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The Voice of Reason

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Psychologist Ethan Kross was coasting through the streets of Ann Arbor, Michigan, in Spring 2010 when he passed a red light. “Ethan, you idiot!” he said to himself, vowing to drive safely the rest of the way home. Then, because he is, after all, a psychologist, he

stopped to reflect on his turn of phrase. He didn't say, "I'm an idiot." "I called myself by my first name," he noted to himself. "Why?"

A few months later, LeBron James, the future Hall of Fame basketball player, was on television discussing his decision to leave the Cleveland Cavaliers for the Miami Heat. Fans in Cleveland were burning his jersey in effigy, but James explained his decision had come from a place of calm. "One thing I didn't want to do was make an emotional decision," he told the audience. "I wanted to do what was best for LeBron James, and to do what makes LeBron James happy." Many questioned his sanity, and Kross himself might have chalked such language up to standard celebrity narcissism had he not recalled his own moment of self-reference.

Then Kross heard Malala Yousafzai, the selfless Pakistani activist for women's education and the youngest person to win the Nobel Prize, on *The Daily Show*, recounting her approach to the Taliban. "If the Taliban comes, what would you do, Malala," she described herself as having said at the time. "Then I would reply to myself, 'Malala, just take a shoe and hit him.'"

That spurred Kross the psychologist into action. He knew that people naturally talk to themselves, but he didn't know whether the chatter amounted to much or whether the words they used even mattered. So he decided to look into things.

In a series of groundbreaking experiments, Kross has found that how people conduct their inner monologues has an enormous effect on their success in life. Talk to yourself with the pronoun *I*, for instance, and you're likely to fluster and perform poorly in stressful circumstances. Address yourself by your name and your chances of acing a host of tasks, from speech making to self-advocacy, suddenly soar.

Indeed, along with addressing a body of research by others, Kross is forcing a whole new take on what has long been ignored or relegated to pop psychology—the use of self-talk to boost confidence. His work elevates self-talk to something far more significant: a powerful instrument of consciousness itself. When deployed in very specific ways at specific times, it frees the brain to perform its absolute best.

By toggling the way we address the self—first person or third—we flip a switch in the cerebral cortex, the center of thought, and another in the amygdala, the seat of fear,

moving closer to or further from our sense of self and all its emotional intensity. Gaining psychological distance enables self-control, allowing us to think clearly, perform competently. The language switch also minimizes rumination, a handmaiden of anxiety and depression, after we complete a task. Released from negative thoughts, we gain perspective, focus deeply, plan for the future.



Scientists studying the inner voice say it takes shape in early childhood and persists lifelong as companion and creative muse. It is so intimate, so constant, says British psychologist Charles Fernyhough, that it can be considered thought itself. “When asked by Theaetetus to define thought,” Fernyhough explains, “Socrates replied, ‘The talk which the soul has with itself.’” User beware: This talk may be misused or pushed to extremes,

becoming a source of painful rumination or even psychosis. Yet it can also make us detached observers of our own life. Inner talk is one of the most effective, least-utilized tools available to master the psyche and foster success.

When We Were Young

Self-talk starts audibly during the toddler years. The incessant self-talk of toddlers is conducted out loud as a kind of instruction manual, a self-generated road map to mastery; your voice directs you to build Lego houses, sound out words and sentences in big-letter books.

Here’s what it sounds like, as captured in the riff of a little boy guiding himself through the construction of a Tinkertoy truck: “The wheels go here, the wheels go here. Oh, we need to start it all over again. We need to close it up. See, it closes up. We’re starting it all over again.”

Dubbed private talk by the Soviet psychologist Lev Vygotsky, that early out-loud self-talk “transforms the task in question, just as the use of a screwdriver transforms the task of assembling a shed,” Fernyhough says. “Putting our thoughts into words gives them a more tangible form, which makes them easier to use.”

Inner talk isn't just mechanical, Vygotsky contended—it is the ultimate social act, an embrace and reinterpretation of teachings picked up from knowledgeable elders, pushed back out in the child's own words. The more challenging the task, the more elaborate and vociferous the talk, all the better to help children take control of their actions and behavior.

Self-talk is the means by which the child navigates what Vygotsky famously called “the zone of proximal development,” the realm of challenges just beyond reach, too complex for a child to master alone. Children build learning partnerships with adults to gain a skill and then go off on their own, talking themselves through the task aloud. As mastery is gained, self-talk is internalized until it is mostly silent—still part of the ongoing dialogue with oneself, but more intimate, no longer broadcast.

A generation of child psychologists, led by Laura Berk at the University of Southern Illinois, has spent decades documenting the nuances: In the best circumstances, the patient teacher or caregiver teaches children the unemotional, useful, step-by-step language for mastering any task; the children, in turn, use such language in their private speech to teach themselves other things. “You can do it—try again,” the well-taught child might say to herself when she runs into trouble, guiding herself through the most challenging problems, one logical phrase at a time.

By contrast, an abrupt, angry teacher, prone to outbursts or impatience, can set children up for an enduring pattern of self-defeating self-talk. Children exposed to such teachers learn the language of frustration, becoming inefficient self-guiders, getting mad at themselves the minute they feel confused. “Idiot, you can't do anything,” a child might say to himself, tossing his book across the room. To add injury to insult, the child also fails to master the task.

Private talk in childhood is also fuel for the imagination, Berk has found. Pretending to be James Bond requires complexities of coordination—arranging your “spy equipment,” finding a hideout in Barcelona (under the staircase), foiling your enemy on her boat (the bathtub), and getting your fake identity documents ready for the plane (your bed). All hinge on, and in turn nurture, executive functions of the brain: controlling attention, suppressing impulses in favor of situation-appropriate responses, and combining various types of information in long-term memory, as well as planning, organizing, and thinking flexibly—the very skills that underlie later academic success.

Through self-talk, children plan out and activate their make-believe characters. The more that children self-talk during make-believe play, Berk discovered, the more likely they are to carry such a strategy into adulthood, setting the stage for a lifetime of focused attention, organization, and self-regulation. “It’s a myth that children with imaginary friends are somehow disturbed,” Berk notes. “Children who talk to imaginary friends engage in more self-talk as adults, and that makes them more self-controlled.”

Make-believe play, intrinsically tied to self-talk, gives children psychological distance from their everyday lives, Berk says. And that distance provides the psychic space they need to gain control over their own impulses. If self-talk is one of the great achievements of humanness, a gift from our evolutionary forebears and caretakers, who soothed and stoked us with words, it is, in turn, one of the deep-seated drivers of human evolution.

Now That We’re Grown

The blueprint for self-talk that is provided by caretakers and built up during years of pretend play guides adult self-talk as well. Words wired into the brain in the early years extend their influence beyond the language centers of the thinking cortex into the primitive limbic brain, seated in the amygdala, where emotional memories take shape and fears can tether us to the certain and the known. As the words of self-talk reach the amygdala, they either mire us in anxiety or free us of its constraints, allowing us to exert high levels of self-discipline under all kinds of demanding circumstances (say, athletic competition or speaking in public).

In his initial studies of self-talk, conducted at the Emotion & Self-Control Laboratory he directs at the University of Michigan, Ethan Kross found that using one’s first name minimizes social anxiety, the fear of being evaluated in a social context—the reason most people hate public speaking. It disables social anxiety not only before the stressful event but, significantly, afterward too, when people tend to chew over their performance and find themselves lacking—what scientists coolly call “postevent processing.”

Kross asked 89 men and women to give a speech about why they were ideally qualified to land their dream job. Each participant was given five minutes to prepare. Half were instructed to use only pronouns to describe themselves in a prep document; the other half were told to use their given name. Those in the pronoun group wound up anchored

in anxiety, apt to see the task as impossible. “How can I possibly write a speech in five minutes,” was a typical comment. Those who used their names felt less anxiety approaching the task and felt highly confident. “You can do it, Ethan,” was a typical exhortation in the run-up to a speech.

But the acid test was what came afterward. Those using their name performed better on the speech (judged by independent evaluators) and engaged in far less rumination after it; they also experienced less depression and felt less shame. In other studies, Kross found that using a first name empowers participants, so what others see as a threat, they see as a challenge. In giving a speech, volunteers using I felt inadequate to the task.

“When dealing with strong emotions, taking a step back and becoming a detached observer can help,” Kross explains. “It’s very easy for people to advise their friends, yet when it comes to themselves, they have trouble. But people engaging in this process, using their own first name, are distancing themselves from the self, right in the moment, and that helps them perform.”



Easy on the Brain

It also eases the workload of the brain, finds Jason Moser, a neuroscientist and clinical psychologist at Michigan State University. He measured electrical activity in the brain as subjects engaged in different varieties of self-talk.

Moser showed two groups of women photographs of a masked man holding a knife to a woman’s throat. One group of women was prone to chronic worrying, the other was psychologically normal. Each group was then asked to elaborate about a positive outcome through self-talk while Moser measured electrical activity in the lobes of the frontal cortex and in the limbic system.

When women naturally employed the pronouns I and me in their self-talk, worriers had to work much harder than nonworriers to talk themselves into a positive view—and even then they failed to calm themselves down. They dwelled on fears that the woman under attack had died. The harder their frontal lobes worked, the more anxious their limbic brain became; the task pitched them into a vicious circle of rumination, anxiety, and more rumination.

The same women were asked to repeat the self-talk exercise, only this time deliberately using their first names instead of personal pronouns. They reported a dramatic reduction in anxiety levels. Electrodes picked up the psychic improvement by documenting a vast reduction in energy consumed by the frontal lobes. What's more, the frantic cries of the amygdala quieted down as well, its activity reduced by just about half. The anxiety of the worrywart women—charted in their brain activity—was relieved.

The findings suggest that the standard therapeutic approach to anxiety reduction—exposure therapy—may be all wrong. Typically, cognitive behavioral therapists ask patients to push through the irrationality of their fear by immersing themselves in a situation that elicits the anxiety and discovering that nothing terrible happens. Afraid of walking over a high bridge? Then walk over that bridge repeatedly until the terror subsides. “Often people don’t stick with those therapies because they are so painful,” Moser reports.

The torment may be needless. A change of language may accomplish much more, much faster. Changing the way people talk to themselves—a simple shift from personal pronoun to first name—may offer a far less painful and more lasting way of obliterating the anxiety. Fear of elevators? I might just conquer it with “Now, Pam, go in that elevator and push 6.” Change a word and you change the brain.

“It is like an automatic switch, in which the brain turns the self on and the brain turns the self off,” Moser explains. “It is programmed into us by our own evolution, built into us by language. This is not the way we have tried to calm ourselves down in the past, but the studies show it is not necessary to scold the emotional brain. Language creates a distance that is real.”



Wisdom at Any Age

Kross contends that the psychological distance gained by using one's personal name confers wisdom. It resolves what he dubs Solomon's paradox: As exemplified by the biblical King Solomon, people reason more wisely about the social problems of others than they do about their own. First-name self-talk shifts the focus away from the self; it allows people to transcend their inherent egocentrism. And that makes them as smart in thinking about themselves as they typically are about others.

In a series of studies reported recently in *Psychological Science*, Kross asked student subjects to consider how the recession of 2008 would affect job search from an immersed perspective (whether it was happening to them) or from a distant vantage point (whether it was happening to someone else). Kross also asked subjects to discuss from both vantage points how the future would unfold should their favored political candidate lose the presidential election that year.

In each experiment, those with the fly-on-the-wall perspective had more intellectual humility; they were more attuned to future changes, more flexible, and more open to diverse viewpoints. They were, in general, far more able to think things through in a wise and measured way. "The psychologically distanced perspective allowed people to transcend their egocentric viewpoints and take the big picture into account," Kross reports. "We usually have trouble with that in the West; we need some kind of mechanism, a trick, to take us out of our own head."

Working together, Moser and Kross have recently obtained evidence from brain scans that self-distancing through self-talk indeed confers wisdom. They directed student volunteers to self-talk while they monitored their brains with an fMRI machine. Among subjects who talked to themselves in the third person, the brain scans resembled those

of other students in the act of giving advice to friends. Not so among a control group of students addressing themselves with personal pronouns.

The findings are applicable to the entire range of social relationships, Kross contends, because asymmetry pervades the way people think about all problems—better at dealing with others' than with their own. Self-distancing, he believes, can bring clarity in thinking about social conflicts, whether in business or romance.



The Infinite Stream

We all carry on an internal monologue. We all engage in self-talk, maintaining a lifelong stream of consciousness and running commentary about ourselves and the world, much of it silent and in our own private shorthand. It turns out to be important to a broad array of mental processes.

Yet much as it can boost self-regulation and unleash cognitive capability, self-talk is not without its dark side. Fernyhough suggests that some glitch in internalization of the

toddler's private speech may underlie auditory hallucinations in the adult. And people could use the self-distancing of self-talk to actually avoid their emotions, Kross notes.

But the science of self-talk is just getting under way. There may be specific words, aside from our names, that can take us higher, faster, further. That possibility awaits study.

In the meantime, the self-talk we're already capable of points to the deep roots of language and its power to affect the most primitive parts of the brain, putting a brake on emotions that narrow our possibilities. By teaching people how to self-talk effectively, Kross says, "We can reach those depths through easy interventions, and that is very important news."

How to Talk Yourself Through a Challenge

Used correctly, inner language can focus thinking, enhance planning, and prevent the poison of later rumination.

“Jennifer(1), what are you nervous about? It’s not the first date you’ve ever been on. I know you like this guy, but take it slow (2), and stay calm. Even if it doesn’t go perfectly, it won’t be the end of the world. You’re capable (3), intelligent, accomplished, beautiful. Just do your best and let the chips fall. Chill, Jen.”

1: Jennifer distances herself from the stress of a first date by addressing herself by name, seeing herself as she would a friend. The distance confers wisdom, confidence, and calm she would never have if immersed in the situation as *I* or *me*.

2: She also taps the kinds of strategies children use when engaging in activities like building with blocks, only instead of instructing herself to put the small square on top of the big rectangle, she now tells herself to be calm. Her self-direction is precise.

3: Not least, Jennifer alleviates the gravity of the situation with a few self-affirmations, allowing her to see the date in the context of her whole being. She will not be devastated or ruminate endlessly on the experience if the date doesn’t work out.

AFFIRMATIVE ACTION

It turns out that affirmations work—but not the way you think.

Switching from pronouns to names isn’t the only path to wise perspective. There’s a kind of self-talk that has long been looked on as hokey—self-affirmations, positive statements (“You are brilliant,” “You are beautiful”) that have that 1970s, New Age aura and seem like shortcuts to self-esteem. But researchers now find that they, too, serve a purpose. Just like using given-name self-talk, such affirmations have the power to defuse threats and confer perspective.

Psychologists Clayton Critcher and David Dunning of the University of California at Berkeley have found that such feel-good ego boosts can undercut criticism, providing a

cushion against blasts of harshness from the world. They can help us stand up to outside threats and persevere in negotiations, in difficult jobs, and in the face of health problems. They don't work by seducing us into feeling great. **It's not that we swallow them whole. They widen our perspective on our self, help mitigate bad blows, and alleviate defensiveness.** They are cognitive expanders.

To determine what it is that affirmations do, the team looked through the opposite end of the telescope—at what threats do that affirmations may serve to counter. They hypothesized that threats give us tunnel vision, narrowing our focus to one facet of the self so that we see only the hungry bear and not the beautiful forest.

In one study, the researchers set up Ivy League students to fail on a test, and prepped some of them with affirmations like “I feel proud” and “I currently feel confident.” After all failed the fake test, the affirmed reported a better sense of self-worth, even though the affirmations had nothing to do with their intelligence. “Self-affirmations broadened perspective, bolstering self-worth by undoing an otherwise constricted perspective under threat,” the team reports.

In another study, the duo gave students a phony personality test, then delivered 36 statements of feedback, 24 of which were negative. Those inoculated by affirmations were able to spend more time poring over the negative feedback, a sign they were less defensive. Those who were not pre-affirmed put the personality-decimating results aside quickly, too defensive to consider them.



Affirmations are very efficient defocusers that help us to avoid the tunnel vision that threats encourage. Bolstered by an affirmation or two, we can more easily transcend a threat and see ourselves more fully.

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