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LIFE | IDEAS | MIND AND MATTER: MELVIN KONNER

Did Campfire Talk Spark the Rise of Human Culture?

What we can learn from 20th-century Bushmen



ILLUSTRATION: TOMASZ WALENTA

By MELVIN KONNER Updated Oct. 12, 2016 3:22 p.m. ET

Anthropologists love to speculate about the origin of human language. Did it start two million years ago or a mere 40,000? Why did it start—to teach, to plan for toolmaking, to resolve conflicts or to communicate dangers and opportunities in the bush? By 1866, so many theories about the origin of language already existed that the Linguistics Society of Paris banned all further discussion of them.

A professor of mine at Brooklyn College, the anthropological linguist Dorothy Hammond, made a joke of it. "What would we talk about, sitting around the fire at night," she would ask the class, "if we didn't have language?"

This charmingly absurd remark brings up a more easily tested set of questions. In an insightful study published in the Proceedings of the National Academy of Sciences, my friend Polly Wiessner, a fellow researcher among Africa's Bushmen, analyzed what more recent hunter-gatherers *did* discuss around the fire and how the use of controlled fire might have spurred the development of humanity.

The 2014 study, "Embers of Society: Firelight Talk among the Ju/'oansi Bushmen," used the group—former hunter-gatherers living in Namibia and Botswana, both just north of South Africa—as a window to the past.

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Her study analyzed the themes of 174 day and nighttime conversations observed in 1974, along with 68 translated texts of more recent interviews. She found that daytime talk centered on economic matters (31% of conversations) and "social gripes"—criticism, complaint and conflict (34%). The grousing involved people talking about themselves and each other, or negative remarks about the overly ambitious; 16% were joking sessions.

In contrast, night was for "singing, dancing, religious ceremonies and enthralling stories," Dr. Wiessner wrote. Fully 81% of the conversations involved stories about living people; another 4% were myths. Darkness and flames enhance drama: Facial expressions were "either softened, or in the case of fear or anguish, accentuated." Everyone got involved. Anthropologist Richard Lee, another Bushman researcher, estimated in a 1982 book that a third of the contributions in such sessions were made by women, often with sleepy children in their laps.

Controlled fire made these magical evenings possible for all our hunting-and-gathering ancestors. Many decades ago, I lived for months in a grass hut in a Bushman village. Based on what I could grasp of the conversations, I concluded that our deep past was one long support group. As Dr. Wiessner writes: "Firelit hours created a space and context for...understanding of the thoughts and emotions of others...and the generation, regulation and transmission of cultural institutions."

This isn't gossip; it's consciousness-raising of the highest order, and it helped to shape our outsize human brains. Sporadic control of fire may be a million years old or more, but only for half that time has it has been used consistently. Cooking transformed food, supplying more high-quality calories with less effort. Some experts see an uptick in the pace of brain evolution around 400,000 years ago.

Fire also had its downside. A stray ember could burn a child or make a grass hut go up in smoke. A recent study in the journal Molecular Biology and Evolution found a gene unique to humans that—conjecturally—could have evolved to process toxins in smoke. More hypothetically, a mathematical model suggests that fire, by increasing human contact, may have been a factor in spreading tuberculosis.

But these are speculations. No one doubts the upside of controlled fire, from cooking to warmth to keeping predators away. Yet perhaps the more magical uses of the freed-up firelit hours made the greatest difference: using stories to guide ourselves, empathize, entertain.

I've often thought of families watching television—the electronic hearth—as trying to recapture firelight conversations. But they passively watch flickering images of strangers. Imagine families circling a fire, creating their own stories every night for a half million years, and you will find a key to our humanity.

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