

High Country News

For people who care about the West

GOOD NEIGHBORS

Researchers look to the Southwest
to learn why we share – and
what happens when we don't

By Brian Mockenhaupt

December 7, 2015 | \$5 | Vol. 47 No. 21 | www.hcn.org



Copyright High Country News

GOOD NEIG



Copyright High Country News

Researchers look to the Southwest to learn why we share — and

Next spring, the fields around Willcox, Arizona, will again grow lush with corn and alfalfa, pistachios and beans — even grapes for the area’s burgeoning wineries. And the farmers, ranchers and homeowners in this arid part of the Southwest will still be sucking too much water from their aquifer. They have been doing this for years. But now, wells are drying up, forcing people to truck in water or pay thousands of dollars to drill much deeper. Irrigation may soon be too expensive for some and tap water a luxury for homeowners.

Cochise County, like more than 40 percent of the state, relies almost entirely on groundwater. And despite 15 years of drought, many people have resisted limits on groundwater withdrawals. If they can reach it, they argue, they should be able to use it. The growing scarcity only amplifies their urgency: If the resource is disappearing, why not get it while you can? Times are already precarious; if you cut back now, you’ll lose money. Some farmers have gone so far as to plant new crops in fallow areas, hoping their expanded use might be grandfathered in to any future restrictions, even boost their overall water allotment. “It’s like telling my kids the candy jar is going to be closed in five minutes,” local banker, rancher and pistachio farmer Richard Searle says. As a Cochise County supervisor, he’s also the principled dad, warning that the easy way is not always the right one.

This defensive response to duress — to grab what you can, while you can — might seem natural, particularly in the individualistic, independent rugged West. But just an hour south of

Willcox, in the vast stretch of mountains and grasslands called the Malpai Borderlands, I discovered a very different approach to scarcity and change, built around cooperation instead of suspicion.

“How do you use it but not lose it?” says Bill McDonald, as we rumble up a dirt road in his red four-wheeler, his two ranch mutts, Oso and Bingo, balancing in the cargo bed and panting over our shoulders. “That’s what we’re all trying to figure out.” McDonald’s family has run cattle here along the Mexican border since the 1890s, when his great-great grandfather left “too tame” Texas and headed west. We bounce along a dried creek bed until the path peters out, choked by brush and boulders, then continue on foot, pushing through the oak and cat’s claw, to inspect the footprint of a week-old fire.

Six-foot-five and lanky, McDonald walks with an easy lope. A wide-brimmed straw hat shields his face from the high, hot sun. He eyes the blackened patch of the fire’s farthest advance, high on a ridge, and sighs; he’d actually hoped it would burn much more, thinning the brush that makes it hard for him to find and move cattle, and encouraging the growth of young grass. But the fire faltered after burning about 6,000 acres, much of it on national forest land, where McDonald has grazing rights. Still, this marked a success, because nature, not man, had halted the fire. In the past, the Forest Service and state authorities would have attacked the blaze without bothering to consult with local ranchers. Now, ranchers and rangers are working together to return good fire to the land. They’ve become less suspicious of

H B O R S

FEATURE BY BRIAN MOCKENHAUPT



Warner Glenn rides on Steer Mountain in the Malpai Borderlands area of southern Arizona, where ranchers are known for their spirit of cooperation.

BLAKE GORDON

what happens when we don't

each other and more receptive to common goals.

This shift started two decades ago, when McDonald and many of his fellow ranchers realized they faced more than they could handle on their own: conflict with environmental groups and government agencies; a damaged ecosystem whose management was complicated by a patchwork of private, state and federal land; developers carving out 20-acre ranchettes and subdivisions. In 1994, they formed a land-management coalition called the Malpai Borderlands Group to preserve threatened open space and biological diversity across 800,000 acres. This, they hoped, would enable them to preserve their way of life — an aspiration summed up in the group's guiding ethic: "The land comes first."

It sounds idealistic, but it worked. The members have mediated land and water disputes between ranchers and facilitated conservation easements that kept large ranches from being broken up. They have worked with biologists to protect endangered species, including the New Mexico ridge-nosed rattlesnake and the Chiricahua leopard frog, and started a communal grass bank that allows ranchers facing drought to rotate their cattle onto unused land while their own pastures recover.

"You start with something you agree on instead of something you disagree on," says McDonald, the group's executive director. He received a MacArthur Genius Grant in 1998 for his work, which he describes as seeking "the radical center."

The next morning, McDonald heads 10 miles down the dirt road back toward town to the ranch of Warner Glenn, one of his nearest neighbors, for the Malpai group's quarterly meeting.

The ranch's great room is decorated with cattle skulls, landscape paintings and photographs of mountain lions. About four-dozen mismatched chairs are crowded with an unlikely mix of ranchers, state and federal fish and game officers, Border Patrol agents, conservationists and biologists. For several hours, they update each other on projects and plans. The agenda might be mundane, but the diversity of stakeholders is remarkable. The personal relationships can be as important as anything accomplished at the meetings. Early on, attendees stuck with their own kind — ranchers, law enforcement, scientists clustering together. Now they fall into easy conversation with each other. Peter Warren, who works for The Nature Conservancy in Tucson, sums up the group's appeal this way: "We deal with these problems better as a group than each of us can individually."

The Malpai Borderlands Group has formalized a particular Western trait that has long defined daily life around here. "Neighboring," some call it, a way of giving others their privacy while remaining available in case they need you. The notion captures a kind of frontier ideal, an acceptance of the individual's autonomy and self-reliance, tempered by recognition of the precarious and occasionally dangerous nature of outdoor work and the environment. This basic cooperation has roots far deeper and wide-reaching than these particular ranchers and their ancestors; in fact, it fueled humanity's early success and our continued prosperity as a species. And it's a part of ourselves we would all do well to understand, and even cultivate, as we face an increasingly complicated future.

Respect. Responsibility. Restraint.

Anthropologist Lee Cronk has found these “Three R’s” to be guiding principles among members of the Malpai Borderlands Group, just as they are among the Maasai.

EARLY ON A SUMMER EVENING in Rodeo, New Mexico, along the state’s far southwestern edge, Lee Cronk rattles down a gravel road, trailed by a wispy plume of dust. His hands are not calloused, nor his face creased from endless sun, and both those facts — and his rental car — mark him as an outsider. Cronk is an anthropologist who teaches at Rutgers University in New Jersey, and these sparsely populated mountains and grasslands present him with a vastly different scale of distance and familiarity. Out here, a driveway can be six miles of dirt. “People consider each other neighbors if they’re within a two-hour drive,” Cronk says. Prone to soft speech and studied observation, he is here to talk with ranchers about the risks and hazards they face, and about how they cooperate with each other. It’s a line of questioning he started in Kenya three decades ago.

While interviewing Maasai herdsman about cultural change and family structure, Cronk had learned of *osotua*, a voluntary but fairly formal system of sharing and mutual support. Herdsmen in such relationships are obligated to help each other in times of need. If, say, drought or disease kills half a herdsman’s cattle, goats or sheep — often a family’s sole source of wealth and livelihood — his partner or partners will offer some of their own.

Seeking to understand the dynamic, Cronk asked the Maasai to play a trust game. Two players start with equal pots of money; Player 1 gives some to Player 2, and the amount is multiplied by the

experimenter as an incentive. One dollar becomes three, for example. Player 2, if he chooses, can then give something back. Most exchanges were tit-for-tat: If players received a little, they returned a little — no surprises there. But then Cronk asked a second group of Maasai to play the same game, only now he told them it was based on *osotua*. “If Player 1 gave less, he got a larger proportion of Player 2’s pot in return; if he gave more, he got less. Why would that be?” Cronk says. *Osotua* was literally a game changer. That’s because, under this culture’s norms, a person who’s able to give a lot of money must not need much back. But a person who gives a little must need a lot in return.

The relationships are guided by what Cronk calls the three R’s: Respect, responsibility and restraint. The partners take the relationship very seriously, and they don’t abuse it, asking only for what’s needed. They give without expectation of repayment, knowing that should hard times befall them, their partners will do the same. It is a lifeline, as the meaning of *osotua* suggests: umbilical cord.

Copyright © The future is unpredictable, and they live in environments that are marginal,” Cronk says. “They can’t minimize risk completely, so they set up these relationships as a way to pool risk.”

Osotua relationships are unique to the Maasai, but the challenges they face aren’t. How, Cronk wondered, do other cultures use sharing to protect against life’s uncertainties?

With Athena Aktipis, an evolutionary biologist and social psychologist at the

University of Arizona, Cronk started the Human Generosity Project to investigate why, and how, people share, and why some people, and cultures, are more generous than others. The project now has eight field sites around the globe: five in Africa, one in the South Pacific, another in Mongolia, and the last here, in southern New Mexico and Arizona, among the Malpai ranchers. That’s why Cronk is here on a summer evening as the sun slips to the hills, sitting at Richard Winkler Jr.’s kitchen table.

Winkler grew up on a nearby ranch and bought this stretch of land in 1995. He often works alone; riding his ranch from end to end takes nearly five hours on horseback across rocky terrain. Poisonous snakes aren’t uncommon. Nor are armed drug and human smugglers crossing from Mexico, just a few miles south. But his daily worries more often involve drought and floods, cattle killed by cougars, fluctuating beef prices and broken equipment. “You’re on edge,” Winkler tells Cronk. “Everything is good today, but the next day there is a list of problems.”

Fellow ranchers have helped him brand cattle and ship them to market, and he’s done the same in return. When Winkler couldn’t get enough water for his cattle in a remote pasture, a neighbor told him to bring the cattle onto his land. He didn’t hesitate to make the offer. “It’s in your best interest to have good neighbors, and to be a good neighbor,” Winkler says. “If you’re in a bind, you can call them.”

McDonald, who lives an hour’s drive

Lee Cronk and Collette Berbesque, below, at a Human Generosity Project field site in Tanzania. Below right, Athena Aktipis with outside the Osotua Hotel, a tea shop in the Loita Maasai region of Kenya, named for the system of sharing among the Maasai.

COURTESY HUMAN GENEROSITY PROJECT





Copyright High Country News

from Winkler, got a sharp reminder of this on Thanksgiving Day, two years ago, when he and a ranch hand rode into the rocky, brush-covered hills behind the ranch to move cattle between pastures. Passing through a gate, McDonald's horse spooked, reared up and flipped over backward. McDonald, who was 61, slammed into the ground, and the horse landed on top of him. The saddle horn shattered his sternum. With a punctured lung, three broken ribs and several cracked vertebrae, he propped himself against a tree and waited for his ranch hand to fetch the pickup. His wife drove him 20-some miles down the bumpy road to a clinic in Douglas, where he was airlifted to Tucson. He spent 10 days in the hospital there and more than two months in a body brace, unable to ride.

News spread fast, within hours — via “the moccasin telegraph,” as Winkler calls it. As McDonald recuperated, several neighbors pitched in to move his cattle. It was more than friendship: Had they been injured, they would have needed the same sort of help. And McDonald would surely have obliged, just like his great-great-grandfather a century ago.

As with the Maasai, this kind of sharing strengthens a person's ability to handle life's unpredictable turns. You give to others, if you are able, partly as a way to mitigate future risk. The natural world abounds with this sort of generosity for the collective good — ant and bee colonies sharing food and work tasks, for instance. At the most basic level, we exist because of cooperation, with the evolution of multicellular organisms that share resources, rather than hog them. Such risk-pooling helped early humans survive in volatile conditions and eventually spread across the globe. “Generosity,” Cronk says, “may be a key to the human success story.”

It makes sense. “Everyone goes out and forages during the day,” Cronk says, “and then they come back and share what they've got, because it's unpredictable who's going to be successful and who's not. But everyone needs something to eat at the end of the day.” If that's the case, though, then why did things change? As societies developed, the acquisition of private property and the creation of organized defense systems, buttressed by formalized support networks that ranged from medieval religious and charitable

Members of the Malpai Borderlands Group, above, talk during a break in a board meeting last spring, below a painting inspired by the jaguar that Warner Glenn saw in the area in 1996, at the Malpai Ranch in southern Arizona. BLAKE GORDON



Bill McDonald on his ranch near Douglas, Arizona. After he was crushed by a horse on Thanksgiving Day two years ago, his neighbors chipped in to do ranchwork. COURTESY LEE CRONK

“You don’t have an obligation to help

anybody who knocks at your door. ... You decide who’s in your network, and then you’re

basically insuring yourself through these network interactions.” Athena Aktipis

Cooperating for the common good

Refuting the inevitability of the “tragedy of the commons,” in which individuals act in their own self-interest and against the best interests of the group, Elinor Ostrom won the 2009 Nobel Prize in Economics for her work on successful management of common-pool resources, like fisheries, grazing lands and irrigation water.

Her eight principles for managing a common resource:

- 1** Define clear group boundaries.
- 2** Match rules governing use of common goods to local needs and conditions.
- 3** Ensure that those affected by the rules can participate in modifying them.
- 4** Make sure the rule-making rights of community members are respected by outside authorities.
- 5** Develop a system, carried out by community members, for monitoring members’ behavior.
- 6** Use graduated sanctions for rule violators.
- 7** Provide accessible, low-cost means for dispute resolution.
- 8** Build responsibility for governing the common resource in nested tiers from the lowest level up to the entire interconnected system.

SOURCE: ONTHECOMMONS.ORG



Elinor Ostrom, who died in 2012, won the Nobel Prize for her work in economics. JOHN SOMMERS II / REUTERS

institutions to modern government safety nets and insurance, took on much of the risk-mitigation role. With increased wealth, people and communities felt less threatened by uncertainty. That was good for individuals and the species overall, though it also lessened our traditional dependence on communal sharing. And these modern constructs can beguile us with a false sense of insulation from vulnerabilities and upheavals. Cronk and his fellow researchers think that a deeper understanding of why and how we share — and how we can do it more efficiently — can offer us strategies both elemental and novel as we grapple with a stressed ecosystem and impending resource scarcity.

THE HUMAN GENEROSITY PROJECT team meets weekly in the psychology department at the Arizona State University, just outside Phoenix, with far-flung members joining by Skype. On a sunny Tuesday morning early in the year, with the desert heat already rising, Aktipis and several graduate students and post-doc fellows gather at a conference table with Cronk, who is visiting from New Jersey. The next day, Aktipis and Cronk will be in San Francisco addressing a global meeting of the Young Presidents’ Organization, a group of chief executives and business leaders.

For this audience, they’ll touch on the modern sharing economy, which is really less about generosity than the utilization of excess resources — perhaps an idle car (Uber), or a spare bedroom (Airbnb). Some airlines use a similar model: If a carrier cancels a flight because of maintenance problems, for example, a competitor might offer open seats at a reasonable pre-determined rate instead of profiting from the last-minute market price. It’s a courtesy that will be repaid when that airline finds itself in similar need.

These are market-based transactions, with specific terms of compensation or reciprocity, but sharing takes many forms. Consider blood donations: We give to people in need, knowing that our contribution might ease suffering, or even save a life, and though we don’t expect any recompense, we know that the life saved might one day be our own. Likewise, fire departments rely on mutual aid: If an emergency overwhelms a department’s resources, neighboring municipalities send help if they can, while municipal water departments often support each other in moments of crisis, hoping to soften the blow of future calamities. We learned this from our ancestors,

the ultimate sharers.

After the Generosity Project meeting, I sit with Aktipis and her colleagues on an outdoor patio at a campus cafe. Aktipis, who is 34 and seems perpetually but happily overextended with research projects, speaks at a rapid clip, as though racing to catch up with her own train of thought. She sees the world around her as endless fodder for experiments, and a meal, it turns out, is an ideal window onto sharing interactions. “If you go to a restaurant with someone, they might pay, and you might get it next time. Or you might offer to split it,” she says. “But that might be awkward. Then you’re saying we’re not really close enough to just trade off or not worry about it. But say you invite someone over to your house. You would be offended if they gave you money for groceries. All these scenarios generate different norms for what will and won’t be transferred, and what will be given in return, or not.”

And that’s just between two people. A server brings Aktipis’ lunch: a bowl of soup and a plate of hummus, with tomatoes, cucumbers, olives and pita bread. “Hundreds of people and transactions are involved in the delivery of this food,” she says, urging me to share her hummus. “It’s just that most of them are invisible.”

The people and transactions in such hyper-complex systems, along with their attendant motivations, norms and outcomes, are difficult to hold in your head all at once. In the not-so-distant past, the people who thought about resources and scarcity came up with heuristics, or rules of thumb, to predict how these systems worked. One of the most familiar is the so-called “tragedy of the commons,” which posits that if herdsman are given a field to share, they’ll wreck it. Out of self-interest, each will graze as many animals as he can, until the commons has been destroyed. This idea is so simple and so familiar that it’s often taken as a given. And places like Willcox, where individuals have acted contrary to the community’s best interests, seem to validate it. But what if it weren’t a given? What if we could recognize the needs of our fellow shepherd — accept that our own fate is tied up with theirs — and therefore be more generous about the whole thing? Today, the concept may at least be calculable, with computer models that can help us understand how people might act when confronted with different kinds of scarcity. These can help us to better know ourselves — and perhaps act in ways good for both ourselves and the community.

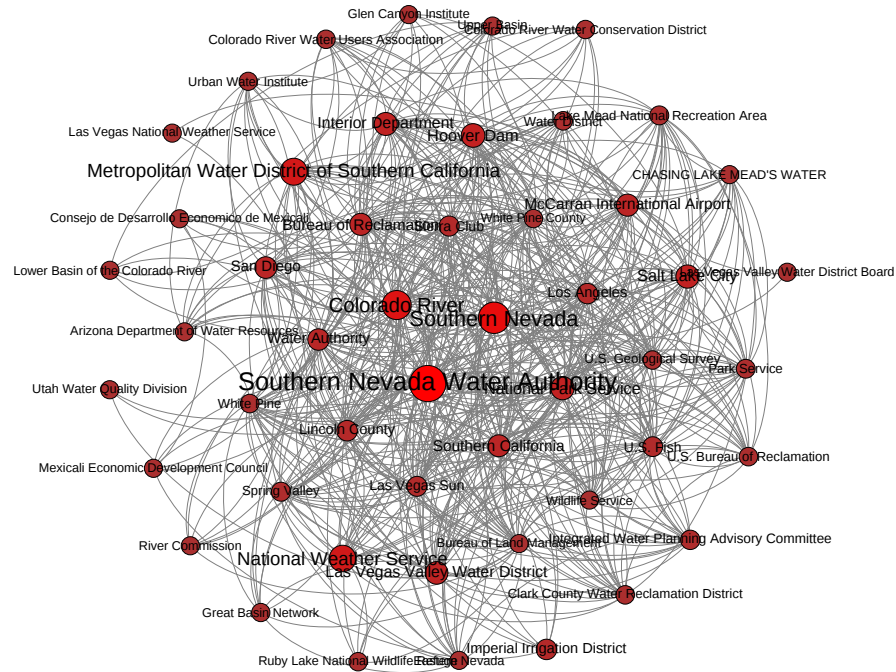
Making connections

John Murphy, an anthropologist and computational scientist at Argonne National Laboratory outside Chicago, builds elaborate models that explore social and ecological phenomena — in particular, water management. Together with colleagues from several universities, he designed a model of water usage in Tucson, regarding each household as an independent agent with a unique water profile based on price and social factors, such as the willingness to conserve water. These agents are connected to others in the network, much as we're connected to acquaintances through social media, so they can both influence and be influenced by others. If your neighbor replaces her lawn with xeriscaping, for example, you will notice it, and you might follow suit. Or suppose the water department mails out a conservation message: Some households will pitch it, some will adjust their own usage, and some might go further, influencing their network, just as we in the real world might nag coworkers to recycle.

The team validated its model against Tucson's actual water usage over the past two decades, which allows them to project scenarios — not predicting future water availability and use, but offering a planning tool that provides a glimpse of possible outcomes set against adjustments in supply and demand. “The models give us windows that we wouldn’t otherwise have,” Murphy says. “What happens *if* ...?”

In future versions, water manager “agents” could adjust prices, negotiate water rights among themselves and collaborate with other managers — or not. What happens if growth exceeds expectations and supplies drop? And what might water rationing or price hikes do to economic growth? The simulation depicts residential water use, but the structure could incorporate myriad factors, including agriculture, which accounts for 70 percent of Arizona’s water usage. Would a price hike for homeowners or water transfers with farmers have a greater impact?

While this model can, of course, be useful to policy makers in Tucson specifically, it offers insight into how these complex systems work in general. As demand and competition for resources increases, such simulations can help us better slice and divvy up a finite pie. Many models have projected supply and demand within the Colorado River Basin and the impacts of drought and climate change, but models like Murphy's look more closely at users within the system, and behavioral responses to variations.



SOURCE: MURPHY, JOHN,
JONATHAN OZIK, NICHOLSON
COLLIER, MARK ALTAAWEEL,
RICHARD LAMMERS,
ANDREW KLISKEY, LILIAN
ALESSA, DREW CASON, AND
PAULA WILLIAMS, 2014:
WATER RELATIONSHIPS
IN THE U.S. SOUTHWEST:
CHARACTERIZING WATER
MANAGEMENT NETWORKS
USING NATURAL LANGUAGE
PROCESSING. WATER 6(6):
1601–1641. DOI: 10.3390/
W6061601

John Murphy and colleagues used data mining of newspaper articles to look at connections between water-management institutions around the West. In the Las Vegas area, Southern Nevada Water Authority got the most mentions, and was perceived as connected to institutions as varied as the Mexicali Economic Development Council and the McCarran International Airport. Once perceived connections are identified, Murphy says, they can be used as a starting point for creating actual networks that could work for the common good.

One caveat: Mentions can mean that the institutions either are cooperating, or that they are not.

What would happen, then, if we took these simulations — this weird way of knowing ourselves — and introduced the idea of generosity? What might system-wide sharing look like?

Aktipis and her colleagues have already built a model that charts the health of a community's livestock herds through various shocks and calamities. If you run these through 50 years of increasing volatility, you discover that the ranchers in scenarios governed by *osotua* do better than those without these relationships. Their herds live longer, even as the hardships worsen. And the more partners they have in their sharing network — say, 20 instead of two — the better they do. “If you’re using *osotua* rules, there’s a long tail of survivability,” Aktipis says — a geeky way of saying that generous people are more likely to survive the apocalypse. “If you’re doing better, your partner is doing better.”

Now, Aktipis wants to plug her “agents” of *osotua* into a new model.

The Decision Center for a Desert City, at Arizona State University, studies water sustainability and urban adaptation to climate change. It also runs a model called Water Sim, which is similar to Murphy's Tucson simulation. It projects water supply and demand in the Phoenix metro area, with adjustable variables like groundwater levels, population growth, river flows and conservation programs.

By viewing water use through the lens of *osotua*, Aktipis says, water managers and policymakers might see more

possibilities for cooperation amid unpredictable future supplies and increasing demand. In recent years, managers have made steps in this direction. Phoenix, for instance, now uses some of its excess Colorado River allotment to recharge Tucson's aquifers; that means that if Phoenix faces a shortage in years to come, it can divert some of Tucson's allotment. Testing *osotua*-based scenarios through simulations could help managers tweak their existing systems and forge more sharing relationships, offering them added flexibility and risk mitigation while allowing them to retain their autonomy — something like the ranchers' neighboring, on a very big scale. "You don't have an obligation to help anybody who knocks at your door, crying about how they've had such a hard life," she says. "You decide who's in your network, and then you're basically insuring yourself through these network interactions."

The trick, then, is figuring out how to expand our networks.

AT OUR MOST INSULAR, we look out for ourselves, ensuring that our own needs are met first. At our most magnanimous, our generosity and concern can expand across humanity, to, say, disaster victims in foreign lands, because we regard them as part of ourselves and empathize with their obvious need. Everything in between is gradations of tribalism: family, neighbors, church congregations, and the geographical delineations of cities, states and countries. A shared identity

“If everyone would start by thinking, *‘I am part of the community,*
and I am part of the solution-searching team for my community,’ then that can change
the mindset from an individualistic way of looking at life to a collective pool of ideas.”

Dennis Sonkoi, Kenyan doctoral student in anthropology, who grew up with the Maasai tradition of sharing



Copyright High Country News

Dennis Sonkoi and Lee Cronk survey the Sonkoi family's herd in eastern Kenya. Sonkoi strives to teach the Masaai traditions to his young daughters, who are growing up in the United States.

COURTESY THE HUMAN GENEROSITY PROJECT



Brian Mockenhaupt, a contributing editor at *Outside* magazine, writes from Phoenix, Arizona.

This story was funded with reader donations to the High Country News Research Fund.

often engenders a willingness to give, but while these connections, boundaries and allegiances can facilitate sharing within subgroups, they can just as easily stymie it across systems. The 1922 Colorado River Compact was, after all, an exercise in cooperation, followed by decades of discord.

“It isn’t a question of the personal ethics of the individual so much as it’s the way the map has already been drawn,” Murphy says. “We’ve been handed this situation where there’s a defined ‘us,’ and it’s either us or them, according to that system. These institutional, social and legal architectures end up shaping the decisions that people can make.

“People say they want to be good neighbors,” he adds, but the cultural constraints they’re under “sometimes make that more difficult than they ever intended.”

Dennis Sonkoi, who is working on a doctorate in anthropology at Rutgers under Cronk’s direction, discovered this when he moved to the United States for graduate school. As a boy growing up in eastern Kenya, he and his brothers and often his cousins slept together on one big bed and always shared meals. “We would each be given a spoon, and all eat from

one plate,” he says. “We used sticks when tending the livestock. If a kid would take my stick, I would say ‘OK, you can keep it, but next time, when you don’t need it, I will take it.’ And then I would go out looking for another stick.

“Now I have two daughters,” he says. “When one touches a toy that belongs to the other, ‘Oh, that’s mine, don’t touch it!’ That’s one big challenge I face. How do I make sure that they get to know who they are, get to know that real Maasai lifestyle of not keeping any boundaries between kinship or neighbors?” His neighbors in America still do not engage with each other as freely as people did in Kenya, he says.

But Sonkoi’s first trip to America, in 2004, was different: He visited the Malpai ranchers, who had traveled to Kenya two years before to study Maasai ranching techniques. Among them, he felt surprisingly at home, seeing “that sense of belonging to a group and being there for one another.”

Sonkoi wants to broaden the localized *osotua* concept to help revamp natural resource allocation and management in Kenya, which has become stressed in recent years under the pressure of climate change and population growth.

At the same time, he believes that *osotua* — with its embrace of a shared fate and the need for coordinated action to both safeguard and prosper — can influence resource management in the U.S. Obviously, land management in the American West isn’t as straightforward as two Maasai herdsman pledging to support each other in times of need. But even as our culture shapes our behavior, our collective behavior, in turn, shapes our culture.

“The general concept of *osotua* is in everyone, is innate in human beings, but the environments in which we are brought up shape the ways in which we apply it in life,” Sonkoi says. “If everyone would start by thinking, ‘I am part of the community, and I am part of the solution-searching team for my community,’ then that can change the mindset from an individualistic way of looking at life to a collective pool of ideas.”

Why and how we share may be rooted in biology, but it’s greatly influenced by history, circumstance and perception. And that suggests an opportunity to change behaviors long constrained by inertia.

Which brings us back to Willcox, and the last call for the candy jar. Out here, inertia is the last thing people need, as the ground slowly collapses and wells dry up and residents ponder a waterless future. In Willcox, a sense of collective fate has slowly begun to emerge.

Sharing becomes more complicated as needs become uniform. If everyone faces the same problems, individual needs can trump cooperation or a concern for the collective good; when resources dwindle, our instinct is to grab what we can. But the prospect of drastic, state-imposed regulations or uniform restrictions on future resource uses was enough to shift the existing strategy of bemoaning the problem, yet ignoring it, to something closer to neighboring. Last year, Searle, the county supervisor, helped assemble a group of farmers, cattle ranchers, homeowners and power plant operators to devise a solution. “If our parents had taken care of this, we wouldn’t be at the table right now,” he says. “But it was just as contentious then. The reality is this is Arizona, and we’ve been chasing water since Day One.”

Nevertheless, once the coalition was formed, something surprising happened: People began to acquire a better understanding of their neighbor’s point of view. The structure shifted; the culture changed — just a smidge, true — but the progress is real, even if it’s slow. “There’s an acknowledgement,” Searle says, “that everyone needs to feel a little pain.” □