TROM

competition and cooperation,
curiosity and motivation

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Summary:

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some say that cooperation is better for learning
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But what if we are being blinded by the language we're
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or could it be much more complex than that?

In this article, we will try to look more closely at these notions,
and also to try to understand what is meant by 'curiosity'.

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In this article, we will try to look more closely at these notions, and also to try to understand what is meant by 'curiosity'.

We leave aside the 'obvious' subtopic of sports and games, as that will require a separate article.

Competition

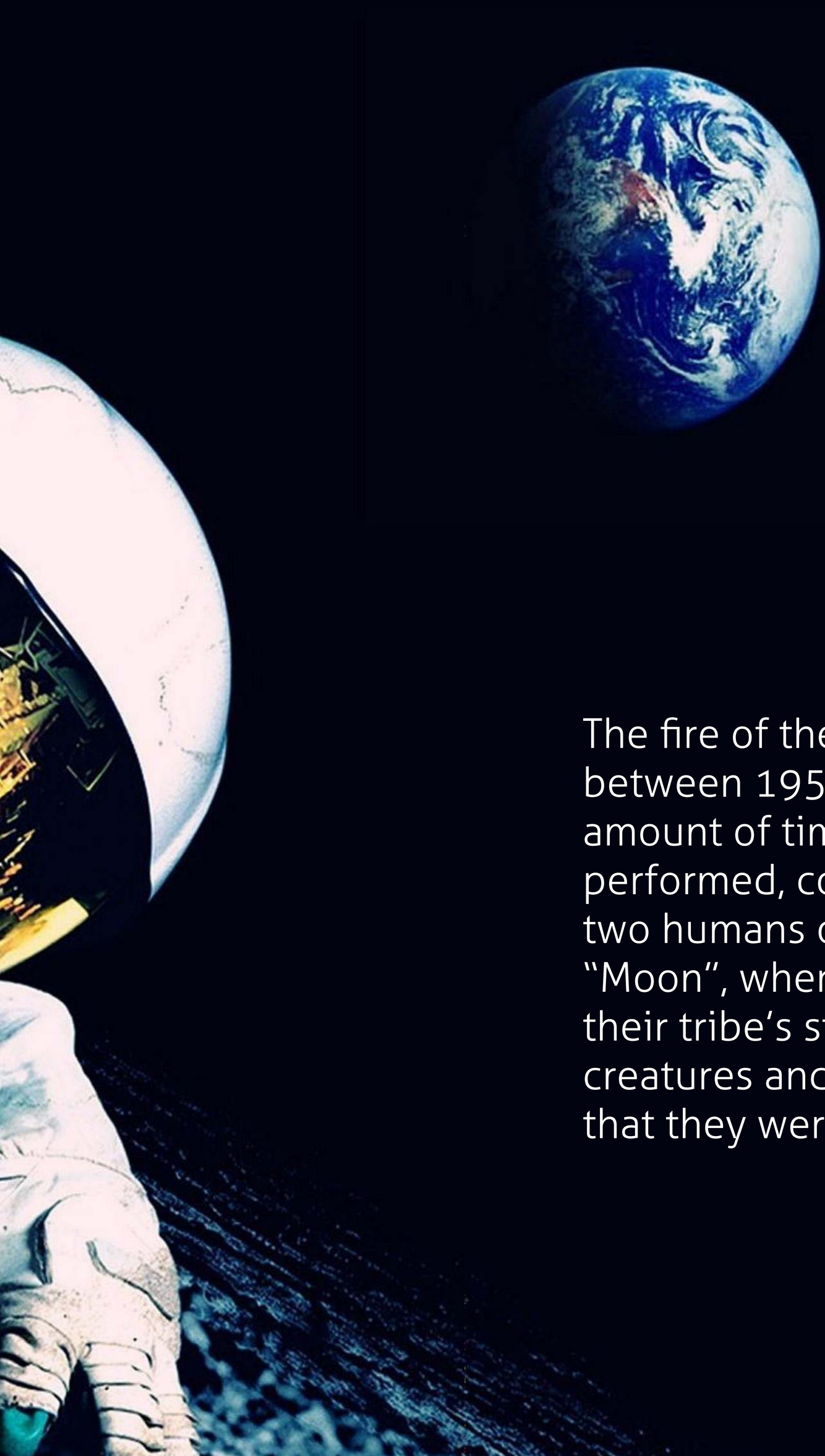
While many may think competition is helpful, and others may argue that it’s a non-productive approach, let’s see if any of that holds true.

70 years ago, two powerful tribes (US and Russia) that were in conflict due to scarce resources, bad parenting (education and enculturation) :), and overall environmental factors, recognized an advantage to living on a sphere along with gravitation and combustion engines. That is, they realized that it was possible to put 'machines' in the sphere's orbit; machines that could 'spy' on the other tribe(s) and perhaps bring other advantages to the tribe that 'owned' the machines.

The challenge to accomplish that was huge, due to the complicated nature of nature: velocity and mass, energy and fuel, gravity and weather. Couple that with the fact that, back then, the best computer was less sophisticated than the computer-controlled stop/start/defrost buttons in modern-day toasters, and you can realize some of the challenges they faced.

In 1940, via the power of competition, the US and Russian tribes rushed to send the first unmanned satellite into orbit, the first animal into space, and then the first man (another animal) into space. This space race was not hidden. On the contrary, it was understood by all.

The Russian tribe had beaten the US tribe at putting the first satellite into orbit, the first animal, and then a man in orbit, so the US tribe felt the 'need' to be the 'first' to put a man on the Moon. The race was a crazy and perhaps laughable one, as both tribes wanted to become the first to do 'something'. At one point, they were competing on putting the first woman in space. Perhaps they should have gone further and tried to be first at putting an elephant into space, or a whale.



The fire of their competition was most intense between 1957 and 1970, and in that short amount of time, a progression of flights were performed, coupled with the first landing of two humans on the rock that we call the "Moon", where they proudly 'stabbed' it with their tribe's stick (flag) so that all of Earth's creatures and any extraterrestrial life to know that they were there first.

Graduating from primitive ‘airplanes’ that could barely fly on Earth to sending and returning people to and from the Moon in just 40-50 years (relying on the computational power of a modern ‘toaster‘) seems like a great achievement. It is true that they sparked huge technological and scientific developments during this race (improved engines, materials, new computer structures and software, etc.).

However, as a direct result of the intense artificial pressures of the race, people and other animals died in rushed attempts (that could be avoided) to become the ‘first’ to accomplish various challenges. Two-thirds of the many species of monkeys, as well as other creatures used in test flights by the US tribe, died. The Russian tribe also sacrificed a few dogs and other creatures.(source)(infographic)

The human creatures were always at huge risk and huge stress due to the competition. The Russian tribe aborted some well-thought engineering plans in favor of a more sophisticated rocket that could carry people into space, and demanded for an older model to be quickly modified to squeeze 2-3 men into it, so that they could become the first to put humans into orbit. The astronauts could not even wear spacesuits for this flight because of the lack of space inside the spacecraft.

On another flight, Alexei Leonov, who performed “the first spacewalk“, had serious difficulties getting back into the spaceship because of the spaceship’s size. A few people lost their lives due to governmental pressures to ‘move faster’ to prove themselves better than the other tribe(source), not to mention the stresses that many complained about for the duration of the race, the job-slavery, and the many resources that were wasted that, under a more cooperative effort, perhaps could have been avoided.

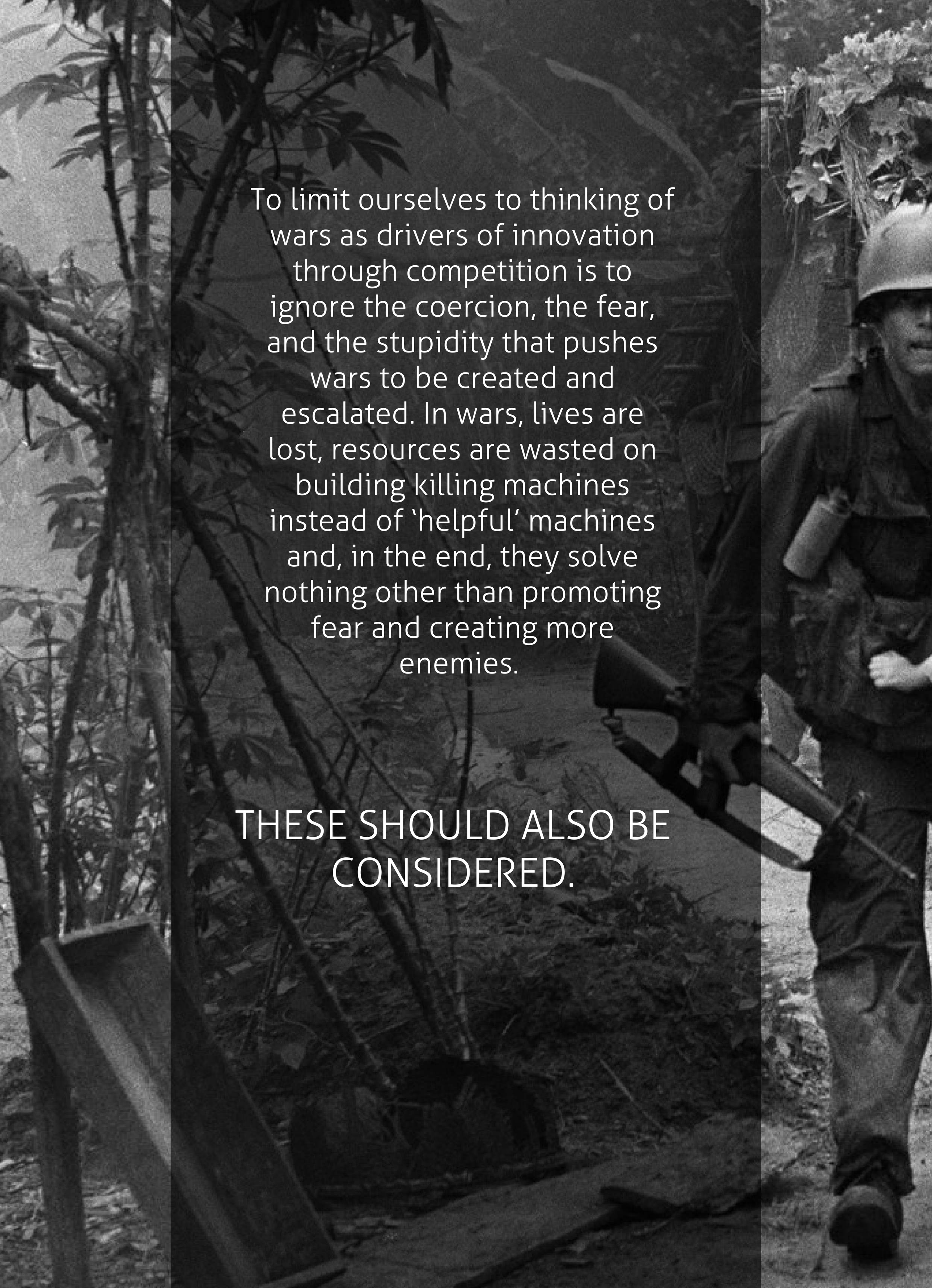
IF THEY WOULD HAVE COLLABORATED, PERHAPS NO LIFE WERE TO BE LOST, NO RESOURCES WASTED AND MAYBE MORE PROGRESS HAVE BEEN MADE.

Wars are usually what drive a lot of technological development, and even scientific progress, as wars represent the ultimate competition for making killing-Machines.

As an example: humans were able to develop the first atomic bombs only a few years after the atom was first properly described, and still not that well understood.(source) They were able to do that in an extraordinary short amount of time, again, because of competitive pressures driven by the wars at that time. As a result of the pressures of wars, new communication devices were invented, new kinds of materials, and even new branches of science. But competition is not the entire 'drive' of wars.

People do not build all these technologies to be ‘better’ than the other side. It is much more about fear, slavery through ‘jobs’, patriotism, lack of resources and so on.

People develop all of these innovations because they have been taught to fear the other tribes; they are slaves to a monetary system and, even if they oppose national decisions to go to war, they can’t do anything about it; because they are raised to ‘love’ their country and to devote their time and life for “IT”; and sometimes because their ‘side’ lacks resources that the other tribe has.


To limit ourselves to thinking of wars as drivers of innovation through competition is to ignore the coercion, the fear, and the stupidity that pushes wars to be created and escalated. In wars, lives are lost, resources are wasted on building killing machines instead of ‘helpful’ machines and, in the end, they solve nothing other than promoting fear and creating more enemies.
THESE SHOULD ALSO BE CONSIDERED.

To say that wars drive innovation without mentioning the problems it creates, is like saying that death is what drives innovation in medicine. It's true to a point, but that is not what you would want as the primary drive for progress in medicine.

WARS CANNOT JUSTIFY THE PROGRESS, AS DYING IS NOT JUSTIFYING THE ‘NEED’ FOR MEDICAL DEVELOPMENT. PROGRESS CAN BE ACHIEVED BY DIFFERENT DRIVERS AS I WILL SHOW YOU.

Today, we are all competitive in one way or another: from jobs to partners, sports to business, we are taught to compete for mostly everything. And this is all due to a mix of environmental and educational drivers. Of course you want to be promoted to a higher function. Your payment would be higher and you can barely pay for your rent with your current pay, therefore you will compete for that Job.

You are living in a world of scarce relationships, goods and services, all due to lack of access because of a lack of money. You might compete for a partner against other people (by making yourself ‘pretty’, more cool, or whatever), but that’s only because you only have access to a relatively small number of people, due to the fact that you don’t have the freedom and means to travel and meet new people.

In this case, competition is the result of scarcity, as people compete to get that 'juicy fruit' that not many have. It is also a result of education, where people are taught from a very young age to compete, and that is reinforced throughout their lives within the monetary system.

There is no doubt that competition in schools, groups, and society as a whole creates stress, losers, fear, a forced race that can blur attention and create rushed and dangerous decisions, the wasting of resources and energy as many groups duplicate work on similar projects, and much more.

How can you improve and become better if your 'progress' depends entirely on those that you compete with? How might the other side limit your abilities? And is it 'healthy' to win at the expense of others losing? These and many other questions should be asked when anyone thinks that competition is good.

Cooperation

Can we achieve technological and scientific achievements, or achievements of any kind, without competition?

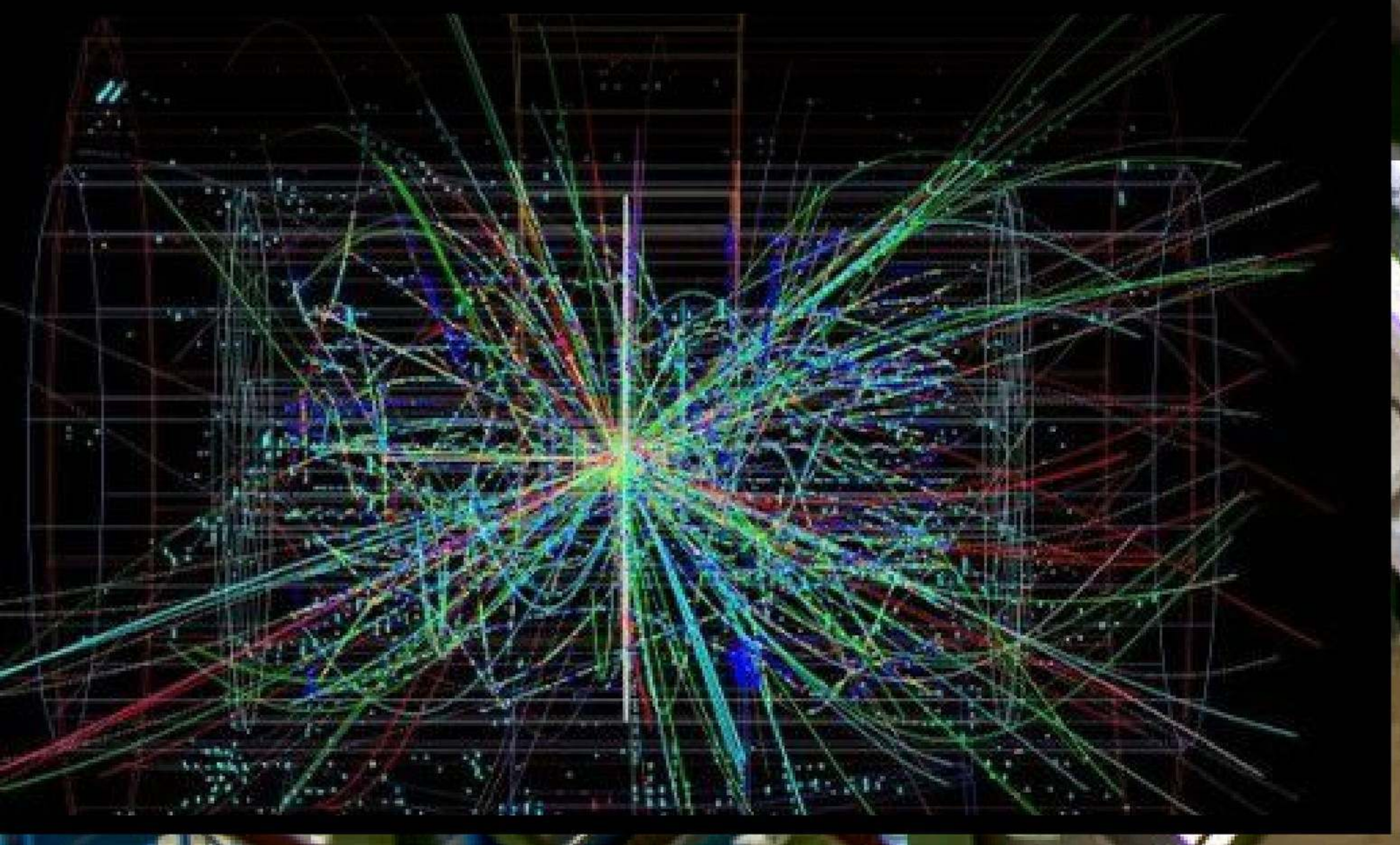
Man initially placed many machines into Earth’s orbit mainly via a competitive race, but then managed to progress well beyond that, and even build a permanent space station for humans to live in, only through cooperation.

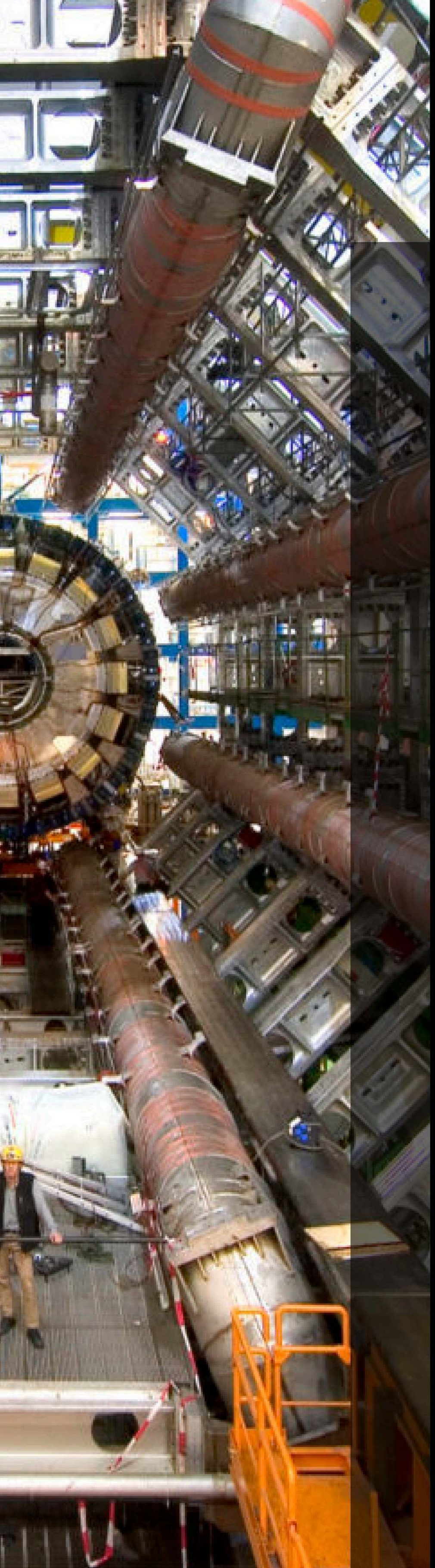
The International Space Station (ISS) is an example of how cooperation between many tribes can create such complex machinery, the biggest man-made object currently in space. Ironically, or not, the same two tribes (US and Russia), plus a few others, decided to collaborate this time to build a sustainable project that has been fully operational for 17 years. From scientific experiments to ongoing technological developments due to living in microgravity, or the need to invent better rockets to reach the station and the development of better modules, all of this is continuously proving how cooperation is not only progressive, but sustainable.(source)

Multiple space missions have been made since the ‘great race of the 50s’ and most have been collaborative projects between tribes. A recent example is a daunting mission to land a spacecraft on a comet, which is almost as crazy as trying to land a mechanical fly on a moving bullet. The entire mission is well described in this documentary.

Looking at the atom again, the collaborative project to understand the structures that underlie the atom (LHC) dwarfs both in complexity and importance the competitive race that brought humanity the horrific atomic bomb. The LHC is the biggest and most complex machine ever built by humans, spanning over 27 km (17 mi) in circumference, with the help of over 10,000 scientists and engineers from about 100 tribes.

They use incredibly powerful magnets, supercomputers and super precise instruments that are capable of smashing atoms together to figure out what they are made of. It may sound simple, but it is like smashing 2 garbage trucks together and trying to figure out exactly what happened at all moments during the collision. It is not like finding a needle in a haystack, it is like finding a piece of a slightly different kind of hay in a haystack. It's an extremely complex challenge. I recommend this documentary to better understand the complexity of this project.





As a side note, the scientist who proposed the existence of the Higgs boson (a very important and elusive particle that is thought to give mass to all other particles), did not take credit for discovering it.

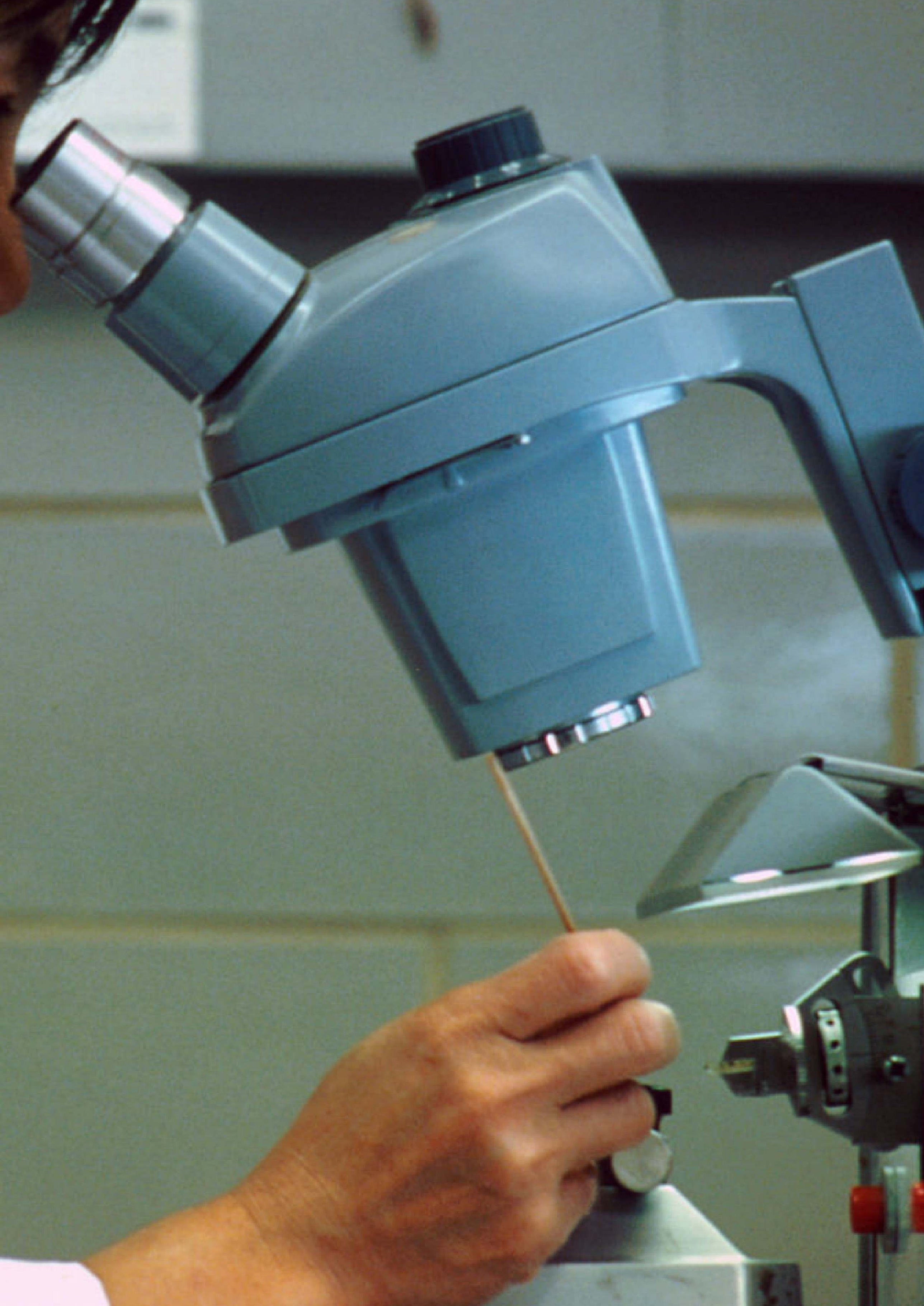
At LHC's particle discovery announcement event, he referred reporter's questions to the huge LHC team, acknowledging that he could not have any detailed description of the finding or details of the particle, although he originally proposed its existence. This clearly demonstrates how humility and collaboration can bring about previously unimaginable discoveries. Imagine this scientist 'patenting' his theory, or keeping it for himself to 'spark' competition on finding the particle.

Imagine that competition spurring multiple groups to build hundreds of LHC-type machines that take a long time and many resources to build, just to be 'the first' team to discover it. But yet humans build thousands of car models, millions of food types and buildings, and many more different electronic circuits, devices, and software programs, all with similar functionality. So much waste.

IF PEOPLE WERE TO STOP COLLABORATING ACROSS THE MANY FIELDS OF SCIENCE, WE WOULD HAVE NO PROGRESS.

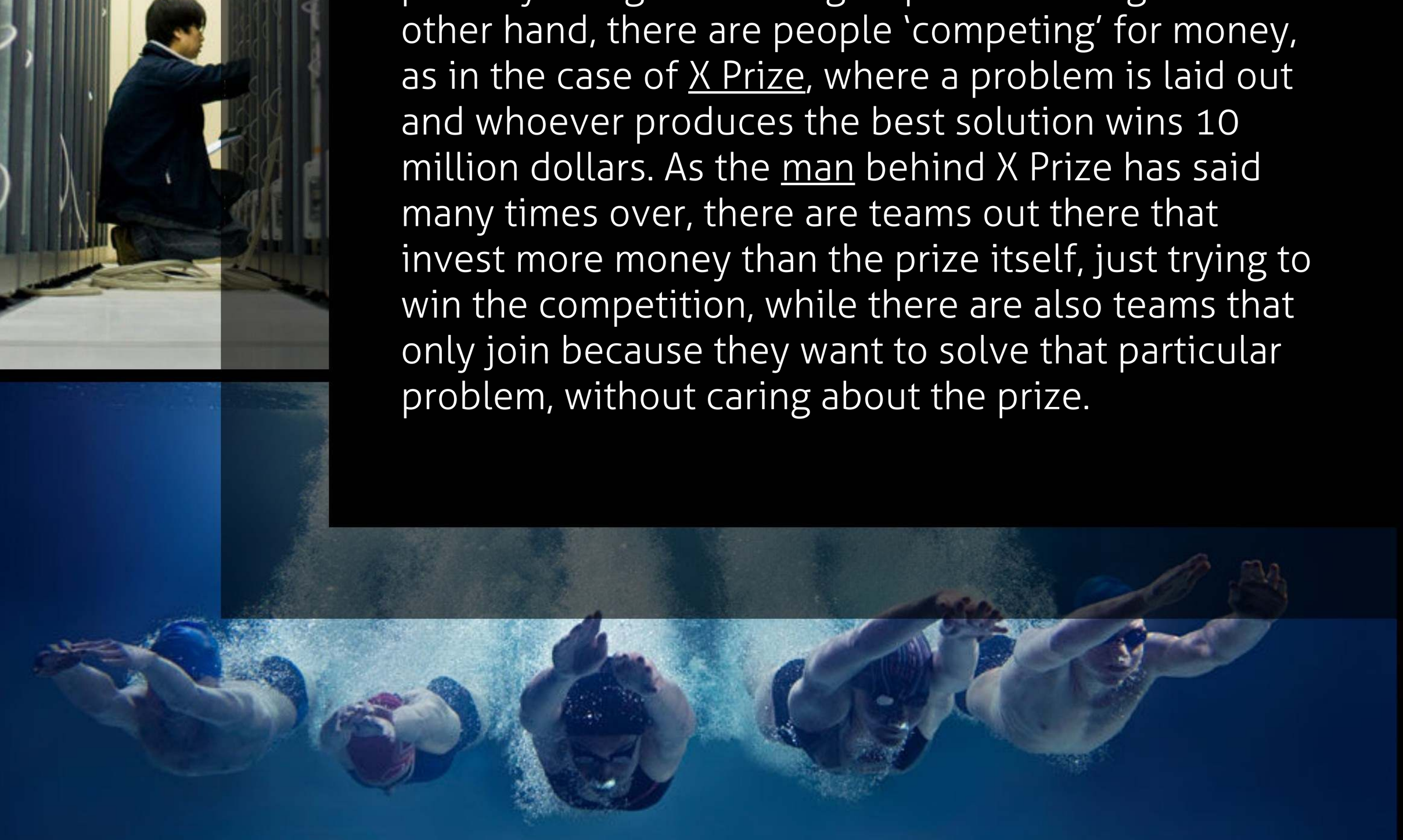
Imagine biologists not revealing their findings to physicists because of some imagined competitive race. That would quickly bring about the end of our species. Yet Apple will not ‘reveal‘ a new battery technology to Google, because they are in competition.

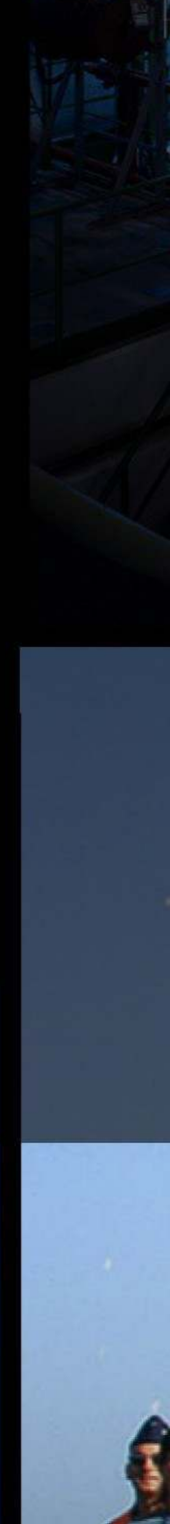
We are generally taught to believe that competition is what brings progress. Even if that is true in cases like the early part of the space race, the same progress, if not much more, is also exemplified in cooperative projects. So, if we are able to fuel significant progress with cooperation, why risk stress, rushed decisions, and waste of resources through competition?



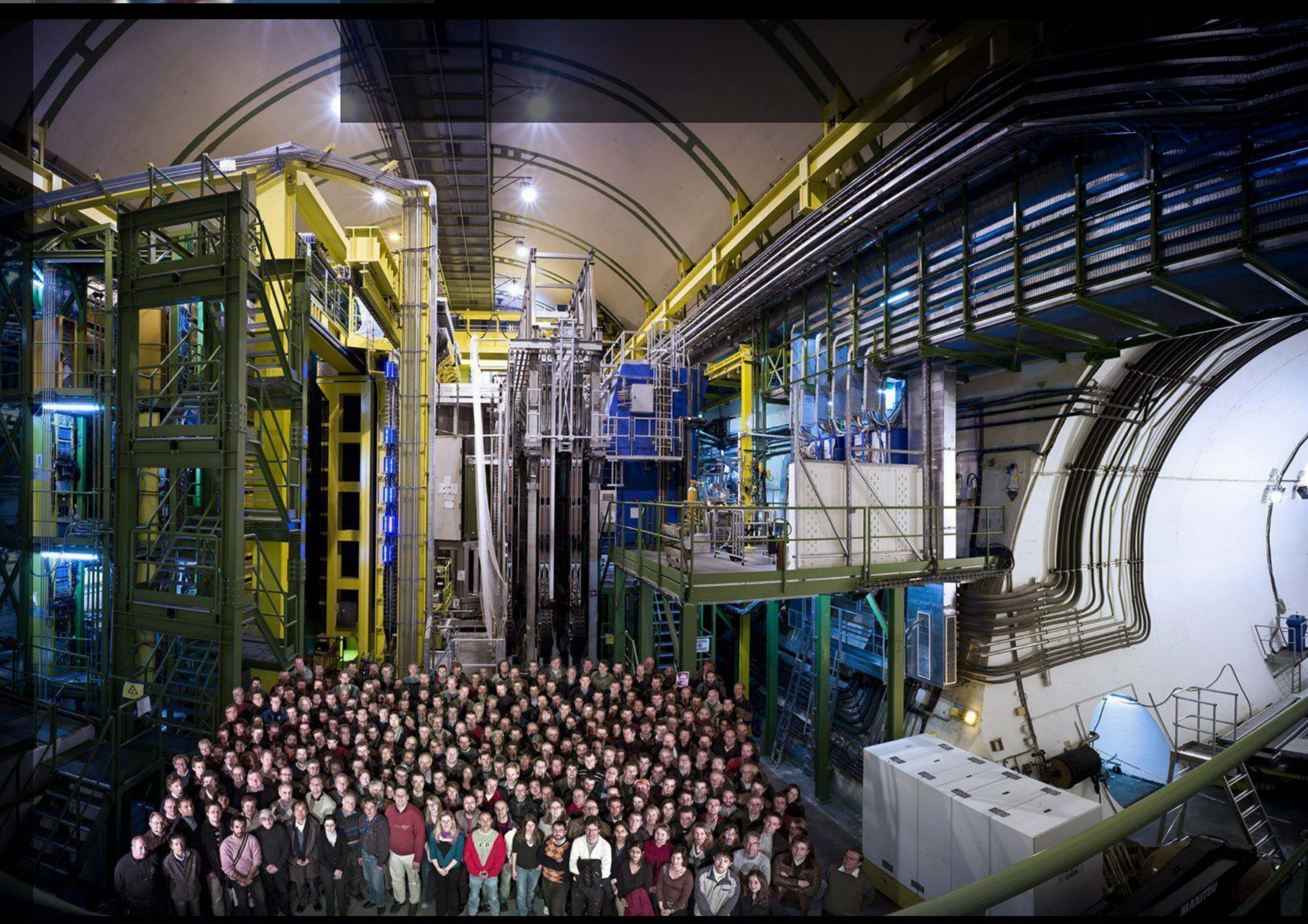
The concepts of competition and cooperation cannot fully reflect the totality of all situations. We cannot properly define these two terms as isolated, as there may be cases in which those who seem to cooperate might internally have a sort of competitive agenda, while some who seem to be competing might understand the race as a joint venture, a sort of cooperation toward a greater goal.

Example: There may be scientists working at the LHC and cooperating with others, but in the back of their heads, they may want to be the first in making a breakthrough, even if that breakthrough may only be publicly recognized as a group breakthrough. On the other hand, there are people 'competing' for money, as in the case of X Prize, where a problem is laid out and whoever produces the best solution wins 10 million dollars. As the man behind X Prize has said many times over, there are teams out there that invest more money than the prize itself, just trying to win the competition, while there are also teams that only join because they want to solve that particular problem, without caring about the prize.





Therefore it is not so simple to think that we can properly define competition or cooperation. What is certain is that sharing information with others and helping each other would help us to progress faster and more reliably, while the alternative can be disastrous.



This is illustrated by a real story: On a tiny island, two tribes managed to build over 1000 tall statues in a competition that ended their societies. The two tribes, driven by superstition and competition, thought that building more numerous and taller statues of a particular kind would prove them better than the other tribe and would help them with their local problems. They wasted a lot of human labor and resources, with far too much energy lost. Agricultural yield wasn't productive enough? They built a statue, thinking that would help them. Experienced a drought? They'd build another statue.

They ended up cutting down all of their trees, making it impossible to build canoes for fishing. As a result of the environmental devastation they caused, various lifeforms went extinct that their food cultivation depended on, so they also ruined their crop yields by their actions. Their food supply continually reduced until they eventually lost order ended up killing each other or dying of starvation and exhaustion. Their blind competition brought about the end of their existence.(source)

We should pay careful attention as we, the ‘modern and sophisticated ones’, may not be far from that. We build taller and taller buildings to support our own superstitions and to show off power; we make thousands of proprietary models of the same products using the excuse that ‘this is how business’ works; and we created a system that demands infinite growth, billions of consumers, on a finite planet. We are seeing too many examples of the negative effects of such a competitive society, but we seem to be blind to all of this and keep on doing the same things.

If we were to try to define these two notions (competition and cooperation) in summary, then we might say that competition brings out the "beast" in us, while cooperation brings out the "best" in us.

Motivation

It really doesn't matter how we define competition or cooperation. In the end, it's all about what motivates people to do something. But to do what? To kill? Have sex? Rape? Sing? Get drunk? Watch cartoons? Fix their car? Look at the stars?....

There is a video that presents some psychological experiments that seem to show that what motivates us most is autonomy, mastery and purpose. Although this video has likely been shared with you many times across various social networks, and while I agree that it presents some very interesting results that seem legitimate, I have to disagree that it represents core ideas that apply to all humans.

You see there are so many people in the world that saying that there are some notions/drivers that motivate all of them (even most of them) may be too much of an assumption. I know people who want instructions, a schedule and someone to tell them what to do, or else they cannot work (even if the work is 'creative', like painting or writing). I also know people that do a pretty good job at whatever they do without wanting to master their skills (there are many people who play games without wanting to become better at it, or play guitar without wanting to 'master' the skill).

The world itself is the perfect example where people mostly do not work for the sake of purpose alone because of the monetary system, but for the money they make, and there are plenty of 'artists' that look forward to their paycheck and become better at what they do because of it. The opposite is also true, so it cannot be an exact thing.

We are talking about what drives people to do what they do. And that is a very complex series of events that can only be described by: people do whatever they feel motivated to do, and their motivations are created by the culture they live in (their entire life experiences). That's how blunt it is.

This is why, when one is well-exposed to science and research, they will be motivated by the research or scientific inquiry itself, and not by a prize. Most scientists do not want to win a Nobel prize - they enjoy their research. If they are influenced by today's monetary-driven culture, they may not be able to accomplish much without a monetary incentive. Or if they are from a religious background, their motivation may be because they are afraid of the 'Devil' or because they want to satisfy their 'God'.

A very good point that the video provides is that people prefer autonomy when it comes to creative work. If you are trying to accomplish a 'creative' work under stress (your boss, your financial situation, a strict deadline), you cannot focus clearly enough on what you are trying to achieve.

If there are 20 people on a deserted island who are all well-educated in regards to science and they deduce that cooperating to build a boat will help all to get off of the island, then they will probably cooperate (but perhaps only under those circumstances). On the other hand, even though all of them have a scientific education, their backgrounds may be widely different from one another, leading to a plethora of conclusions like: kill the others and eat them, build a shelter, pray to one or more gods, desalinate ocean water for their use, and so on.

Many interactions would occur between them and we might be inclined to label them as being ‘cooperative’ or ‘competitive’. However, they are far more complex than that, as each is triggered by the shared situation, plus all that’s going on within each of the people’s ‘heads’ (their personality, which was created by the their entire life experiences).

The primary take-away here is that what motivates people is just what motivates people. The significantly positive thing to recognize about this is that people can be motivated by a wide range of ‘motivators’, such as helping others, improving society, and so on, while the less stress you put on people, the better they will be able to focus on what they want to do.

Curiosity

I am inclined to suggest that all children are born curious, but the more I look into this assumption, the more I realize that I might be fooled by the language we use.

If we imagine a one year old human baby in a room, crawling on the floor and surrounded by objects (toys, chairs, etc.), then we may project that this child will play with the toys, touch the chair, put a bug that crosses in front of him in his mouth, etc.. And we may be right. However, a kitten, puppy, or other kinds of very young animals may do the same.

From birds to snakes to fish, they all react to varied stimuli such as light, sound, heat, movement, etc.. So, what is so different about a human child that we label so many of its responses and reactions as curiosity? Why does a human baby understand complex language or is eventually able to ask complex questions?

First of all, the human brain may be the most complex brain we're aware of, but it is not a unique organ. It's basically a collection of neurons (cells), where the more neurons there are and the more neural connections there are between them, the more associations any brain can make.

If you raise a human baby alongside a chimpanzee baby (which has a brain somewhat similar to humans) in the same environment, you will get different kinds of reactions from them. Even if both are exposed to a similar environment, the chimpanzee and the human will not develop the same, and this seems to be mainly because of differences within their brains. Humans have 4-5 times more neurons than chimpanzees, so they are able to make more connections. There are also significant differences in brain structure between the two that may provide huge influences on how they behave.(source)

Just imagine how differently things appear to a person with brain damage who cannot read, or speak or remember things. Check out this video of a 19 year old girl struggling to talk or read after a brain stroke. If a brain stroke that kills off a relatively small number of brain cells can have such a huge impact on a creature's personality, consider again the huge difference between a chimpanzee brain and a human brain.

Even more than that, the overall anatomy of a creature can allow it to develop a more complex language set, or to perceive ‘reality’ in a more sophisticated way. For example, imagine having more sensitive sensors for a given ‘sense’ function, and many more of them. A dog’s sense of smell is 100,000 times more sensitive than our own. So how does a dog sense the world? We can’t even imagine that. Biology accounts for huge variances in regards to how different creatures respond to their Environments.

Therefore if you place a one year old human baby and a one year old chimpanzee in the same room and observe them for a while, you may note similarities in their behavior, but you’ll also recognize many, many differences.(source) On the other hand, consider that those differences may only seem remarkable from our own perspective. An ‘alien’ creature may not detect much of a difference between them.

Ok, so let's suppose the kid is now six years old and already has a relatively large vocabulary, i.e. he understands language and ask questions. The kid asks things like 'what is a door?', 'what is a chair?', 'when you press that 'thing', why does the light go on?', etc.. Now consider that without someone to teach him these words and expose him to that environment, the child would not be able to ask any questions. Most people don't ask why galaxies move apart from one another at accelerating rates or how neutrinos are formed, simply because they are not even aware of these facts. Questions arise as a result of knowledge and language. The more knowledge a person gains, the more associations they make and, consequently, the more questions they formulate to help complete those associations.

Speaking of questions, we might be inclined to think that this is all quite 'natural' to humans. But is it because of the question mark? In other words, is it because we have language skills and we are the ones observing and judging the behavioral Differences?

If a six year old chimpanzee in the same room tries to open the door but can't, she may then try kicking it, walking around the room, examining it from different angles and perspectives, and so on. Isn't the chimpanzee's reaction similar to a human who asks 'what is a door' or 'what is behind the door'? Perhaps the only difference is in the sophistication of our use of language.

So, what we call ‘human curiosity’ may just amount to our sophisticated biology and the sophisticated environment we grow in. If you were to raise a newborn child in an empty room (only feeding him from time to time) and he is not exposed to stimuli such as light, sound, human interaction, and so on, would you expect this child to become curious in the sense we understand it today?

The notion of 'curiosity' does not have a proper meaning, because it attempts to define dynamic behavioral patterns that continually change, while we are also limited by a relatively new technology called language to try and define this. Humans have complex biology and are part of a complex environment, resulting in even more complex and dynamic behaviors.

What drives people (motivation and curiosity) is entirely created by the culture/environment that one is exposed to. The culmination of these environmental forces may cause some to want to kill over a piece of candy, some will only help short people, while some others may lose interest about the world, or themselves. Humanity is made up of many brains, each experiencing moderately to significantly different personal and external Environments.

IN THE END, HERE IS THE SITUATION THAT EXISTS TODAY:

- There are many people who believe they perform better in certain circumstances if incentivized (by money, sex, badges, toys, food, whatever).

- There are many people who believe they perform better in certain circumstances if not incentivized (you leave them alone and they do their ‘job’)

- Complex projects have been brought to life out of fear, profit, or slavery

- Complex projects have been brought to life by cooperation, sharing, and without slavery

One thing that is very obvious from all this is that when you rely on scarcity, fear, slavery, and other damaging motivational drivers, it hinders people's creativity, slows down science and technological progress, and can lead to increased ruination of our shared global Environment.

If extraordinary projects like LHC, many space missions, or perhaps the entirety of scientific and technological progress are achievable via cooperative means, then there is no excuse for promoting competition to achieve such goals. To find the most humane way of achieving progress in society, we have to treat people as creative assets, instead of livestock to be 'pushed' or otherwise forced to produce something.

The issue here is that the global reliance on monetary systems depends on constant competition, fear, and debt-slavery to perpetuate itself. This brings about something that many call 'progress', but specifically within monetary terms and ideals that almost always place power positioning and financial profit well above human care and ecological concerns. This should make us wonder what 'progress' actually means today...

Humanity can only achieve a more collaborative approach to progress by restructuring the entire system we live in.

Here are some recommended articles to learn about new ways of collaborative education, how millions of people volunteer around the world with no monetary incentive, and why there is no proper or realistic way to quantify people's true skills within a monetary system: RETHINKING EDUCATION / VOLUNTEERING AROUND THE WORLD / VALUABLE WITHOUT A VALUE

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