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Race-Face ID project

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Title Tentacular Face: Doing Face and Race in Forensic Identification

Abstract

The face deserves more attention. In everyday life the face is ubiquitous. Yet in social theory the face is rather absent. In this paper I want to move beyond the representational model and attend to the work that a face can do, and to what the face is capable of. I introduce the concept of the tentacular to analyze how the face draws certain publics together and how it feeds on that public to assume content and contours. My examples come for the field of forensic genetics, where DNA-phenotyping is used to produce a 'composite face' of the unknown individual. I will show that this novel technology is not so much aimed at the individual suspect but at a suspect population, clusters of individuals. I argue that this population is racialized through the biologization of the phenotype. This process prompts the question: what is race? To answer this, I suggest that we need to 'care' for race, i.e., to invent methods that are open-ended and allow us to follow race around and examine how it shifts and changes in practice. I propose the concept of generous methods to show that the slipperiness of race is not simply a matter of 'multiplicity' (Mol 2002); race is not only an 'object multiple'. As a word and a practice, race refers to different kind of things. Different realities. I will argue that the slipperiness of race can be grasped if we consider race to be an object, a method as well as a theory. Three different yet connected realities.

Discussant

Joëlle Vailly (coordinatrice du projet ANR Fitege)

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Notes taken by Juliette Galonnier

Amade M'Charek

This paper presents the work that we are currently doing at the ERC project on the Absence-Presence of Race in Forensic Identification. One of our case studies is the technology of facemaking in forensic identification.

In everyday life the face is ubiquitous. It is widely spread in our media. It enjoys solid cultural presence. Yet in social theory, the face is rather absent. In psychology, the face has mostly been seen as a window to the soul: it expresses something that otherwise would remain hidden. It reveals the feelings and moods of a person. The face is thus a plane of representation.

In this paper, I wonder: how to ponder the face? How to turn it into an object of inquiry? I argue that the face is a way to represent and study race. In our ERC project, we focus on the relation between face-making and race-making in forensic identification. Specifically, we look at three forensic technologies of face-making:

1) genetic facial phenotyping and the inference of visible traits from DNA;

2) craniofacial reconstruction;

3) facial composites based on eyewitness accounts and done either through sketching or computer aided photofits.

The face is involved in doing race. We study technologies of face-making in order to understand how race is done. Following the relation between the individual and the population across different forensic practices (laboratories, police stations, the court and the media), I am interested in finding out when and how this relation becomes racialized. When and how does population become race? In which context does it happen? How does face-making technologies translate from the lab to the police to society? This process of translation is important to study.

Working on race and face, various colleagues tend to suggest to me the work of Emmanuel Levinas. Levinas does very important work for the study of face and race. He argues that the encounter of the Other through the face forbids a reduction to sameness and, simultaneously, installs a responsibility for the Other in the Self. However, the problem in Levinas' take on the

face-to-face interaction is its immediate character: he takes the face at face value. By contrast I want to underline that seeing is never immediate. With Donna Haraway I contend that seeing is a situated practice, based on situated knowledge. It is situated in a technology of vision.

We can take the example of classical prints from anthropology, such as the well-known faces of Swiss anthropologist Rudolf Martin.



Martin used those prints to teach students about classification and to appreciate difference. We are invited to look at faces and distinguish between different races. It is an invitation to learn to do types. These prints are in many ways instructive.

- First they show us that the face does not come by itself. Skin color in itself does not make the facial type. It is accompanied by many attributes, in particular clothing and hairdo. So this means that facial forms, skin tone or hair color do not readily make racial types. These features are connected to cultural items e.g. food, environment, language, religion etc). It is particularly interesting to see how various different entities are connected to parts of the body (its surface) and how such material semiotic relations together produce race.
- Second, the face does not come alone. It does not exist in and of itself. It is through comparison that we identify race. There is a relationality to it. Race is done both through the connection between the face and the attributes, but also through the juxtaposition between different faces. We move between the different faces. By contrasting and comparing many different faces an illusion of the objectivity of vision emerges, one that "knows" the racial types.
- Third, the face or the phenotype is not simply a quality of the body, but dependent on our technologies of vision, to invoke Haraway (1991). This is the learning part of such prints. They have been mass-produced and widely spread in Europe and provided a way for the 'general public' to get to know human diversity. This learning part of the prints have produced a collective and intensive gazing to appreciate human diversity and have thus functioned as a crucial technology of vision.

The face produces proximity and distance. There is an affective dimension to it as well. The viewer is instructed to view. The question is what precisely are the faces doing and how do they do that? How do they enact an individual or a collective face? These faces are not so different from the forensic faces we will encounter.

I want to start by giving a brief overview of the evolution of forensic DNA. Forensic DNA evidence, which was introduced to various jurisdictions in the late eighties, became the champion technology in criminal investigation. In its initial conception it was merely a technology to *include or exclude a suspect* by comparing a biological trace connected to a crime to the DNA profile of a suspect. As it became a more accepted technology, and with advancement of genetic research as well as the fact that our DNA databases got filled, its use started to widen. Not only is DNA-evidence used to include or exclude a suspect, it has also become a technology to *generate a suspect*, ie to give clues about the identity of the unknown suspect. To sum up, it has changed from being a tool to identify suspects to a tool aimed at generating suspects.

There are various ways of producing hints about the identity of an unknown suspect:

- One can enter the DNA profile found at the crime scene into a DNA-database in search for full matches, or conduct dragnets to find the suspect in the population.
- Another possibility called familial searching consists of database searches or dragnets aimed at finding a relative of the suspect. A near match with a person might suggest that the suspect is a son, father, uncle etc. of this person.
- And then there is DNA phenotyping. The inference of appearance of the unknown suspect based on the DNA found at the crime scene.

In the Dutch law that regulates DNA phenotyping, it is stated that DNA research aimed at discovering the identity of the unknown suspect could include research into the: "sex, race, eye and hair color". The article 151 of the Dutch legislation passed in 2003 states:

"DNA research can only be applied to determine the sex, race, or other extremely visible traits to be pointed out through an order in council".

The law literally allows for genetic research into the *race* of the unknown suspect. This is obviously a problematic category in a country that does not know what race is. Indeed, race (*ras*, just like in German *rasse*) is a very controversial term. So the fact that the legislator has insisted on the use of race in the criminal code begs the question: what is race?

The mapping of the human genome was announced at the White House on June 23, 2000. It is interesting that this announcement was made at the White House, and not at a scientific institution. This shows that the human genome is a very political project. It was declared that "all human beings are more than 99,9% the same". It was a celebration of our sameness. Yet unsurprisingly, ever since the completion of the genome, the very 0,1% of difference is where the action is, in terms of attention, scientific research and funding. Whether in the field of medical genetics, genetic genealogy, archaeogenetics or forensic genetics the focus is on differences rather than similarities.

As a result, race has become molecularized. Nowadays geneticists claim to be colour blind, or post-racial, for the differences they study deal with genetic markers, haplogroups or SNP's. As a contrast to physical anthropologists of the 19th and 20th Century, the physical appearance of people has become less interesting in current day diversity research, or so the

story goes. This growing interest in difference at the genetic level led the sociologist Troy Duster and others to alert us to a "reinscription of race at the molecular level" (Duster 2006: 428). Though I see this process of molecularisation, I want to suggest that we are now witnessing what I call *the return of the phenotype*; the biologization of physical appearance. Race is again becoming a matter of (sur)face.

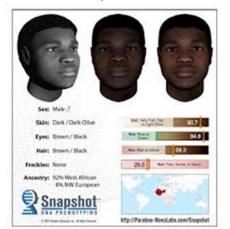
As we all know in the social sciences, the social constructivist approach to race has been dominant (race is not real, but it is a social construction). This approach is based on the idea that racialized differences are built on given phenotypical variations. But this also means that specific features such as skin colour are taken to present themselves immediately to the viewer. These are the "given facts", or the 'mute' foundations, on which the relevant social constructions of race are built. In so doing, these facts become trivialized and are never interrogated. There is a parallel here with the sex and gender dichotomy: gender is deemed to be the relevant playing field, the political part, whereas sex (that is biology) is trivialized, it is the neglected foundation (see Donna Haraway and Annemarie Mol e.g. on this paralyzing distinction). The problem with this perception is that for a long time we could not challenge the biological reality of sex.

Similarly, the social constructivist approach to race, in which some phenotypic markers are taken as given, is problematic (see also Wade 1997). Despite the debunking of biology and the insistence on the social constructed nature of the biological, it contributes to naturalizing the phenotype and promoting a self-evident vision of physical diversity. It does not pose the maybe difficult question: what is the phenotype? Or what are phenotypical markers of difference and what are they made of? By consequence bodily differences such as colour seem to be taken for granted (as the ultimate identifier of race, overlooking many other markers of difference). The effect of this the social constructivist approach and the trivialization of the biological is that even when we say that race does not exist, we seem to know what race is, and thus reify a folk notion of race, even if this notion is unspoken of (as is more than often the case in Europe).

Attending to faces in our RacefaceID project thus gives us the opportunity to examine the phenotype in relation to race, that is, to understand the phenotype as complex. We want to really investigate what face is and what face does. We want to stay attentive to the complexities of how culture and nature come together, as in the Rudolf Martin prints, which show how culture, biology, clothing are intertwined in our vision.

We focus on forensic identification. Let us consider the promise of face in forensic genetics. One of the key face-making technologies that we study in the RaceFaceID project is DNA phenotyping, that is the inference from DNA of the externally visible characteristics (EVC) of an unknown person. Next to the sex and the geographical ancestry of the unknown person, various other markers have been studied and added to EVC, such as iris, hair and skin color, and many more are being studied for forensic use. This is what a company like Parabon NanoLabs does.

It is important to replace the normativity and the sensitivity of these technologies in history. You cannot have these technologies today without the measurements of heads, skulls, etc. that took place in the past. History is contributing, not all the time but some of the time, to how we see race today. Let's have a look at Snapshot DNA phenotyping, offered by the US company Parabon NanoLabs. They promise a real face. They have a database of 3D faces and genotypes of different populations. They compare the collected DNA with their existing database. They propose to give information on sex, skin color, eyes, color of the hair, freckles and ancestry. From DNA, you cannot know much about the shape of the face (the nose, etc.). But this company reconstructs the shape based on ancestry and provides an actual 3D image of the face of the suspect.



It is obviously a very problematic technology but it is very hip today. The face obtained from DNA phenotyping is almost presented as a portrait. There is an individuality to it. Even if DNA technology does not actually allow to do that, this is how it is presented and sold. Let's note here that the actual perpetrator did not look like this at all.

Several scientists contributed to creating the databases that are now used by Parabon, such as Manfred Kayser, Peter Claes, Dirk Smeets, etc. They obtained a grant to try and develop the technology. They did a lot of computational work. Their work on facial morphology is at the basis of the technology of Parabon. In order to attribute 3D qualities to a face, it has to be modeled using computational techniques. Software is used to take '3D pictures' of faces. These pictures then map the face in '7150 so-called quasi-landmarks' (Claes et al. 2014: 209). These are then montaged together to compose the face of the unknown suspect (based on some genetic clues). In making the face of the unknown suspect recognizable with computational techniques, genetic information is transformed into a landscape.

At the beginning, it was mostly the student population of their universities that were in the database. But now the company has an exclusive control over the database. It is completely secret. There is no information available on the number of 3D faces they have, on the algorithms they used, etc. Even the police and the initial scientists do not have access to it.

It does not come as a surprise that most geneticists working on DNA-phenotyping consider themselves post-racial. Race is deemed irrelevant (if not wrong) because their aim is not a group but the individual (suspect), but also because they do not deal with race but with geographical ancestry. To illustrate the tension between individuality and collective identity and the way it figures in the DNA-phenotyping, let us consider a quote from a leading forensic geneticist in this field, the Rotterdam based star geneticist Manfred Kayser.

Imagine a world where a near-perfect likeness could be created from trace DNA evidence collected from a crime scene. This phantom image could be printed, distributed, and used to identify a suspect. Should forensic sketch artists put away their charcoal pencils? Not quite yet. In truth, Forensic DNA Phenotyping is a nascent science. But the potential exists. The scientific work just needs to be done (Manfred Kayser (2011) 'The new eye witness', Forensic Magazine).

Here DNA-phenotyping is presented as an individualizing technology. The goal is not too far away from a photo on a person's drivers license . The technology is said to be more efficient than eye witness accounts because it is presented as "less subjective". But by saying that, it erases the fact that viewers also bring their subjectivities to the reconstructed image they see. The following quote about how faces work in forensic investigation is also very interesting.

Does the drawing need to look exactly like the perpetrator to be effective? No, it does not. The likeness should be as accurate as possible, but a general or close likeness will in many cases stimulate recognition on the part of viewers. In contrast to the commonly held belief that highly detailed or photographic images are more effective, these images actually narrow the scope of interpretation on the part of the viewer who simply concludes that they don't know the person in the picture rather than considering the likeness possibilities. (Charles Jackson, Forensic Magazine 2010)

This quote is counter-intuitive but highly relevant. It indicates that incompleteness is not a weakness of face-making technologies but rather a virtue for the criminal investigation. Incompleteness is a virtue precisely because it draws in members of the public to engage with the image (to pause with it, ponder possible likeness with a person they know, etc.) This indicates also that the face produced in forensic identification is not so much the face of an individual suspect but that of a suspect population; the face of a collective.

This very fact presents us with the explosive trio of crime, biology and minority populations. These technologies are meant to narrow down the number of possible suspects and to provide good leads for the criminal investigation. This becomes particularly sensitive when this population is a minority population. In a country such as the Netherlands, they would be less informative when the conclusion is: suspect is a white man, as was the case in the murder of Marianne Vaatstra (it took more than 12 years to solve the case). But they might be helpful when they suggest that the suspect if of a minority population (as they did in a recently solved case in the Netherlands, when they suggested that the suspect was probably of Turkish descent).

Now given the ways in which we are drawn in and made to engage with face, I want to suggest to view that such composite faces act as tentacular faces. These faces draw us in; they feed on us. I explore the notion of the tentacular to see if it could help us understand the tension between the individual and the population in forensic face-making practices. I like to think about the notion of the tentacular with the help of the work of Deleuze and Guattari. In their essay "Year Zero: Faciality" Deleuze and Guattari argue that "faces are not basically individual" but semiotic fields that are capable of making socialities. This is a process that they have called facialization. They state that:

"Concrete faces cannot be assumed to come ready-made. They are engendered by an abstract machine of faciality (visagéité)" (D&G 2004: 187).

Faces also produce sameness. Sameness is entwined with racism. Those who do not move on the wave of sameness are bestialized and become killable, erasable.

Racism never detects the particles of the other; it propagates waves of sameness until those who resist identification have been wiped out (or those who only allow themselves to be identified at a given degree of divergence). ... There are only people who should be like us and whose crime it is not to be" (D&G 2004: 197-8).

This facial machine is apparent in the rendering of face into different components that can be measured, compared, taken apart, recombined, quantified, hierarchized, yet in the end contribute to the face as a whole, a unity. Forensics, as will become clear is is precisely a field in which the face tends to be broken down into different components. Deleuze calls this the reflective face.

In a paper called "What can a face do?" Richard Rushton argues that for Deleuze "the face is no longer to be perceived as an entity that represents another feeling or idea. Rather, it incorporates as part of itself the very feeling or idea." Rather than the thoughts, feelings, and affects that the face expresses, Deleuze,

"examines the tendencies and trajectories of the face, the direction of the thoughts, and affects that energize the face. Deleuze speaks of the intensive face. The intensive face pulsates, bends, and creeps around its own surface. It is composed of the sum of its parts; that is, instead of the facial unity of the whole being the dominant mode, as it is with the reflective face, in this case the separate and multiple parts of the face take on a life of their own. With the intensive face, the whole is subservient to its parts." (Rushton 2002: 230)

"Those eyes are killer eyes, yes", said the father of Marianne Vaatstra (looking at a composite drawing of the assumed suspect in the murder of his daughter). The face that was drawn was clearly the face of an asylum seeker (a nearby asylum seekers' shelter was thoroughly searched after the diffusion of the composite drawing). Yet, you should know that this drawing was based on the account of a psychic, who acted as a telepathic witness of unattended events. Eventually, the actual killer turned out to be a local white Dutch man, very autochthonous.

My notion of the tentacular is very close to Deleuze's take on face. The forensic faces that we are dealing with are dependent on us the public to give them content and contours. Moreover, the "face" that is most likely to come out of current day forensic laboratories might look like this:

Suspect is male, likely to have brown eyes, brown hair and to be of Mediterranean descent.

In order to relate to such an outlook and make it productive in a criminal investigation, it will have to be translated into a category of concern: e.g. suspect is probably a Moroccan man in the Netherlands (or a Tunisian or Algerian in France, or yet again a Turkish man in Germany). Such translations are contingent upon temporal and spatial specificities. The face thus requires a public. It enacts a public that engages with it as to specify it and makes it concrete.

What about the metaphor of the tentacular in this context? I started to think with this metaphor about these unfinished DNA profiles, that are meant for us as a public to engage with, but

simultaneously need us as a public to do their work. This metaphor is precisely interesting because sensing is the trade of the tentacular. The tentacular, if we think e.g. about of the tentacles of a cuttlefish, is about carefully touching, smelling, grasping, eating, and, also seeing. Tentacles are sensory and receptive organs. The grasping and feeding are of particular interest in this context. Forensic faces are tentacular because they are active, they move (wonder about) and they move us/ they mobilize us to act (even more so because they often index horrible events), yet they are dependent: they feed on us, the public, to fill them in, give them content and contours. The face, one could say, becomes, together, with its public. Attending to the tentacular is attending to the power of the sensorial (touch, vision, smell, taste), it is attending to the political power of the affective.

At the beginning of this talk we started out with the faces of Rudolf Martin. I briefly suggested that the faces do work, the work of:

- 1) instructing the viewer,
- 2) fashioning and type-casting difference, and
- 3) evoking ideas and feelings about proximity and distance when it comes to human diversity.

But the face is not a singular entity encountering a public. To understand the work of the face and how the face is tentacular, I follow Haraway's suggestion for tentacular thinking and would like to situate the face a bit further. I will do so based on an example of Snapshot DNA phenotyping by the US company Parabon NanoLabs.

Generating the face of the unknown suspect from DNA means assembling parts of the face at the molecular level. Technically these parts are mostly related to pigmentation: the color of the eyes, the skin and the hair are determined by looking at particular SNPs and are then brought together to form a whole face. This is the face as a molecular configuration. It is an effect of moving back and forth between parts and whole.



This particular face was produced in the context of the Brockton rapist case, a case that took place in Brockton (USA) in 2016. A double murder and rape, could be connected through DNA to one suspect. But there were no further clues. Parabon was contracted to generate a composite sketch. The striking thing about the faces produced by Parabon is their portrait like

character. The lure of individuality cannot be overlooked. But the DNA evidence contributing to this portrait does not carry the probabilistic statements about skin color, eye and hair color, and, freckles: what does it mean to have black or brown eyes with 59.6% confidence? Yet when we look back to the face, when we see the whole, the image allegedly becomes clear. Thus in order to see the unknown suspect's face as a whole, our eyes have to make little jumps from part to part and back again to the face. The jumps made in the virtual composite are not limited to the facial parts: the little map on the right side of the image suggests geographical jumps.

Eyewitness accounts are often discarded as biased, flawed, subjective etc. However, even though the technology is presented as objective and precise, the facial landscape is not neutral. Facial morphologies are ordered and attributed to specific groups. In fact, this is seen as the most important part of creating a recognizable facial composite: 'Physical accuracy of the facial predictions [...] is mainly determined by sex and genomic ancestry' (Claes et al. 2014: 208). In the process of generating a predicted-face, particular faces become 'European', whereas others become 'African' or 'Asian': racial classifications become attached to particular facial shapes. The facial morphology technology has been compacted into software that allows geneticists to rotate the face, to look at it from all angles. It enables them to experiment with and adjust the face. Mark Shriver a forensic geneticist, and one of the developers of the software, demonstrated the technology during a science festival presentation:

'Just to give an example of a transformation: I click on ancestry, move over to the right, and we get a more African profile. Move it over to the left, we get a more European face.'

With a simple gesture Shriver transforms his own face, making it look 'more African' or 'even more European than I am now.' As he moves his hand from left to right, the virtual face changes shape. The upper- and lower lip become more pronounced, the nose becomes broader, the eyes sink back into the skull. Race becomes measured out in the pronunciation of facial landmarks.

At the end of the nineteenth century, scientists tried to come to know human variation through genetics: the aim was to correlate classifications of appearance and behavior to the genes. Even though race has been declared dead, again and again (such as through the human genome project), the tendency to use racial classifications in DNA phenotyping is still present. On its website Parabon's indicates that: *'modern humans divide genetically into seven continental populations: African, Middle Eastern, European, Central/South Asian, East Asian, Oceanian, and Native American'*. Population does not necessarily translate into race. But the assumption that there is a correlation between the molecular level and the phenotype (that is at the heart of the Parabon technology) does risk producing precisely that: race.

Now what happens when these faces leave the laboratory and start to circulate ? Let us return to the Brockton rapist case, to consider the affective face. This face was presented at a press conference, which was reported on by local newspapers. One of them wrote:

"Police aren't sure if the suspect is still in the area, but, because of his African ancestry and a large Cape Verdean population in the city, they hope someone will recognize him. 'At the end of the day, we need some help from the public, and, particularly in this case, pointing toward our rather large Cape Verdean community,' Brockton Mayor Bill Carpenter said at a press conference. 'We need someone to take a good look at this illustration and point us in the right direction.'" The face of the Brockton rapist is actively put forward to engage the public, to move the public to make it more concrete. In Brockton, with apparently a large population from Cape Verdean descent, the African ancestry of the suspect was readily translated into Cape Verdean. This, together with his sex are the most identifying characteristics of the suspect. (all the other characteristics are more or less fantasy). Yet there is a call for recognition, on the part of the public.

The face of the unknown suspect is emotionally and morally charged, it is geared towards helping to prosecute 'violent criminals' and aimed at '...protecting the innocent and implicate the guilty.' (ibid). The face becomes the focal point around which moral calls to action are centered. What becomes evident from the case of the Brockton rapist, however, is that the affective work that the face does, is not geared towards 'the public' in general. Instead, specific people within this public are called upon to take up extra responsibility and identify the unknown suspect.

Because of his African ancestry, the suspect automatically became a part of the local 'Cape Verdean community'. In this way, residents with a Cape Verdean background were ascribed extra responsibility to get this 'dangerous person off the streets'. They were morally charged with identifying the suspect. It is not said that they are criminal themselves, but they were made to feel extra responsible for this particular crime. For the suspect must be among them. A community is thus brought into being, based on the affect generated by the face.

But there is more work that the face does. This becomes visible when we follow the Brockton rapists' snapshot to Facebook. A Boston newspaper posted an article about the case on their Facebook page. Some of the comments below the image are telling of the face's affective power.

Vind ik leuk · Beantwoorden · 8 maart om 3:31	
Vind ik leuk · Beantwoorden · 🙆 2 · 7 maart om 22:05	ICK
Vind ik leuk · Beantwoorden · 🕐 1 · 7 maart om 17:02	
Please catch this predator Vind ik leuk · Beantwoorden · 8 maart om 1:14	

When the face leaves the laboratory and is made to circulate in newspapers articles and Facebook pages, statistical probabilities and 3D propensities are suddenly not relevant anymore. The focus is no longer on facial landmarks. The face rather becomes a device to arouse affect and ascribe responsibility to particular groups of people. The faces are generic, they work to make certain communities more responsive. The community is asked to mobilize its "expert eyes" to identify who the face belongs to.

I think one of the major challenges that we face is how to study race and its politics without reifying it and contributing to the essentialization of difference. It is important to raise the obvious yet neglected question: what is race? Not to answer this question in general but to unravel what race is made to be in specific practices. As I have shown here, the face, at least in the practice of forensics, plays an interesting role as it enacts the individual and the collective. It is therefore an interesting object to think with about race. But at the same time it

is important not to take the face at face value. As a way to start to think that, I have suggested the notion of tentacular faces. Faces feed on affect, and get their very shape and content through their engagement with their environment. Also, faces help us to attend to an overlooked element of race-in practice, that is the phenotype. I contend that a material semiotic approach allows us to study the phenotype without locking race up in the body, again.

Joëlle Vailly, discussant

Thank you for a fascinating presentation on an emergent technique, at the hinge between the promise of what would be possible one day and what lies at the development of the technique today. You describe an emergent, exploratory technique based on DNA taken at a crime scene. This technique is not used to directly identify a person but to direct investigators to specific traits of a suspect. The focus is not on an individual suspect but on a suspect population. You ask: what does the face do? How is race done? How is the question of race addressed in the process of making face?

You remind us that the face expresses the feelings and moods of a person. But here we are looking at generic images that do not express emotions. These generic images derived from DNA are not behavioral.

When and how does a population become race? You mentioned that race is explicitly named in the legal framework. In genetics, people do not talk so often about race but rather they talk of "geographical ancestry". In the police, in the media, the situation is also complex. This is why we can talk, as you do, about the absence-presence of race.

In the Brockton case, you show that the Cap Verdean community is assigned to take the dangerous person off the streets. These techniques can therefore create suspects within a community. It is a different way of creating and producing suspects. There is a durability of suspicion that prevails.

I was also interested in the fact that the face is deliberately imprecise. The experts do not want to close tracks. Because the technology is not perfect, the uncertainty leaves an active part to the public. But at the same time, the police also attributes nationalities to the suspects ("Turkish", "Cap Verdean", etc.). On what do they rely to affirm that the suspect is Turkish?

Your metaphor of the tentacular reminds me of Medusa, whose gaze cannot be sustained. But what you describe is something else: it is more about what the individual projects onto the face, which becomes more like a receptacle of our senses.

It is interesting to underline that in Rudolf Martin's prints, there is also an attempt to visualize in 3D. You can see profiles or ³/₄ views, even in the ancient images. What was presented in the 19th and 20th century was historically situated, but what is the continuity with today?

According to Peter Wade, a phenomenon can be described as racial when there is a mix of heredity, appearance and domination. Do you follow this definition? What is the role of definition in the context you are describing?

The Netherlands is a very emblematic case. It is the only country to inscribe this technique in the law. What are the political and moral debates it is giving rise to? How to put the question of race in the Dutch context?

Questions from the audience

Daphné Bedinade

I would like to get back to your initial question (what is race?) to ask another related question: who is doing race? Can you give details about the socio-demographical background of the people using these techniques?

=> Answer: The place does not come straight out of the lab. It needs translation and interpretation. That is why there is this focus on minorities (Turkish, etc.). If the suspect is part of the Dutch majority, it raises less interest. But I would like to say that we are all involved in doing that: we are called upon by the face, by the crime, by the media narrative. A whole package is thrown at us. These faces provoke up. But we are part of the actorship.

Juliette Galonnier

Are there resistances to these techniques by citizens, organizations, regulators and scientists? => Answer: Parabon is very much critiqued by the forensics community. To project a whole face, they say, is bad practice because it is assuming that the technology can do it, while it cannot. So there are scientific controversies around it. But there is no public controversy. It is also important to say that the police loves these techniques. What the technology does is that it helps keeping cases alive. Not a single case has been solved through this technology. There is a call for this technology, not because it gives any lead but because it helps maintaining or reopening cases. However, there have been no public controversies at all in the Netherlands, which is surprising. Next week, we are organizing a public event called "Wanted: race in DNA" in Amsterdam. On the other hand, there has been controversy in Germany: it is very public, people are very engaged.

Claude-Olivier Doron

Following on Juliette's question, what are the resistances by the population genomics community? Specifically, what is the position of someone like Mark Shriver himself? He is a very important figure. He is aware of the economic stakes as well.

=> Answer: Mark Shriver's lab is currently working with Hollywood to make better video animations, especially with regards to hair. So it is not a secluded field. There is a lot of convergence going on. Marc Shriven has very bad relations with Parabon. He has no access to their database, he has no involvement with them.

I also have a comment on "learning face". I like this concept. Did you study the role of social networks? I became interested in this idea while following a group of white supremacists. They created this very interesting folk taxonomy about racial types. Someone would post a photo and they would make an exercise of classification of people. Members of the group send pictures and they train at classifying.

=> Answer: Yes, social networks are very important. It is fascinating to study how people react to these pictures.

I also wonder to what extent your work echoes that of Daston and Galison on objectivity. There are different moral economies, different ways of thinking about objectivity. The type is one of them, that is the individual as the incarnation of an ideal type. This is what they call mechanical objectivity. But these kinds of technologies you describe are tied to another of objectivity, in which we are intervening in the process of producing a type.

Finally, I would like to know whether the technologies you study are similar to those used in museums for instance for the reconstruction of face (e.g. the production of faces in the case of Cheddar Man). Are these the same technologies?

=> Answer: On the link between historical facial reconstruction and forensics, it must be said that genetics and cranial reconstruction are not coming together very often. But those who do facial reconstruction in forensics also do historical stuff. These are often the same persons.

Nacira Guénif

I would like to know how your work relates to that of Eyal Weizman on <u>Forensic Architecture</u>. I see parallels between his work and yours. You have a normative goal about police assessment and he aims at constructing a tool to confront the State that destroys all types of building (in Israel, Colombia, etc.) Destroying houses, buildings is akin to defacing in Levinas' sense. There are interesting connections to be made here.

=> Answer: I am very interested in the counter-expertise that Weizman and his team are doing. They are developing forensic tools to confront the State and its inhumane policies (bombings, etc.). It is very important. I am also using forensics in a current project that I am doing in relation to the refugee crisis: we use forensic practices to identify the dead bodies in the Mediterranean. Many of the bodies disappear. There are just traces left. For Weizman, forensics is the art of bringing evidence to the fore. I am developing the idea of forensics as the art of paying attention. These people have disappeared. We have very tiny traces left (clothes, mobile phones, bags, etc.). This can help us think about the divide we are creating between Europe and the rest. I am working with an artist in this direction. Weizman is embracing and reproducing the technology. I am thinking: can I take it somewhere else? In the sense of not just countering politics but using it to do a different kind of politics.

I was also interested in your comments about the gaze. We also produce race, we are also involved as individuals, we do the work, we activate the gaze. This might empower or disempower people. It is important to analyze whether controversies are happening or not.

=> Answer: I agree. In the Netherlands we have all become policemen. If you see something strange, you can text a special number. We are all alerted. I receive text messages all the time from the police, saying that there was a crime in the neighborhood, etc. That is the reality of gazing: we are all taught to do it. "If you see something, say something", they say in the US.

Daniel Sabbagh

I have a minor comment about your use of Deleuze and Guattari. They write "people become bestialized and killable". How does that relate to racism? Is it implicit in racism? Should we

make the assumption that racism always leads to murder? I would advocate caution here because I think there are soft and mild forms of racism that still deserve to be identified as racism.

=> Answer: I use this quote productively in forensic related cases. Racism takes a bend that becomes very aggressive in these cases. Consider the MP3 murder case in Belgium, in which a victim died of throat-cutting. Suspects were videotaped on CCTV cameras. As a result of these videos, the suspect "became" Moroccan. The descriptions that followed were very violent: people talked of a "Muslim killer". Different comments were heard, such as "Muslims know how to cut throats because they do it as kids with sheeps when doing sacrifice", etc. It turned out the killer was Polish. It was the same with Marianne Vaatstra, whose throat was also cut. Many commentators at the time said "this is not the Dutch manner of killing". Yet it was a Dutch farmer who did it. So a very strong "us" is being defined in these moments and it is important to pay attention to it.

I also have a broader question about the connection between race and color. You suggest that there is too much emphasis on color in defining race, which tends to obscure other forms of racism based on religion, etc. It might be useful here to import from the US literature the debiologized understanding of whiteness as a source of privilege that is not exclusively based on color.

=> Answer: When I talked about the race/color issue, what I meant was that we should be careful. I find it very important to talk about race in countries where it is not talked about, such as France. But I find it problematic to start identifying along racial lines ourselves. We should not stop problematizing identification. When we say race, it naturalizes. So the question is: how not to fixate things? I am anxious when my students say "we are not of the same race". I remind them that we are here to study race, not to talk about it in this way.

Patrick Simon

A very important part of the Global Race project is to discuss classifications. We stress the role of history. Racism is based on history. Imaginaries are shaped through history. Whether you avoid the word "race" or not, you never really avoid the meanings attached to the idea of race.

I have a question about the technology itself. I understand that you describe the process of making assumptions about a suspect's face. And the perception of phenotype in this process is something we should address. But I was also very surprised by the lack of scientific grounding of face reconstitutions through DNA. I thought this technology was driven by actual science but it turns out to be very sketchy and imprecise. Consider the case of Cheddar Man: they said it was based on DNA! So how scientific are these face reconstitutions exactly? Is there anything substantial in this technology? Is it possible to reconstitute a face or not? Can we compute the face? Can we re-create the face?

<u>Joëlle Vailly</u>

In France, these tests are proposed by private companies. There are economic issues behind them. Companies do not communicate a lot about the way they are doing their job. The police communicates more. The genetic markers used by the police are more accessible. In France,

the reconstitution of the face is not available for the moment. It is not ready yet. It is a promise. But they can say something about origins and geographical ancestry.

Claude-Oliver Doron

You do have information in the DNA. But there is a margin of uncertainty.

=> Answer: The state of the art at the moment is that the face is too complicated. Geographic descent is what counts. In Germany, they want to remove geographic descent from the tests. There are debates around it. Concerning Parabon: it does not matter that it is fake. A little bit of science is there. Everyone knows it is fake. But the purpose is to keep the cases alive. We have to live with the fact that it is a bit fake but it is also a bit science. The color of the eye, the color of the hair, that we can get. But the shape of the face is impossible to have. Geographical ancestry is what is used to determine tissue thickness.

Josemaria Becerril

I am working on how forensics experts in Mexico identify bodies. It involves a lot of moral and racial judgment on the part of the practitioners. We can learn a lot from forensic cases. We can describe the process of identification that takes place before making a face public.

=> Answer: in Mexico, there are different ways of thinking about race and it is important to attend to these specificities. I work with someone with Colombia to see how things are done in Latin America (María Fernanda Olarte-Sierra).