Introduction:
Studying the 'facesphere'

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1. A controversial object of study

Early comparative studies in academic scholarship on the meaning of the face show a dichotomy between, on the one hand, physical anthropology and anthropometry and, on the other hand, cultural anthropology and ethnology. The former tends to privilege static measurements and determinism, the latter, dynamic observation and contextual interpretation. The former often yields to racial prejudice and even systematic racism, as well as to unethical research practices, whereas the latter rejects such views and methods and emphasizes the role of sociocultural context in the development of face types, their expressions, and the relative meanings, which, however, sometimes results in ideologically and aprioristically denying any impact of human biology on the meaning of the face.

As regards the positivistic trend, Goldstein 1936 (an article on the age-related changes in the dimensions and form of the face) surveys the previous literature, starting from early anthropometric comparative works such as Weckler 1866, Hrdlicka 1900, Boas 1911, Hellman 1927, 1935, Connolly 1928, up to Huber 1931. Other early comparative works along this line – also often influenced by racist prejudice – adopt an embryological perspective (for instance, Schultz 1920, Schaeffer 1935), or an interspecies comparative approach (for instance, Krogman 1930, 1931a, 1931b, 1931c). This tradition of comparative anthropometry with focus on face growing continues with Loth still displaying blatant racist prejudice in the late 1940s: "It is very hard to study facial muscles on the living subject, and is possible only with intelligent people with whom one can communicate to evoke the desired facial expression…I…gave up this study in Uganda" (Loth 1949: 222).

In the following decades, overt racism disappears from literature on facial comparisons, but determinism persists under other guises, for instance, in linking the morphology of faces and facial expressions to climate conditions (Steegman

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1965, 1967, 1970, 1972; Steegman, Plainer 1968; see also Coon 1965 on "the living races of man"). From the late 1960s on, with a few marginal exceptions, the universalist approach to the meaning of faces and their expressions moves from anthropology to psychology (especially experimental, empirical, and, later on, cognitive psychology) as well as to comparative ethology. The idea lingers that some facial significations are shaped not by sociocultural influence but by biological conditions, where the notion of race remains central (the trend continues today; see, for instance, Watson and De Gelder 2017, claiming to have experimentally found that "race influences affective body perception").

The opposite trend, tending to stress cultural variability in types of faces and facial expressions, has an early representative in Edward Burnett Tylor (1871: 66) and its most influential herald in Franz Boas ("motor habits of groups of people are culturally determined and [are] not due to heredity"; Boas 1938: 126). His work then influenced the founder of kinesics, Ray Birdwhistell (1970: 38–39), as well as Otto Klineberg (1940), David Efron (1941), Edward Sapir (1949), Gregory Bateson and Margaret Mead (1942), Weston LaBarre (1947), and others. Early semiotics developing from the mid-1960s onwards disregards the former, biologically deterministic trend, tends to criticize it, and rather embraces the latter, culturalist tendency, in line with the new discipline's approach to meaning as an exclusive product of social conditions. That is, for instance, the perspective adopted by Umberto Eco from the mid-1970s on about the essentially cultural origin of indexicality, including the facial one (Eco 1975).

Whereas the racist biases of the first trend of scholarship have been generally recognized, and are now righteously widely stigmatized, the symmetrical biases developed by the opposite trend as a result of the legitimate desire to counter the first have been neglected. From Franz Boas on, cultural anthropology and then semiotics have praiseworthily rejected the racist prejudices of early anthropometry and physical anthropology, yet they have also tended to dogmatize the role of socio-cultural contexts in giving rise to the meaning of the face. More fundamentally, the second trend neglected to investigate the deep connection between the cultural variability of facial signification and its biological roots.

2. Beyond an ideological dichotomy

The present-day cultural semiotics of the face is therefore urged to adopt a novel perspective, which rejects racial determinism and its racist overtones, but also refrains from any easy dogmatic explanation of the "cultural origin of face meaning". Early physical anthropology tended to explain the meaning of the face in

purely biological terms; early cultural anthropology and semiotics, to the contrary, were inclined to do it in purely sociocultural terms. Contemporary semioticians should reverse the perspective of the first trend without, however, severing culture from its biological origins, which must be investigated not in terms of individual faces but in those of facial clusters and ranges.

'Cultures of the face', indeed, means that faces are not only biologically common and not only perceptually singular but that they can be gathered in clusters which are independent from natural determination and, at same time, transcend individuality and can be subsumed into types. These, however, are not somatic but based on usages of the face that rely on language. 'Cultures of the face', from a semiotic point of view, therefore implies that this part of the body can express its own language, and that this language is also spoken by other faces. Following this argument, faces, the non-verbal languages they speak, and the cultures to which they give rise, can also be an object of translation. This does not mean that an Italian face can be translated into a Chinese one but, more subtly, that semiotic usages of the face in a society that predominantly speaks Italian can – and also, in some circumstances, must – be translated into their equivalent – if any – in Chinese-speaking societies and cultures.

Culture is not only the non-genetic memory of humankind but also what can be translated of humankind, at least theoretically. The possibility of this translation implies that there is a language composed by two planes and a certain articulation of both, and that the expression plane can be rendered in a different way within a different system, while retaining (almost) the same content. The translatability of the face, and therefore its cultural nature, is evident especially in its representations. Paintings, sculptures, and other artifacts representing the face are not actually the body part itself, but just a figment of it. Yet facial representations are as they are not only due to stylistic reasons, but also because they refer to distinct cultures of the somatic face. Moreover, they retroact on actual faces, shaping and influencing their cultures.

Intuitively, faces are neither only biologically common nor only ontologically singular; on the contrary, they fall into categories that result not as much from what faces are as from what they do, or what they are put to use to do. Contemporary visitors of present-day Lithuania coming from other European countries, and especially from the Mediterranean, commonly report as anecdotal evidence that "Lithuanians do not smile". Lithuanians themselves take it as an element of their facial identity, make jokes on it, and propose various explanations, most of which are quite far-fetched. The degree to which societies tend to smile affects representations as well. Several inquiries focusing on big data of selfies shared on social networks seem to indicate that there is a relation between geo-localization

and the degree of smiling. Some cities of the world happen to produce more smiling selfies than others (see Lev Manovich's www.selfiecity.net).

Proposed reasons for such discrepancies often reproduce trivial stereotypes. In fact, explaining why a society smiles more than another is usually accounted for in historical or genealogical terms (Lithuanians lived through Soviet repression; they were struck by famine) or in causal terms (they live in cold climates). A structural explanation, however, might be more convincing: in simpler terms, Lithuanians smile less because other societies smile more, and smiling less is a way the face is put to use in order to outline a somatic, emotional, postural, and gestural frontier. In the end, face dialectics opposing societies and their cultures might structurally work like the famous head gestures for affirmation and negation studied by Roman Jakobson (1972): explaining them in causal terms is misleading; what matters is the opposition, not the opposed terms. They are a cultural shibboleth, yet this does not rule out that the human species might be characterized by a biological inclination towards the production of such structural differentiations. The particular facial terms in the opposition are probably socio-culturally determined, yet the cultural mechanism of semiotic opposition itself between facial clusters might be biologically shaped.

3. Patterns of face signification

Cultures of the face might work exactly along these lines. All the facial elements and features that can be modified may give rise to oppositional patterns – that is, a great number of them may. Either as discrete elements (presence/absence) or as nuanced ones (through levels, gradients, and thresholds), they contribute to sketching the frontier of a facial community. Discrete features usually mark the frontiers of a 'facesphere' more starkly. This is often the case with semiotic arrangements that specifically modify the degree of visibility/invisibility of the face, especially if it is done drastically. Female faces covered by strongly obtrusive Islamic garments such as niqabs or burqas emphatically connote an urban area where this attire is predominant. Similarly, visible face inscriptions like pigments, tattoos, piercings, scarifications, etc. also decisively delineate the confines of a 'face culture'.

These socio-cultural facial patterns, however, are easier to capture than other subtler dialectics. Those that concern the dynamic appearance of the face (and not only its permanent Gestalt), are harder to grasp. Frowning, for instance, is a facial configuration that varies from culture to culture, not only in its expressive composition (depending on which part of the face is predominantly used to "frown") but also in its content (Russell 1994). That shows the fractal nature of

the face in the facesphere: facial cultures are outlined through frontiers between different 'facial ways', yet they too arise from analogous oppositions within the face itself. These internal dialectics also often work in oppositional terms. What matters in frowning, for instance, is neither the specific face part that is used in this expression nor its specific content, but the expressive opposition between a "smooth" face and a "striated" one (in Deleuze's terms), which semi-symbolically conveys the semantic opposition between something that the face finds pleasant and something that, on the contrary, it finds regrettable. In this case too, the corrugated face should not be explained causally – for instance, as a way to withdraw the face from an unpleasant sight – but rather structurally, through opposition with smoothness.

Differences in terms of how cultures not only present their faces but also represent them are even more striking. Their variety can be appreciated both synchronically and diachronically, sometimes with remarkable gaps. Cultural forms of face representations indeed evolve faster than social ways of face presentation, which in turn are faster than changes in the biology of the face. The gap between biology and society is due to language, the one between society and culture is due to media technology. The face is a medium too, yet its representation through advanced media technology accelerates the pace and scope of cultural change. Modalities of representing the face through photographs have undergone a fast evolution, to the point that it is not hard to date immediately a photograph of a face that was taken before WWII or to situate it in one of the following decades. At the present time, the technical evolution of the modalities of face representation is so fast that it is even possible to indicate the year in which a face photograph was taken, judging by the particular technique of the representation. The latest model of iPhone to date, for instance, allows owners to take photograph portraits that characteristically focus automatically on the face, while leaving the background visible but blurred.

This digital format is intended to bestow a special aura on the face, thus coating previous formats of face representation, like the selfie, with a new, quasi-artistic status. In the past, indeed, portrait photographs of this kind were usually the product of accomplished photographers. As has been the trend in the last decades, smartphones tend to miniaturize, automatize, and make portable formats of face representation that were hitherto more exclusive. The selfie popularized the self-portrait, which was theretofore difficult to perform without adequate photographic technology; format filters do the same at a different level; the new portrait function in iPhones, along the same line, enables everyone to execute an "artistic" photographic portrait or self-portrait.

The massive diffusion of a new technological format leads to the rapid creation of novel trends of face representation, which soon tend to become standards. The process is further accelerated by digital social networks: the innovative format of the "artistic" portrait is being increasingly adopted to represent faces in profile pictures or in other forms of digital self-representation, giving rise to a bidirectional reinforcing dynamic: on the one hand, people use it in order to attribute a special aura to the picture of their face, gaining prestige by implicitly showing that they can access the latest and currently most expensive technology; on the other hand, the popularity of the new format makes it trendy: more and more individuals adopt it in order to represent their face in a photographic portrait, implicitly underling the aesthetic and emotional importance of the picture. Through these face photographs that focus on the foreground and blur the background, social network users indirectly communicate the distinction of such face representations in relation to other face representations that do not adopt such a format. The exclusivity and supposed prestige of the new technology is indeed always mitigated by the immediate circulation of imitations through cheaper technology and brands.

The creation of an innovative technological format of face representation results from the creativity of engineers and technicians but does not appear *ex nihilo*. The idea of blurring the background and to focus on the foreground so as to underline the importance of the face is old in photography, and does not probably originate in this technique and its art. This strategy of representation could be retraced back to J. M. W. Turner's pictorial techniques of blurring and, more remotely, to Leonardo's experiments with subtly nuancing the background of his paintings towards infinitely nuanced landscapes. Indeed, the new iPhone 12 does nothing else but reinterpreting an innate visual cognition modality, its connate phenomenology, and its inherent semiotics through the new technological possibility of miniaturization and automatization, including artificial intelligence for face recognition. The visual cognition of focusing and blurring is engrained in the neurophysiology of sight: humans spontaneously focus on objects that are closer to the eyes, since these are a more likely source of either pleasure or danger. This cognitive pattern, however, turns into a tendency to bestow importance to an object that is in focus, especially if it is surrounded by an unfocused background. The mechanism is quite simple: since we focus on what is important, what we focus on tends to become important. Artists, especially in contemporary arts, have been playing with this automatism of cognitive semiotics, often with ironic intents and results. Applying such dialectics of focusing and blurring onto the particular object of the face, though, inheres to a peculiar sociocultural trend, that is, the emerging of the singularity of the individual in modernity. The portrait function of iPhone12, therefore, technically originates from the astuteness of Apple engineers,

yet culturally evolves from the Renaissance, and translates a centuries-old aesthetic trend – whose roots are actually in the neurophysiology of human sight and visual cognition – into new technical ways.

The invention and diffusion of a new device, enabling an innovative technical format of face representation, revamps an already existing trend and contributes to its diffusion and consolidation. Ultimately, with the multiplication of instances of face photographs adopting such a format, these give rise to a culture of face representation that can be distinguished both spatially and chronologically from other cohorts of facial images that do not adopt the same format.

4. Studying the 'facesphere'

Studying the 'cultures of the face' therefore means investigating how biological mechanisms, sociocultural conditions, fashion trends, as well as individual choices continuously structure the 'facesphere' of a society, that is, the way in which, in a human community, faces both individually and collectively are used as language to signify an identity that emerges holistically and is in contrast with other 'facespheres'. In order to understand how this particular configuration of the semiosphere works, measurements are not sufficient; indeed, quantitative research on faces that disregards their qualitative observation leads to exceeding determinism, often with the dangerous biases that have been exposed above; yet qualitative observation of faces and face representations without measurements also neglects to take into account an essential dynamic of the semiosphere, that is, the emergence of new qualitative trends from quantitative accumulation, for instance the concretion of a new facial pattern of signification through the phenomenon of contagion and virality in the semiosphere.

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