

Hunter-Gatherers Lost in the 21st Century

Christine Celata

Dec. 4, 2011, Live Oak UU Fellowship, Alameda, CA

Until 2007 when we moved to Pasadena, I lived for 20 years in a pleasant, upper-middle-class neighborhood in the hills in the Montclair section of Oakland. Just about everyone on our street knew each other. We got our families together every Friday in the summer for picnics, a tradition that had been going on for decades. We Christmas caroled together and had holiday parties together. But just as we were leaving Oakland things started to change in ways that affected even that little neighborhood. Our car was stolen. Our neighbors' cars were stolen. After we left we heard of doors being kicked in and houses on the street robbed. Then in June an awful incident happened that I think a lot of you have probably heard about. A young mother on the street—someone I didn't know because she moved in after we left-- was awakened at 2 AM by her dog barking and went downstairs to find two men, armed with guns, in her house. They took her outside into the trees and raped her, then brought her back and robbed the house. Her two small children were asleep in the house at the time. Horrific and traumatic as this incident was, it was not an isolated incident. There had been 6 armed home burglaries in that little neighborhood in the preceding year and a half. Armed burglaries are occurring across the city and the East Bay and seem unstoppable. Police, surveillance cameras on telephone poles and on houses, dogs, burglar alarm systems and signs, neighborhood watch—nothing has had much effect, though a few people have been arrested. With news like this becoming a common occurrence, you can imagine that people in that neighborhood feel completely vulnerable. It is a breakdown of civilization. In truth, civilization has been breaking down for quite a while now in Oakland, under the weight of poverty and drugs. And indeed, some of what we are talking about here is simply that chaos moving into wealthier neighborhoods. But we Unitarian-Universalists have written that we covenant to affirm “the goal of world community with peace, liberty, and justice for all”. What has happened to the peace, and why, and what can we do about it? These are the questions I am going to discuss today.

To begin, I am going to ask you to try to put away your ideas of who human beings are and how they act. We tell ourselves many myths about our rational motivations that don't work well to explain the situation I just described. Instead, I'd like to talk about human nature-- about what our biology has evolved our human nature to be, and how that human nature limits and determines our behavior on the scale of communities.

So who are we? For over 6 million years—that is a long time, 6 million years— our ancestors, the hominids, lived in small groups that hunted and foraged for food. We were hunter-gatherers. In a situation like that, where you might find an animal and kill it today, but more food might not turn up for 5 more days, survival of the whole group depends on sharing food. We share first with those most closely related to ourselves—our children, for example. If we don't, our genes die out and that behavior dies out. So we all are descended from those who shared

first with close relatives. But, as I've been reading, in such a small group in such harsh conditions we also needed to share with those in need to whom we were not related, or the group would not survive. In other words, out of self-interest we evolved to be altruists. We are a special kind of altruist called "reciprocal altruists". That means that if I share with you today because you are starving, I expect that you will reciprocate later when I am the one in trouble. But what exactly is it that evolved that makes us altruists? Evolution evolved in us feelings—feelings of sympathy, obligation, guilt, friendship, affection, and trust, and toward those who do not reciprocate properly, outrage and dislike. These feelings are what we use to decide what to do in a given situation—to help, or not to help, for instance. In other words, these feelings constitute our conscience. And if we look backward through our evolution, those feelings at some point cease to exist. I will come back to the conscience in a moment. But I also want to note that we had to evolve some way to police this reciprocal altruism situation. So in all human cultures, showing that it is innate behavior, we find the use of shame, ridicule, shunning, and gossip to spread the word on who is untrustworthy and to keep people in line, just as described in the interview with Robin Dunbar.

Now, back to the conscience, because this is very relevant to the questions we began with. How can anyone with a conscience perpetrate the crimes I described—home invasions, especially with the attendant violence? Evolutionary psychologists tell us that 30-40% of our ideas of right and wrong are the same, universally, across human cultures. So 30-40% of our conscience is genetic. But that leaves 60-70%, the major part, which is formed by our environment—by the conditions under which we are raised and what we are taught. Evolution had to leave our consciences adaptable because in some situations it is more beneficial to survival to lie or cheat or even be violent than to be virtuous. You can think about a Jew in Nazi Germany as an extreme example. But as we think about the origin of those crimes in Oakland we can all imagine that poverty produces this kind of situation also. If I can't provide for myself or for my family, I will need to think differently about the right and wrong of lying, stealing, or even violence. It would be the same for any of us. Right and wrong are not absolute. And the conscience is not what we have always imagined it to be-- a mental system, a compass, pointing us to the absolute right. It is an innate, evolutionary tool aimed at insuring our survival in a group based on reciprocal altruism. It makes us appear to be "good" and perform properly so that we can stay in the group. And it is tuned by our circumstances.

So that is how we act with people in our "in group".

Of course over the course of those 6 million years we also had to deal with the arrival of occasional people outside our "in group"-- the stranger, the "other". And judging by what we see as the natural reaction to outsiders in all human cultures, those people must have been pretty threatening to our survival. Because in all human cultures the natural feelings toward outsiders are distrust and suspicion, and the strategies we employ are often exploitation and even violence. We see this everywhere today. We see it in anti-immigrant and anti-Muslim sentiment here and abroad. We see it in the attitude of some of the people of Lancaster, CA, who want to eject everyone in Section 8 housing from their city. A small example is the treatment that my daughter experienced in 5th grade, when she

wasn't a member of the "popular group", so she was an outsider. I'm sure many of us can relate to that, or went through it with our children. But there are also much more serious examples, like the attitude of one gang in Los Angeles or Oakland toward the gang in the next neighborhood—the other—or every instance of ethnic cleansing, or slavery. All of these shameful acts of our present and past are perpetrated by people we would call normal, not by sociopaths. That is a clue that this is innate behavior. This is our natural heritage, too-- our innate feelings toward "the other".

Can't we be saved from this instinctive behavior by thinking? We are supposed to be the "thinking animal". Well, the problem is that the part of the brain that does rational thinking, the neocortex, is "neo". It is new. It arrived rather late, about 250,000 years ago. Until then our decisions were made by a much more ancient system in the brain, the limbic system. The limbic system creates our emotions and emotional memories. So if we were confronted with a situation, the limbic system would pull out memories of emotions from previous similar situations. And if it felt good, we did it; if it felt scary, we ran away. The neocortex didn't replace the limbic system; it was an add-on. When information arrives from the senses telling you what is going on in the world, that information goes to both the limbic system and the neocortex, but it gets to the limbic system a quarter second before it reaches the neocortex. That's a long time. It is long enough for the limbic system to flood the neocortex, and it does, with emotions and emotional memories and its own emotional decision about the situation. My daughter Rayna majored in cognitive science in college. And when the professor was describing the limbic system to the class, he told them a true story of a man who was walking beside a river, when all of a sudden he found himself standing in the river, holding a baby. What had happened was that his eyes saw a drowning infant. His limbic system flooded him with emotions and the emotional imperative to save the baby. He jumped in the river and saved the baby before his neocortex ever registered that there was a baby. This kind of thing happens all the time—you jump out of the way of a car literally before you realize you have seen it. Then the neocortex steps in and weaves a story around the situation—a story of rational decisions and free will-- and makes a nice, tidy, analytical memory of the situation. What I am saying is that a lot of our decisions, especially the quick ones, the ones where we don't think we have to think about it much, the ones we don't mull over, have a very large emotional component to them. Indeed, we can't make any decisions without the limbic system. We need to rehearse the situation beforehand and know which decision will make us feel good and which might make us feel guilty. People with damaged limbic systems can't make decisions, as it turns out. So all of our decisions have an emotional component. And many of those emotions are left over from an ancient time when the very presence of a stranger could be a life-threatening emergency. So we can't get around our negative emotions toward outsiders very well simply by trying to be rational. But it obviously isn't impossible. We have a whole church here full of people here who have learned to value difference. I like meeting strangers. But notice that I said "learned" to value difference. It isn't natural behavior for the person in the flatlands of Oakland to feel positive toward the richer person on the hill—or vice versa. It isn't natural behavior for a gang in

Oakland or Los Angeles to be nice to the gang in the next neighborhood. It takes training, through upbringing or formal training, to change this.

So that is who we are, toward people in our “in group” and toward outsiders.

Now all of this instinctive, evolved behavior worked fairly well in our communities until fairly recently. In my grandparents’ time, say, around 1900, most of us in the U.S. were still living in something approximating the environment we evolved for. $\frac{3}{4}$ of us lived on farms or in very small towns in the country. Those in the cities had been in rural areas within a generation or two, so this story of the farms and small towns is the story of very nearly all of us. In those towns we recognized everyone around us, were close to many of them, and fear of small-town gossip kept us in line, just as Dunbar said—Granny wagged her finger if you got out of line. Or someone else’s granny wagged her finger, because everyone knew everyone else’s business. But then there came a rapid rise of technology that made big changes in agriculture. This brought us something in the U.S. that our species had never had before—reliable food surpluses. The population grew very quickly, it exploded, and because of mechanization almost none of those people had to be on a farm. So today 80% of us live in cities. Our environment has changed radically. The people around us are mostly strangers. This is not at all what we evolved for. And there was another trend that came with the transition from farm to city. Difference, the characteristic we use instinctively to identify a stranger, has been magnified in new and numerous ways. Before 1900 there was a relatively small number of occupations. People might be farmers, or craftspeople, teachers, or work in or own a shop. And everyone had seen and understood these jobs. There was also a relatively small spread in income among the general mass of people. Families tended to be large by our standards, because big families are needed for farm work. So a family looking at another family in another county or neighborhood saw people like themselves, spending their whole lives raising all of those children, occupying their time in ways that were common and understood, and making do with the same economic resources. They saw folk similar to themselves. But the rise in technology brought a huge expansion in the types of occupation. I may know the job titles of my friends and neighbors, but I really don’t understand how they spend their time every day and why. And before I retired, they certainly didn’t understand what I did every day as a physicist. Moreover, within those occupations there is a very large disparity in income from rich to poor, with families segregated in neighborhoods by income in our cities. Now when a family in one neighborhood looks at a family in another neighborhood they are likely to see people with very different priorities and levels of privilege, doing things all day that are unfamiliar or even incomprehensible. We don’t know or understand the people we are looking at anymore. And we see hundreds, or thousands, of people every day who are not in our “in group”. This isn’t what we evolved for. Yet human nature has not had time to evolve. It is the same as it was.

Amazingly enough, we don’t do too badly. New York City is not a pit of vipers. We live much as we did over that 6 million years. Studies show that we still each have our “in groups”, which average groups of 3-7 intimate relatives or friends, plus about 20 people whom we know well and go to for help, and enough more we know somewhat well to add up to about 150, the Dunbar number. But that is 150

out of a population, in Oakland, of almost 400,000. Whether we think about it or not, most of the people we see around us every day are strangers. And conditions have gone much farther in this direction since the mid-nineteen seventies. Government policies, especially tax structure policy; economic developments; and corporate greed have hugely increased the income gap between rich and poor. And so we now have desperately poor people segregated in certain areas of our cities. There are no rich people close in any sense to the “in group” of the poor. In such circumstances the 60-70% of the conscience that is formed by our environment gets formed in ways that are very predictable and practical but which don’t favor what we call communitarian civilized behavior. Note that I am not saying that all of the poor commit crimes. What I am saying is that right and wrong are fuzzy in a situation of need, and if we add lack of hope and obvious gross inequity to this change in the conscience, then crime, especially crime aimed at acquiring money and property, and all the attendant violence, grows in frequency, as it is in Oakland.

So what can we do? First I would like to make a brief remark about what we are doing. We are doing the evolutionarily natural thing. We are making ever more punitive laws to lock up more and more of “those people”, to keep them away from us. But if you take the species-wide, historically long view that I have been talking about, and look at the causes of these crimes, you will come to the conclusion that these methods don’t work. They don’t attack the causes. And indeed, the statistics show very little effect on the crime level of things like mandatory sentencing laws.

So what does work? From the picture that I’ve described, I can see two places where we as individuals, and our churches, can make a real difference. The first concerns neighborhoods. A neighborhood can be friendly and cooperative, because in general the number of adults will be below the Dunbar number, so that people can get to know and trust each other. The problem is, then, that the rest of the city is full of strangers. We see what that can lead to when we think about violence between gangs from different neighborhoods, and even the legends that grow up in one city neighborhood concerning the character of people in another neighborhood. How can we knit our neighborhoods together? That requires making real relationships between people. You can think of many ways to do this. Maybe we could have regular elementary school events involving schools in different neighborhoods, with the parents planning the events. The children will learn what the people in the next neighborhood really are like. Maybe churches from different neighborhoods should invite each other over for food and conversation. You can think of many more activities that would work. These are things that will make a difference, and they are eminently do-able. After I preached this sermon in Pasadena, I went to talk to the Pasadena chief of police about these issues. He said to me, “The problem with Oakland is that it is too isolated.” When I started to bristle, he said, “It isn’t enough for people in your neighborhood to know each other and watch out for each other. They have to care about the whole city. Crime doesn’t stay in one neighborhood.” We need to care about the whole city. We need to do what the Buddhists would call “erasing the illusion of separateness” between people in our neighborhoods.

The second problem has to do with children. I read three books on crime control and prevention in preparation for this service. They all agreed that normal

methods, including most community policing, aren't effective in preventing crime. Boston made community policing work (see reference below), but it involved comprehensive commitment over years of all the services in the city. However, what shines out of those books I read, what works very effectively, is intervening in the life of an at-risk child while they are forming their ideas of how to behave—while that 60-70% of their conscience that is adaptable is being formed. That lowers crime. What those children need is the respect of the whole community. They need good education. They need economic equity for their families. These are things that we can't provide. We have no control over the political situation at that level. We must all continue our political work toward those goals. But the books I read talked about much more manageable things that we all can do that really work. Those children need mentors. They need news of hope. They need opportunities created and brought to them, and something that is proven to be very powerful: formal or informal training in making good decisions. Myself, I tutor math at Marshall Fundamental High School in Pasadena, a school that is full of at-risk kids. I think you have all heard of the organization "Big Brothers and Big Sisters". They have a proven track record for helping children. But what you might not know is that the studies show that they also have been very effective at lowering crime. What I am asking is for any of you who have the temperament to go out and connect yourself to an at-risk child. You will change a life and also make our communities safer.

When I ask you to do these things— work with a stranger's child, organize events to change a city— I know how you must feel. You feel uncomfortable. You know you don't have time. You don't want to get into this. You hope someone does these things, but you hope that it doesn't have to be you. That is evolution talking again, in very strong terms, on what it knows best. Evolution tells us what our priorities are, and they are clear. Our business is to survive, to take care of our children and families and maybe a few friends. It isn't our business, it isn't a priority, to take care of a bunch of strangers. So we feel that we don't have the time or energy. That attitude is obviously what brought our cities to the state they are in. It is a restatement of everything I've said about our attitude toward strangers. It is also, I think, why we allow poverty to exist at all. But we need to get over that disinclination we feel. As a species we cannot live in such large communities in right relationship without some thought and work. Can we do it? Yes. Will we do it? That is up to you and me. But I know something about what that choice means. On the Montclair Security Listserv I see neighborhoods investigating and organizing to hire armed guards. As the world population, unfortunately, continues to grow rapidly, and poverty continues to increase, I think we will have a choice. We can end up in a neighborhood-against-neighborhood city of armed enclaves, or we can have the vision I've proposed: a city where people are friendly to people across the city, and we take care of each other's children.

I also hold out the hope in my heart that by following this path we will bring more equity to our communities. It is easy to ignore inequity when it happens to strangers. It is much harder when it happens to someone who has become a friend. Then inequity becomes unbearable and maybe we will do something.

Finally, I hope that you can go out of church today thinking of the song that you heard before the sermon, “Scrambled Eggs and Prayers”. Think of that woman who, looking at a criminal, saw someone like her own sons, someone not different from herself. Her compassion changed his life. It changed her own life. And it changed the life of her community. I know that you can do that, too. Amen, and so be it.

Bibliography

This is a short list of the best books and articles that contributed to the thoughts I’ve expressed above.

The Moral Animal, by Robert Wright – a fascinating book on evolution and morality

Strangers in a Strange Land, by Douglas S. Massey - the history of cities, including discussion of how they fit, or don’t fit, the human psyche

Crime Control in America...What Works?, by John L. Worrall – very readable, but thorough and encyclopedic, review of what works in crime control and prevention

Robin Dunbar’s paper on the “Dunbar number”: R.I.M Dunbar, "Neocortex size as a constraint on group size in primates," *Journal of Human Evolution* (1992), vol. 20, pp. 469-493.

“The Boston Strategy”, a report at

http://sasnet.com/bostonstrategy/downloads/BS_StoryPruitt.pdf

This is a fascinating story of what really worked in Boston to decrease violent crime. This is the kind of community policing that really works.