WHAT IS INST

PHOTOGRAPH BY
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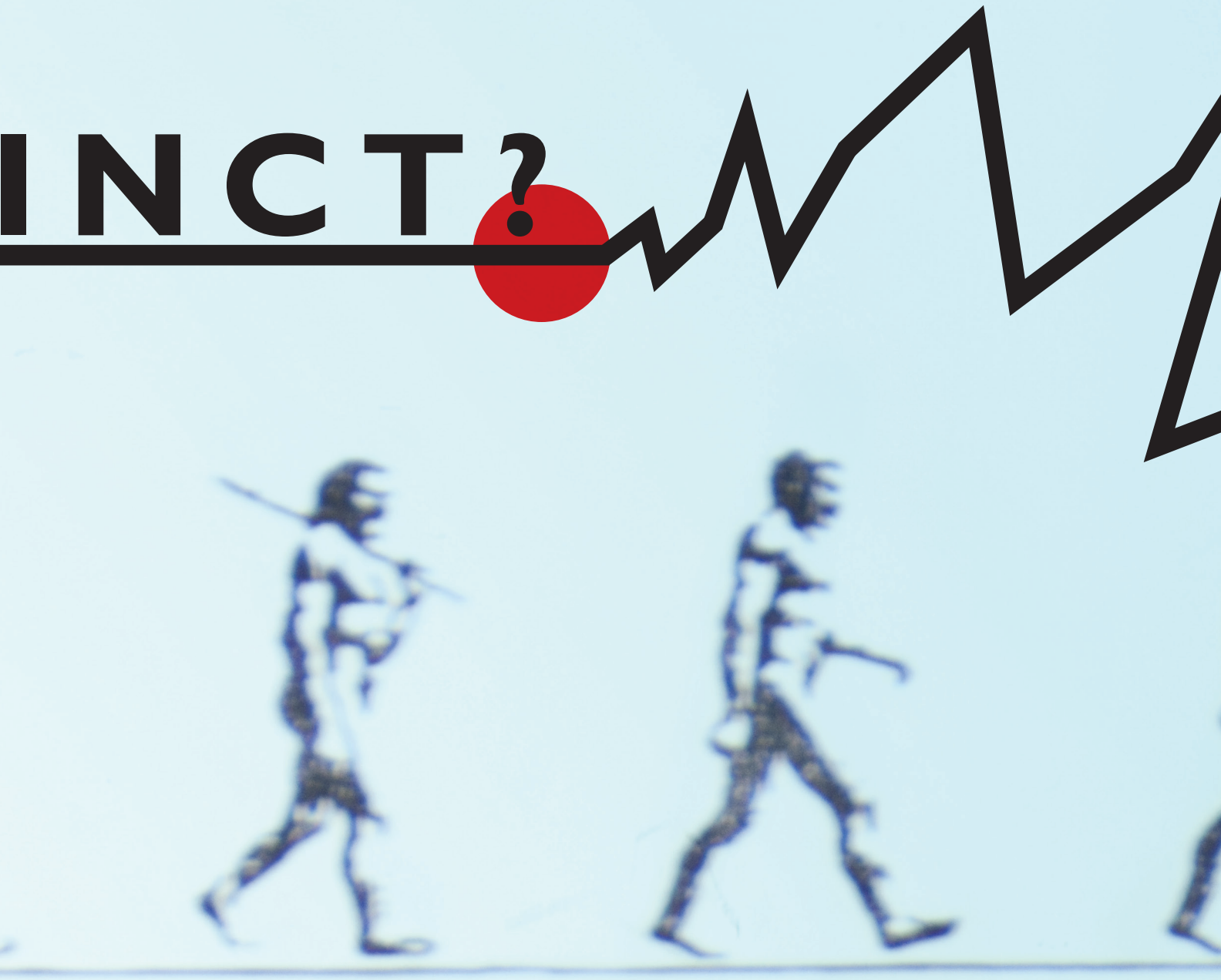
INCT?



FOUR DECADES AGO, anxiety weighed heavily upon Gombe, Nigeria. Poliomyelitis (polio) had jammed its foot in the door and could be sensed everywhere. As the virus continued to spread, once reliable legs became useless and Gombe collapsed to a standstill. Yet polio wasn't after humans. This time, it was chasing chimps.

The virus eventually caught one special chimp, who would go further down in history the longer the polio virus bore into him. Mr. McGregor, as he was jokingly called by researchers, first lost functioning in his legs. He was spotted multiple times frantically reaching for berries while his legs lay scrambled on the ground. Since he could no longer easily obtain food, he began to starve and his ribcage jutted out further with each passing day. Soon enough, his sphincter muscles gave out. Not only could he not move or eat easily, he was also covered in excrement and blood while swarms of flies flickered around him.

Yet researchers noticed something strange: There were no other chimps around to help him. Despite the fact that Mr. McGregor was a popular enough chimp before his illness, the other chimps all seemed to vanish on the first day that he was observed to have a limp. These chimps know nothing about polio, nor do they know how viruses work. Yet that initial signal — the limp —

was enough to establish a quarantined zone where McGregor could die without affecting the tribe and passing on the virus.

This avoidance is more than fear of the unknown; it's instinct. Although the term has historically been used with a mystical, somewhat psychic connotation, modern biology dictates that it is any complex behavior that has a fixed pattern throughout a species, yet is unlearned. Instead, animals such as chimps know instinctively to avoid a sick animal through experiences that have been passed down from generation to generation.

When we have a sense of disgust, whether it be for mold on bread or the obnoxious sneeze of a classmate, that also falls under the category of instinct. After all, both the mold and the sneeze serve as a threat to your immune system and could even render you dead.

One recent study underlines this point perfectly. Participants were shown a picture of a man with an ugly red patch of skin spreading over half of his face, but were informed that he had nothing wrong with him and that it was only a birthmark. They were then shown a picture of a different man, who looked completely normal, but were told that he had tuberculosis. After conducting a test where words were flashed on a screen next to each man's picture, it was found that participants were more likely to associate negative effects (such as "danger," "avoid" and "illness") with the man who had a birthmark, not the one with tuberculosis. The visible birthmark set off one of our many health-conscious instincts.

Strangers, too, are under the scrutinizing eye of instinct. Not only do they represent a possible hostile takeover of land, they introduce new diseases with which the immune system has never been acquainted. Particularly throughout the Age of Exploration, countless diseases were brought to indigenous populations by sailors. The end result was decimation and more reason to heed one's instinct.

Some researchers have dubbed this situation "dear enemy recognition." Territorial creatures will react more strongly to strangers than to their neighbors since it minimizes the time and energy spent on territorial defense. That, and we instinctually choose not to trust someone from another territory, culture or tribe.

Yet some instincts exist to prep the immune system, not just keep contaminants at bay. In humans (and many other species), one theory is that babies feel the need to put everything in their mouth as a way of introducing bacteria and other microorganisms in a neat, controllable bundle.

Animals from outside of the primate order have such health-related instincts, too. Salmon return to their birthplace to spawn. Mice can smell the difference between a mate that has intestinal worms and one that does not. Sheep avoid parasites by staying away from manure where parasites tend to breed. Every species lives to dodge death.

STAYING ALIVE

MAURO PROSPERI had been swallowed by the sands of Morocco. What would have ordinarily been a week-long marathon for this experienced pentathlete turned into a day-to-day battle with the elements. The sandstorm was so fierce that it forced Prosperi into disorientation; he was soon stranded in the middle of the Sahara Desert.

The temperature soared above 100 degrees Fahrenheit and Prosperi had nothing but a sip of water left over. After two days, he found a Muslim shrine and was so desperate for a drink that he wrung the necks of several bats and slurped their blood. He also drank his own urine.

Eventually, Prosperi left the shrine and set off across the desert towards a mountain range in the distance. A full nine days after his disappearance, he was found and taken to an Algerian military camp, then to a hospital. He had trekked approximately 186 miles off route and had lost around 40 pounds in body weight. He has since returned to compete in the same marathon three times.

Prosperi's survival instinct had kicked in. The term throughout the ages for this instinct has been conatus, which is Latin for endeavor, effort, striving, impulse and a plethora of other words pointing to self-preservation. It refers to the instinctive, inexplicable will to live.

Scholars whose names line our history books have philosophized conatus extensively. Aristotle, Cicero and Laertius each believed that this survival instinct dominated and influenced all other emotions. Accordingly, the will to survive is more persistent than going against instinct and giving up.

Another aspect of this view of conatus was the way the philosophers believed humans perceived morality. They asserted that people do not wish to do something because they consider it "good," but rather that they want to do it and, therefore, it is "good." Our current perception of morality is arguably based on this belief, for cultures throughout the world have created what is considered "good" itself.

THE MORAL INSTINCT

PSYCHOLOGIST JONATHAN HAIDT has a wealth of knowledge at his fingertips when it comes to instinctual morality. In his studies, he has developed several scenarios in which the characters are placed in often morally revolting situations. After reading each scenario, he simply asks: Was it okay that this happened?

Take, for instance, the story of Kate and Justin: It's 1993 in Paris, where Kate and Justin have just finished off delectable croque-monsieur sandwiches. They are exploring the city as part of their summer vacation from college. One night, they decide it would be interesting and fun if they tried making love. Kate is already taking birth control pills, but Justin wears a condom, just in case. They both enjoy the sex, but decide never to do it again because they are brother and sister. They keep the night to themselves, as a secret, which makes them feel closer to each other. Was it okay for them to make love?

Chances are, "No" had jabbed its way into your brain as soon as incest stepped into the picture. This reaction happens to be precisely what Haidt is hoping for. In response to the above scenario, participants usually scoff out a resounding moral "No." Yet when asked why something was not "okay" — religious teachings aside — people bite their tongues.

One common explanation is that the act might offend the community, to which Haidt would remind them that the two were in France at the time and that they kept it a secret. Subjects would then often suggest that the two may be emotionally hurt, even though the story makes it clear that the pair was fine. The possibility of birth defects also makes its way to the stage of reasoning, despite the fact that Kate and Justin were very considerate of contraception. Eventually, patients give up on reasoning, and resort to a simple, "I don't know. It's just wrong."

This instinctual, inexplicable reason that something is wrong may have its own reproductive roots. It's well known that the offspring of siblings are less likely to be healthy, yet the study revealed that breeding reasons were the final mention and the smallest consideration in a participant's decision that the incest between Kate and Justin shouldn't have happened. Instead, morality instantaneously took the front seat, possibly in the form of disgust.

AN INSTINCTUAL DIVERSION

MORALITY has a difficult case to make. It can't be proven as an instinct in the strictest definition of the term because the overwhelming consensus is that morality is learned — from parents, religion or the very act of being involved in a community.

Morality is taught, but certain responses, such as disgust, are not. They are instinctual. It is theorized that we are taught to feel disgust or other negative instinctual emotions — the ones which ordinarily stop us from eating that moldy bread or sitting near someone with the flu — so as to keep us from doing something dangerous.

Incest in Haidt's scenario may actually have more to do with maintaining genetic variety and fitness, but it is furthest from our mind. Upon the mention of incest, we become wary of the situation, possibly because an association has been built between morality and instinct. In this way, humans in a moral pickle can divert attention to an instinct that triggers anxiety, avoidance or any mix of the two.

Often, we go against instinct. We can sit by that sniffling classmate or willingly eat that slice of moldy bread. Yet the backbone for any instinct is strong: Regret, about something your mind knew better to avoid. •