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Bonobos Just Want Everyone to Get Along

New research suggests that unlike humans, the peaceful primates pay more attention to bonding opportunities than they do to threats.

Finbarr O'Reilly / Reuters

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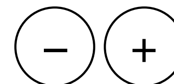

In a lot of ways, we have more in common with chimpanzees than we do with bonobos. Both species of ape are considered humans' genetically closest living relatives, but chimpanzees live in patriarchal societies, start wars with their neighbors, and, as a paper published today in *Proceedings of the National Academy of Sciences* put it, "do not take kindly to strangers."

By contrast, bonobos, which form female-dominated societies, have no problem welcoming outsiders into the fold: They mate, share food, and readily form bonds with strangers. They're also great at defusing conflicts before they escalate—when bonobos stumble upon a new feeding ground, for example, they tend to celebrate with group sex before eating, a habit researchers believe is meant to relieve tension that could otherwise translate into competition for food.

We do share some things with the warmer, fuzzier contingent of our ape family tree: In 2013, for example, researchers from Emory University found strong similarities between the emotional development of young bonobos to that of human children. But in the recent *PNAS* paper, a team of researchers from the Netherlands found one more difference: Where humans are primed to pay more attention to threats, bonobos are more captivated by examples of cooperation.

The researchers recruited four female bonobos to participate in what's known as the "dot-probe" task: A split screen flashes a pair of images, followed by a dot on one side, and the participants are timed as they indicate the location of the dot. The task is meant to measure attention bias—when the dot appears in place of a captivating image, the reasoning goes, participants will be able to find it more quickly. In the past, the dot-probe task has been used to show that humans pay more attention to emotional images than to neutral ones, particularly images showing some sort of danger.

In this case, the screen showed some combination of an emotional bonobo (either positive or negative), a neutral-looking bonobo, and a different animal as a control. The researchers ran the test over 25 sessions, 13 tests to a session, and found that the bonobos located the dot most quickly when it appeared in the place of an emotional image—specifically, images depicting "affiliative behaviors" like grooming (a prized bonding ritual among

bonobos), and "behaviors that are highly contagious," like yawning, which researchers believe indicates empathy. Unlike with humans, though, images with a more negative, threatening emotional tinge—pictures of bonobos in distress, or showing signs of aggression—didn't command the same attention. Neither did images of bonobos playing or handling food, which were positive but not their main bond-forming activities.

"For social species like primates," the study authors noted, "efficiently responding to others' emotions has great survival value." Knowing how to read and react to emotional cues helps keep social bonds strong, which in turn benefits the group as a whole. Because of the peaceful way bonobo society is structured, they argue, bonding may be more important to its survival than detecting danger. Somewhere over the course of evolution, as bonobos and humans diverged from their common ancestor, the values they placed on various emotions began to diverge, too.

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