

Second-Order Animals: Cultural Techniques of Identity and Identification

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Abstract

This paper explores the thesis that the concept of cultural techniques should be strictly limited to symbolic technologies that allow for self-referential recursions. Writing enables one to write about writing itself; painting itself can be depicted in painting; films may feature other films. In other words, cultural techniques are defined by their ability to thematize themselves; they are second-order techniques as opposed to first-order techniques like cooking or tilling a field. To illustrate his thesis, Macho discusses a sequence of historical examples, from body signs and death masks to digital code and ID papers. These examples serve to reiterate another basic proposal that is already announced in the paper's title. The recursive, self-observing qualities of cultural techniques make them a 'technology of the self' and thus render them indispensable for the generation, repetition and maintenance of identity.

Keywords

cultural techniques, identity, second-order observation, writing tools

I. Symbolic Animals

Ever since Aristotle, humans have been seen as animals capable of speaking and inventing, ordering and manipulating signs. In contrast to most other animals, they make use of alphabets, number sequences, notation systems or codes: they practice cultural techniques. The term does not encompass all the techniques a culture has at its disposal, but strictly those techniques that make symbolic work possible. Every culture is

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grounded in numerous techniques that guarantee its survival, such as the techniques of fire use, hunting, the making of clothes and tools, nutrition and cooking, agriculture, economy, or social organization. Primates, too, are in possession of some of those techniques, which is why Frans de Waal (2001) rightly assigns the term ‘cultures’ to them. Human cultures, however, are not simply composites of these multiple techniques, but evolve out of their symbolic concentration. This symbolic work endows all other activities with their specific meaning; it gives order to the world and enables cultures to develop self-reflexive concepts. Symbolic work requires specific cultural techniques, such as speaking, translating and understanding, forming and representing, calculating and measuring, writing and reading, singing and making music.

Cultural techniques differ from all other techniques through their potential self-referentiality, a pragmatics of recursion. From their very beginnings, speaking can be spoken about and communication be communicated. We can produce paintings that depict paintings or painters; films often feature other films. One can only calculate and measure with reference to calculation and measurement. And one can of course write about writing, sing about singing, and read about reading. On the other hand, it is impossible to thematize fire while making a fire, just as it is impossible to thematize field tilling while tilling a field, cooking while cooking, and hunting while hunting. We may talk about recipes or hunting practices, represent a fire in pictorial or dramatic form, or sketch a new building, but in order to do so we need to avail ourselves of the techniques of symbolic work, which is to say, we are not making a fire, hunting, cooking, or building at that very moment. Using a phrase coming out of systems theory, we could say that cultural techniques are *second-order techniques*.

As second-order techniques, cultural techniques have from their very beginning been operating as techniques of self-reflection, identity formation and identification. Even today, the majority of cultural techniques serve as vehicles of self-description, self-legitimation, and authentication, whether in the form of pictures, writings or numbers: be they portraits and passport photos, signs of the body (such as fingerprints), seals, stamps, coats of arms or logos, signatures and signs, or numerical codes (ranging from one’s personal and social security number to the PIN-code at the ATM). Cultural techniques have always been practiced as ‘technologies of the self’ (in the sense of Michel Foucault, 1988). They constitute subjects that have evolved out of a multiplicity of recursions and media, not simply a singular ‘mirror stage’, as with Lacan (2002 [1977]).

2. Body Signs

The history of these ‘technologies of the self’ begins in prehistorical darkness. When the Paleolithic cult caves in France and Spain were

first explored, scientists did not only see the impressive and realistic representations of numerous animals, but also spotted occasional hand prints. These prints were either positives, whereby a painted hand was pressed onto the rock, or negatives, meaning that the artists traced the contour of a stretched-out hand with dabs of color or a blowing tube. (See, for example, the prints in the caves of Pech-Merle, Gargas, El Castillo, Tibiran, Bayron, La Baume-Latrone, Rocamadour, Bernifal, Font-de-Gaume, Le Portel [cf. Leroi-Gourhan, 1982], or in Chauvet in the Ardèche Valley, which was not discovered until 1994 [cf. Chauvet et al., 1995: 30, 112]). Sometimes these prints would appear in isolation, other times they appeared in clusters. In Gargas, for example, scientists identified 150 red and black hands, 50 in El Castillo, and 12 in Tibiran and Pech-Merle. Originally, the prehistorian Henri Breuil assumed that virtually all of the impressions were those of left hands; later, scientists recognized that those impressions contained some made of right hands (with the back). Most of the hands are so small that they were first thought to be impressions of women and children (which was given further credence by the fact that the caves of Niaux, Aldène or Pech-Merle contained numerous impressions of the feet of children in the loamy soil). Most puzzling were the hand impressions in Gargas: a substantial number of hands appeared to have mutilated or twisted fingers, which was originally assumed to be evidence of archaic practices of ritualized amputations. Only later – as is so often the case with prehistoric research – were scientists able to correct their dramatic observations: upon closer scrutiny, it became evident that the fingers of those hands that had been placed with their back against the rock were bent inward and, in some instances, retouched and shortened afterwards.

The meaning of these hand prints and their performative practices remains unclear. Are they connected to the abstract symbols, sticks or spirals, that André Leroi-Gourhan classified as gender indications? Were they produced in the course of magic rituals of ‘rebirth’ of animals or humans, as was surmised by Max Raphael (1979) or Hans Peter Duerr (1984)? Or were these hand prints indeed the first signs of origination, as Martin Schaub assumes:

The artists of the prehistoric caves have exempted themselves almost completely out of their works. Yet the imprint of their hand is everywhere: as greeting, memory, signature? . . . Did the artists in these caves write, or sign their artworks? What is the significance of the ‘mutilated’ hands one can see every once in a while? Are they hunting inscriptions, ‘priestly’ signs, the commemoration of a visit, a communication with the dead and descendants, signs of remembrance, traces of rituals, signs of magical empowerment, grave inscriptions? Many theories have been advanced, but nothing

is conclusive except for the proud gesture that says ‘I’ and ‘here.’ I, my hand, and here is the testimony to that. (1996: 84)

Already in antiquity it was common to sign contracts with an impression of fingers, but as a medium of crime detection – as a modern technique of identification by the police – ‘fingerprints’ were not popularized until the late 19th century (Galton, 1965 [1892]). At that point, they no longer operated as active but passive signs of the body – they had been used for thousands of years, when it came to branding cattle or marking slaves or prisoners.

3. Seals, Stamps and Coats of Arms

From a technical perspective, the history of body signs can be seen as a chapter in the history of ‘impressions’, which always predate expressions. What is being ‘impressed’ are either parts of the body (such as hands or fingers), or objects onto a surface (such as plaster, clay, or wax). The technique of ‘imprinting’ does not differentiate between bodies and artifacts, between practices of embodiment and the use of objects extending the body. Every imprint requires a ‘*carrier* or a material substrate, a *gesture* producing that very imprint (usually a gesture of impression, or at least of touch), and a mechanical result, that is, an indented or protruding mark’ (Didi-Huberman, 1999: 14, emphasis in original). This imprint, however, is not tied to specific objects. In the case of an authentication, the imprint should produce a mark that points to its maker – a sign that should not be mistaken for an unintended trace, but rather be decipherable and legible as a specific and individual signature. While humans often take care not to leave any ‘detectable’ traces, these imprints, on the contrary, should by their very definition indicate who made them.

Perhaps it was this strategic intention which served to discredit body signs, for it is difficult to discern whether the trace of a body, a hand, a finger, or a foot was produced by accident or by design. Who knows whether it was not for that very reason that Paleolithic hand prints had to be retouched after the fact? The history of pictures and of writing can, hence, be told as the history of instruments necessary for making impressions: stencils, pencils, brushes, quills. The first signs of authentication were imprinted onto clay tablets or urns with seals and stamps as early as 4000 BC. At first people used carved bones or stones to leave specific patterns, ornaments, or marks in the clay; only later did they use metal or precious stones. The seals left individual, unmistakable imprints; if they served as a personal emblem, they were often worn like ornaments: stable and reliable elements on a body whose organic extensions were capable of producing fleeting and ambiguous traces only. In the Orient, for example, people liked to wear pin seals as bracelets – small, cylindrical

pins with pictures or cuneiform writings. Seal rings with the imprint of their wearers became popular in Greek antiquity. (We, too, by the way, are fond of wearing our preferred writing instruments close to us, in chest pockets or purses.)

The ecclesiastical and secular authorities of the Middle Ages, for their part, developed differentiated systems of signs as an index of status and affiliation. Royal dynasties, noble families, knights, but also popes, cardinals, bishops and later the guilds used colors and signs that had to be composed into coats of arms, following the art of heraldry. The code of heraldry distinguished between seven primary colors: the ‘lacquer colors’ red, blue, green, and black, the ‘metals’ gold and silver, as well as purple (violet), which could be used as both a lacquer and metal color. Coats of arms were assembled in accordance with the rule to alternate lacquer colors with metals. They were used not only in the service of representation, but also identified friends and enemies during battle.

4. Speaking Objects

Seals, pin seals and stamps were (and are) objects giving voice to other objects. Until today, their most important function has consisted in combining texts, pictures, or objects with an I or a person into a speech act. With the help of a seal or stamp, a speech act is transferred onto an object; the resultant artifact proclaims, for example, who has made or authorized it, or who owns it (aside from the motifs that it represents in its image, text, or materiality). Basically, seals function the way speech acts do in relation to a written text or a painted picture; the seal and stamp represent – either as an object or ornament – the externally materialized voice of authority or the author. That’s why the charge of ‘safekeeping a seal’ in the advanced civilizations of old was entrusted to the highest-ranking civil servants, because the ‘custodian of the seal’, in a sense, exercised control over the voice of the king, his ‘second body’. Today’s English ‘Lord Chancellor’, formerly the presiding officer of the House of Lords and head of the Judiciary, evolved from the ‘Custodian of the Great Seal’, and France and Italy retained that title for their minister of justice as well. In the Holy Roman Empire, the Margrave of Mainz served as ‘Arch-Chancellor’ and ‘*sigilli custos*’ until 1806, and even in the bureaucracies of today stamps bearing a so-called ‘official seal’ are kept under lock and key.

The history of seals (and later of signets in Greek antiquity) can also be associated with the development of inscribed objects – i.e. vases or statues – which have of late become of interest to archaeologists. The Italian epigraphy expert Mario Burzachechi described these artifacts as ‘speaking objects’ or ‘*oggetti parlanti*’ to account for the curious fact that most of their inscriptions were in the first person and – because of words running together – make sense only when read aloud (1962: 3–54).

Reading in such an arrangement can be understood as a kind of ‘overwhelming’ of the reader by the ‘speaking’ statue or artifact, as Jesper Svenbro has argued.

The object of inscription is named in the first person, the writer, by contrast, in the third. (Objects naming the writer in the third person have only been found dating back to about 550 BC, and they do so, in part, to hide the real authority identified by the ‘I’.) A 6th century amphora may serve as an example: ‘I have been made by Kleimachos and I belong to him (*ekeinou eimi*).’ When you read this Kleimachos will no longer be here; he will be gone, which is communicated well by the demonstrative pronoun *ekeinos*. (*Ekei-nos* is the demonstrative pronoun of the third person pointing to the fact that the person is not ‘here,’ but ‘there,’ ‘away from here’ (*ekei*’.) The amphora itself, by contrast, is here. Nobody can claim the ‘I’ in the inscription. Kleimachos cannot do that. He writes onto his own amphora because he already anticipates his future absence (otherwise, it would not be worth his while to write on it). (1999: 74).

5. Portraits and Death Masks

Portraits and self-portraits are among the most important cultural techniques of self-reflection. What is unclear is when precisely humans began to depict their own faces. The Paleolithic caves contained few representations of humans, let alone portraits. For a couple of millennia artisans painted animals almost exclusively, but virtually no humans; and if human representations were etched into the rock they were typically not given facial features. The artisans of the Old Stone Age had ‘a variety of materials at their disposal and an arsenal of powerful images from everyday life, with which they transformed caves into holy places’, but they did not make portraits of members of their own species. ‘The repertoire of images was to find its apex in the magnificent, richly rendered galleries at Lascaux in the southwestern part of France. Lascaux has been called the Sistine Chapel of the Stone Age. It is a holy place where spiritual thinking has been externalized, where the drama of the imaginative life is depicted. And yet in this cave, among hundreds of images, there is not a single example of a human face’ (Landau, 1989: 189).

In the 1960s, during her excavations at the site of the Neolithic town of Jericho, the British archaeologist Kathleen Kenyon discovered a series of human skulls that were artfully decorated. Through the retrospective application of layers of lime and plaster, those faces were given a face lift, as it were, to counter the effects of facial decomposition. Terry Landau writes that ‘each face is distinct and strongly individual. Each is made with a purpose. That purpose was to perpetuate life beyond

death by replacing the transient flesh with something more enduring' (1989: 192). Flesh decomposes but bones last; skin can be conserved, much in contrast to the innards. The qualities of various materials such as stone, metal, wood, clay, plaster or wax correspond to these differences, and these qualities determine how and in what way the materiality of a corpse can be transmuted into the form of a picture or statue.

Georges Didi-Huberman, for example, points out that the famed golden masks of the royal graves of Mycenae, dating back to the 16th century BC, were apparently 'made directly from a face' and meant to represent the 'three-dimensionality of the head'; they reproduced '*the suggestion of resemblance through touch*'. At the same time, '*the attention to modeling and the hammer work*' evident in these masks also points to 'a solid schematism' which testifies to 'the predominance of *ornamental thinking* in the representation of the human form'. What has to be factored in is that the 'dialectical treatment of physical touch and ornament' would be unthinkable 'if the gold plate as carrier metal were not as extraordinarily pliable as it is, and if the imprinting process were not inherently reversible. Gold plate can be worked on from both sides' (1999: 34, emphasis in original).

Hans Belting connected the fundamental paradox of the deceased – his 'present absence' (Landsberg, 1973: 14) – with the oldest impulses of the visual and plastic arts.

The real meaning of the picture is in its representation of something that is absent, and can only be present in pictorial form. It makes visible, not what *is* in the picture, but can only *appear in* the picture. The picture of a deceased, in that sense, is not an anomaly, but the ur-meaning of what a picture is in the first place. The deceased is always already an absence and death itself an unbearable absence whose void the picture served to fill and make bearable.

But this second picture is only a response to the first picture, as Belting notes (*pace* Maurice Blanchot):

Death itself is already present in the very picture because the corpse has already morphed into an image that merely resembles the body of the living person . . . The living person is no longer a body, but only the image of one. Nobody can resemble himself. He [or she] does it only in an image or as a corpse.

Dying, in that sense, means to be transformed into the 'image of oneself'.

The terror of death resides in the fact that a speaking and breathing body transforms, at one fell swoop and in front of everybody, into a mute image . . . Humans were helplessly exposed to the experience of

life commuting into its own image upon death. They lost the deceased, who had participated in the life of the community, to a mere image.

Belting argues that it was only this contingent experience of 'becoming an image' that prompted humans to make pictures or statues on their own.

Now it was an artificial image that countered the other image, the corpse. Through the act of making images humans became active in their attempt to resist the experience and terror of death. (Belting, 1996: 94)

Later it became common practice to make an imprint of the faces of the deceased. The Latin term 'larva' designates an actor's mask as well as the ghost of a dead person. This double meaning is not coincidental; it refers to the well-known custom of letting the dead reappear as bearers of masks. The Romans routinely made waxen imprints and masks of prominent figures in public life, which were preserved as effigies and displayed during various parades. According to the historian Polybius (2nd century BC), such waxen imprints were first used during burial ceremonies, later mounted in ancestral portrait galleries, and publicly displayed (and decorated) for appropriate occasions. At funerals or sacrificial ceremonies, powerful ancestors were represented either through dressed-up effigies or actors wearing the respective death masks. Romulus and Pompey participated in this way at the funeral of Emperor Augustus, aside from the Emperor himself (Von Schlosser, 1993: 21).

6. Mirror Images and Shadows

Humans and animals change into their image not just in death, but also with each reflection and in every shadow. It is certainly true that reflections and shadows don't produce lasting signs, as Umberto Eco has emphasized (cf. Eco, 1995: 9–37). Maybe it was for that very reason that both were viewed with suspicion in antiquity. Back then most mirrors were construed not as flat surfaces but as convex or concave mirrors suitable for optical experiments. Reflections were given legitimate status neither in everyday life nor in scientific experiments, which may well have been attributable to materials from which mirrors were constructed. The mirrors of Archimedes, like many other mirrors dating from the 4th century BC, were presumably made from bronze; later, almost every other conceivable metal was used for the making of mirrors, provided it was suitable for scraping and polishing. Greece had its first school for mirror makers about a century following the birth of Plato, where artisans were taught how to smooth and polish a metal plate with sand without scratching it. Romans and Etruscans had a preference for silver mirrors. Beginning with the first

century BC, gold mirrors became part of a preferred medium of payment for servants among the upper classes. As a general rule, metal mirrors were not particularly large; they were mostly conceived as hand mirrors (including a handle) or fold-out mirrors (with a stand). The depth of field and color fidelity of metal mirrors can hardly be compared to the quality standards of mirrors today.

It was only in the 14th century that the first glass-based mirrors were made in Venice, the center of European glass blowing. The reasons for this delay, especially given that glasses, glass containers and windows had been made for centuries, are evident: much in contrast to metal, glass cannot be rendered smooth and polished. Glass planes have to be cast perfectly, usually as hollow cylinders that have to be pried apart afterwards. The first glass mirrors did not come close to an undistorted reflection. Nevertheless, glass mirrors almost instantaneously held a triumphant entry into European households. In 14th-century Venice, wealthy men and women

took to ostentatiously wearing glass mirrors about the neck on gold chains as pendant jewelry. While the image in the glass might be disappointingly poor, the image of a mirror-wearer in the eyes of others was one of unmistakable affluence. Men carried swords with small mirrors set in the hilt. Royalty collected sets of glass mirrors framed in ivory, silver, and gold, which were displayed more than they were used. Early mirrors had more flash than function, and given their poor reflective quality, they probably served best as bric-à-brac. (Panati, 1989: 230)

The breakthrough into the modern production of mirrors did not occur until the 17th century. In 1687 the French glassmaker Bernard Perrot secured the patent for a uniform rolling process of glass planes. Since then, it has become possible to produce not only optical mirrors or cosmetic hand-held or fold-out mirrors but also life-sized mirrors for walls and stands. Thanks to that technology, spaces could quite literally be 'representative', such as the Great Hall of Mirrors in Versailles, which was built in 1686. Thanks to the new technology for mirror production, the magic of mirrors could be defined anew. Previously, that magic had fascinated luminaries in such forms as Archimedes' concave mirror, *Lorrain-Glas*, the medieval *magia naturalis*, and the catoptric theater of illusions in the Baroque: if the old mirrors produced a magic of transformation, distortion, refraction, transmission, combustion, reduction and magnification, the new mirrors (beginning in the second half of the 17th century) made possible a magic of doubling, deceptive resemblance, reproduction and representation. If the deception in the case of an old mirror produced the appearance of an object in distorted form and at the wrong place, the deceptive effect of a new mirror yielded an

object in its natural form and at the right place, except that it appeared in a symmetrically reciprocal, that is, inverted, space.

Simply put: the 'cabinet of mirrors', a disorienting labyrinth that is still a feature at some carnivals, was surpassed by the hall of mirrors, which demonstrates the serial reproduction of the king (as can be seen on the title page of Thomas Hobbes' *Leviathan* of 1651). The magic of transformation took a back seat to the magic of repetition, just as the magic of craftsmanship took a backseat to the miraculous machines of industrial consumption. Ovid's monsters in the *Metamorphoses* (from werewolves to sirens) were surpassed by the doppelgänger of the Romantic period.

The history of shadows proceeded differently. While a reflection could, in essence, be made into a real and stable representation only with the advent of photography, fixing a shadow was possible as early as in antiquity. In his *Natural History*, Pliny the Elder tells the following, well-known myth of the origin of painting:

We have no certain knowledge as to the commencement of the art of painting... The Egyptians assert that it was invented among themselves, six thousand years before it passed into Greece; a vain boast, it is very evident. As to the Greeks, some say that it was invented at Sicyon, others at Corinth; but they all agree that it originated in tracing lines round the human shadow. The first stage of the art, they say, was this, the second stage being the employment of single colours; a process known as 'monochromaton,' after it had become more complicated, and which is still in use at the present day... On painting we have now said enough, and more than enough; but it will be only proper to append some accounts of the plastic art. Butades, a potter of Sicyon, was the first who invented, at Corinth, the art of modelling portraits in the earth which he used in his trade. It was through his daughter that he made the discovery; who, being deeply in love with a young man about to depart on a long journey, traced the profile of his face, as thrown upon the wall by the light of the lamp. Upon seeing this, her father filled in the outline, by compressing clay upon the surface, and so made a face in relief, which he then hardened by fire along with other articles of pottery. (Book 35, chs. 5, 43)

It might be appropriate to mention that the young man went to war and did not return, but his shadow (which was said to travel into the underworld) was captured and fixed as an image before his death.

The technique of shadow painting (*skiagraphy*) was very popular in Greece. This technique is intimately linked with the cultural techniques of geometry and astronomy, where the shadow cast by a shadow shaft

(*gnomon*) was retraced and used for measurement (of temporal and spatial relations):

A shaft of the sundial or gnomon casts shadows on the ground or on the face of the dial according to the positions of the stars and the Sun throughout the year. From Anaximander on, apparently, Greek physicists knew that these readings indicated certain occurrences in the sky. The light from above describes on the earth or on the page a pattern which imitates or represents the forms and real positions of the universe, through the intermediary of the stylus.

As nobody in those days really needed a clock, and as the hours varied enormously since summer and winter days, whatever their length or brevity, were always divided into twelve, the sundial was rarely used for telling the time. Thus it was not replaced by the timepiece but was used as an instrument of scientific research in its own right, demonstrating a model of the world, giving the length of shadows at midday on the longest and shortest days, and indicating the equinoxes, solstices and latitude of place, for example. It was more of an observatory than a clock. We do not really know why the shaft or pin is called a gnomon, but we do know that this word designates that which understands, decides, judges, interprets or distinguishes the rule which makes knowledge possible. The construction of the sundial brings natural light and shadow into play, intercepted by this ruler, a tool of knowledge.

To this end, [astronomers] were able to construct a rule as precise as the stylus which writes. The black ink on the white page reflects the ancient shadows cast by the sun via the pointer or sundial. This point writes unaided on the marble or the sand as if the world knew itself. (Serres, 1995: 79–80)

Cultural techniques as technologies of the self: even the physiognomic tables of Johann Caspar Lavater work with shadowy outlines to represent individual (and yet typological) facial features.

7. Signs and Signatures

Seals and stamps produced ‘speaking objects’ long before epigraphics came onto the scene, and they served as precursors not only of signs but trademarks as well. Already, by 50 BC, Roman ceramics circulated as *terra sigillata* through the civilized world. Imprints of seals conveyed information about the manufacturer and the craftsman making the product. Individual pieces received a signature, in that sense: a name

functioned as testimony of the manufacturer, and later the owner. At that time, of course, hardly anybody signed anything. In Roman antiquity, with its highly differentiated contractual laws, the imprint of a thumb was frequently sufficient. In the Middle Ages, people marked contracts with three crosses. And yet, as early as 439, a Roman law stipulated that a will could be signed if its content should be kept secret from witnesses present at the signing; sales contracts too were signed by name every once in a while. In royal communications, seals were – well into the Middle Ages – favored over hand signatures, which were relatively rare, or three crosses, which certainly made possible the famous ‘forgeries’ of numerous Merovingian documents or the Donation of Constantine.

The modern system of a personal signature in one’s own hand presupposed not only comprehensive literacy (at least of the elite) but also a judicial system including personal and civil rights and, above all, an acute awareness of the meaning of proper names as a marker of individuality and distinction. During the Middle Ages it was more often clothing, jewelry, a coat of arms or related attributes that indicated one’s social status and rank, less so one’s proper name. For that reason, any history of signatures is more directly connected to the techniques of cataloguing and systematizing personal names than to any social and historical investigation into the evolution of the European naming system (the way margraves, lieges, or saints were given their titles). ‘As impressive as the evolution of personal identity may strike us in some medieval sources, the written identification of a single person was not just the triumph of the individual, but first of all the result of his registration’ (Groebner, 2004: 51).

Keeping lists of personal names began in the 13th century. Confessional lists kept by church authorities were soon followed by lists of lawbreakers (both sentenced and at large), heretics and people burned at stakes – and eventually by a list of taxpayers in the 15th century. The word ‘signature’, in fact, does not appear until 1536; the English legal system anchored the principle of signature in its statutes in the 17th century. The gradual popularization of the signature in early modernity is also attributable to the invention of print, which (following centuries of perfected calligraphy) facilitated the gradual process of individualized handwriting and, to date, occasionally inspires children (and their adult counterparts) to practice their own signature.

8. Autographs

With the rise of the signature as a distinguishing marker of personality and identity, seals and stamps were replaced once more by signs of the body: signatures, after all (unlike seals and stamps), have to be made manually, in one’s own hand. They endow handwriting generally with an

iconic quality, not just the signatures of artists that accrued exponentially beginning in the 15th century: a ‘typeface’ that is not only legally binding, but can also be understood as an individual’s trace, a sign of character. In 1622, the Italian doctor and professor of medicine Camillo Baldi published the first treatise on the meaning of handwriting at the University of Bologna, with the following title: *Come da un lettera missiva si conoscano la natura e qualità dello scrittore* (1992). It would of course be a while for these first steps in the direction of graphology to be developed. More immediately, knowledge of character – a kind of proto-psychology – ushered in physiognomy, the study of faces. In the third volume of *Physiognomic Fragments* (1777), Lavater illustrated five tables in his study with corresponding handwriting samples, but he remained skeptical with regard to handwriting’s range of interpretations. Before handwriting could be associated with the interiority of the subject, the peoples of Europe had to be alphabetized. Hegel in *The Phenomenology of Mind* compared one’s handwriting with one’s voice:

The simple lines of the hand, then, the ring and compass of the voice, as also the individual peculiarity of the language used: or again this idiosyncrasy of language, as expressed where the hand gives it more durable existence than the voice can do, viz., in writing, especially in the particular style of ‘handwriting’ – all this is an expression of the inner. (1949: 343)

The many representations (and expressions) of this ‘interiority’, however, had to be first registered and decoded. One year before *The Phenomenology of Mind* first appeared, Moreau de la Sarthe, a doctor and professor of medicine in Paris, published a translation of Lavater’s *Physiognomic Fragments*; his developments of Lavater’s ideas influenced a number of French clerics who were subsequently preoccupied with the interpretation of handwriting. Abbé Jean-Hippolyte Michon’s *Système de graphologie* appeared in 1875, precisely one hundred years after the publication of the first volume of Lavater’s *Fragments*. This work, which first introduced the term graphology, was followed by *Méthode pratique de graphologie* in 1878. Michon’s system was based on a semiotic relationship of graphological signs – of chirographic idiosyncrasies that were associated with ‘*signes fixes*’ – with corresponding dispositions of character. The publications coming out of Michon’s school of thinking, such as the *Traité pratique de Graphologie* in 1885 by Jules Crépieux-Jamin, the son of a watch maker, were quickly translated into German. The German Graphological Society was founded in 1896 by Ludwig Klages, Laura von Albertini, and Hans Heinrich Busse. Between 1900 and 1908, the society published the *Graphologische Monatshefte*. In 1917, Klages published the treatise *Handwriting and Character*. Hardly any other work by a German philosopher and psychologist has remained

as popular as this one: it is still in print as *Gemeinverständliche Abriß der graphologischen Technik* ('An accessible sketch of graphological techniques'), and, as of 1989, has gone through 29 editions, including numerous examples and handwriting samples.

9. Digital Signature and Numerical Codes

The technological revolutions of the computer age have caused a disempowerment of images and handwriting. These days, hardly anybody practices personal handwriting, which ratifies what Georg Simmel (in *The Philosophy of Money*, 1990 [1900]) noted on the typewriter: 'Writing, an external concrete activity but one that still has a typically individual form', is counteracted

in favor of [the typewriter's] mechanical uniformity. On the other hand, this has a dual advantage: first, the written page now only conveys its pure content without any support or disturbance from its written form, and second, it avoids revealing the most personal element, which is so often true of handwriting, in superficial and unimportant as well in the most intimate communications. (1990 [1900]: 509)

In the meantime, the ubiquity and strategic rationalization of the various forms of electronic writing have pushed handwriting even further to the sidelines than Simmel ever anticipated. For that very reason, the precious traces of 'the most personal element' were reframed as antiques and rarities and (as with autographs) became highly desired collectors' items at auctions triggering bidding wars. For the photos and autographs of stars, computer data and emails are as yet no match.

Photographic portraits and signatures have become rare documents today, fetishes of VIPs. Even in the everyday world, by the way, people sign less and less. Physical signs of one's own manual dexterity are increasingly replaced by a new type of seal and stamp: the digital signature. Financial transactions are processed and authorized by PIN codes and routing numbers; numerical codes facilitate all imaginable orders, purchases, and sales. Accounts, insurances, personal data, phone lines and identities are all expressed in sequences of numbers. Numerical codes have pushed names into the background. Digital signatures evolved from (military) cryptology and were introduced in the early 1980s. For the past couple of years they have enjoyed virtually the same legal status as a handwritten signature. Such laws were first passed in the United States, as with the 'Utah Digital Signature Act' of 1995, and then in Germany (the 'Digital Signature Act' of 1997). Digital signatures are increasingly serving as signatures in global knowledge societies. They fulfill the demands of 'privacy and authentication' no longer by employing hands and faces but

rather through the use of memories and mnemotechnologies. Whoever forgets his code gets disconnected – because a code must be remembered and never be written down (as banks and telecommunications companies remind us time and again). To put it bluntly: if you want to be an individual today, you have to be able to memorize numerical sequences.

10. Identity and Identification

As I have tried to illustrate in the preceding examples, the epistemological framework for this paper assumes that cultural techniques – such as speaking, translating, writing, reading, picturing, calculating, or measuring – can reflect upon themselves: in speaking about speaking, in writing about writing, in pictures about pictures, in various number or measure-based recursions. Only by being recursive can cultural techniques rotate and refer to one another. A writing person can be pictured, and a picture or a mathematical operation can be written about. And, of course, we can speak of writing, calculating or measuring, and we can measure the act of speaking (with the help of, say, a water meter), or picture it (with a caption), or simply write it down. Understood as recursive techniques of symbolic work, cultural techniques can be described and practiced as ‘technologies of self’ in a Foucauldian sense, or, more precisely, as techniques of identity. In a certain sense, they generate the subjects that, retrospectively, come to understand themselves as the preconditions and nodal points of their very operations. However, the structure of the sentences articulating a self-reflective identity – the aporetic ‘self-consciousness’ of idealist philosophy, so to speak – is not a self-identical ‘ $I = I$ ’. Instead, they encode the proposition ‘I know that I p’, as Ernst Tugendhat (1979) has demonstrated in his linguistic lectures on self-consciousness and self-determination. Thirty years ago, Tugendhat (together with Wittgenstein) assumed a ‘linguistic turn’. This paradigm shift has, in the past 30 years, not only been replaced or complemented by a series of other ‘turns’, such as ‘the pictorial turn’ or ‘the sonic turn’, but has been elevated to the level of cultural-technical generality.

The possible recursions of cultural techniques are what generate questions of identity and identification in the first place; they produce recursive relationships, which differ from tautologies in that they require media: screens and mirrors, paper and books, instruments of measurement and calculation, sound and visual storage equipment, computer. Cultural techniques cannot be practiced without media, but they cannot simply be reduced to media technologies either. Even if it is unclear which cultural technique should be considered the first, it is safe to argue that cultural techniques are always already older than their media and that they are certainly older than the terms which emerged from them. People wrote long before any notions of writing or the

alphabet were conceived; pictures and statues did not inspire the idea of a picture until thousands of years later; to date, some people still sing and make music without any conception of tone or a system of notes. Counting, too, is older than numbers. Most known cultures did, no doubt, count or perform certain mathematical operations, but they did not necessarily derive the notion of a number from such operations. As early as during the Paleolithic era, people recorded forms of counting, which is evident from various notched-in bones. We do not, however, know what events or objects were counted: hunting records, the moonrise, menstruation cycles (cf. Leroi-Gourhan, 1993: 370; Marshack, 1991; Barrow, 1992: 31–33; De Mause, 1982: 272–3)? It was quite possible to count without corresponding words or signs, such as with the aid of notches in bones, fingers, or stones that were meant to represent the object to be counted: animals in a herd, soldiers, or distances (as with the Greek hodometer).

The cultural technique of counting does not necessarily force abstract systems of numbers into being. Some languages, for example, use different numerals for different classes of objects. In 1881, Franz Boas published a table of numerals used by native peoples in Canada, in which he documented the systems of numerals for flat, round and long objects, and for humans, canoes and measurements. In his catalogue, he makes it clear that any hypothesis about the evolution of mathematical abstractions should be approached with caution; the Canadian natives, after all, were familiar with plain numerals and measuring terms as well. The history of cuneiform writing, in fact, even suggests that plain numerals may be older than numerals attached to concrete objects. This leads to the conclusion that the use of plain numerals is independent of the definition of any abstract notion of numbers. Codes, it appears, may not need any systematic foundations to function precisely.

Translated by Michael Wutz

Note

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