ON THE ORIGIN OF CULTURES – TRANSCRIPTION

on the origin of cultures I

our guides (among others)
   vilayanur ramachandran, neurologist
   giacomo rizzolatti, neurophysiologist
   michael tomasello, developmental psychologist
   victoria horner, ethologist
   jane goodall, primatologist
   charles darwin, naturalist
   rené girard, anthropologist

prologue

Dr. Vilayanur Ramachandran (University of California, San Diego, USA): So, here you have my last slide. For the longest time people have regarded science and humanities as being distinct. C.P. Snow spoke of the two cultures: science on the one hand, humanities on the other; never the twain shall meet. So, I’m saying the mirror neuron system lies at the interface, allowing you to rethink about issues like consciousness, representation of self, what separates you from other human beings, what allows you to empathize with other human beings, and also even things like the emergence of culture and civilization, which is unique to human beings. Thank you.

In Ethiopia, 3.2 million years ago lived Australopithecus Afarensis: ‘Lucy’. In her body and behavior Lucy is in most respects an ape – from her diet to her small brain and habitat. The big difference is the way she walked. Walking upright is the first piece in our evolutionary puzzle, the first step on the road to humanity. Having travelled back in time over three million years, we’d found a creature that seemed to begin the human line, yet Lucy was a long way from being human.

Dr. Joe Cain (University College London, UK): We found a common ancestor of all the things that are human, but at the end of the day it’s a bit empty. Look what we don’t find with Lucy: we don’t find culture, we don’t find the things that make us human, we don’t find our humanity.

   1) mimesis (imitation)
      learning by imitation

This is Lake Victoria in Uganda. And this is researcher Victoria Horner. She has developed a simple but brilliant experiment that could explain how we came to be the most successful species on the planet. Strangely it’s because there are some tasks we do worse than chimpanzees.

Dr. Victoria Horner (University of St Andrews, Scotland): It’s very difficult in the field to actually see learning in action. And chimpanzees have only been studied scientifically in the wild for about forty years.
She uses two boxes to test whether the way we learn can explain our success.

Dr. Horner: *We present both chimpanzees and children with this box. This is a black box and it’s completely opaque. You can’t see the inside of the box, you can’t see how it works at all. And inside it there is a food award for chimpanzees, or for human children there’s a little sticker.*

Horner demonstrates the long sequence of actions Jessica must use to get the reward. She reloads the box. It’s now Jessica’s turn to show she has learned what she has seen. She successfully picks up the complicated sequence of actions and gets her reward.

Next Horner and her boxes make the fifteen minute journey to a nearby island. This tropical paradise is a sanctuary for rescued chimpanzees. It’s four years since Horner was last here, and Billy, a female chimpanzee, greets her like a long lost friend. Greetings over, it’s time for the experiment. Horner demonstrates the movements to Billy. Now it’s Billy’s turn. Will she copy the actions? Just like Jessica the chimpanzee copies the actions and gets her reward. But Horner has just been toying with both ape and child. This experiment is not about how apes learn, it’s about understanding how humans learn. Back at the school she swops the boxes.

Dr. Horner: *We then present them with what we call the clear box. And this one is structurally identical to the black box, but this time all of the walls of the box are made of see-through material. And actually there’s a full ceiling which runs right around the top here, so that all the actions to the top are irrelevant. They’re nonsense actions. And the sticker or the food award is actually located in this tube here at the front.*

Jessica can now see that poking the stick in the top is pointless. And yet... The only action she needs to do is the last one. But for some reason Jessica sticks faithfully to what she has learned. Even though she can see that the first actions are unnecessary, she carefully repeats them. Finally she gets the reward.

Dr. Horner: *Well done, very good.*

It’s not just Jessica. Horner has tested children around the world, and they all copy her actions. Not one of them takes the short cut.

Dr. Horner: *What we found was actually rather surprising. We found that the children copied everything that I did, no matter whether they had the black box or the see-through box.*

So what will Billy do? She goes straight for the sweet. This isn’t unusual. In trials with a dozen chimpanzees, Horner has found that two times out of three, chimpanzees take the shortcut.

Dr. Horner: *This tells us perhaps that chimpanzees are not so reliant on accurately copying and imitating as we are. Perhaps it’s less important to their development than it is for ours.*

It’s a start towards explaining why humans and apes are so different. Chimps don’t just follow the leader. They work out the most direct route. They want to get the food as quickly
as possible. In contrast, children copy faithfully. It may seem like wasted energy, but in reality this behavior gives us a big advantage.

Dr. Horner: *Imitation and copying accurately is a huge part of our development as humans. It's how we learn languages, how we learn to interact with objects and acquire cultural behaviors and lots of the complex things that we do as humans. It's a little as if it's a sort of default for us to copy accurately.*

So it seems that blindly copying isn't so stupid after all.

On the journey between human and ape something changed. At some point our brains began to develop differently. Now scientists think they know when and how this change happened. We've come to Philadelphia where this discovery was made by pure chance. Hansell Stedman of the university of Pennsylvania studies muscular dystrophy. To understand the disease better he decided to compare human muscle cells with those in the great apes. He noticed something unusual in some of the cells in one particular muscle: the jaw muscle. He took a thin slice of chimpanzee and a thin slice of human jaw muscle and compared them under a microscope.

Dr. Hansell Stedman (University of Pennsylvania, USA): *We're looking at a razor thin section of one of the jaw closing muscles from a great ape.*

These red cells seen in cross-section are a chimpanzee’s biting muscle fibers. But when Stedman looked at the human jaw muscle, the difference was immediately obvious. The human biting muscle fibers at the bottom are one third the size of the great apes. This isn't just an isolated case. Every human jaw muscle looks the same. Stedman has discovered that in the distant past a genetic mutation occurred. It made our ancestors jaw muscles much weaker than those of the other apes. You wouldn't think that a weaker jaw could be an advantage back in the prehistoric era. But incredibly it's this genetic mutation that could be responsible for something even more amazing. The secret lies in the way muscles attach to bones, in this case the skull.

Dr. Nancy Minugh-Purvis (Drexel University College of Medicine, Pennsylvania, USA): *If you take a look at this orangutan skull – this is an adult male –, this illustrates very nicely that muscles leave an indelible mark on the bones where they attach to them. And so this dramatic cresting, so magnificently developed in this specimen, shows you that there was a very powerful jaw closing muscle in this individual.*

All the great apes have a crest along the top of their skull. They need it because their strong jaw muscles need a firm anchor. But the thick skull has another effect. It acts like a rigid and inflexible cage on the brain. In humans, our weak jaw muscle exerts far less pressure on the skull.

Dr. Minugh-Purvis: *If we take a look at this adult male human, in comparison you can see the remarkable contrast. The skull surface is actually quite smooth, there's a very tiny residual mark... But in fact this muscle is a very thin weave, feeble almost by comparison, with the orangutan that we just looked at.*
Around 2 million years ago there were several hominid species walking the earth.

Dr. Minugh-Purvis: You have populations with individuals as dramatically different looking as this, literally living cheek by jaw.

These skulls belong to two different hominid species, living together over two million years ago. Australopithecus Bosei on the left, and Homo Erectus on the right. Anthropologists are convinced the genetic mutation occurred in one of these hominids, weakening the jaw muscle, and allowing the skull and brain to expand. But which one? The Australopithecus has a large ape-like jaw muscle, while the Homo Erectus has a much smaller human-like jaw muscle – it’s this one that has the genetic mutation.

Dr. Minugh-Purvis: The other dramatic difference obviously is in the size of the brain case.

Homo Erectus has a brain that’s 50% larger than Australopithecus Bosei. But when did this happen? By comparing how genes vary in different species over millions of years, Hansell Stedman has calculated that the strong jaw muscle mutated into the weaker muscle in our ancestor Homo Erectus about 2.4 million years ago. It’s one of the most important moments in our evolutionary history. And it’s all down to a single genetic mutation.

Dr. Stedman: That occurred in one individual at one point in time when there was a gene-pool of interbreeding animals that all had the normal version of this gene. And yet with the passage of time the only surviving version of that gene in humans is the mutant version. It eclipsed all of the others that were in that breeding pool at that time through the process of genetic fixation.

A single genetic mutation, but powerful enough for our ancestors to outcompete all other hominids. But how did these early ancestors of ours survive with jaw muscles ten to fifty times weaker than their rivals?

Dr. Stedman: If you know you gonna lose a jaw to jaw combat, then avoid jaw to jaw combat all together. Find some other way to annihilate your competitors.

And that’s what our ancestors did. They switched from brawn to brain. Blessed with a larger brain, our ancestors began to cooperate. They shared their plans, developed complex social structures. This was the first step on a journey that would ultimately propel us into a different world.

mirror neurons

Dr. Ramachandran: I’d like to talk to you today about the human brain, which is what we do research on at the University of California. Just think about this problem for a second. Here is a lump of flesh, about three pounds, which you can hold in the palm of your hand. But it can contemplate the vastness of interstellar space. It can contemplate the meaning of infinity, ask questions about the meaning of its own existence, about the nature of God.
And this is truly the most amazing thing in the world. It’s the greatest mystery confronting human beings: how does this all come about? Well, the brain, as you know, is made up of neurons. We’re looking at neurons here. There are 100 billion neurons in the adult human brain. And each neuron makes something like 1,000 to 10,000 contacts with other neurons in the brain. And based on this, people have calculated that the number of permutations and combinations of brain activity exceeds the number of elementary particles in the universe.

So, how do you go about studying the brain? One approach is to look at patients who had lesions in different parts of the brain, and study changes in their behavior. This is what I spoke about in the last TED. Today I’ll talk about a different approach, which is to put electrodes in different parts of the brain, and actually record the activity of individual nerve cells in the brain. Sort of eavesdrop on the activity of nerve cells in the brain.

Now, one recent discovery that has been made by researchers in Italy, in Parma, by Giacomo Rizzolatti and his colleagues, is a group of neurons called mirror neurons, which are on the front of the brain in the frontal lobes. Now, it turns out there are neurons which are called ordinary motor command neurons in the front of the brain, which have been known for over 50 years. These neurons will fire when a person performs a specific action. For example, if I do that, and reach and grab an apple, a motor command neuron in the front of my brain will fire. If I reach out and pull an object, another neuron will fire, commanding me to pull that object. These are called motor command neurons that have been known for a long time.

But what Rizzolatti found was a subset of these neurons, maybe about 20 percent of them, will also fire when I’m looking at somebody else performing the same action. So here is a neuron that fires when I reach and grab something, but it also fires when I watch Joe reaching and grabbing something. And this is truly astonishing. Because it’s as though this neuron is adopting the other person’s point of view. It’s almost as though it’s performing a virtual reality simulation of the other person’s action.
We may have some special circuitry in our brains that helps us whenever we look at each other. Ask yourself: why do people get so involved, so deeply involved, with such anguish, such pain, such nail-biting tension over... football? Why are we such suckers for sports? And it's not just sports. We can lose it completely at the movies, at videogames, watching a dance... Is there something about humans, humans particularly, that allows us to connect so deeply when we watch other people – watch them moving, watch them playing, watch their faces? Well, as it happens, scientists have an explanation for this strange ability to connect. It's new...

Dr. Daniel Glaser (University College London, UK): *It had never been found on a cellular level before.*

A set of brain-cells found on either side of the head. Among all the billions of long branching cells in our brain, these so-called 'mirror neurons' have surprising power.

Dr. Glaser: *What we found is the mechanism that underlies something which is absolutely fundamental to the way that we see other people in the world.*

And it began entirely by accident at a laboratory in the lovely old city of Parma, Italy, where a group of brain researchers was working with monkeys. And they were testing a neuron, that's a brain-cell, that always fired, made this sound - * - whenever the monkey would grab for a peanut. So the lab had all these peanuts around, and whenever the monkey made its move, the neuron would fire. Scientists thought: now here is a neuron that is essential to motion, it is a motor neuron. Then, one day, the monkey was just sitting around, not moving at all, just sitting, when a human scientist came into the lab. And when that scientist grasped a peanut, yeah, the monkey's cell fired. Now, the monkey hadn't moved. It was the human that had moved. Suggesting that this neuron up here couldn't tell the difference between seeing something and doing something. Seeing and doing were the same. Or more intriguingly, that for this neuron watching somebody do something is just like doing it yourself. The head of the lab, Giacomo Rizzolatti, thought: 'Wow!'

Dr. Giacomo Rizzolatti (University of Parma, Italy): *The same neuron, one neuron, fired both when the monkey observed something and when the monkey is doing something. It's almost unbelievable.*

Dr. Glaser: *It was surprising because this cell which was involved with motor-planning for the monkey turned out to be interested in the movements of other people as well.*
Some people call them ‘monkey see, monkey do’-neurons, but the name that stuck is ‘mirror neurons’, because with them, the brain seems to mirror the movements it sees. This accidental discovery got scientists thinking on what soon became pretty clear: that this is not just a monkey thing, it’s a people thing too. We all know that humans learn by looking and copying. That’s what infants do. First you look, then you do. And once you’ve watched and copied and learned a set of moves, you not only have them in your head... If you see somebody else doing it, you can share the experience. They know the moves, you know the moves, so you can move with them.

Dr. Glaser: If you can use the years of training that you yourself have done... Learning to crawl and learning to walk and learning to eat... This is an incredibly rich set of knowledge...

Dr. Ramachandran: Now, what is the significance of these mirror neurons? For one thing they must be involved in things like imitation and emulation. Because to imitate a complex act requires my brain to adopt the other person’s point of view. So, this is important for imitation and emulation. Well, why is that important? Well, let’s take a look at the next slide. So, how do you do imitation? Why is imitation important? Mirror neurons and imitation, emulation.
Now, let's look at culture, the phenomenon of human culture. If you go back in time about [75,000] to 100,000 years ago, let's look at human evolution, it turns out that something very important happened around 75,000 years ago. And that is, there is a sudden emergence and rapid spread of a number of skills that are unique to human beings like tool use, the use of fire, the use of shelters, and, of course, language, and the ability to read somebody else's mind and interpret that person's behavior. All of that happened relatively quickly.

Even though the human brain had achieved its present size almost three or four hundred thousand years ago, 100,000 years ago all of this happened very, very quickly. And I claim that what happened was the sudden emergence of a sophisticated mirror neuron system, which allowed you to emulate and imitate other people's actions. So that when there was a sudden accidental discovery by one member of the group, say the use of fire, or a particular type of tool, instead of dying out, this spread rapidly, horizontally across the population, or was transmitted vertically, down the generations.

So, this made evolution suddenly Lamarckian, instead of Darwinian. Darwinian evolution is slow; it takes hundreds of thousands of years. A polar bear, to evolve a coat, will take thousands of generations, maybe 100,000 years. A human being, a child, can just watch its parent, kill another polar bear, and skin it and put the skin on its body, fur on the body, and learn it in one step. What the polar bear took 100,000 years to learn, it can learn in five minutes, maybe 10 minutes. And then once it's learned this it spreads in geometric proportion across a population.

This is the basis. The imitation of complex skills is what we call culture and is the basis of civilization.

We cooperate. We work together. We play in teams, share our activities with others. From remote villages to big cities communities pull together to help each other survive. This is perhaps the most extreme example: war. The people of an entire nation strive together towards a common goal. Everyone has a different role, but everything is focused towards this one end. So is it cooperation that separates us from the apes? One scientist has witnessed and filmed an astonishing event that reveals just how far chimp cooperation can go.

2) violence desiring through imitation

In November 2002, primatologist David Watts set out into the Kibale Forest in Uganda on his daily observations of the Ngogo chimpanzees. He was about to witness a shocking event.
Watts observed as a group of male chimpanzees embarked on a mission into neighboring territory. As they left their own territory, these normally noisy animals all fell silent, and began to tread stealthily, like a special forces team on the move. Suddenly, they spot a small group of neighboring males. They move in for the attack. One male is surrounded by eighteen males. It makes a desperate bid to escape, but it's too late. They beat it to death.

Watts was profoundly shaken. Such behavior has rarely been seen.

Dr. David Watts (Yale University, USA): This poor male was completely overwhelmed and outnumbered, and within about ten minutes of when we first got there and saw that they had him trapped, he was dead.

What David Watts witnessed was a strategic assault by chimpanzees at war with another tribe.
Dr. Watts: They make a decision – they seem to be quite good at this – about what the risks are, how many of them are together as opposed to how many of the neighbors do they think there are, and if they outnumber them sufficiently then they attack. They start giving each other subtle cues, like some intense grooming, or moving in a certain direction. Then something clicks in all their minds and then they just start going.

So far, the evidence suggests that, like humans, apes cooperate. They groom each other. They help their offspring overcome the everyday hurdles of life. And at the other extreme, a group of chimpanzees will work together to hunt monkeys.

Dr. René Girard (Stanford University, California, USA): In other words, there will always be a conflict. We cannot think of imitation as a source of conflict, and probably the main concept in my views is this one: to understand that imitation can be a source of conflict.

scanning each other’s intentions

We’re on the verge of finding the barrier that divides humans from apes. We’re trying to find out if our ape cousins are capable of cooperating and helping others the way humans do. In our final experiment, a researcher places a piece of food under one of two cups. The chimp has to choose the cup where the food is hidden. The researcher reaches for the cup with the food. And the chimp goes straight for it.

Dr. Michael Tomasello (Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany): You set up a situation where you’re competing with the chimpanzee, and you reach for it like you’re trying to get it yourself in competition with the chimp. Then they see that and make the inference: that must be where the food is. If he’s trying to get in there, that must be where the food is…

imitating each other’s desires

Dr. Girard: Why are human beings always in conflict? Why don’t human beings, as you say, get along together? In great literary works, you know – I started with the novels, but I guess ancient tragedy would be very important for this –, you have a certain type of conflict, which is a conflict of desire. The archetypal tragic characters are identical twins, fighting for the same inheritance, always fighting together, always desiring the same thing: desiring the same woman, desiring the same power, the throne of their father. The question is: why is conflict so important in human life? Is the fact that people desire the same thing an accident, is it pure chance? Or is there something in mankind which forces men who are close to each other to desire the same thing? And I think those great works give us indications that the social sciences do not give regarding this type of conflict. They say that there is a tendency in human beings to desire what their neighbors desire, to be influenced. If I reach toward an object, your tendency will be to imitate me and to reach for the same object.

Dr. Ramachandran: Now, it turns out there are neurons which are called ordinary motor command neurons in the front of the brain, which have been known for over 50 years. These neurons will fire when a person performs a specific action. For example, if I do that, and reach and grab an apple, a motor command neuron in the front of my brain will fire. If I reach out and pull an object, another neuron will fire, commanding me to pull that object. These are called motor command neurons that have been known for a long time.
But what Rizzolatti found was a subset of these neurons, maybe about 20 percent of them, will also fire when I'm looking at somebody else performing the same action. So, here is a neuron that fires when I reach and grab something, but it also fires when I watch Joe reaching and grabbing something. And this is truly astonishing. Because it's as though this neuron is adopting the other person's point of view. It's almost as though it's performing a virtual reality simulation of the other person's action.

reconciling science and humanities

So, here you have my last slide. For the longest time people have regarded science and humanities as being distinct. C.P. Snow spoke of the two cultures: science on the one hand, humanities on the other; never the twain shall meet. So, I'm saying the mirror neuron system lies at the interface allowing you to rethink about issues like consciousness, representation of self, what separates you from other human beings, what allows you to empathize with other human beings, and also even things like the emergence of culture and civilization, which is unique to human beings. Thank you.

Dr. Girard: From the beginning of ancient philosophy, with Plato and Aristotle, imitation – in Greek: mimesis – has been a very important subject. But most people feel that imitation is always a matter of imitating gestures, imitating the way people speak, imitating what people like and dislike… in a very general way. But can imitation and desire be joined together, do they have something to do with each other? If there is a tendency in man to imitate the desire of his fellow man, the convergence of desires on the same object is not fortuitous. It's something which will always take place.

mimetic struggles

Dr. Girard: In animals you already have this type of rivalry. You see, modern ethology, especially since the second World War, has studied animals and has discovered that these mimetic struggles for a female or for territory play an enormous role in animal life.

Recently, satellite cameras exposed a well hidden secret in the rainforest of Africa. Distinct clearings buried deep within the forest. These strange islands are located in the northwest corner of the Republic of Congo, where an expanse of lush vegetation makes up Odzala National Park. The westerners were unaware of these clearings. Local people call them 'baïs'.

In the dim morning light, creatures cautiously approach the bai. It's a group of western lowland gorillas. A large male sports a waistcoat of white hair, a symbol of his dominance. At more than three hundred pounds, this silverback rules a herd of unrelated females and family members.

On any given day, several groups may share the bai in peace. But the equilibrium is fragile here, and easily upset. This morning, a young solitary male is also on the scene. He swaggers in, perhaps for a drink and a bite to eat, but to him the bai is also an attractive singles bar, a place where he can eye the market of potential mates. The young females give him the once-over. And he conducts himself with style, casually moving to an even better vantage point.
A dominant silverback has enormous responsibilities, looking out for the welfare of his group. His family relies on him for guidance, for leadership, for protection. Any challenge to a silverback’s authority is a potential threat to the stability of his family. This one tries to ignore the intruder in their midst, but how long can he hold out? With a rush of confidence the single male dances across the bia, creating a spectacle. The silverback has seen enough. They silently, but aggressively face-off. Far outmatched, the young male turns tail and runs. Calm restored, the bia returns to its more peaceful state.

Dr. Girard: *You know at certain seasons, certain animals will always fight for the females. And this mimetic fighting between animals... You can say that it is mimetic fighting precisely because the female may get disgusted with the males fighting over her, and she may disappear and the fight will go on. In other words, the males become fascinated with each other, and that’s what I would say is mimetic fighting; the object becomes less relevant than the rivalry itself.*

**mimetically uniting against a common enemy – the scapegoat mechanism**

As humans have shown, some of the most sophisticated thinking can result in devastating violence. This may also be the case in the wild, where chimpanzees can band together in deadly attacks on their fellow primates.

Jarod Miller (Oswego State University, New York, USA): *They definitely have the ability and the potential to be extremely violent and use some military tactics.*

The question is: are these attacks organized as a result of animal thinking?

Dr. Watts: *The decision to retreat or attack must be conscious. The fascinating question is: are individual chimpanzees aware that the other chimpanzees are making the same decision?*

Anthropologist David Watts has spent the last thirteen years filming and observing primates at Ngogo, in the wilds of Kibale National Park, Uganda.

Dr. Watts: *The community there turns out to be by far the largest that anyone has found in the wild, with now over a 150 chimpanzees.*

It’s well known that chimpanzees have one of the highest capacities for thinking among animals. A chimpanzee brain weighs almost 15 ounces. It’s about an ounce and a half more than a new born human’s. Nearly 96 % of their DNA is the same as human’s, although some of the biggest differences are in brain development.

Their complex social alliances and strategizing show a very sophisticated level of thought. Chimpanzee communities are led by an alpha-male. Males vie for dominance and form complicated, frequently changing alliances in order to move up the hierarchy.

Dr. Watts: *Many, if not all of them, put a lot of effort into trying to achieve the highest status that they can.*
Like many animals, chimpanzees are fiercely territorial. Males will actively conduct patrols to enforce their boundaries.

Dr. Watts: Normally male chimpanzees are noisy. When they're patrolling, they're silent. They often go in a file, and sometimes they stop and sit silently and intently listen. And if they get any sign of other chimpanzees, they get excited but they still don't make noise.

Chimpanzees can inflict extreme violence on a member of an outside community. But an attack on an adult member of the same community is so unheard of that anthropologists only had one on record.

Dr. Girard: People tend, when they become really excited, really angry in a rivalry, to kill each other. And that’s what literature is primarily about – people killing each other for a woman [etc.]. The dominance patterns which are established in each generation in animals will fail in men, because they will fight to the finish and tend to kill each other.

Hearing screams, Watts caught up to an attack in progress: a gang of males pummeling a fellow community member, whom researchers called Grapelli. The following incident is graphic.

Dr. Watts: Several males immobilized him, and others were biting him, kicking him, hitting him.

At one point the chimpanzees pause, and it seems they might let Grapelli go.

Dr. Watts: Another adult male was literally holding his arm and had the opportunity to let go, but instead he deliberately turned and bit Grapelli. And they resumed the attack.

The assault continues for several more minutes before Grapelli escapes into a tree. Now another male chimp, known as Hair, who has only been watching, takes extraordinary action.

Dr. Watts: Hair climbed up a tree next to him, got very close and stayed there. A couple of other males who had been involved in the attack started to climb up towards Grapelli, and Hair defended him.

Hair is not a close ally of Grapelli’s, but he is a high ranking male, important to the chimpanzee community.

Dr. Watts: I could imagine that Hair was thinking: ‘This should not be happening.’ He might even have wanted to intervene and try to stop the attack, but I think that would have been too dangerous.

More than thirty minutes pass before Grapelli finally descends. He begins limping away from the community towards isolation.
Dr. Watts: Except that Hair went with him, again quite remarkable — as if he was interested, he was concerned. And I think there was empathy between Hair and Grapelli.

Grapelli was mortally wounded and three days later he would be found dead.

an ape "king oedipus"?

Watts isn't sure if the attack was spontaneous or chillingly calculated, but he saw one clue in the character of Grapelli.

Dr. Watts: Grapelli seemed to have the wrong combination of personality skills, that is: ambitious, a rival to some of these males, but not doing a good job of cultivating alliances. I think they might simply have gotten rid of a rival.

Perhaps another clue lies in the chronic violence of a close relative to these primates: humans.

Dr. Girard: That would mean that no human society is possible, unless there is another mechanism. You see, and I really believe there is another mimetic mechanism. When you have these great battles — which I postulate, which I have never seen, of course — if you have mimetic fighting which doesn't end, the mimetic power ultimately will tend to gather on one victim. In other words, men cannot share an object if they are fighting for that object. Fighting for an object is divisive. But then they will reach the point where they are all fighting among themselves, and the mimetic force will tend to move from one antagonist to another. As soon as two antagonists choose the same antagonist, there will be a tendency for one more to do the same thing, then one more, then one more, then everybody. And I would say what I call the scapegoat-mechanism is the moment when all antagonists choose the same one.

Interviewer: All the opponents, you say antagonists, but perhaps...?

Dr. Girard: All the people of the group who are fighting over the same object, among each other, you see, at some point will choose the same antagonist for purely mimetic reasons. For no reasons that can be attributed to some external cause. The choice of the scapegoat, I would say, ultimately is random. It would be comparable to what we call a crowd effect. We all know that if you have a very agitated crowd, the crowd will tend to be looking for a victim.

Dr. Watts: One of the other mammals in which groups of males cooperatively engage in attacks on members of other groups, is humans.

Dr. Jane Goodall (Jane Goodall Institute): Unfortunately, this is the kind of moving into the dark side of chimpanzee and human nature. We used to think it was only humans who waged war, but we find that chimpanzees like humans have this rather unpleasant ability to create an in-group and an out-group. It makes them seem even more like us than they had before. Unfortunately. But you know, I've been criticized for this by some of my scientific colleagues: ‘You shouldn’t publish this stuff. You shouldn’t publish descriptions of
intercommunity aggression,' which is like war. And because that will indicate that we have innate aggressive tendencies.

I do believe we have innate aggressive tendencies. I think you honestly cannot look around the world today and deny that that must be true.

3) religion
   restraining violence

Dr. Girard: Mimetic interaction is going to shift from the object to the antagonists themselves. And the paradox is: fighting over an object divides people, but everybody fighting against the same antagonist can reunite them.

3.1 restraining violence through sacrifice

Because they can all destroy their antagonist together, then they find themselves in a way reconciled. Therefore that victim is going to seem to them to be responsible for the disruption first, then for the reconciliation. And if you really look at primitive religion, you will see that the gods, sacred ancestors, semi-gods, any type of divinity you can have — whichever name you can give them — they always have that dual quality of being seen as extremely disruptive in a first phase, and saviors in a second phase. And in between, there is always either the dead of the god himself, or the dead of a substitute of the god. So my hypothesis is that behind primitive religion, there are these phenomena of collective turmoil, ending in the killing of a victim.

sacred demands for sacrifice (the kombaí from papua)

Bruce Parry: The Kombaí seem to lead such easy lives. When they're hungry they go and find food. The rest of the time they relax together. I find it hard to acquaint these laid-back people with a practice that is such a taboo in our society: cannibalism. There are many reasons why cannibalism has been found within cultures around the world. From simple hunger to honoring your dead. While there's been very little research into the Kombaí way of life, studies of neighboring tribes suggest that cannibalism here is a form of tribal punishment. Only evil men are killed and eaten. That night I attempt to find out more.

Tribe members: We call these evil men Khakhua-Kumu. Our ancestors have always killed and eaten Khakhua-Kumu.

I am scared of Khakhua-Kumu. Every time I am walking alone or hunting alone I think about them and I am scared.

Bruce Parry: They tell me that Khakhua-Kumu consume the souls of their victims, so they must be killed and eaten in return. It's about retribution and restoring balance. The Kombaí believe that the soul lies in the brain and the stomach, and that's why they have to eat these parts to end the evil once and for all.
Tribe member: My father captured a Khakhua-Kumu. He tied his hands, threw him in the river and started shooting him with arrows. He drank the water mixed with the man's blood and then killed him. He severed the head with a bamboo-blade and cut off the arms and legs. He cut the head, torso and stomach into pieces, and ate them.

Bruce Parry: It's an extraordinary story. I ask whether it still goes on today.

Tribe member: Last year my youngest brother was dying. I asked him 'Who got you?' and he told me a name. I sat crying out of love for my brother while he died. I took my bow and told one of the elders of the Khakhua-Kumu. He said I could kill that man. I killed him and carried him on my shoulder. On my way home I decided not to eat him. I have eaten two people before so I thought on this occasion I will leave him. I would kill again. If a Khakhua-Kumu kills either of my brothers, I will kill that man. If he comes from another clan I will kill him and eat him. If he comes from among us, I will give him to other people to be eaten.

back in the animal kingdom

These calls announce the start of a raid into land controlled by their neighbors. As they leave their core zone the patrol goes silent, occasionally stopping to listen. Signs of the enemy are detected and examined closely. The chimp militia are now at the very edge of their territory. All need to be on maximum alert. They must wait and listen.

An unfamiliar chimp call raises attention. It's an uncertain time. The size of the rival group is as yet unknown. Not far away, their neighbors are feeding in a fig tree, oblivious to the approaching dangers. The patrol moves off, with a sense of purpose. They must remain silent until they close in on their rivals.

The attack is on. To intimidate their opponents, the aggressors scream. Several males corner an enemy female. It's a ferocious attack and she's lucky to escape with her life. Others are not so fortunate. The battle won, a grizzly scene unfolds. An enemy youngster has been caught and killed. The carcass is shared between members of the group, and eaten. Killing a competitor makes sense if you want to protect your food supply. But exactly why they cannibalize the dead chimp is not fully understood. It may simply be chance for some extra protein.

meanwhile in human history...
3.2 restraining violence through ritual

Dr. Girard: My hypothesis is that behind primitive religion, there are these phenomena of collective turmoil, ending in the killing of a victim. Big crisis, collective murder, then peace. Therefore they are very grateful. Therefore they say ‘How can we keep that peace? Because we are the same people... Why are we the same people? Because of that victim...’ You see, the whole scheme the society is responsible for, the group is responsible for – was disrupted first and reconciled by the victim –... but the group is going to project the whole trajectory of events on that victim. ‘That victim tells us to do again what reconciled us...’ If you look at primitive rituals, what do they consist of? They consist of a community, voluntarily going into a crisis.

contemporary sacrificial rites (the suri from ethiopia)

Bruce Parry: There’s an incredible atmosphere as the Donga start. The aggression, the tension, the excitement – it’s like nothing else on earth.
There's plenty of sex, as well as violence, at a stick fight. The sidelines are strictly for flirting, not fighting. Scratch the surface, and there's sex everywhere. The tip of every stick is deliberately phallic, and the songs leave little to the imagination.

Tribe members: ‘Make love to a woman – it will relax you... Make love to a woman – it'll make you fight better...’

Bruce Parry: Stick fights are more than just a meeting place. They’re a training ground for young men to get them used to the bloodshed they’ll face from the Bume and other tribes. This way, the Suri learn about violence in a controlled, structured way.

Dr. Girard: If you look at primitive rituals, what do they consist of? They consist of a community, voluntarily going into a crisis, a form of disorder in order to reach sacrifice. That’s how the ceremony looks.

contemporary sacrificial rites (inca descendents from bolivia)

In the Andes of Bolivia, descendents of the Inca make a living from thin mountain soil. At 13000 feet, life is a constant struggle. In central Bolivia, farmers break ground to plant potatoes. According to local tradition, for the crop to flourish, it needs more than skilled tilling and good weather. The potatoes, these farmers believe, need the nourishment of human blood.

To guarantee sufficient food for the coming year, villagers stage a festival called Tinku, that provides the necessary blood. Herman Golane, known as ‘Campeon’ or ‘Champion’, is the town’s top fighter. Soon he and complete strangers will be knocking one another cold in the kind of mayhem many societies might find difficult to control.
In a nearby house, Sabino Charque, is also getting ready to fight. He wears a cow-hide helmet, modeled on those the conquistadores wore five-hundred years ago.

“This helmet we use to protect ourselves, so our heads don’t get hurt.”

Sabino expects that even with his armor on, he’ll be wounded. During Tinku, that’s the whole point. In the contest, the villagers will be fighting to entertain the spirits of the earth and mountain.

Musicians let villagers and spirits alike know that Tinku has begun, and the procession sets off. All will converge at the town, for a battle that pits village against village, and spirit against spirit. Though strangers to one another, competitors choose their opponent by location. The teams date to ancient times. The one that triumphs is seen as having the strongest spirit, and therefore is due the best harvest.

It’s showtime, and Campeon and Sabino join the fray. The blood itself is an offering to nourish the spirits, just as water nourishes the earth. Boys as young as ten enter the fray. It’s a free-for-all with few rules, and it can end in death. Participants claim that almost every year someone dies. Campeon, as always, gives better than he gets.

Finally, the fighting winds down. Many duels end with an embrace. This is no place for personal grudges. The aim isn’t to beat someone up, but to impress the spirits. After a day of bruising battles, the villagers recur to a bar to show their scars and tell their stories. Campeon claims he’s lived up to his name.

“We fought without resting. We fought many times. Before I leave here, I will fight one more time. Okay, friends, let’s have a toast, let’s have a drink for your mountain spirit.”

The battle of Tinku has given the villagers hope. They’ve done their part, delivering the promised sacrifice. Now it’s up to the spirits to perform as requested. Until then, the villagers can focus on less dangerous games.

Dr. Girard: I would say, this type of ceremony, which is the typical primitive ritual, is a reenactment of the scapegoat phenomenon, understood as a sacred dispensation coming from the divinity.

sacrificial rites from the past (the moche from peru)
on the origin of cultures II

a summary so far
connecting the different pieces of the puzzle

fact 1: humans developed a larger brain

fact 2: a larger brain facilitates reliance on a more complex social network
and the rapid spread of knowledge

fact 3: cooperative skills are improved by mimetic abilities of the brain (mirror neurons)

fact 4: imitation of a desire for certain objects (like males desiring the same female)
leads to rivalry and "dueling" violence

fact 5: living in larger groups relies on more mimetic ability
but this also increases the tensions of mimetic rivalry
a sense of community might be restored by mimetically uniting
against an enemy who becomes the victim of the whole group
as this is observed in groups of animals close to humans

Dr. Watts: The community there turns out to be by far the largest that anyone has found in the wild, with now over a 150 chimpanzees.

It’s well known that chimpanzees have one of the highest capacities for thinking among animals. A chimpanzee brain weighs almost 15 ounces. It’s about an 1,5 more than a new born human’s. Nearly 96 % of their DNA is the same as human’s, although some of the biggest differences are in brain development.

Their complex social alliances and strategizing show a very sophisticated level of thought. Chimpanzee communities are led by an alpha-male. Males vie for dominance and form complicated, frequently changing alliances in order to move up the hierarchy.

Dr. Watts: Many, if not all of them, put a lot of effort into trying to achieve the highest status that they can.

Like many animals, chimpanzees are fiercely territorial. Males will actively conduct patrols to enforce their boundaries.

Chimpanzees can inflict extreme violence on a member of an outside community. But an attack on an adult member of the same community is so unheard of that anthropologists only had one on record.

fact 6: humans developed rituals permitting mimetic violence in a controlled way

fact 7: the oldest known rituals always involve some kind of sacrifice
fact 8: gods are usually regarded as being responsible for all sorts of crises (natural disasters, diseases, ...) 
potentially destabilizing the community

to restore balance and stability rituals and/or sacrifices are performed

the dassanech tribe

Bruce Parry: That night the rain-clan is busy again, praying for the drought to break. These women are all herders. It’s so dry their cattle and goats are at risk. They’ll sing and dance every night till the rain finally comes.

the plague (crisis destabilizing the community)

plague doctor (religious leader)
sacrifice (burning jews) (hetero-aggression)

all of these facts allow for the following assumption (made by rené girard)

Dr. Girard: My hypothesis is that behind primitive religion, there are these phenomena of collective turmoil, ending in the killing of a victim. The whole scheme the society is responsible for, the group is responsible for – was disrupted first and reconciled by the victim –... but the group is going to project the whole trajectory of events on that victim. ‘That victim tells us to do again what reconciled us...’

in other words: the origin of culture and religion is based on a murder and a lie

the murder: a collectively killed victim
the lie: the perception of the victim
as being responsible for what happens to the community

the gods of traditional religion are nothing more than divinized scapegoats

fact 9: gods are used to justify sacrificial violence and oppressive taboos,
cultural institutions structuring human societies...

enabling people to avoid responsibility for their own actions
in other words: gods are used as scapegoats!

the dassanech tribe

Bruce Parry: One of the women who circumcises the girls has arrived in the village. I’ll be gone by the time the ceremony happens, so Bunta demonstrates what she’ll be doing in a few weeks time.

Bunta: Hold her tight... Pretend to cry...
Bruce Parry: Some girls who were circumcised a few years ago join in.

Bunta: This is half of it... This is the other half... This is the clitoris, bring me some water...

Bruce Parry: They're only acting, but the real thing changes women's lives forever.

Bunta: Circumcision is our culture... If we stop our culture, we will all die.

Bruce Parry: I'm told if she doesn't get circumcised, she won't get married, and she'll be cast out from the tribe.

Bunta: If a woman with a clitoris gives birth, she, her child, everyone will die. Her clitoris will come up to her head. It'll come out of her nose, and back into her head. It'll kill her, she'll die. Her father will die, her mother will die. That's why we cannot stop circumcision.

Bruce Parry: Beliefs like these are often used to justify practices such as female circumcision. It may be one of the cornerstones of Dassanech culture, but this is one custom I'd be happy to see go.

gods, experienced as the embodiment of violence, can only be approached in a ritualized way

in other words: violence itself can only be allowed in a ritualized way

all sorts of cultural phenomena can be traced back to a basic pattern of primary associations between violence and "the sacred" – the "foundational murders" of "scapegoats"
3.3 taboos as complements to rituals

focusing on the negative (taboo) or positive (ritual) aspect of the sacred

fact 10: mimetic phenomena (mirrors, twins, homosexuals, ...) are often associated with evil

fact 11: objects of mimetic rivalry (women, territory, food) are often sacred and taboo (only to be approached in a ritualized way)

fact 12: the forces of nature (drought, heavy rain, lightning, fire, water, ...) are often experienced as sacred

explanation:
bad weather and lack of food enforce the risk of mimetic violence and cause diseases and death – the ultimate (results of) mimetic crises
e.g. fire belongs to the gods and should be handled carefully to experience its peaceful aspects

other embodiments of what mimetic crises are all about (sexual intercourse, social status, survival) are also perceived as sacred (transvestites, kings, shamans, ...), once again only allowed and approached ritualistically

taboos and rituals evolved in all kinds of directions (from dances to eating habits)

but not only human customs can be traced back to universally human tendencies

researchers also found common patterns and images in human storytelling – from myths to movies...
on the origin of cultures III

4) human storytelling and the odd judeo christian touch

our guides (among others)
  james george frazer, anthropologist
  joseph campbell, mythologist
  christopher vogler, hollywood development executive
  george lucas, director
  rené girard, literary critic

  universal patterns in human storytelling – the "monomyth"
  "the hero's journey" as defined by joseph campbell

taking "the hero's journey" to hollywood – joseph campbell and "star wars"

Mary Henderson: Joseph Campbell was a professor and he wrote a very important book about myth. And this book was used on college campuses across the country. And this was a book that George Lucas read. In it, Joseph Campbell said: 'Myth is a metaphor for the experience of life.'

Dr. Joseph Campbell (Sarah Lawrence College, New York, USA): Myths and dreams come from the same place. They come from realizations of some kind that have then to find expression in symbolic form.

Dr. Jonathan Young (Center for Story and Symbol, Santa Barbara, California, USA): Joseph Campbell was very influenced by Carl Jung, and Jung’s theories of psychology explain that we process experience visually – that deeper than ideas or feelings there’s a visual flow, very much like a movie.

Henderson: George Lucas studied the work of Joseph Campbell and – of course he was also a filmmaker – in the Star Wars films George Lucas has made a very compelling use of one of the myth forms, which is the hero’s journey. And this is by far the most commonly found form in the history of mythology.

Dr. Young: Star Wars is what’s sometimes called the hero’s journey. It’s the initiatory pattern, that is a journey story that represents a transition – moving from one identity, say young adulthood, into another identity, say full adulthood.

Dr. Leo Braudy (University of Southern California, USA): When Lucas was writing the script of Star Wars, he was heavily interested in Joseph Campbell. What Joseph Campbell was interested in was to see the connections between myths, the myths of different cultures, to try to find out what were the threads that tied all these very disparate cultures together.

George Lucas: I did research to try to distill everything down to motives that would be universal. I attribute most of the success to the psychological underpinning which had been around for thousands of years, and people still react the same way to those stories as they always have.
Bill Moyers: George is nothing if not a good reporter, and when he sets out to do his work he starts reporting from the best sources he can gather. He brought Campbell into the process of looking at his work on Star Wars, and saying: ‘Is this right? Am I getting it down, is this the right emphasis, this the right character...?’ Joseph Campbell said to me the best student he ever had was George Lucas.

Like such epics as the Odyssey, Beowulf, and the legend of King Arthur, Star Wars drew from a shared pool of mythic archetypes.

Carrie Fisher: You have the youth who is on the adventure that you can identify with. You have the swashbuckler, and you have the damsel – she may not sort of have the reactions that are conventional, however: she is in distress... And you have the wise old man who you go and you find him, and you have the funnier characters. I mean it really adheres strictly to that form.

George Lucas: It's the traditional, ritualistic coming of age story. And when I went into the mythological side of what I wanted to do, that's a key factor with heroes.

but the "star wars" saga is just one of many examples...

Christopher Vogler: I like mining the past, going into the myths, finding modern applications or updating them. Just tapping, you know, this resource that mythology and folklore can be. My model for this is Joseph Campbell, who looked at certain patterns that show up again and again in the myths and the legends and also in our own structure – the way we're built as human beings, in our dreams, in our psychology.

Mythology helps you to identify the mysteries of the energies pouring through you. Therein lies your eternity.

The first plot point is called the ordinary world. Protagonist is shown – living in their drab, ordinary world that should contrast dramatically to the new one coming up.

This is also where you must establish a clear hero goal, where he must leave what is familiar and go into the unknown to retrieve something.

Vogler: You almost always start out with a hero who is in some kind of environment where he or she is not completely comfortable and they know something's wrong, and something's got to be done.

The second step is a call to adventure, where something becomes even clearer now: you have to do something.

The third plot point is hero refuses call. Fear of unknown creeps up and protagonist doesn't want to go on the journey. They start thinking about it and say 'No, I don't think I want to do this.'

Vogler: You come to the third stage, which is refusal of the call. Where the hero says 'No, I can't', or the fear comes up. That is what it's really about, expressing everyone's fear of change.
A wise teacher or mystical force shows up. New tools and training are given. Mentor or teacher has been to the unknown side and helps hero prepare. So this is where you see wise old wizards, tough drill sergeants, scientists, shaman, holy men, coaches, guards, ghosts, spirits, mystical creatures or forces.

Vogler: Next stage is to overcome that fear, and usually this is meeting with the mentor.

The ship sails off, the romance begins, the wagon train gets rolling, the track begins, the road trip starts. Plot goal is clearly stated. Brings us to plot goal six, crossing the first threshold. Act two begins.

Vogler: Number five is crossing the first threshold. Almost every story has a moment like this, where you get that sense: all the prep is over, all the packing is done, now we’re really setting out on the adventure.

Hero meets new people and decides who is friend or foe. Information is gathered, rules of new world are established. New challenges arise and skills are tested.

Number eight, hero prepares before the most dangerous place – underground place where plot goal is hidden.

Vogler: Test allies and enemies. This is stage six. And here the hero begins to experiment with that new world, and finding out what’s really new about it – you know, ‘who’s on my side, what can I eat, what can eat me…?’ And picks up some lessons...

Plot point number nine, hero confronts greatest fear. Not sure if hero will survive. He’s trapped in the clutches of the villain... Maybe it’s the death of a relationship, or rites of passage.

Ten, hero hits bottom, death, resurrection. Hero hits bottom battling worst fear and appears to have died. Things look very bleak for hero to ever accomplish plot goal. This is not have to be a physical death. This could be a death of a dream, a death of a relationship, a goal, a death of some kind of... spiritual or emotional death, or some sort of disaster. So you want the hero... this is like... they’ve given up, they’ve died, something’s happened, big disappointment – they don’t think anything’s gonna turn out...

Vogler: Seven is approach. And here the hero is now pretty deep into the new country and getting ready to face the big one – the big question or battle or struggle in that world. So there’s a moment of preparation and rehearsal for that.

And then there’s the actual moment of facing the fear. That’s stage eight, the ordeal, where the hero has to go through some kind of severe test, that may involve facing death.

Hero accomplishes plot goal in unexpected way.
Act three begins with plot point twelve, which usually involves a chase scene. This is an attempt to return to the ordinary world, full of complications with the enemy in hot pursuit.

Plot point number thirteen, final confrontation. A confrontation between two characters over an issue that has been building since the beginning comes to a head.

Vogler: Next stage then is the road back, where the hero actually now has to collect himself or herself and start finishing. And often there'll be a chase scene at this stage.

The result to that is stage nine, there's some kind of reward. If you survive, there is a reward. That is a pay-off.

Climax, death, revelation, resurrection. Second brush with death, where hero faces death or appears death. So, you're going to have another death moment.

Vogler: Eleventh stage is resurrection, where the hero has to face death one more time, but in a more final way, a bigger scale and at a deeper level. So that they're really being tested about everything they've learned on the whole journey so far.

Fifteen, hero returns home. Hero returns home with treasure, information and transformation. Shares lessons, delivers treasures to save world. Gets a medal and a new uniform, maybe. Wins over the girl. There's some sort of welcome home ceremony. Hero's shown as new person in old world. So change their appearance. And what do they get when they come home? This is like the big celebration, because remember heroes leave and come back.

Vogler: That leads to the final movement, return with the elixir – which is a term Campbell used. The elixir is some kind of magic thing, like the Golden Fleece or the Holy Grail, that brings back life into the culture. And so the idea is the hero has to go on a journey and learn some things and change, and bring something back to share with everybody else or it's a total waste of time.
The Hero's Journey

1. Ordinary World
2. Call to Adventure
3. Refusal of the Call
4. Meeting the Mentor
5. Crossing the Threshold
6. Tests, Allies, Enemies
7. Approach
8. Ordeal, Death & Rebirth
9. Reward, Seizing the Sword
10. The Road Back
11. Resurrection
12. Return with Elixir

The Hero's Inner Journey

1. Limited awareness of problem
2. Increased awareness of need for change
3. Fear, Resistance to Change
4. Overcoming Fear
5. Committing to change
6. Experimenting with new conditions
7. Preparing for major change
8. Big change with feeling of life and death
9. Accepting consequences of new life
10. New challenge and Rededication
11. Final Attempt(s) Last-minute dangers
12. Mastery
rené girard discussing the same universal pattern of mythology

Peter Robinson: One source of René Girard’s thinking, a close reading of The Golden Bough, Sir James Frazer’s classic study of ancient myths. Published in 1890, The Golden Bough explained that myths throughout the ancient world contained a central element, the periodic sacrifice of a sacred king, dying and then resurrected. Christianity, The Golden Bough suggested, represented nothing but one more such myth... A point to which we will return.

Dr. Girard: And if you really look at primitive religion, you will see that the gods, sacred ancestors, semi-gods, any type of divinity you can have – whichever name you can give them –, they always have that dual quality of being seen as extremely disruptive in a first phase, and saviors in a second phase. And in between, there is always either the dead of the god himself, or the dead of a substitute of the god.

If you look at myths, they all have the same shape. It is always the story of a man who is killed by an entire community.

the universal mythological patterns suggest a common origin in typical, basic and universal human behavior
Peter Robinson: It is your belief that the pattern that underlies myths around the world of the dying and resurrected king reflects actual events in pre-historic society?

Dr. Girard: Sure.

Peter Robinson: We have to establish the scope of time we are discussing here. You are actually talking about early homo-sapiens, half a million years? So this goes on for hundreds of thousands of years and becomes ritualized in myth.

Dr. Girard: I'm not interested in finding out the exact time, it is not my business. I'm a pure theoretician. I say at some point people must have been reconciled in order to create communities, permanent communities, against not a leader directly, but a scapegoat that they all kill together and it united them.

the revelatory power of judeo christian scripture (the bible)

Peter Robinson: When in The Golden Bough Frazer suggests that Christianity, and he has as much of a shock on late 19th century... the West... as did Darwin... It’s less known now... That Christianity is nothing but one more myth that takes the pattern of the dying and resurrected god. Frazer believed it and some intellectuals to this day believe it. You answer how?

Dr. Girard: I answer very simply that Frazer was perfectly right to point to the similarities between myth and Christianity. In both instances you have a victim who is killed by an entire community and who becomes the god, or who is and who has always been, the king of the community. What Frazer did not see, which is the simplest thing of all and should convince everybody immediately if they were honest, is that Christianity is very different from mythology while being the same. It is exactly the same situation. Christianity tells you that Christ was innocent, whereas all myths tell you that the victim is guilty. The victim is a god, but gods are guilty characters. They are dangerous characters. They can be good to you through strange circumstances that are not very easy to understand, but they can also do all sorts of bad things, which is not the case of Christ. Simply, Christianity tells you Christ is innocent. People do not see that it is the first time in the history of mankind that a myth occurs which is read not falsely with the victim guilty, but with the victim innocent.

I think the nineteenth century anthropologists, who were all anti-Christian, made an enormous discovery when they said: 'All religions are like Christianity. Therefore Christianity is only a religion among others.' With the sacrifice at the heart. But they didn't see the most important thing, which is so obvious that it blinds them, is that the perspective is the opposite. It's not the same thing to look at a murder from the point of view of the murderer, and to look at it from the point of view of the innocent victim who says that murder is wrong. And that difference is already there in Cain and Abel.

The archetypal tragic characters are identical twins, fighting for the same inheritance, always fighting together, always desiring the same thing: desiring the same woman, desiring the same power, the throne of their father.

Cain and Abel, it's like the two twins who kill each other. It's exactly like Romulus and Remus.
So in all these courses on myth and the Bible that they teach on university, they tell you 'Look, Cain and Abel, Romulus and Remus... is the same thing...' But, look, the Bible asked Cain: 'What did you do with your brother? The blood of your brother crieth unto Me...'

And Cain is declared a murderer by the Bible, whereas Romulus is not a murderer in Roman history. Romulus is right. It's the victim who is wrong. You see, there it's very obvious.

In other words, Christianity is the myth that reads all myths; the myth which is read and reads all myths. People say, are you doing anthropology or are you doing mythology? I answer no. I am showing that to read mythology right and to have a true anthropology are one and the same thing.

testing girard's claims by comparing the biblical story of joseph to the classical greek story of oedipus

You know, in the story of Joseph you have a young man. He's the victim of his twelve brothers, and he's expelled from his family.

the expulsion of joseph

Then after that he's adopted by a very powerful Egyptian.

But then the wife of his master has sexual designs upon him.

the theme of incest

And accuses him, because he refuses to make love to her. Accuses him of trying to rape her, and then he's put in jail.

joseph expelled once more

You look at that story, you feel: 'Well, very interesting story and so forth, but full of unbelievable things. It must be some kind of myth.' Now look at the Oedipus myth. Everybody knows the Oedipus myth in the version of Sophocles. You have a young boy. He's supposed... An oracle says he's going to kill his parents, and his parents get rid of him, expel him.

the expulsion of oedipus

Oedipus was raised by shepherds, in foreign territory, unaware of his real parents

And this oracle says he's going to kill his father and to make love to his mother.
the theme of incest

The Oedipus story tells you: Oedipus is responsible for the plague because he really committed incest and killed his father. The myth ultimately tells you that he did all this. We didn’t realize it, but he did it. Not only did he do it, but when he became the king of Thebes – because he had done it and no-one knew it –, he was responsible for a disaster that destroyed the whole community.

oedipus expelled once more

Compare this with the Joseph story. In the Joseph story he’s expelled from his family, but instead of being guilty the Bible tells you: ‘The brothers were jealous of him.’ Then he’s accused of trying to make love to the wife of his protector. It’s like incest, because his protector is a father to him. But the Bible tells you: ‘The Egyptians, the heathens, believe in this, but the Bible doesn’t. He’s accused unjustly.’

These are two myths and they look alike. They look like pure imagination, but one is the reverse of the other one. One tells you the victim is always guilty. The other one tells you the victim is always innocent.

There is an equivalent of the Theban plague in the Joseph story: the famine.

joseph is released from prison and saves egypt,
interpreting dreams and foreseeing the upcoming famine...

jacob sends his sons to egypt,
and no one knows they will meet joseph again, after all those years...

The Bible tells you not only that Joseph is not responsible for the famine, but he’s the one who fed everybody. You see what I mean? At every turn... you have some similar theme... which seems to be very different... But the Bible always tells you: the victim is innocent and the crowd believes in the guilt of the victim. But the business of the Bible is to tell you that it is not true.

Look at the end of the Joseph story, which is even more enlightening. At the end of the Joseph story, Joseph is master of everything. And his twelve brothers come to get grain, but they don’t bring the youngest one, Benjamin – who is the only real brother of Joseph, from the same mother; the other ones are sons by another mother... And Joseph gives them grain, and they don’t recognize Joseph, but Joseph recognizes them. And Joseph tells them: ‘You have another brother, you didn’t bring him. If you want more grain, bring him the second time.’

joseph plays games with his brothers, who don’t recognize him...

They wait for a long time, you know, because they don’t want to bring the brother. They are afraid he’s going to die. Because they already... they repent a little bit the murder of Joseph. And they don’t want to bring Benjamin, because they say ‘If we brought him and if he disappeared, our old father will die’.

But they become so hungry that finally they go back with Benjamin.
And this time, Joseph sets a trap for them. And he has one of his people put his precious cup in the sack of grain of Benjamin. And then he has them arrested at the border, after giving grain to everybody, and he says: 'Benjamin is the culprit, and I retain him.' And the other brothers – only ten are left now –, one of them, Judah says: 'I cannot stand this.' And goes to Joseph and says: 'Look, I will take the place of my brother. Keep me, and free my brother, because my old father would die.' And then Joseph understands that his brothers have changed. After sacrificing him, they refuse to sacrifice Benjamin. And then it’s a very beautiful ending, because then they all recognize each other and acknowledge each other as brothers.

But the meaning of the story is against sacrifice. But at the same time the gesture of Judah is very important, because Judah accepts to die so that his brother will not die. It’s in a way the very opposite of the beginning. So I would say the Joseph story can be considered as symbolical of the whole trajectory, from primitive religion – the twelve brothers killing one, and going back to the father and saying that he was devoured by a wild beast and so forth – to the refusal of sacrifice. But in order to refuse sacrifice... You see, what the Bible tells you and no other religion tells you, is that sacrifice is so inborn in human beings, so important in human society, that you can refuse sacrifice only if you accept to die. Because the moment will come where rivalry, mimetic rivalry between your brother and you, will put you in a situation where either he kills you or you kill him. And I think Greek tragedy stops right there – says: 'Well, I have the right of self-defense. It is mine.' What I think the Bible does, is saying: 'You have to go beyond that.'

people like mahatma gandhi, martin luther king, oscar romero
"died against sacrifice"

And I really think that Judah... Judah was considered by the Fathers of the Church as a symbol of Jesus, and I think that it’s a very profound view. You see, it’s a very profound view, because the gesture of Jesus is that he dies against sacrifice. But his death is a sacrifice, is a sacrifice from the point of view of the victimizers. Therefore, I would say: the Bible and the Gospel go the full circle of human possibilities, from sacrifice to the opposite of sacrifice. But the opposite of sacrifice with Jesus at the center is the same event as the original event. So people who don’t understand the enormous difference in perspective tell you that Christianity is a primitive religion.

conclusion

the "hero's journey" of oedipus:

1 after being expelled/sacrificed
oedipus resurrects as the nemesis of his family

2 oedipus is held responsible for the crisis
within his community and sacrifices himself in the end

the "hero's journey" of joseph:

1 after being expelled/sacrificed
joseph resurrects as the one who forgives his family

2 joseph's brother judah is prepared "to die against the sacrifice" of joseph's full brother Benjamin this behavior is imitated by joseph and this way he becomes the saviour of his community

in other words:

joseph's royal status saves his father's and his family's life while the royal status of oedipus implies the death of his father and of his family

another kind of 'kingdom'? 'not from this world'?

throughout the bible the christian story gradually evokes a different attitude towards victims and victimization, showing that sacrifices are really unnecessary

5) the challenge to discern the dynamics of Love from the dynamics of love/hate relationships criticizing some historical appearances and convictions of christian tradition itself

Interviewer: There is still a long tradition of sacrifice in the Bible also.

Dr. Girard: That's right. There is a long history of sacrifice in the Bible – in Leviticus etc. But if you look at the main biblical stories, even in the Old Testament, they are all like the Joseph story. I think they are stories against sacrifice. The early councils which defined the Trinity, the Incarnation and so forth... you will see that
in not one of them you have the word sacrifice. You know, the Roman Catholic Church uses the word sacrifice in the canon of the mass. Lutheranism is sacrificial too, Calvinism is sacrificial too... And I think it's a very mixed bag... I think they don't see...

Interviewer: Could you say it is a garment in which the real secret is hidden?

Dr. Girard: In which the real secret is partly hidden, because I would never say that the sacrificial interpretation of Christianity by the Christians themselves has been equivalent to a primitive religion. All Christian churches have always told you that Jesus is innocent, and that the people who killed Jesus are guilty. At the same time, they also tell you: 'God the Father needs the death of the Son and so forth...' They are formulations that I think would be improved upon. In other words, God is innocent of all sacrifice. God has never asked men to kill victims, especially not to kill his Son. It's not for me to say, but I suggest... there has been a certain amount of misunderstanding on the word sacrifice, which is very difficult to dispel.

6) the story of Jesus Christ as the story that transforms humanity ‘from within’ a story from a "more than human" perspective?

Christ’s death on the cross as a "saving event" for mankind

Peter Robinson: What changes when this innocent god-man dies on the cross? How does that affect human understanding? Why is that a saving event?

Dr. Girard: Well, because if you read the mythical situation the way I just did, you can see there is something which is not purely human about it. We are offered all these victims and we take them for culprits, and so forth. In the case of Christianity there are a few disciples who say 'No, no, he is not guilty'; who maintain to the end that he is innocent, whatever people may say about him. Therefore they say the truth, simply. They say a truth which is anthropological before being religious, but which is the same thing.

Peter Robinson: And so Christ’s death on the cross frees humankind from this deep, profound, inescapable, and largely hidden cycle of the scapegoating impulse?

Dr. Girard: Yes. Potentially it does, and Christianity asserts certainly that it does...

Peter Robinson: ...of the ancient patterns...

Dr. Girard: What we see in human society as a whole... In a way people always unite around victims, but in order to unite solidly they must keep believing that these victims are guilty...

in order to become more loving towards others, battling victimization of any kind (like the following)

Kids being bullied, sometimes to death. It is a story you see in nearly every headline today, but sadly it's a story we were covering as long as eighteen years ago, right here on 20/20. And yet there’s certainly nothing old about this problem. In fact, it seems the passage of time has
only made bullying worse. Listen to this, 160,000 kids a day miss school because they are too afraid to go.

So troubling the trend, the media started keeping a body count, beginning with Phoebe Prince. At only fifteen years old, she killed herself, supposedly after being called an Irish slut constantly at school. Unrelenting bullying, online and off, is what drove South Hadley High School freshman Phoebe Prince to hang herself in January. A band of Massachusetts teens will stand trial, having pleaded not guilty to charges of criminal harassment.

And in just the last month, five kids have taken their own lives, all related to bullying. Eighteen year old Tyler Clementi, the latest to lose his battle. The college freshman in New Jersey jumped off this bridge. Reports soon surfaced the cause may have been his humiliation at being exposed online by classmates, who secretly videotaped him during a sexual encounter with another man.

Kids whose lives were over before they’d barely begun. Families left with nothing but painful memories, like the Longs.

Father David Long: It’s hard. Our lives will never be the same. But this is a special room for me. Me and Tyler spent a lot of time in here, playing videogames, talking... And I miss my son. I always will.

David and Tina Long adored their seventeen year old son Tyler. Tyler enjoyed normal kid things like karate, videogames... He even aspired to go to college. All the more impressive because Tyler had Asperger Syndrome, a form of autism, which mom says gave him a unique personality.

Interviewer: What did that mean, in terms of his daily life at school? What would the kids say? What would they do?

Mother Tina Long: He’d point out the rules to them quite a bit. Asperger kids are very rule-oriented. They like things the same every day, and when someone’s talking in class I know he would say ‘You know, we’re not supposed to be talking, that’s the rule...’ And, you know, I think that just irritated a lot of them. They saw him as something different than what they were.

What mom saw as a virtue, made Tyler a target at school.

Father David Long: They would take his things from him, spit in his food, call him gay, faggot. And just, from one day to the next, it was continuous harassment from the other kids in the classroom.

The Longs say this was a constant, well known pattern of bullying that they brought to the school’s attention, but nothing happened. They say this went on for years, and eventually their fun loving son disappeared.

Father David Long: I just remember the last couple of weeks, looking back, that he wasn’t there. I mean, he just seemed like he was a hollow person.
Interviewer: They had taken something from him?

Father David Long: They took his pride from him.

On October 17th, two months into his junior year, Tyler Long changed out of his pyjamas into his favorite t-shirt and jeans, strapped a belt around his neck, and hanged himself from the top shelf in his bedroom closet.

Father David Long: So I stepped into the room, and I found Tyler in the closet – that poor darling, rushed over here, picked Tyler up, tried to release the pressure of his neck, and I started screaming for Tina. I couldn’t get the belt off his neck... We checked to see if he was still alive... but it was too late...

Dr. Girard: I would say this: man is a mimetic creature, he is imitative. And if you look at the Gospel, you will see that the theme of imitation is present. It’s present, I think, in the negative form I’ve been talking about, when it talks about scandal and that sort of thing. But it’s also present in the sense that Jesus in the Gospel and Paul in the epistles both say: ‘Imitate me. Imitate me and you will not encounter any obstacle, my yoke is light...’ What does it mean? It means: ‘I’m not competitive. I’m not going to compete with you. I’m not going to be an obstacle to you.’ You see, I think in order to understand that, you can see it in the light of the moment, you know, when Peter reproaches Jesus for making an announcement of his suffering and death. And Peter says: ‘Oh, no, master, this should not happen to you, you’re a great leader and you will be very successful.’ And Jesus’ reply: ‘Move away from me, Satan, you’re an obstacle’ – that’s what the word is in the Gospel. Meaning: ‘You teach me the type of worldly ambition which is going to transform us into rivals of each other, and create rivalry all around.’ If you follow the dictates of the Kingdom of God – the word dictate is not good for that –, you will not encounter any obstacle because they will not give you any advice which can lead you into mimetic rivalry with your fellow man.
Interviewer: Is that not about the same as the Buddha?

Dr. Girard: I think there are similarities, and they are important similarities. I think all the great eastern religions are trying to move away from sacrifice, and they do it. And they have a great revulsion for sacrifice. Even things like vegetarianism in modern Hinduism are connected with that. But the technique is a pure withdrawal from the world. How we get away from this? In other words, we leave the world to itself. The world will go to parts, you know, we cannot do anything with it. What eastern religions are not interested in is in the mechanism of sacrifice. I think the originality of the Bible and the Gospels is that through the scheme of the Passion they go back to human culture, they talk to you about the origins of human culture, about the scapegoat mechanism. They go to the root of what man is.