THE BITTER LEGACY OF SLAVERY

TEXT: STEFANIE REINBERGER

When people find their final resting place in a mass grave, their life stories are often buried along with their mortal remains.

Researchers from the Max Planck Institute for the Science of Human History in Jena have succeeded in reconstructing part of the story of three African men who lived in Mexico City in the 16th century: theirs is a story of forced migration and slavery, but also of dangerous pathogens that traveled around the world undetected.

Since the 1960s, the construction of the subway in Mexico City has brought numerous testimonies to the turbulent history of this centuries-old metropolis to light, thus saving them from obscurity. In one example, workers constructing a new subway line in 1992 came across a mass grave in the grounds of the Hospital Real de San José de los Naturales. The hospital was founded in 1530 specifically for the indigenous inhabitants, who were hopelessly vulnerable to diseases introduced by the Spanish invaders. Yet three of the skulls did not fit this scenario at all. Thanks to work carried out by an

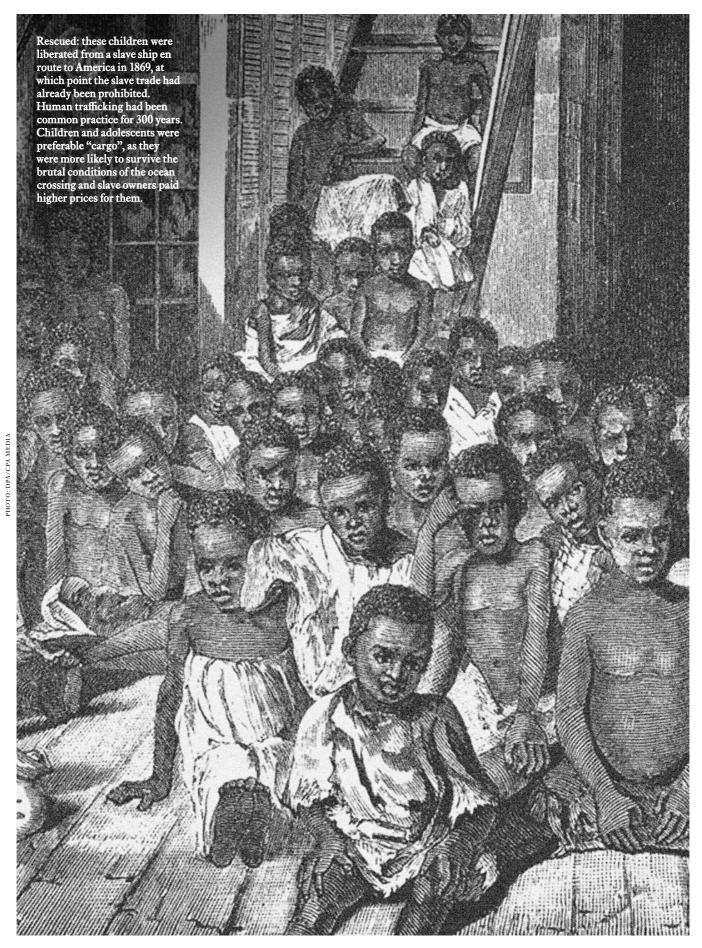
international research team under the auspices of the Max Planck Institute for the Science of Human History in Jena, the mortal remains of three men are now able to tell part of their story, which is one of slavery and suffering and provide new insights into Mexico's colonial era, but also into diseases that travel the globe alongside a mobile humanity.

The skulls of the three men stood out because of striking modifications to their incisors, which had been sharpened. Something similar had already been observed in African slave remains found in Portugal. And even now, this type of decorative dental modification is still common among certain ethnic groups in West Africa. The most obvious assumption was that the three men were of African origin. Research carried out by Rodrigo Barquera, a doctoral researcher and member of a team headed up by Johannes Krause, Director of the Department of Archaeogenetics at the Max Planck Institute for the Science of Human History, has recently shed light on the situation. Barquera has already

had an eventful research career, having been active in everything from pharmacological chemistry to immunology, genetics and anthropology. However, the Mexican scientist has a particular interest in the history of his country and the roots of Mexico's contemporary population. "Everyone talks about the Spanish immigrants and the few survivors of the indigenous population," Barquera explains. "Yet, this is only a part of the truth: there were also African slaves as well as migrants from Asia and Polynesia, whose genetic heritage is also reflected in modern Mexicans." But this is hardly ever mentioned.

In 2014, the Mexican researcher, who, at the time, was Laboratory manager at the National School of Anthropology and History in Mexico City, invited Krause to participate in a workshop at which he talked about his field of research. Krause is one of the few experts in the field of archaeogenetics, which involves the analysis of old and ancient DNA, which can, for example, be isolated from skeletal remains. Barquera was so

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excited about this research field that he decided to relocate to Jena as a doctoral researcher. Once there, he got the opportunity to get hands on the putative Africans from the mass grave in Mexico City. He and Krause extracted one molar from each of the three skulls so that they could isolate DNA samples from them. "We can extract incredible amounts of data from very small amounts of biological material using modern laboratory techniques," Barquera explains. "The range and breadth of information we can currently glean from the analysis of a single tooth is something we could only have dreamt of ten years ago." So ancient DNA is now able to reveal many things that archaeologists have only been able to speculate about until now: it can be used to help classify people's origins and track mass migrations; it provides clues about what people ate in the past and discloses the diseases from which mankind suffered in ages

The analysis of the teeth from Mexico City identified a genetic signature that points towards southwest Africa. It proved possible to match the three men's Y-chromosomes to a genetic lineage that is widespread in Africa today and is also prevalent within the African American population. Such matching is possible because the Y-chromosome is inherited virtually unchanged from father to son and, therefore, bears the genetic signature of all male ancestors. An isotope analysis also showed that all three men were born outside of Mexico. The three skeletons show signs of violence and malnutrition. Fractures and deformities point to maltreatment and barbarous, hard labor. Traces of buckshot embedded in his bones prove that one of the men had suffered a gunshot wound at some point and that he obviously lived with it for several years. All three died young between the ages of 25 and 35. "Together with the evidence that they were born outside Mexico," Barquera explains, "all of this

strongly suggests that the three men were among the first African slaves to be transported from their native land to Mexico."

In 1518, King Carlos I of Spain authorized the transportation of African slaves to the Viceroyalty of New Spain, which encompassed what is now Mexico. By the time the importation of slaves into this region was prohibited in 1779, some 130,000 to 150,000 Africans had been forcibly

SUMMARY

The skeletal remains of three men, who were probably transported from Africa to the New World as slaves in the 16th century, were discovered in Mexico City.

A research team was able to prove this using DNA and isotope analyses.

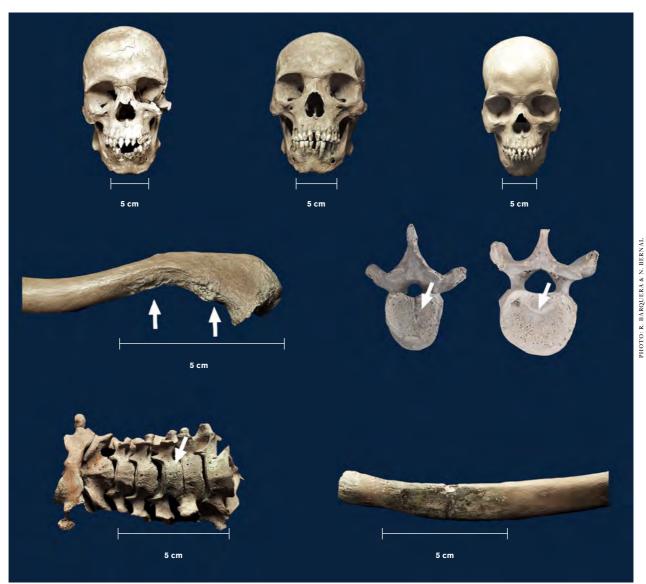
Diseases that were new to the New World also traveled to Mexico aboard the slave ships.

resettled there. The reason for this was that the indigenous peoples, who until then had been abused as forced laborers, were dying en masse from diseases imported by the Europeans. Their immune systems were unable to mount a defense against such things as measles, smallpox and typhoid fever. Finally, a law was passed in 1542 that prohibited their use as laborers. Nevertheless, the colonialists still demanded to have slaves to do their household chores, agricultural labor and gold panning, and Africans were deemed to be more resistant to the contagious diseases that had been introduced. "However," says Barquera, "that might have been a mistake." One has to wonder, he continues,

how the three African men ended up in the mass grave at the Hospital Real de San José de los Naturales, when this hospital was actually reserved exclusively for the treatment of indigenous people suffering from infectious diseases introduced by the Europeans. In all probability, the mass grave was for the victims of an epidemic to which the three Africans may also have succumbed.

But the three deceased also tell a story of pathogens that travel around the world on ships unnoticed - which given the current COVID-19 pandemic could hardly be more topical. Not only did the genetic tests reveal information about the origins of the men, they also showed that one of them had been infected with a strain of hepatitis B that is typically found in West Africa today. Whether this viral disease was rife in Mexico at that time remains unclear. Another of the men had been infected by the bacterium Treponema pallidum pertenue, which causes a painful, infectious disease similar to syphilis known as yaws. Previously, Barquera and Krause had discovered the same strain of the pathogen in Mexico in a 17th century European immigrant, which could indicate that the pathogen originated in Africa and spread among the early colonial populace.

The disease in both men was very probably still at the symptom-free stage, i.e., they were probably unaware of the pathogens, which, like stowaways, had been deported to Mexico along with them. "What this teaches us," says Barquera, "is that, whether it's voluntary or forced, human mobility has always gone hand-in-hand with the risk of spreading pathogens." Still, the fate of the three men is the researchers' main focus. As Krause summarizes, "We were able to gain insight into the life histories of some of the first African slaves in the Americas by combining molecular biology, isotope analysis and bioinformatics methods with traditional historical, anthropological and archaeological evidence."



A striking find: the sharpened incisors in the three skulls (above), which were discovered in a mass grave in Mexico City, differentiate them from the other interred persons. Genetic analyses revealed an African origin. The Africans' skeletons show traces of excessive strain, due to heavy physical labor (center) and maltreatment (below): discolorations on the bones, for example, indicate gunshot wounds inflicted with copper shot.

In the future, the team would like to use contemporary African genomes to learn more about the precise origins of the three men. "Unfortunately," Krause explains, "there have been far fewer genome analyses performed on contemporary Africans than on people outside Africa." While Africa is the cradle of mankind, he continues, and is home to the greatest genetic diversity in Homo sapiens, there is nevertheless far too little genetic data available

from that continent. "Should this change in the future, we would hopefully be able to not only identify the origins of the three individuals from early Mexico, but also to give the many millions of descendants of abducted slaves currently living in North and South America more precise information about the origins of their ancestors."

Through their work, the researchers in Jena have been able to sketch out the

fate of three individuals, who serve as examples of the lives of African slaves in colonial Mexico. Yet, they cannot reflect the full history of these forcibly resettled people who were brutally trafficked from one continent to another. As Rodrigo Barquera states, one thing is certain: "Everyone here at the Institute has been profoundly moved by the fate of these three men. We're finding it difficult to simply move on to the next research topic."



"STRICTER LAWS ARE A SIGN OF HELPLESSNESS"

INTERVIEW: MECHTHILD ZIMMERMANN

From Luegde and Bergisch Gladbach to Muenster, the scourge of child abuse cases does not seem to be slowing down. Demands for harsher punishment for the perpetrators are becoming louder than ever. In early July, the Federal Ministry of Justice presented its initial reform proposals. But what effect could stricter laws have? Tatjana Hörnle, Director at the Max Planck Institute for the Study of Crime, Security and Law, is skeptical about this trend. The lawyer has been dealing with the issue of abuse for years.

Proponents of tougher laws are demanding that child abuse should be punishable by at least one year in prison. But hasn't that been the case until now?

TATJANA HÖRNLE Most of the cases that have recently caught the media's attention – such as those of Muenster or Luedge – are clear-cut cases of serious sexual abuse. The Criminal Code already stipulates a prison sentence of between two and 15 years. Such acts are thus clearly classified as felonies. However, the legislation also covers less serious cases. For example, when a fleeting physical touch was on the borderline between "sexual" and "harmless". Overall, the framework is quite broad. This corresponds to the various types of offenses

and presents a convincing range of sentences that does not require amendment.

So you do not believe in higher minimum sentences?

I know that when it comes to sexual offenses against children, some people see it as trivializing matters when a distinction is made between serious and less serious acts. But especially the recent extreme cases make it clear: there must be a way to correlate varying degrees of offenses to varying levels of penalties. It is precisely in those cases in which the perpetrators have

been particularly brutal and there are many victims that the lower limit in the Criminal Code is no longer relevant. Therefore, the question is: what do we want to achieve? When it comes to deterring offenders, it would be more important to increase the risk of discovery. When it comes to the moral condemnation of sexual violence against children, there is an unusually broad societal consensus. By increasing the minimum penalties, the legislator tends to create new problems.

In what respect?

In the legislation, there is a rigid age limit of 14 years; up to this age, any sexual act is prohibited. Based on surveys of 12- and 13-year-olds, we know that

many have their first sexual contact with their peers at this age. But according to the legislation, a French kiss that a 15-year-old gives to his 13-year-old girlfriend is punishable by law. Austria and Switzerland already have an exemption clause for such cases. One positive aspect of the current reform project of the Federal Ministry of Justice is that a similar solution is to be introduced in German criminal law. But there are also lesser offenses in other constellations such as the one-time touches mentioned earlier. These are only just above the threshold of what must be considered "sexual". For example, briefly caressing the genital region when the child is wearing clothes. The range of sentences should be designed so that even atypical, minor offenses can be punished appropriately.

The Federal Minister of Justice also wants to increase the minimum penalty in connection with child pornography.

What do you think about that is?

The problem is similar than the one just discussed: the degree of wrongdoing varies. A continuum of cases ranges from youths wanting to break a taboo and experience the revulsion such images evoke to perpetrators who spread numerous images of rape with child victims. Here too, the range of sentences in the Criminal Code is designed to take the differences into account. When sexual acts with children are filmed and distributed over the Internet, the penalties for the perpetrators are already quite high. Even the mere intent to disseminate pic-

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Tatjana Hörnle is a Director at the Max Planck Institute for the Study of Crime, Security and Law. Her areas of expertise include legal issues relating to sexual violence and sexual self-determination.

tures of such abuse can result in a prison sentence of two to 15 years. However, a differentiation must be established for cases in which perpetrators redistribute these images without being involved in the abuse. At present, the sentence is only up to five years; a proposal to increase the upper limit to 10 years has recently been put forward. This is justifiable because the offense can be particularly serious in certain circumstances. For example, when individual perpetrators pass on many extreme images to numerous recipients. However, a critical view should be taken of the planned increase of the minimum penalty, especially for possession. Trivial actions such as looking at a single picture for a short time do not deserve to be classified as felonies with high minimum punishments.

So why are these demands being made?

The cases of Muenster and Luedge have caused a great deal of public outcry. Across all political, cultural, and social divides, there is a broad consensus that child abuse must be combated. The outrage is particularly noticeable in our media-saturated society. Politicians are facing increasing pressure to act quickly. The simplest course of action is to change the range of sentences. Ultimately, this is a sign of helplessness. This is because the government and the Bundestag have no influence on court decisions. More effective investigative measures are currently hindered by the fact that data retention is on hold.

What would be the benefit of such retention?

If attentive citizens or child protection organizations report pornographic content to the police, the investigators may be unable to attribute it to specific computers or persons – even if the content was uploaded from German IP addresses. This is because IP addresses are often dynamic. Only if the IP addresses with the associated user data were stored by the Internet provider for a certain pe-

riod of time would it be possible to track down the perpetrators. The Federal Criminal Police Office has published figures for 2019, which show that in 2100 cases of child pornography, the person behind the IP address could not be identified.

What is currently holding up the implementation of data retention measures?

A decision of the European Court of Justice is currently pending. It concerns the complaint of providers and the question of whether the German legislation passed in 2015 violates European data protection regulations. Telecommunications companies, data protection officers, and net activists all criticize the regulation. It is certainly justifiable to question whether (and under what conditions) we should accept the storage of our data especially without cause. A reasonable compromise that controls and regulates access to retained data without hindering the work of law enforcement authorities would be preferable.

