The Seventh Symposium on Iconicity in Language and Literature
Toronto, 9-14 June 2009

Piotr Sadowski
Dublin Business School
Piotr.Sadowski@dbs.ie

The iconic indexicality of photography

Just as linguistic iconicity adds emotive expressiveness to the informational content communicated by language's symbolic code, so in visual communication combining different types of signs can enhance the expressive power of images. A classic case in point is photography, whose unique visual appeal results from combining the basically iconic code, involving close perceptual resemblance between image and its referent, with indexicality. Photography is indexical insofar as the represented object is "imprinted" by light and the chemical (or more recently electronic) process on the image, creating a visual likeness with a degree of accuracy and "truthfulness" unattainable in purely iconic signs such as painting, drawing, or sculpture. The indexical origin of the photographic image explains why discussions of the photographic media (including film and television) often employ categories normally reserved for the emotive and irrational effects produced in traditional societies by sympathetic magic, with its objectively wrong but psychologically compelling sense of direct causal link between objects once physically connected but later separated (here: the object and its displaced photographic "imprint"). My paper will accordingly discuss the semiotic status of photography both in terms of its postulated iconic indexicality, and in the context of photography's antecedents such as prehistoric imprints of hands, ancient death masks, early modern shadow portraits and experiments with the camera obscura.

Like all signs, photographic images operate first of all within the direct context of *contiguity*, in which the sign itself in physically co-present with the receiver, as when a person looks at a photograph. Thus understood contiguity is a prerequisite for other types

of communication involving displaced reference. The simplest form of displaced reference is a physical trace, or *index*, produced by a communicator in the immediate environment. Indexes can be either fully contiguous with the sender, as in the case of a cast shadow, mirror reflection, personal odour or voice, or they can be spatio-temporally displaced from the sender, as in the case of a footprint, a finger print, a DNA trace, a death mask, a bullet hole, a bomb crater, or a photograph.

In another type of indirect communication a sender produces a change in the environment (a sign) which is perceptually analogous, in other words similar, to some other object implied by the sign, here called an *icon*. Familiar examples of iconic communication in language include onomatopoeia, synaesthetic sound symbolism, or morphological and syntactic iconicity. Visual icons are also a part of gestural communication and conventional sign languages. However, the most spectacular examples of iconic communication among humans are permanent imitative visual representations, as in realistic painting, sculpture, and photography.

As I'm going to argue, photography owes its exceptional perceptual and emotive appeal to the fact that it combines—uniquely in the history of human visual representations of the world—elements of iconic and indexical communication, in addition to being related in an important way to human contiguous experience. Painting for example is by comparison limited to iconicity, which explains why even the best executed painted portrait is usually considered less "authentic" and "truthful" in relation to the represented person than a poor-quality photograph—and that difference in perception has everything to do with the indexicality of photography and the iconicity of painting. From a semiotic point of view therefore photography can be defined in terms of *displaced iconic indexes*, as can photography's animated extensions such as film and television. The iconically indexical character of photography means that its images not only closely resemble the photographed objects, but that the images are also physically related to the objects they represent in a way never achieved in painting. Even in painting from life, the painted scene reflects only the painter's subjective beliefs of what is there, whereas a scene in front of the camera is not affected by the photographer's beliefs. In other words, photographs depict realities that already exist, whereas paintings create physically non-existent realities. The indexical nature of a photograph also creates

an impression of a surrogate possession of the photographed object—be it one's lover, child, an admired actor or a pop star. This illusory if psychologically compelling sense of possession is based on an implicit assumption of identity, or at least of inseparable sympathy between a photograph and what it represents, between object and its index.

Interestingly, the perceptual and cognitive prerequisites of photography—the ability to create and appreciate displaced iconic indexes—have been there ever since the *Homo sapiens* with their reflective consciousness, extended working memory, and the resulting symbolic culture emerged from their pre-symbolic primate ancestors. The earliest purposefully executed iconic indexes on archaeological record are imprints of human hands with outstretched fingers, found among the paintings of animals on the walls of the Chauvet cave in southern France from over thirty thousand years ago. In Chauvet hands were placed flat on the cave's wall, and paint was then applied around it and between the fingers. Such negatives of human hands have also been found in other Upper Palaeolithic caves in France and northern Spain, as have the positives: impressions of hands coated with pigment and pressed against the wall. These "signatures" are the first recorded deliberate iconic indexes: iconic in the sense that the impressions bear a close resemblance in actual size to the real hands, and indexical in the sense that the impressions were actually physically caused by living people, who evidently wanted to preserve a bit of themselves for posterity, not unlike those modern tourists who cannot resist inscribing or carving their names, with dates, on the walls of famous buildings they visit.

The combined effects of iconicity and indexicality also appear responsible for the notoriety surrounding a Christian relic known as the Turin Shroud—a piece of cloth allegedly covered with an impression of the body of Christ as it was, according to tradition, taken down from the cross to be buried. It is interesting to note that while there exist thousands of paintings, drawings and sculptures showing the image of Christ, for Catholic Christians none of these iconic representations possesses the magical appeal of the unique artefact of the Turin Shroud, and that again has everything to do with the alleged indexical character of this relic. And from a semiotic point of view it doesn't matter that the Turin Shroud is a fourteenth-century hoax—for Christians the alleged indexical impression of Christ's body on the Turin Shroud is the next best thing to

actually witnessing the Crucifixion directly, while the countless number of merely iconic paintings and sculptures has a correspondingly much weaker emotional appeal.

In early modern times a direct precursor of displaced iconic indexes of photography were the fully contiguous iconic indexes produced by the camera obscura, an optical device and a drawing aid used by realistic painters in the seventeenth and eighteenth century. The camera obscura, literally, a "dark chamber," was a portable box fitted with a convex lens and an internal mirror which righted the upside-down image created by the lens, so that it could be traced on a piece of paper placed on translucent glass plate installed at the top of the device. Drawings thus made could help artists to trace the outlines of shapes to be transferred onto canvas to achieve highly realistic and accurate, truly "photographic" paintings, mostly of cityscapes, such as those by Canaletto (1697-1768). Before the invention of film and television the effects produced by the camera obscura must have been truly astounding: on the two-dimensional screen the viewer could see a three-dimensional scene, in its natural colours, fully animated, reduced in size and neatly framed. The camera obscura could capture a moving image (that is, it could create a contiguous iconic index of a scene, like live television), but it could not fix it to make it temporally displaced—this part was undertaken by the painter who created a permanent icon out of a fleeting iconic index, losing the indexical character of the image in the process. This is why Canaletto's paintings of Venice, Rome, and London, realistic as they are, are not as faithful and "real" as would have been achieved even by a primitive, black-and-white grainy photograph, to say nothing of today's colour, high-definition digital cameras.

However effective the camera obscura was in tracing the outlines of buildings and perspectives of streets and city squares, it was of no use in trying to transfer onto canvas the image of a human face, which consists of tones and shades rather than of lines. An early attempt to capture a human figure, especially the head if not actually the face, and to fix it in a permanent iconic index were the silhouette cut-outs, popularized in the late eighteenth century by the Swiss scientist Johan Caspar Lavater. The shadow of a person's profile cast by sunlight or a candle was traced onto paper, and then the image was filled in by hand, or used by the artist as a template to cut a silhouette from black paper. These shadow portraits were part entertainment and part artistic venture, and their

popularity drew on the widespread conception that human character could be read through the study of facial features. Silhouettes were of course not as detailed and colourful as painted portraits, but were considered to be more faithful and truthful of a person's appearance and personality than the latter, precisely because of their indexical rather than just iconic origins.

The missing indexicality in painted images may also be responsible for the subject of the "invention of painting," popular in early modern art. Accordingly, the origin of the art of portraiture was attributed to the observation and tracing of a person's shadow. The idea goes back to an ancient Roman poetic love tale recorded by Pliny the Elder (23-79 CE), in which a potter discovered with the help of his daughter how to model portraits in clay. She was in love with a youth, and when he was leaving the country she traced the outline of the shadow which his face cast on the wall by lamplight. The father filled in the outline with clay and made a model. The popular cut-out silhouettes of the eighteenth century were based on the same quasi-photographic principle that combined the indexicality of a person's shadow with the iconicity of traditional painted portraits, to achieve the accuracy and fidelity of representation unattained by conventional painting or sculpture.

Photography in the true sense of the word came upon the scene in the early nineteenth century, when the Frenchman Joseph Nicéphore Niépce for the first time fixed an iconic index using a camera obscura and the photographic process of silver nitrate. The subject of the first ever photograph, taken in 1826, was nature, a courtyard seen from Niépce's window, rather than a human figure, mainly because the image required eight hours of exposure to be recorded on the photosensitive plate. In the decades that followed photography became all the rage, chiefly among rich enthusiasts, who carried their cumbersome and expensive cameras and tripods to take pictures of city squares, landscapes, historic monuments, and other large and immovable objects. The exposure time was gradually reduced to 15 minutes in full sunlight in the late 1830s, and then to 20-40 seconds by the early 1840s.

The fascination with the new, initially expensive but very easy and quick way of making accurate pictures went hand in hand with the recognition of the fundamental difference between photographic images and traditional paintings. Unlike the latter,

photography was first perceived not as an art but as a mechanical process of impersonally copying nature, while the photographer was thought to be merely a non-interfering observer—a scribe, not a poet. Indeed, while it obviously took human inventiveness to produce the camera in the first place, the very creation of the image was taken care of by the optical and photochemical processes largely beyond the photographer's control. At the beginning photography was thus considered more of a natural phenomenon than an artifice, much like magnetism or electricity—phenomena understood to be discovered rather than invented, and subsequently applied to human use.

Of course the photographic process was not totally accidental, because it involved the photographer as the conscious agent who chose the object to be photographed, placed the camera in front of it, and allowed the processes of nature to create a desired image. But it is these natural, physical processes, applying largely beyond the photographer's control, that determine the inherently indexical character of photography, so different from the iconicity of painting or drawing, which are created entirely by the artist. It is because of this fundamental difference between intentional and personal (that is, iconic) depiction, and natural and impersonal (that is, indexical) record of reality that we say that a painting is *made*, whereas a photograph is *taken*. While painting is never more than the stating of an interpretation, a photograph, in the words of Susan Sontag, is "a trace, something directly stencilled off the real, like a footprint or a death mask," which turns a photograph into "a material vestige of its subject in a way that no painting can be."

Unlike paintings therefore, photographs are causally dependent on the objects they represent, whereas paintings are causally dependent only on the beliefs and skills of the painter. This also means that paintings, iconic as they are in relation to the objects depicted on them, are also indexical in relation to their authors, which explains why in popular perception paintings are valued not so much for their subject matter, as because of who painted them. Art critics, dealers, and the general public seem to care less about what a painting by Da Vinci, Cézanne, or Picasso represents, than about the fact that it is a painting *by* Da Vinci, Cézanne, or Picasso. By the same token, the indexicality of photography explains why we are more interested in what photographs depict than in who took them, so that the photographers' names, even as important as those of Alfred Stieglitz, Robert Capa, or Henri Cartier-Bresson, are not as well known in popular culture

as the names of some twentieth-century painters. This is also why naïve or commercial photography is no different in kind from photography as practised by the most accomplished professionals: there are pictures taken by anonymous amateurs which are just as interesting, just as formally (if inadvertently) sophisticated as professional photographs. The stylistic characteristics of artistic photography, such as controlled studio lighting, skill of composition, clarity of subject, precision of focus, quality of print, elitism of gallery exhibition—all features borrowed from painting—are extraneous to the essence of photography. Its indexical nature, which guarantees a closer relation with the represented object than can be achieved in merely iconic painting, means that amateur, spontaneous, crudely lit, grainy and unfocused, asymmetrically composed photographs can be just as interesting and compelling, if not more, than the most accomplished painting.

The inherent ability of photography to transcribe external reality from its inception gave the medium its documentary validity as both accurate and seemingly unbiased. The writer Edgar Allan Poe, whose own daguerreotype portrait was made in 1849, wrote in an article for a popular magazine that "the closest scrutiny of the photographic drawing discloses only a more absolute truth, a more perfect identity of aspect with the thing represented." This is why taking photographs and manipulating them gives one a sense, illusory though it may be, of ordering and somehow controlling reality. A chronological order of snapshots in family albums, or the meticulous filing of photographs used in science, art history, or police investigations turn indexical images of selected fragments of the world into systems of classification, appropriation and control. At the same time the indexicality of photography gives the information thus obtained the quality of objective evidence rather than of just subjective impression, which is why photographs, film or video footage (from CCTV cameras for example) are accepted as indisputable legal evidence, together with fingerprints and DNA samples.

As soon as the exposure time in early photography was reduced to 20-40 seconds in the early 1840s, the most popular photographic objects became—predictably—human faces. Family histories and genealogies are an inseparable part of recorded history, and must have preoccupied humans ever since the beginning of consciousness and the first awareness of the transience of individual life. Family portraits, however, come late in the

history of visual representation, to culminate in Roman sculpted marble busts—3-dimensional icons of remarkable realism, which included also the earliest portrait "photographs": indexical wax masks of dead members of Roman families. With their no-nonsense approach to reality the Romans insisted on an exactitude that included every wart, pimple, wrinkle, and blemish in their busts, which were certainly done from life, like the much later painted portraits and photographs.

In mid nineteenth century the long-established human preoccupation with family history received a truly miraculous boost in the form of photography which—for the first time in history—allowed people to know exactly what they looked like when they were younger, and what their parents and grandparents looked like as children. Our appearance naturally changes throughout our lives, from day to day, from year to year. We look at the snapshots of ourselves and of our relatives and friends taken a few years ago, and we recognise with a shock that we all have changed much more than we tended to notice in the day-to-day business of living. This is because the feeling of constancy completely predominates over the changing appearance. Before the invention of the camera not even a tiny minority of the rich who commissioned paintings of their children could possess that knowledge, as even the best painted portraits, due to their iconic nature, were less informative than a casual family snapshot.

At first to have a photograph taken of themselves people had to go to the photographer's studio, with its choice of painted backgrounds and plaster pillars. The popularity of family photographs increased after the 1880s, when the camera became more mobile and could enter more freely the private and domestic space. Hundreds of thousands of people were now learning to take their own pictures that recorded the main events of their lives, which in semiotic terms meant converting direct, contiguous events into indirect, displaced iconic indexes of these events. Private cameras became inseparable from tourism, both as a way of collecting visual trophies as evidence of trips taken and places visited, and as a way of relieving the stress of travelling and adapting, if only for a brief time, to new environments. The very activity of taking pictures while on holidays is soothing and reassuring, in assuaging general feelings of disorientation and anxiety likely to be exacerbated by travel. While it can be argued that taking pictures all the time while on holidays gets in the way of contiguous, direct experience,

photographing the visited places seems to establish a sense of instant appropriation and an illusion of control over the new and otherwise unfamiliar surroundings. In the long term, photographs will also exist as displaced indexical records and memory aids of events that have ended, of people who have gone away or died, conferring a kind of immortality and importance that the photographed objects would never otherwise have attained.

The quasi-magical sense of appropriation and control over photographed objects is also responsible for the often uncomfortable feeling people have when being photographed. The anxiety is due to our instinctive if incorrect recognition, underlying universal magical thinking, that both indexes and icons possess a direct though hidden link with the objects they depict or refer to, in this case with ourselves. In this sense a photograph, or a related medium such as film or the old camera obscura, can exert an even more powerful "magical" effect than painting, precisely because of the combination of iconicity and indexicality in the photographic media. The "magic" of photography is amusingly illustrated by an account given by the early-nineteenth-century English explorer Edward Dodwell during his visit to Athens, then under Turkish occupation. While in Greece Dodwell remained under the supervision of a Turkish official, who constantly put difficulties in the explorer's way, which could only be overcome by bribes, until one day Dodwell got rid of the mercenary Turk in a most extraordinary way. While examining the ancient monuments Dodwell was using a camera obscura, and

> no sooner did the Turk see the Temple of Acropolis instantaneously reflected on the paper in all its lines and colour, than he imagined that I had produced the effect by some magical process. He was visibly astonished and alarmed. When again he looked into the camera obscura, some of his soldiers just happened to pass before the reflecting glass, and they were beheld by the astonished Turk walking upon the paper. He now became outrageous, and after calling me pig, devil, and Buonaparte he told me that if I chose I might take away the temple, but that he would never permit me to conjure his soldiers into my box. When I found that it was in vain to reason with his ignorance, I changed my tone, and told him that if he did not leave me unmolested, I would put *him* into my box, and that he should find it a very difficult matter to get out again.

Visibly alarmed, the Turkish official immediately withdrew and henceforth carefully avoided Dodwell and his dangerous box.

A person from the iconoclastic Islamic world could react with superstitious fear to the allegedly appropriating power of photographic images, but even in the West, with its long history of rich visual culture, people still tend to feel apprehensive and self-conscious at having their pictures taken. We know rationally that cameras do not "steal our souls" and take us into the photographer's possession, as tribesmen were reported to feel when first confronted with a white man's camera, and therefore we do not panic when we are being photographed. Still, the residual magical fear remains, making us feel awkward and uncomfortable, as if our privacy has been invaded, and some trespass and disrespect have taken place.

Interestingly but probably not surprisingly, our anxiety about being photographed seems to increase with age, which means that we should feel least uncomfortable to be photographed when young. Indeed, young people generally enjoy having their pictures taken, provided they look "cool" on them, that is, relaxed, at ease, self-assured and in control, not tense or self-conscious. Having a photographic, that is, indexical copy, or better still, multiple copies of oneself at the prime of one's life is actually a very desirable way of advertising one's phenotypic quality as widely as possible. This desire is greatly facilitated today by the visual mass media, such as the MTV Channel for example, which show practically nothing else but young, good looking, bouncy, assertive, laughing and smiling people of both sexes, whose body language and tone of voice (never mind what they actually say) communicate to millions of viewers their health and attractiveness, that is, indirectly their good genes. As we grow older and less attractive we begin to be afraid of the camera's disapproval, and when photographed we want to look "our best," which usually requires some preparation before the picture is taken: adjusting dress, hair and makeup, assuming a bodily posture signalling health and vigour, putting on a rejuvenating smile and so on. Older people will only tolerate being photographed if given the opportunity to manipulate their appearance before the picture is taken, and they absolutely hate surprise, casual, unprepared snapshots of themselves (even if they do not always say so).

For this reason older or less attractive people not only tend to manipulate their own appearance before being photographed, but they also expect and often insist on manipulating the picture *after* it is taken. As early as the mid-1840s a German photographer invented the first technique for retouching the negative, and his two versions of the same portrait—one retouched, the other not—astounded crowds at the Exposition Universelle in Paris in 1855. Retouching, involving the removal of wrinkles, warts and so on, is basically a form of intentionally reducing the indexicality (that is, truthfulness) of the photographic image, and of increasing its iconicity, thus bringing the image closer to the traditional painted or drawn portrait. In this way a touched-up photograph, like plastic surgery, falsifies reality in order to flatter our vanity, by making us believe that we are younger and better-looking than we actually are.

But no matter how anxious and uncomfortable we felt at the time of being photographed, and how much we disliked our portrait when we first saw it, we tend to like photographs of ourselves with time—as we grow older we always prefer images of ourselves when we were younger. In this way portrait photography exerts a double psychological effect: on the one hand it is a way of arresting the damages caused by time and of achieving a sort of perennial youth, and on the other hand photographic portraits are a sobering reminder of how illusory and self-deceptive our desire to freeze the past is, as the difference between the face on the photograph and the face in the mirror grows wider and wider with time. The two opposite effects of photography, one giving us a pleasing illusion of timelessness and the other painfully reminding us of the ravages done by time, thus cancel each other out, leaving us not better off perhaps than were the people before the age of photography, who never had to experience the frustration of comparing their current appearance with their younger image. Without photographic portraits people are both denied the pleasure of seeing their young selves "immortalized" and spared the anguish and nostalgic sorrow of seeing their youth gone.

The popularisation of photography in mid-nineteenth century, together with the invention of moving pictures towards the end of the century, marked the beginning of iconic indexical culture that was to dominate Western societies, gradually to replace the early modern culture based on iconic painted and printed images. Photography not only offered an opportunity for anyone to possess and contemplate their own and their

families' realistic portraits—it also affected every aspect of life, providing the technological basis for twentieth-century visual mass media such as photojournalism, advertising, cinema, television, video, DVD, and the Internet. Still photography, documentary film and television, due to their indexical nature and wide dissemination, offered an opportunity of surrogate participation in events not directly experienced, thus enlarging the sphere of individual interaction with the increasingly global social environment.