

# Stephen J. Gould

## MEASURING HEADS

From S. J. Gould (1981) *The Mismeasure of Man*, New York: W. W. Norton.

[...]

### Masters of craniometry: Paul Broca and his school

#### *The great circle route*

**I**N 1861 A FIERCE DEBATE extended over several meetings of a young association still experiencing its birth pangs. Paul Broca (1824–80), professor of clinical surgery in the faculty of medicine, had founded the Anthropological Society of Paris in 1859. At a meeting of the society two years later, Louis Pierre Gratiolet read a paper that challenged Broca's most precious belief: Gratiolet dared to argue that the size of a brain bore no relationship to its degree of intelligence.

Broca rose in his own defense, arguing that "the study of the brains of human races would lose most of its interest and utility" if variation in size counted for nothing (1861, p. 141). Why had anthropologists spent so much time measuring skulls, unless their results could delineate human groups and assess their relative worth?

Among the questions heretofore discussed within the Anthropological Society, none is equal in interest and importance to the question before us now. [...] The great importance of craniology has struck anthropologists with such force that many among us have neglected the other parts of our science in order to devote ourselves almost exclusively to the study of skulls. [...] In such data, we hoped to find some information relevant to the intellectual value of the various human races.

(1861, p. 139)

[...]

Broca and his school used facts as illustrations, not as constraining documents. They began with conclusions, peered through their facts, and came back in a circle to the same

conclusions. Their example repays a closer study, for unlike Morton (who manipulated data, however unconsciously), they reflected their prejudices by another, and probably more common, route: advocacy masquerading as objectivity.

### *Selecting characters*

When the "Hottentot Venus" died in Paris, Georges Cuvier, the greatest scientist and, as Broca would later discover to his delight, the largest brain of France, remembered this African woman as he had seen her in the flesh.

She had a way of pouting her lips exactly like what we have observed in the orang-utan. Her movements had something abrupt and fantastical about them, reminding one of those of the ape. Her lips were monstrously large [those of apes are thin and small as Cuvier apparently forgot]. Her ear was like that of many apes, being small, the tragus weak, and the external border almost obliterated behind. These are animal characters. I have never seen a human head more like an ape than that of this woman.

(in Topinard, 1878, pp. 493–4)

The human body can be measured in a thousand ways. Any investigator, convinced beforehand of a group's inferiority, can select a small set of measures to illustrate its greater affinity with apes. (This procedure, of course, would work equally well for white males, though no one made the attempt. White people, for example, have thin lips – a property shared with chimpanzees – while most black Africans have thicker, consequently more "human," lips.)

Broca's cardinal bias lay in his assumption that human races could be ranked in a linear scale of mental worth. In enumerating the aims of ethnology, Broca included: "to determine the relative position of races in the human series" (in Topinard, 1878, p. 660). It did not occur to him that human variation might be ramified and random, rather than linear and hierarchical. And since he knew the order beforehand, anthropometry became a search for characters that would display the correct ranking, not a numerical exercise in raw empiricism.

Thus Broca began his search for "meaningful" characters – those that would display the established ranks. In 1862, for example, he tried the ratio of radius (lower arm bone) to humerus (upper arm bone), reasoning that a higher ratio marks a longer forearm – a character of apes. All began well: blacks yielded a ratio of 0.794, whites 0.739. But then Broca ran into trouble. An Eskimo skeleton yielded 0.703, an Australian aborigine 0.709, while the Hottentot Venus, Cuvier's near ape (her skeleton had been preserved in Paris), measured a mere 0.703. Broca now had two choices. He could either admit that, on this criterion, whites ranked lower than several dark-skinned groups, or he could abandon the criterion. Since he knew (1862a, p. 10) that Hottentots, Eskimos, and Australian aborigines ranked below most African blacks, he chose the second course: "After this, it seems difficult to me to continue to say that elongation of the forearm is a character of degradation or inferiority, because, on this account, the European occupies a place between Negroes on the one hand, and Hottentots, Australians, and eskimos on the other" (1862a, p. 11).

Later, he almost abandoned his cardinal criterion of brain size because inferior yellow people scored so well:

A table on which races were arranged by order of their cranial capacities would not represent the degrees of their superiority or inferiority, because size represents only one element of the problem [of ranking races]. On such a table, Eskimos, Lapps, Malays, Tartars and several other peoples of the Mongolian type would surpass the most civilized people of Europe. A lowly race may therefore have a big brain.

(1873, p. 38)

But Broca felt that he could salvage much of value from his crude measure of overall brain size. It may fail at the upper end because some inferior groups have big brains, but it works at the lower end because small brains belong exclusively to people of low intelligence. Broca continued:

But this does not destroy the value of small brain size as a mark of inferiority. The table shows that West African blacks have a cranial capacity about 100 cc less than that of European races. To this figure, we may add the following: Caffirs, Nubians, Tasmanians, Hottentots, Australians. These examples are sufficient to prove that if the volume of the brain does not play a decisive role in the intellectual ranking of races, it nevertheless has a very real importance.

(1873, p. 38)

An unbeatable argument. Deny it at one end where conclusions are uncongenial; affirm it by the same criterion at the other. Broca did not fudge numbers; he merely selected among them or interpreted his way around them to favored conclusions.

In choosing among measures, Broca did not just drift passively in the sway of a preconceived idea. He advocated selection among characters as a stated goal with explicit criteria. Topinard, his chief disciple, distinguished between "empirical" characters "having no apparent design," and "rational" characters "related to some physiological opinion" (1878, p. 221). How then to determine which characters are "rational"? Topinard answered: "Other characteristics are looked upon, whether rightly or wrongly, as dominant. They have an affinity in negroes to those which they exhibit in apes, and establish the transition between these and Europeans" (1878, p. 221). Broca had also considered this issue in the midst of his debate with Gratiolet, and had reached the same conclusion (1861, p. 176):

We surmount the problem easily by choosing, for our comparison of brains, races whose intellectual inequalities are completely clear. Thus, the superiority of Europeans compared with African Negroes, American Indians, Hottentots, Australians and the Negroes of Oceania, is sufficiently certain to serve as a point of departure for the comparison of brains.

Particularly outrageous examples abound in the selection of individuals to represent groups in illustrations. Thirty years ago, when I was a child, the Hall of Man in the American Museum of Natural History still displayed the characters of human races by

linear arrays running from apes to whites. Standard anatomical illustrations, until this generation, depicted a chimp, a Negro, and a white, part by part in that order – even though variation among whites and blacks is always large enough to generate a different order with other individuals: chimp, white, black.

[...]

### *Averting anomalies*

Inevitably, since Broca amassed so much disparate and honest data, he generated numerous anomalies and apparent exceptions to his guiding generality – that size of brain records intelligence and that comfortable white males have larger brains than women, poor people, and lower races. In noting how he worked around each apparent exception, we obtain our clearest insight into Broca's methods of argument and inference. We also understand why data could never overthrow his assumptions.

[...]

### *Flaws in a pattern of increase through time*

Of all Broca's studies, with the exception of his work on differences between men and women, none won more respect of attention than his supposed demonstration of steady increase in brain size as European civilization advanced from medieval to modern times (Broca, 1862b).

This study merits close analysis because it probably represents the best case of hope dictating conclusion that I have ever encountered. Broca viewed himself as a liberal in the sense that he did not condemn groups to permanent inferiority based on their current status. Women's brains had degenerated through time thanks to a socially enforced under-usage; they might increase again under different social conditions. Primitive races had not been sufficiently challenged, while European brains grew steadily with the march of civilization.

Broca obtained large samples from each of three Parisian cemeteries, from the twelfth, the eighteenth, and the nineteenth centuries. Their average cranial capacities were, respectively, 1,426, 1,409, and 1,462 cc – not exactly the stuff for a firm conclusion of steady increase through time. (I have not been able to find Broca's raw data for statistical testing, but with a 3.5 percent mean difference between smallest and largest sample, it is likely that no statistically significant differences exist at all among the three samples.)

But how did these limited data – only three sites with no information on ranges of variation at a given time and no clear pattern through time – lead Broca to his hopeful conclusion? Broca himself admitted an initial disappointment: he had expected to find intermediate values in the eighteenth-century site (1862b, p. 106). Social class, he argued, must hold the answer, for successful groups within a culture owe at least part of their status to superior wits. The twelfth-century sample came from a churchyard and must represent gentry. A common grave provided the eighteenth-century skulls. But the nineteenth-century sample was a mixture, ninety skulls from individual graves with a mean of 1,484 cc, and thirty-five from a common grave with an average of 1,403 cc. Broca claimed that if differences in social class do not explain why calculated values fail to meet



expectations, then the data are unintelligible. Intelligible, to Broca, meant steadily increasing through time – the proposition that the data were meant to prove, not rest upon. Again, Broca travels in a circle:

Without this [difference in social class], we would have to believe that the cranial capacity of Parisians has really diminished during centuries following the 12th. Now during this period [...] intellectual and social progress has been considerable, and even if we are not yet certain that the development of civilization makes the brain grow as a consequence, no one, without doubt, would want to consider this cause as capable of making the brain decrease in size.

(1862b, p. 106)

But Broca's division of the nineteenth-century sample by social class also brought trouble as well as relief – for he now had two samples from common graves and the earlier one had a larger mean capacity, 1,409 for the eighteenth century vs. 1,403 for the nineteenth. But Broca was not to be defeated; he argued that the eighteenth-century common grave included a better class of people. In these prerevolutionary times, a man had to be really rich or noble to rest in a churchyard. The dregs of the poor measured 1,403 in the nineteenth century; the dregs leavened by good stock yielded about the same value one hundred years before.

Each solution brought Broca new trouble. Now that he was committed to a partition by social class within cemeteries, he had to admit that an additional seventeen skulls from the morgue's grave at the nineteenth-century site yielded a higher value than skulls of middle- and upper-class people from individual graves – 1,517 vs. 1,484 cc. How could unclaimed bodies, abandoned to the state, surpass the cream of society? Broca reasoned in a chain of surpassingly weak inference: morgues stood on river borders; they probably housed a large number of drowned people; many drowned are suicides; many suicides are insane; many insane people, like criminals, have surprisingly large brains. With a bit of imagination, nothing can be truly anomalous.

[...]

## References

- Broca, P. (1861) "Sur le volume et la forme du cerveau suivant les individus et suivant les races," *Bulletin Société d'Anthropologie Paris* 2, pp. 139–207, 301–321, 441–446.
- (1862a) "Sur les proportions relatives du bras, de l'avant bras et de la clavicule chez les nègres et les européens," *Bulletin Société d'Anthropologie Paris*, vol. 3, part 2, p. 13.
- (1862b) "Sur la capacité des crânes parisiens des diverses époques," *Bulletin Société d'Anthropologie Paris* 3, 102–116.
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- Topinard, P. (1878) *Anthropology*, London: Chapman and Hall, 548 pp.

## Allan Sekula

### THE BODY AND THE ARCHIVE

From A. Sekula (1986) "The body and the archive," *October* 39: 3–65.

[...]

On the one side we approach more closely to what is good and beautiful; on the other, vice and suffering are shut up within narrower limits; and we have to dread less the monstrosities, physical and moral, which have the power to throw perturbation into the social framework.

(Adolphe Quetelet, 1842)

**T**HE SHEER RANGE AND VOLUME of photographic practice offers ample evidence of the paradoxical status of photography within bourgeois culture. The simultaneous threat and promise of the new medium was recognized at a very early date, even before the daguerreotype process had proliferated.

[...]

Although no "Police Act" had yet embraced photography, the 1820s and '30s had engendered a spate of governmental inquiries and legislation designed to professionalize and standardize police and penal procedures in Britain, the most important of which were the Gaols Act of 1823 and the Metropolitan Police Acts of 1829 and 1839.

[...]

Although photographic documentation of prisoners was not at all common until the 1860s, the potential for a new juridical photographic realism was widely recognized in the 1840s, in the general context of these systematic efforts to regulate the growing urban presence of the "dangerous classes," of a chronically unemployed sub-proletariat.

[...]

[A] new instrumental potential in photography [was recognized]: a silence that silences. The protean oral "texts" of the criminal and pauper yield to a "mute testimony" that

## Notes

- 1 See Michel Foucault (1977) *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan, New York, Pantheon and *The History of Sexuality, Volume I: An Introduction*, trans. Robert Hurley, New York, Pantheon, 1978.
- 2 Any photographs that seek to identify a *target*, such as military reconnaissance photographs, operate according to the same general logic. See my 1975 essay "The Instrumental Image: Steichen at War," in *Photography against the Grain: Essays and Photo Works, 1973-1983*, Halifax, The Press of the Nova Scotia College of Art and Design, 1984.
- 3 The theoretical ground for the construction of a specifically *bourgeois* subject can be found in Hobbes's *Leviathan* (1651). C. B. Macpherson has argued that Hobbes's axiomatic positing of an essentially competitive individual human "nature" was in fact quite specific to a developing market society, moreover, to a market society in which human labor power increasingly took the form of an alienable commodity. As Hobbes put it, "The *Value* or WORTH of a man, is as of all things, his Price; that is to say, so much as would be given for the use of his Power: and therefore is not absolute; but a thing dependent on the need and judgement of another" (Thomas Hobbes, *Leviathan*, Harmondsworth, Penguin, 1968, chap. 10, pp. 151-2. See Macpherson's Introduction to this edition and his *Political Theory of Possessive Individualism: Hobbes to Locke*, London, Oxford University Press, 1962).
- 4 Jeremy Bentham, "A Fragment on Government" (1776) in Mary P. Mack (ed.) *A Bentham Reader*, New York, Pegasus, 1969, p. 45.
- 5 Quoted in Helmut Gernsheim (1969) *The History of Photography: From the Camera Obscura to the Beginning of the Modern Era*, New York, McGraw-Hill, p. 239.
- 6 Marcus Aurelius Root, *The Camera and the Pencil*, 1864, reprint, Pawlett, Vermont, Helios, 1971, pp. 420-1.

## Lennard J. Davis

## VISUALIZING THE DISABLED BODY

## The classical nude and the fragmented torso

From L. J. Davis (1997) 'Nude Venuses, Medusa's body, and phantom limbs: disability and visibility', in D. T. Mitchell and S. L. Snyder (eds), *The Body and Physical Difference*, Ann Arbor: University of Michigan Press.

[...]

**S**HE HAS NO ARMS or hands, although the stump of her upper right arm extends just to her breast. Her left foot has been severed, and her face is badly scarred, with her nose torn at the tip, and her lower lip gouged out. Fortunately, her facial mutilations have been treated and are barely visible, except for minor scarring visible only up close. The big toe of her right foot has been cut off, and her torso is covered with scars, including a particularly large one between her shoulder blades, one that covers her shoulder, and one covering the tip of her breast where her left nipple was torn out.

Yet she is considered one of the most beautiful female figures in the world. When the romantic poet Heinrich Heine saw her he called her 'Notre-Dame de la Beauté.' He was referring to the Venus de Milo.

Consider too Pam Herbert, a quadriplegic with muscular dystrophy, writing her memoir by pressing her tongue on a computer keyboard, who describes herself at twenty-eight years old:

I weigh about 130 pounds; I'm about four feet tall. It's pretty hard to get an accurate measurement on me because both of my knees are permanently bent and my spine is curved, so 4' is an estimate. I wear size two tennis shoes and strong glasses; my hair is dishwater blonde and shoulder length.

(Browne *et al.* (eds) 1985, 147)

[...]

I take the liberty of bringing these two women's bodies together. Both have disabilities. The statue is considered the ideal of Western beauty and eroticism, although it is armless



and disfigured. The living woman might be considered by many 'normal' people to be physically repulsive, and certainly without erotic allure. The question I wish to ask is why does the impairment of the Venus de Milo in no way prevent 'normal' people from considering her beauty, while Pam Herbert's disability becomes the focal point for horror and pity?

In asking this question, I am really raising a complex issue. On a social level, the question has to do with how people with disabilities are seen and why, by and large, they are de-eroticized. If, as I mentioned earlier, disability is a cultural phenomenon rooted in the senses, one needs to inquire how a disability occupies a field of vision, of touch, of hearing; and how that disruption or distress in the sensory field translates into psychodynamic representations. This is more a question about the nature of the subject than about the qualities of the object, more about the observer than the observed. The 'problem' of the disabled has been put at the feet of people with disabilities for too long.

Normalcy, rather than being a degree zero of existence, is more accurately a location of bio-power, as Foucault would use the term. The 'normal' person (clinging to that title) has a network of traditional ableist assumptions and social supports that empowers the gaze and interaction. The person with disabilities, until fairly recently, had only his or her own individual force or will. Classically, the encounter has been, and remains, an uneven one. Anne Finger describes it in strikingly visual terms by relating an imagined meeting between Rosa Luxemburg and Antonio Gramsci, each of whom was a person with disabilities, although Rosa is given the temporary power of the abled gaze:

We can measure Rosa's startled reaction as she glimpses him the misshapen dwarf limping towards her in a second-hand black suit so worn that the cuffs are frayed and the fabric is turning green with age, her eye immediately drawn to this disruption in the visual field: the unconscious flinch; the realization that she is staring at him, and the too-rapid turning away of the head. And then, the moment after, the consciousness that the quick aversion of the gaze was as much of an insult as the stare, so she turns her head back but tries to make her focus general, not a sharp gape. Comrade Rosa, would you have felt a slight flicker of embarrassment? shame? revulsion? dread? of a feeling that can have no name?

In this encounter what is suppressed, at least in this moment, is the fact that Rosa Luxemburg herself is physically impaired (she walked with a limp for her whole life). The emphasis then shifts from the cultural norm to the deviation; Luxemburg, now the gazing subject, places herself in the empowered position of the norm, even if that position is not warranted.

Disability, in this and other encounters, is a disruption in the visual, auditory, or perceptual field as it relates to the power of the gaze. As such, the disruption, the rebellion of the visual, must be regulated, rationalized, contained. Why the modern binary – normal/abnormal – must be maintained is a complex question. But we can begin by accounting for the desire to split bodies into two immutable categories: whole and incomplete, abled and disabled, normal and abnormal, functional and dysfunctional.

In the most general sense, cultures perform an act of splitting (*Spaltung*, to use Freud's term). These violent cleavages of consciousness are as primitive as our thought processes can be. The young infant splits the good parent from the bad parent – although

the parent is the same entity. When the child is satisfied by the parent, the parent is bad. As a child grows out of the earliest phases of infancy, she learns to combine those split images into a single parent who is sometimes good and sometimes not. The residue of *Spaltung* remains in our inner life, personal and collective, to produce monsters and evil stepmothers as well as noble princes and fairy godmothers.

In this same primitive vein, culture tends to split bodies into good and bad parts. Some cultural norms are considered good and others bad. Everyone is familiar with the 'bad' body: too short or tall, too fat or thin, not masculine or feminine enough, not enough or too much hair on the head or other parts of the body, penis or breasts too small or (excepting the penis) too big. Furthermore, each individual assigns good and bad labels to body parts – good: hair, face, lips, eyes, hands; bad: sexual organs, excretory organs, underarms.

The psychological explanation may provide a reason why it is imperative for society at large to engage in *Spaltung*. The divisions whole/incomplete, able/disabled neatly cover up the frightening writing on the wall that reminds the hallucinated whole being that its wholeness is in fact a hallucination, a developmental fiction. *Spaltung* creates the absolute categories of abled and disabled, with concomitant defenses against the repressed fragmented body.

But a psychological explanation alone is finally insufficient. Historical specificity makes us understand that disability is a social process with an origin. So, why certain disabilities are labeled negatively while others have a less negative connotation is a question tied to complex social forces (some of which I have tried to lay out in earlier chapters). It is fair to say, in general, that disabilities would be most dysfunctional in postindustrial countries, where the ability to perambulate or manipulate is so concretely tied to productivity, which in itself is tied to production. The body of the average worker, as we have seen, becomes the new measure of man and woman. Michael Oliver, citing Ryan and Thomas (1980), notes:

With the rise of the factory...[during industrialization] many more disabled people were excluded from the production process for 'The speed of factory work, the enforced discipline, the time-keeping and production norms – all these were a highly unfavourable change from the slower, more self-determined and flexible methods of work into which many handicapped people had been integrated'.

(1990, 27)

Both industrial production and the concomitant standardization of the human body have had a profound impact on how we split up bodies.

We tend to group impairments into the categories either of 'disabling' (bad) or just 'limiting' (good). For example, wearing a hearing aid is seen as much more disabling than wearing glasses, although both serve to amplify a deficient sense. But loss of hearing is associated with aging in a way that nearsightedness is not. Breast removal is seen as an impairment of femininity and sexuality, whereas the removal of a foreskin is not seen as a diminution of masculinity. The coding of body parts and the importance attached to their selective function or dysfunction is part of a much larger system of signs and meanings in society, and is constructed as such.

'Splitting' may help us to understand one way in which disability is seen as part of a system in which value is attributed to body parts. The disabling of the body part or

function is then part of a removal of value. The gradations of value are socially determined, but what is striking is the way that rather than being incremental or graduated, the assignment of the term 'disabled', and the consequent devaluation are total. That is, the concept of disabled seems to be an absolute rather than a gradient one. One is either disabled or not. Value is tied to the ability to earn money. If one's body is productive, it is not disabled. People with disabilities continue to earn less than 'normal' people and, even after the passage of the Americans with Disabilities Act, 69 percent of Americans with disabilities were unemployed (*New York Times*, 27 October 1994, A:22). Women and men with disabilities are seen as less attractive, less able to marry and be involved in domestic production.

The ideology of the assigning of value to the body goes back to preindustrial times. Myths of beauty and ugliness have laid the foundations for normalcy. In particular, the Venus myth is one that is dialectically linked to another. This embodiment of beauty and desire is tied to the story of the embodiment of ugliness and repulsion. So the appropriate mythological character to compare the armless Venus with is Medusa. Medusa was once a beautiful sea goddess who, because she had sexual intercourse with Poseidon at one of Athene's temples, was turned by Athene into a winged monster with glaring eyes, huge teeth, protruding tongue, brazen claws, and writhing snakes for hair. Her hideous appearance has the power to turn people into stone, and Athene eventually completes her revenge by having Perseus kill Medusa. He finds Medusa by stealing the one eye and one tooth shared by the Graiae until they agree to help him. Perseus then kills Medusa by decapitating her while looking into his brightly polished shield which neutralizes the power of her appearance: he then puts her head into a magic wallet that shields onlookers from its effects. When Athene receives the booty, she uses Medusa's head and skin to fashion her own shield.

In the Venus tradition, Medusa is a poignant double. She is the necessary counter in the dialectic of beauty and ugliness, desire and repulsion, wholeness and fragmentation. Medusa is the disabled woman to Venus's perfect body. The story is a kind of allegory of a 'normal' person's intersection with the disabled body. This intersection is marked by the power of the visual. The 'normal' person sees the disabled person and is turned to stone, in some sense, by the visual interaction. In this moment, the normal person suddenly feels self-conscious, rigid, unable to look but equally drawn to look. The visual field becomes problematic, dangerous, treacherous. The disability becomes a power derived from its otherness, its monstrosity, in the eyes of the 'normal' person. The disability must be decapitated and then contained in a variety of magic wallets. Rationality, for which Athene stands, is one of the devices for containing, controlling, and reforming the disabled body so that it no longer has the power to terrorize. And the issue of mutilation comes up as well because the disabled body is always the reminder of the whole body about to come apart at the seams. It provides a vision of, a caution about, the body as a construct held together willfully, always threatening to become its individual parts – cells, organs, limbs, perceptions – like the fragmented, shared eye and tooth that Perseus ransoms back to the Graiae.

In order to understand better how normalcy is bred into ways of viewing the body, it might be productive to think about the body as it appears in art, photography, and the other visual media. There has been a powerful tradition in Western art of representing the body in a way that serves to solidify, rather early on in history, a preferred mode of envisioning the body. This tradition, identified by Kenneth Clark, has been most clearly articulated in the 'nude'. The nude, as Clark makes clear, is not a literal depiction of the human body but rather a set of conventions about the body: 'the nude is not the subject

of art, but a form of art' (1956, 5). Or, as he says, the nude is 'the body re-formed' (ibid., 3). If that is the case, then the nude is really part of the development of a set of idealized conventions about the way the body is supposed to look.

While some nudes may be male, when people talk about 'the nude' they most often mean the female nude. Lynda Nead, in a feminist correction of Clark, points out that 'more than any other subject, the female nude connotes "Art"' (1992, 1). And in that tradition, the Venus becomes the vortex for thinking about the female body. The Venus is, rather than a subject, a masculine way of fashioning the female body, or of remaking it into a conceptual whole.

I emphasize the word 'whole', because the irony of the Venus tradition is that virtually no Venuses have been preserved intact from antiquity. Indeed, one of the reasons for the popularity of the Venus de Milo was that from the time it was discovered in 1820 until 1893 when Furtwangler's scholarship revealed otherwise, the statue was, according to Clark, 'believed to be an original of the fifth century and the only free-standing figure of a woman that had come down from the great period with the advantage of a head' (1964, 89).

The mutilation of the statues is made more ironic by the fact that their headless and armless state is usually overlooked by art historians – barely referred to at all by Clark, for example, in the entirety of his book. The art historian does not see the absence and so fills the absence with a presence. This compensation leads us to understand that in the discourse of the nude, one is dealing not simply with art history but with the reception of disability, the way that the 'normal' observer compensates or defends against the presence of difference.

[...]

This amnesia, this looking away from incompleteness, an averting of the attention, a sigh, is the tip of a defensive mechanism that allows the art historian still to see the statue as an object of desire. So the critic's aim is to restore the damage, bring back the limbs, through an act of imagination. This phenomenon is not unlike the experience of 'phantom limb', the paradoxical effect that amputees experience of sensing their missing limb. In the case of the art historian, the statue is seen as complete with phantom limbs and head. The art historian does not see the lack, the presence of an impairment, but rather mentally reforms the outline of the Venus so that the historian can return the damaged woman in stone to a pristine origin of wholeness. His is an act of reformation of the visual field, a sanitizing of the disruption in perception.

This is the same act of imagination, or one might say control, that bans from the nude the representation of normal biological processes. For example, there are no pregnant Venuses, there are no paintings of Venuses who are menstruating, micturating, defecating – lactating and lacrimating being the only recognized activities of idealized women. There are no old Venuses (with the exception of a Diana by Rembrandt). One might think of a pregnant Venus as a temporarily disabled woman, and as such banned from the reconstruction of the body we call 'the nude'. Clark distinguishes between prehistoric fertility goddesses, like the Willendorf Venus, images of fertility and pregnancy, and the differently ideal Grecian versions which are never pregnant. As Nead notes (1992, 19), 'Clark alludes to this image of the female body [the Willendorf Venus] as undisciplined, out of control; it is excluded from the proper concerns of art in favour of the smooth, uninterrupted line of the Cycladic [Greek] figure.' As artists and art historians shun the fluids and changes in shape that are incompatible with the process of forming the 'regular' body, the evidentiary record of mutilated Venuses must be repressed by a similar process.



A cautionary word must be said on the decapitated and armless Venuses. While it is true that male statues equally are truncated, the incompleteness of the female statues suggests another obvious point that has been repressed for so long – violence. Did all these statues lose their arms and heads by sheer accident, were the structurally fragile head and limbs more likely to deteriorate than the torso, were there random acts of vandalism, or was a particular kind of symbolic brutality committed on these stone women? Did vandals, warriors, and adolescent males amuse themselves by committing focused acts of violence, of sexual bravado and mockery on these embodiments of desire? An armless woman is a symbol of sexual allure without the ability to resist, a headless nude captures a certain kind of male fantasy of submission without the complication of the individuality and the authority granted by a face, even an idealized one. We do not know and will probably never know what happened to these statues, although the destruction of the Parthenon figures has been documented as done by occupying soldiers. The point is that the violence against the body, the acts of hacking, mutilation and so on, have to be put in the context we have been discussing. An act of violence against a female statue is constitutively different from that against a male statue – and these are acts that can be placed in a range of terrorist acts against women during war. Such acts create disabled people, and so, in a sense, these Venuses are the disabled women of art. To forget that is again to commit acts of omission of a rather damning nature.

Of course, a statue is not a person. But as representations of women, the Venus statues carry a powerful cultural signification. The reaction to such statues, both by critics and other viewers, tells much about the way in which we consider the body both as a whole and as incomplete. One point to note is that the art historian, like Clark, tends to perform a complex double act. On the one hand, the critic sees the incomplete statue as whole, imagines the phantom limbs in order to defend against incompleteness, castration, the chaotic or 'grotesque body', as Peter Stallybrass and Allon White (1987) have, using Bakhtinian terminology, called it. On the other hand (if indeed our standard is *two hands*), the critic and the artist are constantly faced with the fragmentary nature of the body, analyzing parts, facing the gaze of the missing part that must be argued into existence.

The model for the fragmentary nature of the nude is best illustrated by the famous story of Zeuxis, as told by Pliny. When Zeuxis painted his version of Aphrodite, he constructed her from the parts of five beautiful young women of his town of Kroton. His vision of the wholeness of Aphrodite was really an assemblage of unrelated parts. Likewise, the critic in regarding the whole nude must always be speaking of parts: 'their torsos have grown so long that the distance from the breasts to the division of the legs is three units instead of two, the pelvis is wide, the thighs are absurdly short' (Clark 1964, 91). The whole can only be known by the sum of its parts – even when those parts are missing. John Barrell has detailed the reactions of eighteenth-century men to the Venus dei Medici, and noted how they tended to examine every detail of the statue. Edward Wright, for example, tells observers to 'strictly examine every part' and a typical account read thus:

One might very well insist on the beauty of the breasts. ... They are small, distinct, and delicate to the highest degree; with an idea of softness. ... And yet with all that softness, they have a firmness too. ... From her breasts, her shape begins to diminish gradually down to her waist; ... Her legs are neat and slender; the small of them is finely rounded; and her feet are little, white, and pretty. (Barrell 1989, 127)

Another carped:

The head is something too little for the Body, especially for the Hips and Thighs: the Fingers excessively long and taper, and no match for the Knuckles, except for the little Finger of the Right-Hand.

(ibid.)

These analyses perform a juggling act between the fragmentation of the body and its reunification into a hallucinated erotic whole. In imagining the broken statues, the critic must mentally replace the arms and the head, then criticize any other restoration, as does Clark in attacking the reconstruction of the Venus of Arles: 'the sculptor Girardon ... not only added the arms and changed the angle of the head, but smoothed down the whole body, since the King was offended by the sight of ribs and muscles' (Clark 1964, 87). The point here is that the attempt of the critic to keep the body in some systematic whole is really based on a repression of the fragmentary nature of the body.

One might also want to recall that for the Greeks these statues, while certainly works of art, were also to be venerated, since they were representations of deities. For the Greeks, Aphrodite was not a myth; she was a goddess whose domain was desire. It somehow seems appropriate that the ritualistic or reverential attitude toward these statues, pointed out by Walter Benjamin (1969, 223–4), indeed their very appearance in stone (which Page Dubois sees as a cultic representation of the bones of the female spirits), has been reproduced in the attitude of that most secular of worshippers, the art critic. For the Venus has a double function: she is both a physical and a spiritual incarnation of desire. In that double sense, the critic must emphasize her spiritual existence by going beyond her physical incarnation in fallible stone, and her mutilations, to the essential body, the body of Desire, the body of the Other.

We can put this paradox in Lacanian terms. For Lacan, the most primitive, the earliest experience of the body is actually of the fragmented body (*corps morcelé*).<sup>1</sup> The infant experiences his or her body as separate parts or pieces, as 'turbulent movements' (Lacan 1977, 2). For the infant, rather than a whole, the body is an assemblage of arms, legs, surfaces. These representations/images of fragmented body parts Lacan calls *imagos* because they are 'constituted for the "instincts" themselves':

Among these *imagos* are some that represent the elective vectors of aggressive intentions, which they provide with an efficacy that might be called magical. These are the images of castration, mutilation, dismemberment, dislocation, evisceration, devouring, bursting open of the body, in short, the *imagos* that I have grouped together under the apparently structural term of *imagos of the fragmented body*.

(ibid., 11)

The process that builds a self involves the enforced unifying of these fragments through the hallucination of a whole body, 'a Gestalt, that is to say, in an exteriority' (ibid., 2), as Lacan has pointed out. The process 'extends from a fragmented body-image to a form of its totality ... and, lastly, to the assumption of the armour of an alienating identity' (ibid., 4). When the child points to an image in the mirror – at that stage Lacan calls 'the mirror phase' – the child recognizes (actually misrecognizes) that unified image as his or her

self. That identification is really the donning of an identity, an 'armor' against the chaotic or fragmentary body.

In this sense, the disabled body is a direct *imago* of the repressed fragmented body. The disabled body causes a kind of hallucination of the mirror phase gone wrong. The subject looks at the disabled body and has a moment of cognitive dissonance, or should we say a moment of cognitive resonance with the earlier state of fragmentation. Rather than seeing the whole body in the mirror, the subject sees the repressed fragmented body; rather than seeing the object of desire, as controlled by the Other, the subject sees the true self of the fragmented body. For Lacan, because the child first saw its body as a 'collection of discrete part-objects, adults can never perceive their bodies in a complete fashion in later life' (Ragland-Sullivan 1987, 21). This repressed truth of self-perception revolves around a prohibited central, specular moment – of seeing the disabled body – in which the 'normal' person views the Medusa image, in which the Venus-nude cannot be sustained as a viable armor. In Lacanian terms, the *moi* is threatened with a breaking-up, literally, of its structure, is threatened with a reminder of its incompleteness. In a specular, face-to-face moment, the ego is involved in what J. B. Pontalis calls 'death work', which involves the 'fundamental process of unbinding [of the ego], of fragmentation, of breaking up, of separation, of bursting' (cited in Ragland-Sullivan 1987, 70). Thus the specular moment between the armored, unified self and its repressed double – the fragmented body – is characterized by a kind of death-work, repetition compulsion in which the unified self continuously sees itself undone – castrated, mutilated, perforated, made partial. In this context, it is worth noting that the Venus tradition involves castration at its very origin. Aphrodite is said to have been born from the foam of Uranus's genitals which Cronus threw into the sea after castrating his father (Graves 1957, 49). The dynamic is clear. Male mutilation is mitigated by the creation of the desirable female body. The disabled body is corrected by the wholeness of the constructed body of the nude. But, as has been noted, the emphasis on wholeness never entirely erases the foundation of the Venus tradition in the idea of mutilation, fragmented bodies, decapitation, amputation.

If we follow these terms, the disabled Venus serves as an unwanted reminder that the 'real' body, the 'normal body', the observer's body, is in fact always already a 'fragmented body'. The linking together of all the disparate bodily sensations and locations is an act of will, a hallucination that always threatens to fall apart. The mutilated Venus and the disabled person, particularly the disabled person who is missing limbs or body parts, will become in fantasy visual echoes of the primal fragmented body – a signifier of castration and lack of wholeness. Missing senses, blindness, deafness, aphasia, in that sense, will point to missing bodily parts or functions. The art historian in essence dons or retains the armor of identity, needs the armor as does Perseus who must see Medusa through the polished shield. The art historian's defense is that mirror-like shield that conjures wholeness through a misrecognition linking the parts into a whole.

What this analysis tells us is that the 'disabled body' belongs to no one, just as the normal body, or even the 'phallus' belongs to no one. Even a person who is missing a limb, or is physically 'different', still has to put on, assume, the disabled body and identify with it. The disabled body, far from being the body of some small group of 'victims', is an entity from the earliest of childhood instincts, a body that is common to all humans, as Lacan would have it. The 'normal' body is actually the body we develop later. It is in effect a Gestalt – and therefore in the realm of what Lacan calls the Imaginary. The realm of the 'Real' in Lacanian terms is where the fragmented body is found because it is the body that

precedes the ruse of identity and wholeness. Artists often paint this vision, and it often appears in dreams 'in the form of disjointed limbs, or of those organs represented in exoscopy [...] the very same that the visionary Hieronymus Bosch has fixed for all time' (Lacan 1977, 4).

In understanding this point, we can perhaps see how the issue of disability transcends the rather narrow category to which it has been confined. Just as, I claim, we readers are all deaf, participating in a deafened moment, likewise, we all – first and foremost – have fragmented bodies. It is in tracing our tactical and self-constructing (deluding) journeys away from that originary self that we come to conceive and construct that phantom goddess of wholeness, normalcy, and unity – the nude.

One might even add that the element of repulsion and fear associated with fragmentation and disability may in fact come from the very act of repressing the primal fragmentariness of the body. As Freud wrote, 'the uncanny is in reality nothing new or foreign, but something familiar and old-established in the mind that has been estranged only [in] the process of repression' (Freud 1963, 47). The feelings of repulsion associated with the uncanny, *das Unheimlich*, the unfamiliar, are not unlike the emotions of the 'normal' when they are visualizing the disabled. The key to the idea of the uncanny is in its relation to the normal. *Heimlich* is a word associated with the home, with familiarity – and with the comfortable predictability of the home. The disabled body is seen as *unheimlich* because it is the familiar gone wrong. Disability is seen as something that does not belong at home, not to be associated with the home. Freud notes that the terror or repulsion of the uncanny is ambivalent, is found precisely in its relation to and yet deviance from the familiar. That the uncanny can be related to disability is made clear when Freud cites specifically 'dis-membered limbs, a severed head, a hand cut off at the wrist' as *unheimlich* (ibid., 49). What is uncanny about dismemberment seems to be the familiarity of the body part that is then made *unheimlich* by its severing. As Freud wrote, 'the *unheimlich* is what was once *heimlich*, homelike, familiar; the prefix "un" is the token of repression' (ibid., 51).

But in this equation I think Freud is actually missing the earlier repression of the inherently fragmentary nature of the original body *imago*. The homeyness of the body, its familiarity as whole, complete, contained, is based on a dynamic act of repression. Freud is assuming that the whole body is an a priori given, as he had done with the concept of the ego. But as Lacan has shown more than adequately, the ego is a multifaceted structure to be understood in its philosophical complexity. Likewise the ground of the body, its materiality given by Freud, needs a re-analysis. The route of disability studies allows for this revisioning. In this process, the *heimlich* body becomes the *unheimlich* body, and the fragment, the disabled parts, can be seen as the originary, familiar body made unfamiliar by repression. Dominant culture has an investment in seeing the disabled, therefore, as uncanny, as something found outside the home, unfamiliar, while in fact where is the disabled body found if not at home?

[...]

We can return, again, to the Venus, neatly enclosed in its marmoreal skin and thus representing an unperforated body, despite the mutilations that have disfigured it. Most of the visual arts eschew disability and disabled images, except perhaps for the romanticized images around madness. The work of Mary Duffy, a contemporary artist without arms, provides one notable exception to this reluctance to think of Venuses without arms as the equivalent of Medusa. In the first plate of a photographic series entitled *Cutting the*



*Ties that Bind*, we see a standing figure draped entirely in white cloth against a dark background so that the figure beneath the drapery is not visible. In the second plate, the drapery is partially removed so that it covers mainly the thighs and legs revealing us a female body, the artist's, without arms. The figure is clearly meant to reproduce the Venus de Milo in the flesh. The third picture in the series shows the figure stepping away from the drapery with a triumphant smile. The work serves to show how the female disabled body can be reappropriated by the artist herself. Duffy writes:

By confronting people with my naked body, with its softness, its roundness and its threat I wanted to take control, redress the balance in which media representations of disabled women [are] usually tragic, always pathetic. I wanted to hold up a mirror to all those people who had stripped me bare previously ... the general public with naked stares, and more especially the medical profession.

(cited in Nead 1992, 78)

The Medusa gaze is rerouted so that it comes not from the object of horror, the monstrous woman, but from the gaze of the normal observer. It is the 'normal' gaze that is seen as naked, as dangerous. And unlike Perseus slaying Medusa by holding up a mirror, it is now the 'object of horror' who holds the mirror up to the 'normal' observer.

This reappropriation of the normal gaze was further carried out by the photographer Jo Spence. Recognizing the inherent and unstated pose of normalcy imposed by the camera and by the photographic session, Spence revisioned her photography to be capable of representing the nude model as a person with disabilities. Her work, detailed in many shows and in her book *Putting Myself in the Picture: A Political, Personal, and Photographic Autobiography* (1986), partly focuses on her mastectomy. Spence links this operative and post-operative process to an understanding and participating gaze that seeks to touch, not recoil from, bodily changes. In addition to the simple fact of the partial mastectomy, Spence includes in her work photographs and texts that question assumptions about age and beauty. Her body is middle-aged, irregular, and defies the canons of ideal feminine beauty. Her work is involved with 'explaining my experience as a patient and the contradictions between ways in which the medical profession controls women's bodies and the "imaginary bodies" we inhabit as women' (Spence 1986, 156).

The visual arts have done a magnificent job of centralizing normalcy and of marginalizing different bodies. As we have seen, initially the impulse came from a move to idealize the body and make up the perfect body out of perfect sub-units. Then with the rise of hegemonic normalcy, the impulse veered from ideal to normalizing representations. Either of these paradigms pushes the ordinary body, the abnormal body, out of the picture. Photographer David Hevey has written about the paucity of images of the disabled in photographic anthologies. He concludes that 'disabled people are represented but almost exclusively as symbols of "otherness" placed within equations which take their non-integration as a natural by-product of their impairment' (Hevey 1992, 54). When he looked for any images of disabled people, he found either medical photographs in which the 'patients' appear 'passive and stiff and "done to," the images bear a bizarre resemblance to colonial pictures where "the blacks" stand frozen and curious, while "whitey" lounges confident and sure' (ibid., 53), or images like those of Diane Arbus that show the disabled as 'grotesque'. Ungrotesque, routine pictures of disabled people in advertising, 'art'

photography, films and so on are hard to find. With the same regularity that bodies of color were kept out of the mainstream (and even the avant-garde) media in the years before the civil rights movement, so too are disabled bodies disqualified from representing universality.

One of the ways that visual images of the disabled have been appropriated into the modernist and postmodernist aesthetic is through the concept of the 'grotesque'. The word was used by Bakhtin to describe the aesthetic of the Middle Ages, which reveled in presenting the body in its nonidealized form. The grotesque, for Bakhtin, was associated with the common people, with a culture that periodically turned the established order upside down through the carnival and the carnivalesque. Gigantic features, scatological references, inverse political power were all hallmarks of the grotesque – an aesthetic that ultimately was displaced by humanistic notions of order, regularity, and of course power during the Renaissance.

While the term 'grotesque' has had a history of being associated with this counter-hegemonic notion of people's aesthetics and the inherent power of the masses, what the term has failed to liberate is the notion of actual bodies as grotesque. There is a thin line between the grotesque and the disabled. Hevey examines, for example, how critics have received Diane Arbus's photographs of the disabled. Susan Sontag writes that Arbus's 'work shows people who are pathetic, pitiable, as well as repulsive, but it does not arouse any compassionate feelings'. Later she adds, 'Do they see themselves, the viewer wonders, like that? Do they know how grotesque they are?' (Hevey 1992, 57). The grotesque, in this sense, is seen as a concept without the redeeming sense of class rebellion in Bakhtin's formulation. Here it is simply the ugly, what makes us wince, look away, feel pity – more allied with its dictionary definition of 'hideous', 'monstrous', 'deformed', 'gnarled'. Though artists and writers may use the grotesque, they rarely write about that state from the subject position of the disabled. The grotesque, as with disability in general, is used as a metaphor for otherness, solitude, tragedy, bitterness, alterity. The grotesque is defined in this sense as a disturbance in the normal visual field, not as a set of characteristics through which a fully constituted subject views the world. One problem with terms like 'disability' and 'the grotesque' is that they disempower the object of observation. The body is seen through a set of cultural default settings arrived at by the wholesale adoption of ableist cultural values.

In no area is this set of cultural values related to the visual more compelling than in film. Film is a medium whose main goal, one might say, is the construction and reconstruction of the body. The abnormal body plays a major role in the defining of the normal body, and so one might assume that film would be concerned with the issue of disability. Martin F. Norden has recently published the most complete account to date of disability in the film industry, *The Cinema of Isolation: A History of Physical Disability in the Movies* (1994). The remarkable thing about this book is the staggering number of films that have been made about the issue of disability. When I first began to consider the issue of how the disabled body is depicted in film, I came up with my own list of twenty or so films, and I thought that I would mention the occasional way in which the disabled were included in a film industry that mainly focused on the normal body. In other words, I thought I was dealing with a parallel situation to, say, the depiction in cinema of African-Americans – a marginalized group who rarely appeared in Hollywood films until recently and, if they did, played mainly minor characters or supernumerary roles.

But the facts about the depiction of disability are quite the opposite of what I had thought. The film industry has been obsessed with the depiction of the disabled body

from the earliest silent films. The blind, the deaf, the physically disabled were singled out from the very beginning of cinema. Norden finds movies about disability from as early as 1898, and the earliest one-reeler silent films of the period 1902–09 include such representative titles as *Deaf Mute Girl Reciting 'Star Spangled Banner'* (1902), *Deaf Mutes' Ball* (1907), *The Invalid's Adventure* (1907), *The Legless Runner* (1907), *The One-legged Man* (1908), *The Hunchback Brings Luck* (1908), *The Little Cripple* (1908), *A Blind Woman's Story* (1908), *The Blind Boy* (1908), *The Cripple's Marriage* (1909), *The Electrified Hunchback* (1909), to name only a few. Later multi-reeler silent films routinely told the stories of the disabled. D.W. Griffith made a few disability-related films, culminating his efforts in the famous *Orphans of the Storm* (1921) in which two hapless sisters (Lilian and Dorothy Gish), one of whom is blind, try to survive on the streets of Paris. But the noteworthy fact about this film is not merely its disability-related content but that Griffith's version was the fifth filmic remake of the 1874 French play *Les Deux Orphelines*. With film only in its infancy, this particular disability story had been told afresh approximately once every four years from 1900 through 1921.

[...]

The point that Norden's book made clear to me is that the cinematic experience, far from including disabilities in an ancillary way, is powerfully arranged around the management and deployment of disabled and 'normal' bodies. Disabled stories, stories of people's bodies or minds going wrong, make compelling tales. But more than that, as with any obsession, there has to be an underlying reason why films are drawn obsessively to the topic of disability. In order to understand why film makers routinely incorporate disabled bodies into films, it might be relevant to ask what else routinely appears in films. The answer is more than obvious: sex and violence. While it is fashionable for liberals to decry the violent content of films, and conservatives to decry the sexual, it might be more accurate for them to think of films as vehicles for the delivery of images of the body in extreme circumstances. The inherent voyeuristic nature of film makes it a commodity that works by visualizing for viewers the body in attitudes that it is otherwise difficult to see. Few people in quotidian life see couples making love on a regular basis, but that is a routine experience to filmgoers. Likewise, most middle-class citizens rarely see dead, mutilated, bleeding bodies, but the average viewer has no shortage of such images.

So films, one could say, are a streamlined delivery system that produces dramatically these bodily images in exchange for a sum of money (as the Coca-Cola industry can be said to be a system for delivering caffeine and sugar, or as cigarettes are really timerelease delivery systems for nicotine administration). As novels were seen to be mechanisms for the cultural production of normativity, so films have to be seen in the same regard, with the addition that the phantasm of the body is particularly subject to these normativizing activities.

Films enforce the normal body but through a rather strange process. The normal body, which had been invented in the nineteenth century as a departure from the ideal body, shifted over to a new concept – the normal ideal. This normal ideal body is now the one that we see on the screen. It is the commodified body of the eroticized male and female stars. This body is not actually the norm, but it is the fantasized, hypostatized body of commodified desire. In order to generate this body and proliferate its images, films have constantly to police and to regulate the variety of bodily differences. These

bodies are the modern equivalents of the nude Venuses, and to keep them viable, to encourage viewers to think on and obsess about them, the Medusa body has constantly to be shown, reshowed, placed, categorized, itemized, and anatomized. In short, we cannot have Sharon Stone without Linda Hunt; we cannot have Tom Cruise without Ron Kovic; we cannot have the fantasy of the erotic femme fatale's body without having the sickened, disabled, deformed person's story testifying to the universal power of the human spirit to overcome adversity. As Norden points out when films about disabled people are made, more often than not the disabled characters get cured by the end of the film. The tension between the whole and the fragmented body, between the erotic complete body, and the uncanny incomplete body, must be constantly deployed and resolved through films.

The film *Boxing Helena* provides some interesting ways of seeing these tensions worked through. In the film, Nick (Julian Sands), a surgeon, amputates the legs of Helena (Sheryl Fenn), the bitchy, sexualized woman with whom he is obsessed but who rejects his advances. He performs the amputation initially to save her life after a car accident but then goes on to amputate her arms as a way of keeping her and containing her – of rendering her helpless so he can take care of her.

A replica of the Venus de Milo decorates Nick's family mansion. The statue is used as a double symbol. In one aspect, it is an illustration of the former beauty of the dismembered Helena, its marmoreal glaze representing the still and ever beautiful Helena. But, it also represents idealized female beauty (in its wholeness) and is associated with Nick's mother, whose blatant sexuality was used to humiliate her son when he was young. The filmmaker wants us to see the dismemberment partly as an act of revenge against the castrating mother, whose legacy shows up in Nick's premature ejaculation syndrome.

The salient point is that when Helena's limbs are amputated, that is, [...] becomes the Venus, she becomes desexualized – merely idealized. Whereas before her dismemberment she is a fantasy of ravenous female sexuality unencumbered by the traditional female values of caring, nurturing, or sweetness, after her dismemberment, she loses her sexuality. In a typical ableist moment, she says after her amputation: 'How can I ever look at myself and think of myself as worthwhile?' Her worth in this case is her sexuality, which is lost. Her disability is actually created and owned by Nick.

In another instance of bourgeois, ableist celebration of the discursivity of sexuality, both she and Nick regain their sexual function (thus becoming undised) through eros. He buries his head in her lap, which of course despite all the mutilation leads us to realize that everything that is conventionally part of female sexuality is still intact – and in a moment of his fantasy she comes alive sexually, a trope that is equated with her suddenly having arms and legs. She caresses his head, walks, and whispers the answer to Freud's question, 'What do women want?' telling him how women want to be made love to. Her whispered erotic litany begins to release the bad dream of disability. But it is only he, as the owner of her body, who can fully accomplish this release, and so she begs him: 'I want to feel like a woman. Give me back what you've taken away.' The supplement that has been missing is returned like the Lacanian phallus by Nick in a very Lacanian moment. As Helena watches through a semi-opened door, Nick makes love to another woman (who in the credits is called 'fantasy woman'), and we see he is no longer sexually dysfunctional. Helena's self is reconstituted through a triangularization of desire in which her mirror image of the whole body is re-created by viewing the desire of the



Other. The other woman represents her wholeness, and the entire issue of functionality is blurred into sexual ability.

As trendy as the director Jennifer Lynch is trying to be, she cannot separate herself from traditional views of people with disabilities. Never does the surgeon have to catheterize Helena or change her tampon; more tellingly, Helena is never allowed to be both naked and disabled – as her body was so openly revealed before her amputations. Her double-amputated body is partly held up as an object of beauty, but not of sexuality – and therefore it can never be seen naked as she had been revealed to the camera's gaze before the operations. Unlike Mary Duffy or Jo Spence, Lynch cannot allow herself to show us the naked, disabled body. This would be too great a primal-scene moment, in which the true nakedness of disability, its connection with the nakedness of the unwhole fragmented body, would be unavoidable and unable to be repressed.

The film ends with the revelation that the entire narrative has all been Nick's dream. Helena was hit by a car, but in actuality she was taken to hospital, and at the end of the film she remains physically intact. Disability is just a bad dream, as she herself had cried out when she first discovered she had had her legs amputated. She is cured.

The film returns to the whole, untarnished body because that is always seen as the norm. In general, when the body is mentioned in literature or depicted in drama and film, it is always already thought of as whole, entire, complete, and ideal. In literature, central characters of novels are imaged as normal unless specific instruction is given to alter that norm; where a disability is present, the literary work will focus on the disability as a problem. Rare indeed is a novel, play, or film that introduces a disabled character whose disability is not the central focus of the work. More often, the disability becomes part of a theme in which a 'normal' person becomes romantically involved with a person with a disability and proves that the disability is no obstacle to being attractive. At its most egregious, this theme is taken up in works such as W. Somerset Maugham's *Of Human Bondage*, in which the character's sexual life is cleared of problems only when the disability is removed. With an only slightly more educated view, films like *My Left Foot* confirm the character's inner worth when he attracts a wife at the end of the film. And Jennifer Lynch's *Boxing Helena* is simply part of this parade.

[...]

I have tried to show that the concept of disability is a crucial part of the very way we conceive of and live in our bodies. In art, photography, film, and other media in which the body is represented, the 'normal' body always exists in a dialectical play with the disabled body. Indeed, our representations of the body are really investigations of and defenses against the notion that the body is anything but a seamless whole, a complete, unfragmented entity. In addition to the terms of race, class, gender, sexual preference and so on – all of which are factors in the social construction of the body – the concept of disability adds a background of somatic concerns. But disability is more than a background. It is in some sense the basis on which the 'normal' body is constructed: disability defines the negative space the body must not occupy, it is the Manichean binary in contention with normality. But this dialectic is one that is enforced by a set of social conditions and is not natural in any sense. Only when disability is made visible as a compulsory term in a hegemonic process, only when the binary is exposed and the continuum acknowledged, only when the body is seen apart from its existence as an object of production or consumption – only then will normalcy cease being a term of enforcement in a somatic judicial system.

## Note

- 1 The term *corps morcelé* is a bit more vivid than 'fragmented body', the now-standard translation of the term into English. *Morceler* is defined as 'to divide up into pieces'. It more actively carries the concept of chopping, cutting, or hacking. Thus the *corps morcelé* might more accurately be called 'the cut-up body'. However, I will retain the standard usage, for the sake of uniformity.

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## Carlos Novas and Nikolas Rose

### GENETIC RISK AND THE BIRTH OF THE SOMATIC INDIVIDUAL

From C. Novas and N. Rose (2000) 'Genetic risk and the birth of the somatic individual', *Economy and Society*, 29: 485-513.

[...]

**T**HE RISE OF THE PERSON genetically at risk is one aspect of a wider change in the vision of life itself – a new 'molecular optics'. Life is now imagined, investigated, explained, and intervened upon at a molecular level – in terms of the molecular structure of bodily components, the molecular processes of life functions, and the molecular properties of pharmaceutical products. Of course, geneticists still gather information on family histories. But increasingly this gross level of data is only a stepping-stone in the attempt to construct linkage maps which can then be the basis of DNA sequencing and gene hunting which will identify the exact chromosomal location and sequence of the mutated gene in question.<sup>1</sup> We can see the molecular optic at work when heredity is visualized in terms of the sequences of bases on the human genome and when illnesses or susceptibilities are identified in terms of mutations at particular locations on a specific chromosome. For example, one condition involving fronto-temporal Dementia and Parkinsonism is known as FTDP-17 because it is linked to a number of mutations in a specific region of chromosome 17. Increased susceptibility to breast cancer has been linked to the mutations known as BRCA1 and BRCA2 on chromosome 13. Researchers have tried to link variations in personality such as novelty seeking, or psychiatric disorders such as manic depression, with the synthesis or non-synthesis of particular proteins or the characteristics of particular neuronal transmitters or neural receptor sites – chromosome 11 being a particular favourite.<sup>2</sup> As the body becomes the subject of a molecular gaze, life is recast as a series of processes that can be accounted for and potentially re-engineered at the molecular level.

Most generally we will suggest that the birth of the individual 'genetically at risk' has to be understood as one dimension of a wider mutation in personhood that we term 'somatic individuality' – in which new and direct relations are established between body and self. New biomedical languages of description and judgement – high blood pressure,



abnormal heart rhythm, raised blood cholesterol and the like – have moved from the esoteric discourse of science to the lay expertise of citizens. Genetic ideas of personhood are already beginning to infuse the languages of somatic individualization, inscribing an indelible genetic truth into the heart of corporeal existence [cf. Kenen 1994]. Like earlier languages – that of intelligence, or that of 'hormones' – these genetic languages render visible to others and to oneself aspects of human individuality that go beyond 'experience', not only making sense of it in new ways, but actually reorganizing it in a new way and according to new values about who we are, what we must do, and what we can hope for.

New genetic languages and techniques thus come into an association with all the other shifts that are assembling somatic individuality, with the norms of enterprising, self-actualizing, responsible personhood that characterize 'advanced liberal' societies, and with the ethics of health and illness that play such a key role in their production and organization.

[...]

### Somatic individuality

A number of authors have suggested that we are witnessing a whole-scale geneticization of identity with the consequent reduction of the human subject to a mere expression of their genetic complement (Dreyfuss and Nelkin 1992; Lippman 1991, 1992). While these authors accept that genes play a role in all sorts of illnesses, in interaction with one another and with social, biographical psychological and environmental factors, they claim that 'geneticization' is a determinism which asserts that genes 'cause' disorders. They argue that these genetic narratives of health and disease orient the ways in which problems are defined, viewed and managed within society. They suggest that this legitimates funding and support for the projects of the gene mappers, and hence defines more and more problems of health and disease as 'genetic disorders'. Geneticization is seen as an individualizing tactic that redirects scarce resources away from social solutions to social problems, and represents a threat to doctrines such as equal opportunities, as well as to ideas to free will, intentionality and responsibility. 'The individual affixed with a genetic label can be isolated from the context in which s/he became sick ... The individual, not society, is seen to require change; social problems improperly become individual pathologies' (Lippman 1992: 1472–3). Hence the application of genetic knowledge in diagnosis, assessment and treatment is associated – wittingly or unwittingly – with strategies for the subjection and control of individuals and groups.

These arguments make some significant points, but taken as a whole we find them misleading.

The geneticization argument implies that to ascribe genetic identity to individuals or groups is to objectify them, hence denying something essential to human subjectivity. But to make human individuality the object of positive knowledge is not 'subjection' in the sense of domination and the suppression of freedom – it is the *creation* of subjects that is at stake here. Today, as at the birth of clinical medicine, the sick person bears their illness within their corporeality and vitality – it is the body itself that has become ill. But this somaticization of illness did not, in fact, mandate the eternal passivity of the patient. In fact, clinical medicine, increasingly over the last half of the twentieth century, constituted the patient as an 'active' subject – one who must play their part in the game of cure

(Armstrong 1984; Arney and Bergen 1984). While not denying that illness was inscribed in the body, medical practice required the patient to offer up their voice in the diagnostic process in order to permit the disease itself to be identified, to commit themselves to the practice of the cure as part of a therapeutic alliance, and to conduct themselves prudently prior to illness, in the light of information about risks to health. The same is true of the role of contemporary medical genetics in the fabrication of the person genetically at risk. The patient is to become skilled, prudent and active, an ally of the doctor, a proto-better. Patients at genetic risk and their families are not passive elements in the practice of cure. The studies carried out by Paul Rabinow (1999) as well as Vololona Rabeharisoa and Michel Callon (1998) have shown that such persons – the ill patients themselves, those 'asymptomatically ill' and their families – are increasingly demanding control over the practices linked to their own health, seeking multiple forms of expert and non-expert advice in devising their life strategies, and asking of medics that they act as the servants and not the masters of this process.<sup>1</sup> These persons defined by genetic disease have an investment in scientists fulfilling their promises and discovering the basis of, and the cure or treatment for, genetic conditions. Medicine, including medical genetics, notwithstanding its resolutely somatic understanding of the mechanisms of disease, has been one of the key sites for the fabrication of the contemporary self – free yet responsible, enterprising, prudent, encouraging the conduct of life in a calculative manner by acts of choice with an eye to the future and to increasing self well-being and that of the family.

Critics also tend to suggest that the new medical genetics leads to a focus upon the individual as an isolate. We disagree. Within such practices, individuals are subjectified through their location in a matrix of networks. [...] The illness or condition becomes a 'family' matter. The 'cause' of the patient's problem might be a family member in a previous generation; the diagnosis in one person has all kinds of implications not only for themselves but also for their relatives. New connections are traced in terms of the genetic threads that connected one person with another. Genetic identity is revealed and established only within a web of genetic connectedness, which is overlaid upon a web of family bonds and family memories, with their burden of mutual obligations and caring commitments, and with all the ethical dilemmas they entail. In becoming part of a genetic network, the subject genetically at risk may re-think their relation to their current family – lovers, potential and actual spouses, children, grandchildren and so forth – in terms of these issues of risk and inheritance. They may reshape their form of life – lifestyle, diet, leisure activities, alcohol, smoking – in these terms, which also reshapes their relations with those with whom they interact. They are brought into relation with novel networks of interaction – those not of 'society', but of 'community' – groups, associations, communities of those similarly at risk; groups of patients at particular hospitals or clinics; participants in trials of new therapies; subjects of documentaries and dramas on radio, television and the movies.

Further, the mutations in personhood associated with the new life sciences and bio-medical technologies of life are multiple and not simply genetic. For example, new reproductive technologies have split apart categories that were previously coterminous – birth mother, psychological mother, familial father, sperm donor, egg donor and so forth – thus transforming the relations of kinship that used to play such a fundamental role in the rhetorics and practices of identity formation (Franklin 1997; Strathern 1992, 1999). Developments in psychopharmacology have transformed the ways in which individuals

are understood, as the very features that seemed to constitute their individuals are understood, as the very features that seemed to constitute their individuality – such as personality or mood – now appear to be amenable to transformation by the use of specially engineered drugs such as Prozac (Fraser 2000; Slater 1999). New visions of personhood are coming to the fore associated with the growing interest and sophistication in brain-imaging techniques, which localize the features of the personality, affects, cognition and the like in particular regions of the brain (Beaulieu 2000; Dumit forthcoming). Practices of subjectification that operate in genetic terms – in terms of genetic forms of reasoning, explanation, prediction and treatment of human individuals, families or groups – find their place within this wider array of ways of thinking about and acting upon human individuality in 'bodily' terms. Or, to put it more positively, recent developments in the life sciences, biomedicine and biotechnology are associated with a general 'somaticization' of personhood in an array of practices and styles of thought, from techniques of bodily modification to the rise of corporealism in social and feminist theory and philosophy. This is what we mean when we speak of 'somatic individuality'.

In any event, we suggest, the geneticization of identity has to be located in a more complex field of identity practices. Advanced liberal democracies are traversed by multiple practices of identification and identity claims – in terms of nationality, culture, sexuality, religion, dietary choice, lifestyle preference and much more. Only some of these ascriptions of, and claims about, identity are biological or biomedical. Indeed, biomedical identity practices and identity claims, including those that operate in terms of genetics, find their place among a bewildering array of other identity claims and identificatory practices, sometimes taken up, by subjects or by others, in a rewriting of identity in biological terms, sometimes vehemently contested. If anything, identities are plural and multiple: one is identified as a gay man within some practices, as a Muslim within others, as a carrier for sickle cell disease within others. Even when regulatory practices utilize biological conceptions of personhood, genetic identity is rarely hegemonic. In insurance, as we shall see, genetic information is considered alongside other non-genetic aspects of personhood – medical history, habits such as smoking, risks associated with lifestyle choices and so forth. In the courtroom, a range of biological evidence is now entering, including that from brain scans, in the determination of aspects of personhood such as capacity to stand trial or responsibility – but courts have proved remarkably resistant to arguments that responsibility or intentionality at law should be re-conceptualized in terms of evidence from genetics (Rose 2000). Ideas about biological, biomedical and genetic identity will certainly infuse, interact, combine and contest with other identity claims; we doubt that they will supplant them.

[...]

## Notes

- 1 Nancy Wexler's work on genetic linkages in a community of Venezuelan families with a very high incidence of Huntington's Disease, which led to the location of its genetic basis to the short arm of chromosome 4, is an exemplar here – best described by Alice Wexler (1996).
- 2 Novelty seeking was linked to variations in the D4DR site on the short arm of chromosome 11; bipolar affective disorder was linked to specific DNA markers on

chromosome 11 in the Old Order Amish, although the correlation later proved to be false – for a popular account, see Ridley (1999).

3 For further examples, see the website of the Genetic Alliance which 'fosters a dynamic coalition of consumers and professionals to promote the interests of children, adults and families living with genetic conditions. For twelve years the Alliance has brought together support groups, consumers and health care professionals, creating partnership solutions to common concerns about access and availability of quality genetics services. Currently numbering 287 support groups and 214 consumers and professional members, the Alliance was founded in 1986 – propelled by the energy of the self help and support group movements' (<http://www.geneticalliance.org/allianceinfo.html>).

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