

The world in a spit

A few days ago in Italian prisons commenced the collection of samples destined to compose the National Archive for DNA, an institution run under the Minister of Internal Affairs who is busy compiling *the genetic profile* of all the individuals incarcerated, investigated, arrested or detained, along with the Dna found on crime scenes. This process is in accordance with a decision taken on a European level – sanctioned in 2005 by the treaty of Prüm, endorsed by Germany, France, Belgium, Spain, Luxemburg, the Netherlands and Austria (and adopted by Italy in 2009) – as part of the the so-called “fight against terrorism and criminality”, which also extends beyond the European Union’s borders. Now, officially and with a few years of delay, the italian authorities have started to put into practice a measure which has already been implemented since years in other countries. In the United Kingdom, the homeland of the inventor of the genetic print, Alec Jeffreys, the *National Dna Database* was already instituted back in 1995. Also France certainly did not wait for the Treaty of Prüm to create its very own *Fichier national automatisé des empreints génétiques*, founded in 1998.

Genetic profiling is described by all governments as a “powerful weapon in the fight against crime”, capable of providing key elements to punish the perpetrators of particularly heinous crimes and of exonerating the innocent. Especially evoked in the cases of homicide and rape, Dna as a piece of evidence, is presented as if it were definitive, irrefutable, synonym of absolute truth. Today the british archive as well as the french one contain millions and millions of genetic codes and their number is constantly increasing. All potential killer rapists? Certainly not. As a crossroads between a “justice equal for all” and a “science at the service of all”, the taking of Dna samples is a judicial procedure which possesses the same exponential and irreversible qualities of technique. Exactly like justice and science, it is functional only to the interests of the State. Thus, in countries like the cunning Albion the taking of a DNA sample is intended not only to solve particularly brutal cases, but also against those accused of shoplifting or of public drunkenness or of participation in a non-authorized demonstration (to give an idea of the generalization of such a practice, it suffices to mention that already by the end of 2007 the british database contained the data of 150.000 kids under the age of 16); while in the land of human rights the field of genetic collection, originally proposed to unmask a serial killer, has been extended over the course of the last years in order to uncover, among other abhorring crimes, the authours of graffiti and saboteurs of Gmo cultivations.

All of this could pose some scruples to some noble democratic consciences, who could remain vexed before the quite totalitarian idea that a State should proceed with the classification of the genes of millions of its citizens and that according to its discretion would sift through its database on the occasion of each infraction of its penal code, basically turning everyone into potential criminals. To quell their indignated souls, they propose and expect some limits to Dna screening and to its use, limits which clash both with the security promises of such a procedure and with its own scientific qualities. The punitive efficiency and the dissuasive one of a Dna match are in fact both inherent to an initial prerequisite: the Dna has to already be present in the archive. It is in fact completely useless to posses the Dna of a homicidal rapist if there is no Dna with which to match it. The more Dna samples are collected, the more likely it is to find the perpetrator (punitive efficiency). The more Dna samples

are stored the more probability of crimes diminishing (dissuasive efficiency). To genetically profile an entire population would therefore be an ideal perspective from a securitarian point of view, because it would at the same time guarantee the highest preventive measures and the highest level of repression. Remember, the State knows you, knows everything about you, and therefore...don't be afraid, and just don't do bad things. Why would this ever arise ethical doubts for those who accept securitarian logics? Because those who invoke security cameras everywhere and have nothing against phone tapping, nor against the taking of fingerprints, why would they worry about an eventual genetic screening? If *Dna doesn't lie* as scientists swear, if its test is a scientific procedure *that works* what can then be the problem? There is no problem, in fact it seems that the first ones who ever supported the necessity of profiling all citizens were some arab countries, whose governments notoriously take to heart the triumph of truth and justice. Or maybe, perhaps, some small problem in this whole affair is still lingering. In fact the father of the genetic print on one hand proposed the profiling of the entire population, on the other hand was keen on pointing out that the data should not be preserved by the State, but rather by a "neutral" institution.

Ridiculous scruples. It is not at all difficult to understand where the problem lies, nor its dimensions. Let's even leave behind for now the technical disputes over Dna samples, on how long it should actually be in order to be reliable or about how long it should be stored in order to preserve the "right to privacy". And forget the hypothetical future scenarios, such as: what would happen if this data fell into the wrong hands...? This is not the point. This data is already falling into the hands of someone, who is collecting them. And why? To protect us from sex maniacs and blood thirsty killers? That Dna doesn't lie is already not a certainty. But the State that uses it, certainly does lie! In the end, it is not even necessary to rig the answer, when it is possible to rig the question.

But let's even start from the answer, the one of Dna. Lawyers and scientist agree on presenting it as if it were a supreme proof, indisputable. Because deoxyribonucleic acid is a macromolecule present in the cells of all living organisms, responsible for the transmission and the expression of hereditary traits, as they say, unique, different from individual to individual, the Dna of a spit will automatically spit out the Truth.

Now, even though the media always talk generically about Dna evidence, it is necessary to know that there exist two types: the nuclear one and the mitochondrial one. Nuclear Dna derives half from the father and half from the mother, it is the more precise and discriminating one, it is present in "live cells", such as saliva, blood, sperm, hair follicles. However, it has a defect: as soon as it detaches itself from the body, it deteriorates quite easily. Often by the time it arrives to the laboratory it is no longer usable. The mitochondrial Dna, instead is transmitted through the lineage of the mother, and it is quite less precise (it can be shared by people that don't belong to the same family as it can vary between family members) and it can be found also in "dead cells", such as skin flakes. This is why it lasts longer.

From a trace of Dna, from a tiny piece of the human body, a "profile" is obtained, in other words a series of data which correspond to a part of the Dna of the individual. It is not the entire Dna sequence, but only *a part of it*, the one chosen by the experts. The Dna profile is therefore obtained by the analysis of some of the points of the entire Dna sequence. Once this profile is obtained, the

authorities search for some correspondences, similarities among those present in their archives. Then, following their procedure, the result can never be the absolute truth, but only an approximation based on a probability calculation. *This is not the same thing*. Already it is an hypothesis that the Dna of 7 billion people is different in each individual (have all of them been examined and compared?); then taking into consideration that only a small part is actually analyzed (found where? how long? and after how much time? these parametres vary from country to country, from epoch to epoch); then subjected to other possible external contaminations, how can it be affirmed that the answer is peremptorily precise?

The most recent case, and for us the closest and best known, is the one about the murder of a 13 year old girl near Bergamo, which took place in 2010. In order to find the culprit, the Dna of 18.000 people was taken, basically all the inhabitants of the region (which offered themselves voluntarily). The presumed perpetrator was arrested precisely based on a Dna match. His Dna was found on the underwear of the young girl. But, wait, there was found no trace of his mitochondrial Dna! This fact was deemed inexplicable by the same experts. Could this be the reason why the prosecutors fabricated a video which showed the defendant's van on the scene of the kidnapping of the girl? Would this be the incontestable, indisputable truth for which more than 3 million Euros were spent?

Several similar cases have occurred. In England in 2000 a man struck by Parkinson's disease was arrested for a robbery committed 300 km away. Having already been arrested for a quarrel with his daughter, the police had taken his Dna, which matched the one found on the crime scene. The lawyer demanded that a longer strand of Dna be examined, and the result turned out negative. In France in 2004 the husband of a woman murdered two years before was arrested, because on the body they had found a hair whose mitochondrial Dna matched the one of the man. After different months of pre-arrest and of probation, the man was released when the comparison with the archive of genetic profiles gave an unexpected result: his Dna sample matched also an other profile, the one of a convict who had deceased some time earlier.

It is therefore not a chance that some prefer to talk about "compatibility" of Dna. The profiles don't correspond, they can at most be considered "compatible". What does this mean? That the supreme incriminating evidence, which should demonstrate the (penal) responsibility of a human being, enough to warrant a sentence and a subsequent reclusion, is that a *part* of the Dna of the defendant is apparently *compatible* with a *part* of the Dna *found* on the crime scene, and therefore *probably* attributable to the culprit. Factual truth or rather rough hypothesis?

To this can be mentioned the problem of human errors and contaminations, both during the course of the crime scene forensic sampling and during the analysis. Switching of labels, of test tubes, mixing up of organic tissues. The same Alec Jeffreys admits that the widening of a genetic archive, as much as he deems it essential, will certainly increase the numbers of mistakes: "created and maintained by human beings, it will undoubtedly have mistakes, it's mathematical". In fact in the United States in 2002 a man was condemned to 12 years of prison for a rape and he was released after four and a half years of detention. It turned out that the Dna discovered by the police belonged to two different people, excluding the fact that he could have been involved. It ended up being a mistake committed in the forensic laboratory, which was subsequently shut down because of its unreliability. The prosecution then opened an investigation in order to verify the accuracy of 25 sentences, 7 of which capital

punishments. Even more hilarious is the story of the “woman without a face”, considered by the media “the worst serial killer that Europe has ever known”, who apparently committed her first murder in 1993 in Germany. Over the course of the years her Dna had been found on the crime scene of different murders and robberies, around twenty in total, spread out over half of Europe (Germany, France, Austria). Unpredictable, elusive, nobody had ever seen her, but she seemed to leave her genetic print everywhere. Against her unleashed a mighty woman-hunt: thousands of witness statements, intense interrogations against her presumed accomplices, 12 million Euros spent over the course of the investigations and a price on her head of 100.000 Euros. Thousands of Dna samples were taken from women in the south of Germany, France, Belgium, and even Italy. Finally in 2009, the “woman without a face” was identified, nailed for her role in this whole story. The irrefutable truth came out: the Dna was of a worker for the company who provided to many of the european police services the swabs used to take the genetic samples from the crime scenes!

As we have seen, the answer that Dna gives is not exactly synonym with truth. But there’s more: it is the question itself which is false. Because even if the Dna evidence were to be authentic, even though the entire sequence of the Dna of a person were to be analyzed and would perfectly match the complete sequence found on a crime scene, what would this prove? Nothing, it would still not be a proof of guilt. The Dna found on a bottle thrown against a line of cops during a manifestation does not necessarily mean that it belongs to the individual who threw it. It could be the Dna of somebody who packaged it, or who sold it, or who bought it, or who opened it, or who drank it, or who passed it on, or who threw it away... The Dna found on the scene of a crime does not necessarily correspond to the one of the culprit, it could very well be the one of someone else. Furthermore, *the presence of Dna does not even demonstrate the actual presence on the crime scene of the person considered a match*. Each human being, on a daily basis loses hair from all parts of their body, talks and spits, eats and drinks, pisses and shits, can also scratch, bleed or smoke. He leaves traces of his Dna in all kinds of places, on many objects, on countless people. Leaves traces and picks others up, also moving them elsewhere. Shoes, for example, how many traces of Dna could they pick up and transport? Therefore, to claim the guilt of someone based on the fact that their Dna was found on the scene of a crime is absurd.

There was a time in which the same men of law would insist that a snitch could not even enter a court room. His word could not constitute an element of proof, it could only provide the investigators a path which *still needed to be demonstrated*. If his indiscretions could be upheld by concrete evidence, these were the elements that could be admitted. His word in itself, would not count for anything. From this point of view the discovery of Dna on a crime scene, even though it would be the matching one of the suspect, would be even less reliable. The snitch says who he thinks is (in his opinion, interest, memory and knowledge) the responsible one for a crime. Dna says who is (perhaps, probably, and in some cases certainly) the responsible for a crime.

But since justice is blind, to be able to see, it tends to trust in others. In human beings, for example, even when they are as disgusting as snitches. In fact today the word of two “collaborators” is enough to condemn someone. Let alone then if justice would not trust even more and more willingly in the microscope of science, who since always has the bad habit of presenting its hypotheses as

irreproachable truths. “It’s true, it’s scientifically proven, science says so.” Instead history shows again and again that a scientific hypothesis, presented as absolute truth in a certain era, could be considered false some time later. Scientific discoveries are presented as certainties, but rarely are. In fact, each scientific theory is based on a representation which is determined by an ideology. Biological sciences interpret living organisms as if they were a machine that responds to the command of a program composed by genes. This approach, which reduces and compares the human being to a computer, is not at all the result of observations. On the contrary, it is what determines them. It is not the observation of life to suggest the existence of a program, it is the mechanistic vision which ensures that life be observed in this particular way. Scientists begin from an a priori, and then go searching for the confirmation of their thesis (“man is a machine, let’s look for its gears!”).

In the current world, science is considered a synonym of truth. This pushes almost anyone to use apparently scientific arguments to give himself legitimacy. What is true is what those qualified say, what the experts say. Everyone follows this logic, from the cops to the prosecutors, from militants to activists, without even having to mention normal people. The expert, is someone who knows. His opinion is “objective”, it melts away all doubts. An expert is a pusher of truth.

The State, who loves to pass itself off as a guarantor of the common good where in fact it serves only the interest of the few, administrates a Justice which it claims being the same for the usual everyone but that is made by laws written and applied by the usual few. The State, like its Justice, are obviously biased, but have a desperate need to appear neutral, objective, above all parties. This is why they use science. When Lambroso would measure the cranium to identify thieves and assassins, when Hitler measure noses to discover Jews, what were they doing so differently than who today consults biology to make Justice triumph? Today Dna evidence represents the magical answer to the anguish of the judicial mistake, the only nightmare that can occasionally keep awake the butchers in black coats and wigs. And once immersed in the test tubes of the laboratory, Justice can finally appear perfect, as precise as a computer.

Except that there are many experts and that most of the time they *have contradicting opinions*. This is because science cannot assert absolute truths, it can only offer hypotheses. We are thus before the following paradox: no “scientific truth” can be considered a certainty, however today everything that a society wants to deem a certainty cannot avoid using scientific arguments. What instead is certain, indisputable, terrifying, is unfortunately something else. The governments of many countries are screening millions of people, using arguments which pre-announce a total screening and profiling. Those who hold power, political or even just economic, will have access to the most intimate data of each one of us *and will be able to do with it anything they want*. It is not necessary to venture off into science-fiction scenarios, it is enough to look at what has already happened only yesterday to sense what is going to come tomorrow. Someone remembers the molotov cocktails “found” in the courtyard of the Diaz school in Genova in July 2001, just after the slaughter perpetrated by the police? There you have it, from now on to eliminate the undesirable, the authorities will no longer even have to construct special investigations, instruct false informers, fabricate false evidence. No, it will be enough to let something as imperceptible as a *drop of saliva, a hair, a cigarette butt* – belonging to those to eliminate – be found on the next crime scene.

Within this world, of this social order, human beings drag on a dull existence, voided of beauty and passion, immersed in anguish and desperation, in a daily search for crumbs of survival. The ill of living provokes everywhere conflicts, acts of violence. The State intervenes to limit the effects for which it is the main cause. It presumes to impose punishments decreed by laws created to protect itself. And to identify the authors of these acts of violence it relies on the hypotheses of science, which are pushed as truths. The circle is closed in the coherence of abjection. A vile State applies a blind justice through a manipulable and manipulative science; all of this presented as an example of virtue. There you have it, the world in a spit.

[14/6/16]