

## Conclusions

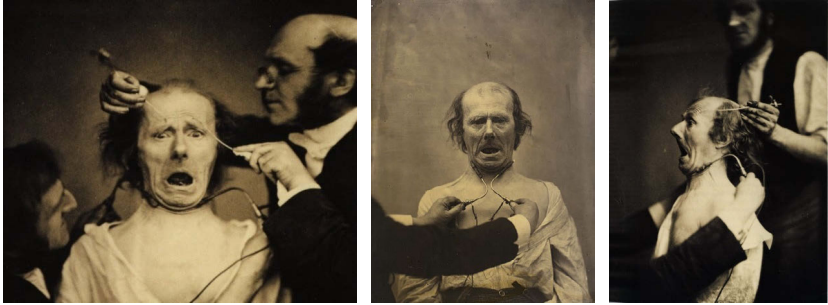
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In 2012, news traveled around the globe that the experiment on which Charles Darwin's treatise *The Expression of the Emotions in Man and Animals* (1872) was based had successfully been recreated by modern investigators. While researching the book, Darwin asked some dinner guests to look at a series of photographs in which human faces were artificially contracted by electric probes and to decide what emotion each photo conveyed. Almost one and a half centuries later, from October 2011 to March 2012, the same photographs and a similar methodology were used by a group of British researchers at the University of Cambridge to study the same subject as Darwin, but in a digital environment.

Two aspects of this reenactment show that the obliteration of corporeality on which the present book has focused is as real and insidious today as ever. The first point worth noting is the ease with which the three experiments involved in this story were conflated by the media. "Darwin's Creepiest Experiment Brought Back to Life," announced one headline. "Cambridge University to Complete Charles Darwin's Last (and Most Creepy) Experiment into Human Emotion," read another. In addition to such dramatic announcements, media reports on the topic invariably featured images of a man looking terrified, possibly also in pain from being prodded in the face by two uncannily placid figures (Fig. 17). Without knowing all the details, readers assume that the photos are directly associated with Darwin, when in fact they stem from a different experiment conducted by the French neurologist Guillaume-Benjamin Duchenne, shown on the right in the left-hand photo below. As has already been mentioned in the discussion of *Berlin Alexanderplatz*, Duchenne wanted to study the expression of emotions in the human body. To this end, he applied electrical current to the faces of his subjects, sending their muscles into a state of contraction and recording the results with the recently invented camera. Darwin, for his part, showed eleven of Duchenne's photographic plates to colleagues, friends, and family members in hopes of proving that facial muscles can express only a few universally recognizable emotions — not 60, as Duchenne had argued. Darwin's "experiment," therefore, was effectively a survey and did not involve any more electrical prodding than the Cambridge experiment. That news outlets led readers to think it did, thereby

erasing the historical distinctions among the three experiments, is a textbook example of media sensationalism. It proves how susceptible the human form still is to semantic and ideological manipulation — not in spite of the fascination it exerts, but because of it.

Fig. 17 Photographic stills from Duchenne's experiment.



The same idea transpires from the second aspect that this constellation of experiments lays bare, namely the ease with which the same set of body representations — in this case, photographs — lends itself to appropriation by various, not always transparent, programmatic currents within research. Duchenne had primarily an electrophysiological interest in conducting the original experiment. But the treatise in which he presented his findings (*The Mechanism of Human Facial Expression*) contains an “aesthetic” section, in addition to the “scientific” one, from which it is clear that the French neurologist saw the body not only as a mechanistic entity but also as a performative tool. And we can also not discount Duchenne's photographic interest in the human form, given his pronouncement that photography was the only adequate means to render the “truth” of his subjects' expressions, which were too fleeting to be drawn or painted.

Darwin was also intrigued by the photographic component of Duchenne's project, but in a different sense. By comparing his impressions with those of his dinner guests, he wanted to gauge whether, and how much, reading the text that accompanied Duchenne's plates had influenced his perception of them. This evokes another distinction between the approaches of the two scientists. Whereas Duchenne disregarded possible variations in how bodily signs are interpreted by different viewers, Darwin emphasized the fact that human appearance does not have a fixed, absolute meaning, and that it is ‘read’ subjectively. Darwin also wanted to determine the accuracy of the photographic representations and the effectiveness of Duchenne's method to artificially induce emotions by means of electric stimulation. Beyond this, it is impossible not to draw a connection between

the survey that Darwin conducted among his dinner guests in 1868 and his theory of evolution. His ultimate goal in re-evaluating Duchenne's photographs was genealogical, aiming as he did to demonstrate that most expressions are innate in humans, with shared expressions being evidence of a common descent not just of all human races but also of humans and animals.

As for the Cambridge research group, their only professed goal in recreating the nineteenth-century experiment was to “provoke curiosity,” seemingly as a tribute to the “endlessly curious” Darwin. But a much more concrete objective emerges if we survey the other projects overseen by Peter Robinson, one of the experiment's lead investigators. Robinson and his research team are famous for their work in developing “emotionally intelligent” technologies that can decode human feelings and respond accordingly — all through the medium of facial expressions, tone of voice, and body movements. It is easy to see how a rerun of Darwin's visual experiment would be useful in teaching computers to “read our minds” and replicate the emotional expressivity of humans. Whether or not this kind of research spells “the beginning of a beautiful friendship” between man and machine, as Robinson envisages in an online video,<sup>1</sup> remains to be seen. The more immediate conclusion here is that issues of corporeality continue to be at the forefront of widely differing research projects. Be it in order to understand what defines us as uniquely human and where we come from, as Darwin set out to do, or quite the opposite, in order to ‘export’ our humanity for the prospect of a better future, as researchers in Cambridge believe, scientists of all denominations still depend on the body for answers.

Or so it seems. For, in actual fact, the neglect of corporeality that I have traced in earlier centuries is still ongoing. Peter Robinson's words are very illuminating in this respect. At the beginning of the video mentioned previously, we find out that the decision to devote himself to building emotionally intelligent and responsive computers was triggered by a personal frustration with having his embodied presence neglected. “The problem,” Robinson says, “is that computers don't react to how I feel, whether I'm pleased or annoyed. They just ignore me.” A strong argument can be made, however, that Robinson's own work undercuts the uniqueness of humans instead of affirming it. Much like in the 18<sup>th</sup>, 19<sup>th</sup>, and early 20<sup>th</sup> centuries, underneath the appearance of interest and concern lies indifference. Now, as then, engagement with the physical body is scant at best and illusory at worst.

The three writers discussed in this study show that novels can safeguard the body's visibility by exposing the intricate mechanisms whereby it is overlaid with predetermined values and by letting the human form retain its ‘semantic impertinence,’ to adapt a term from Paul Ricoeur (1975: 78). La Roche, Spielhagen,

1 See <https://www.stem.org.uk/elibrary/resource/33008> (accessed on April 11, 2019).

and Döblin achieved these two objectives through different, sometimes opposing, strategies. This means that there is no royal road to truth, no fixed recipe for how to resist the leveling gaze of modernity and give corporeality its due. What matters is to develop an ethical, responsible mode of reading in and through literary fiction that acknowledges the body as omnipresent but ultimately unknowable.