A way of thinking may enable battle but prevent war crimes

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Combat troops must minimize the humanness of their enemies in order to kill them. They can't be effective fighters if they're distracted by feelings of empathy for opponents. But indifference to the enemy, rather than loathing, may help prevent war crimes and provide troops with a better path back to healthy civilian lives, researchers at Case Western Reserve University propose.

Their hypothesis is based on new work showing how the brain operates when people objectify—that is, think of others as mere objects—or dehumanize, which entails seeing others as disgusting animals.

These two ways of suspending humanity are common. Think of being treated like a number by an insurance company or enduring a boss who deems subordinates incompetent baboons.

"Whether a person objectifies another or views another as a subhuman animal, he suspends his moral concern for that other person," said Anthony Jack, assistant professor of cognitive science at Case Western Reserve and leader of the recently published neuroimaging study.

But how the brain is activated in each case is far different—the key to their premise.

To think of another as an object, people deactivate the empathetic network in their brain, and sometimes also activate the analytical network, depending on the complexity of their thought. This seesawing

between the two networks is a natural function of the healthy brain. Jack's earlier research shows the adult brain naturally cycles between the two networks at rest and chooses the appropriate network depending on the task at hand.

To dehumanize another as so animal-like as to evoke disgust causes both networks to become active. But rather than leading to a good mix of empathy and analytics, this kind of thinking is used in anti-social, manipulative behavior and is most closely associated with mental illnesses, from depression to schizophrenia.

But it's easy to do.

"It's built in from infancy, and ranges in intensity from a mild feeling of revulsion when we see people eating something we don't like…," Jack said.

"…Up to utter contempt and the conclusion that it's OK to kill them," said Shannon French, the Inamori Professor of Ethics, associate professor of philosophy at Case Western Reserve and a specialist in military ethics.

Jack and two former Case Western Reserve undergraduate students, Abigail J. Dawson, currently a graduate student at the University of Otago in Dunedin, New Zealand and Megan E. Norr, currently at Georgetown and recently accepted to a Clinical Psychology PhD at UC Berkeley, describe the brain's workings in this week's online issue of *NeuroImage*. Jack and French propose how the findings could be applied to the military in a preprint released today of a paper due to appear in the book: Responsibilities to Protect: Different Perspectives, edited by David Whetham, King's College London. The papers can be found at: https://sites.google.com/site/tonyjack/pubs.

Dehumanizing has preceded atrocities throughout history, from the Nazis comparing Jews to rats before systematically murdering them to Tamerlan Tsarnaev saying he didn't understand Americans—that they can't control themselves—before planting a bomb at the Boston Marathon this spring, the researchers said.

"There's a kernel of hope in this," French said, "because it suggests you first have to develop a certain mindset before you can get past the moral reservations we naturally have about killing another human. Killing is harder than some might think."

To learn what happens in the brain when someone dehumanizes another or does the opposite by focusing on the humanity of another, Jack's team used functional magnetic resonance imaging (fMRI) to record the brain activity of healthy adults.

The adults, who ranged in age from 19-59 years, were shown photographs with narrations designed to evoke the two recognized types of dehumanizing and humanizing, labeled as mechanistic (objectifying) and animalistic.

A runner who forgot her water bottle and was on all fours drinking from a puddle in the middle of the road evoked animalistic dehumanization, while a narrative of a student who rejected an easy chance to cheat on a hard test evoked animalistic humanization. An accountant who had no contact with others and spent his day working on spreadsheets evoked mechanistic dehumanization, while a basketball player lifting an opponent from the floor after a hard-fought game evoked mechanistic humanization.

While both forms of humanization are marked by sympathy, mechanistic dehumanizing is marked by indifference and animalistic dehumanizing by disgust.

Each image was followed by a text question: "How does this make you feel?" Images that evoked animalistic dehumanization made participants feel the worst, while those that evoked mechanistic humanization made them feel the best.

Looking at overall activity in the brain networks, the fMRIs showed that relative to both forms of humanizing, mechanistic dehumanizing (or objectification) deactivated the social reasoning network while maintaining the same level of analytic reasoning activity. Three more complex stimuli in this category—scientific descriptions explaining a working heart, brain patterns and a psychological phenomenon did take up analytic reasoning resources.

Animalistic dehumanizing produced high levels of activity in both the social and the analytic reasoning network.

"Our evidence shows that objectification frees up mental resources, whereas animalistic dehumanization uses up all our resources, both empathetic and analytic" Jack said.

Objectifying can be useful in everyday life, he explained. "We want surgeons to think of a person as a biological machine that they are cutting into to fix, rather than being distracted by emotions." He continued, "But they also have to switch back to thinking of the person as a human so they have a genuine appreciation of what the patient needs and cares about. Studies show this sort of empathetic connection is also critically important for optimal outcomes."

In the military, "We should train our troops to objectify the enemy for the purposes of combat," French said. "Because we believe this is the only mode that frees their cognitive resources to deal with the strategic and performance demands of intense combat situations." She was quick to add, "However, we also need to counterbalance a powerful

psychological tendency to dehumanize the enemy."

"One way we can do that is by training tropps to think analytically in response to specific threats, so they objectify in response to a circumstance rather than a person." Jack explained.

"Another way to limit dehumanizing of the people involved in a conflict is to increase discipline around the issue and also improve cultural understanding," French said. "That is also useful for other strategic purposes, such as peacekeeping and rebuilding."

Americans have been fighting in two wars in which they're at the same time trying to build positive relations with civilians in the conflict regions. This often requires the brains of our troops to switch quickly between analytic and empathetic modes, French said. "And the vast majority of our troops manage this amazingly well." Dehumanizing the enemy, on the other hand, creates a vicious cycle of hatred that prolongs the conflict and can cause troops to underestimate their enemies through lack of respect.

Indications are strong that those involved in headline-grabbing violations of the rules of war, including jailers mistreating prisoners at Abu Ghraib, U.S. troops urinating on the corpses of Taliban fighters, and Staff Sgt. Robert Bales, who admitted to yesterday that he murdered 16 Afghan civilians—mostly women and children— were using animalistic dehumanization.

Not only were the killings and mistreatment morally wrong, they served as a billboard for enemy recruiting efforts, French said. When dehumanization occurs on both sides of a conflict, it can lead to cycles of escalating atrocities.

Even if they don't participate in an atrocity, troops who generate intense

disgust and contempt to help them kill will have a harder time readjusting to civilian life after the violence is over, French said. "It is important for our troops to know that they have fought honorably. But there is no honor in killing subhumans. Those who encourage dehumanization of the enemy are not really acting in the troops' best interest."

Training troops to objectify with language such as "neutralizing threats" and "taking down targets" is less damaging,the researchers contend.

That's not to say that objectifying in order to kill is a free pass to a clear conscience. "We believe only psychopaths can permanently avoid re-examination of their actions from an empathetic perspective," Jack said. "Objectifying is a necessary but temporary fix. To feel fully human ourselves, we need to be able to reconcile our actions towards our fellow humans. That is easier to achieve if you have objectified in a limited way for a good reason, although it often still requires some readjustment and sorrow. The situation is much harder psychologically if you have descended into hatred and contempt."

Post-conflict reconciliation is vital to veterans. As a recent National Public Radio story reported, even drone pilots, who face no personal danger, often suffer from PTSD and can struggle with reconciling the deaths they caused or viewed through cameras from thousands of miles away.

A core principle in military ethics is that it matters who you kill, and why. Killing can be reconciled as an honorable act of defending against a real threat, whether to one's own life, or to the lives of others you are defending, French said. "This warriors' code is what protects our troops from crossing the line from warrior to murderer and sacrificing their own humanity."

Jack said that more research is needed but that this work suggests they can develop psychological tests to check that troops are battle-ready, "Before we ask them to fight for us in battle," he said, "we need to be sure our troops are ready to switch between the two major networks in the brain just as you and I can do in our much gentler civilian lives."

Provided by Case Western Reserve University