of Oregon State University, Newport, and colleagues drew up the first molecular phylogenetic tree for *Mesoplodon*, they were surprised to find that species with similarly shaped tusks are not closely related, as had been thought. Nor do closely related species have similar tusks. The pattern is typical of diversification driven by sexual selection, they report in this month's *Systematic Biology*.

Until now, the only mammals known to have undergone speciation as a result of sexual selection were ungulates with horns and hooves. Just as stags use their horns to fight for females, male beaked whales rake each other with their tusks, says lead author Merel Dalebout, an evolutionary biologist at the University of New South Wales, Kensington, in Australia. "Certain tusks may be shaped better for hitting harder or for sneaky attacks. … Those males win the fights and the females, and then their tusk shape spreads through the population."

CREDITS (TOP TO BOTTOM): NAN HAUSER, CENTER FOR CETACEAN RESEARCH AND CONSERVATION; MICHAEL TARR; MAX PLANCK SOCIETY

Red Fellas, Green Gals

Men are colored like Mars, but women are greenish—and the difference may help explain how people perceive *la difference*, researchers at Brown University say.

Cognitive scientist Michael Tarr and grad student Adrian Nestor made the discovery by averaging mug shots of 200 white males and females into a single androgynous face. They then obscured it further with randomly placed red and green pixels.

Three volunteers looked at 20,000 different versions of the image—some redder, others greener—and told the researchers which sex they thought each face represented. The result: Faces with green pixels were tagged as female and those with more red pixels as male. The color of the cheekbones, nose, and sides of the mouth were particularly important to decisions, says Tarr, whose paper is in press in *Psychological Science*.

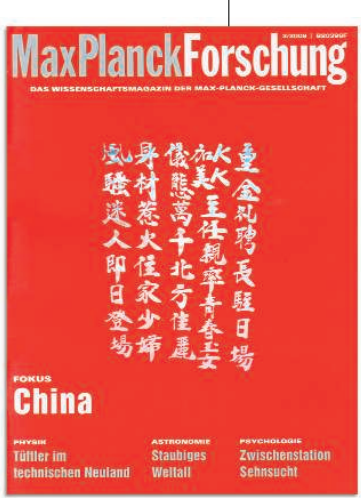
Marlene Behrmann, a psychologist at Carnegie Mellon University in Pittsburgh, Pennsylvania, says the fact that people subconsciously recognize the red-green distinction "means there is something evolutionarily and ecologically important about color that extends even into the human central nervous system."

Max Planck Turns Blue

It seemed like a good idea at the time. For a special issue on China, *MaxPlanckForschung*—the quarterly magazine of Germany's Max Planck Society—asked a designer to find a nice Chinese poem for the cover image. The text, drawn from a photo database, turned out to be anything but. It included turns of phrase such as: "*Beauties from the north who have a distinguished air of elegance and allure / Young housewives having figures that will turn you on. …* "

"You can find similar language on houses of prostitution all over Hong Kong," says Victor Mair, a professor of Chinese language and linguistics at the University of Pennsylvania who posted a translation on a linguistics blog.

Reactions in China ranged from amusement to outrage. The Max Planck Society immediately apologized, saying in a statement that "it has now emerged that the text contains deeper levels of meaning, which are not immediately accessible to a non-native speaker." Well, not exactly, says Mair. "It's impossible anyone who knows even 2 or 3 years of Chinese would be fooled," he says. "The language is veiled, but it's not that veiled." The journal is playing it safe now: The cover image online and in the forthcoming English edition will be graced with the title of a book by a 17th century Catholic priest.



The Starling Has Landed

Whereas jokers wonder about chickens crossing the road, scientists ponder why starling flocks land. The answer is, apparently, because everyone in the flock wants to.

The speed, agility, and cohesion of starling flocks are both beautiful and puzzling. István Daruka of Eötvös University in Budapest designed a digital flock of 200 starlings to model the rapid shift from foraging flight to landing. The model, based on field observations, describes the starlings as independently moving points in space, each with a ranking of "landing intent" that can vary from zero (the bird doesn't want to land) to one (the bird definitely wants to land).

The results, published this month in the *Proceedings of the Royal Society B*, show that a single starling decides to land when the average landing intent of nearby birds—presumably signaled by body language—crosses a critical threshold. Mathematician Andrew Wood of the University of York in the U.K. says most models of complex biological systems do not consistently account for individual reactions to objects, in this case neighboring birds. "It is very welcome to see this work addressing this directly," he says.

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