

BRITISH ACADEMY LECTURE

Kinds of People: Moving Targets

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I HAVE LONG BEEN INTERESTED in classifications of people, in how they affect the people classified, and how the effects on the people in turn change the classifications. Since 1983 that has led me to undertake an unending series of studies: two books, one about 1980s multiple personality and one about 1890s dissociative fugue;¹ articles about old criminology, about contemporary child abuse, and a study of the very idea of the poverty line.² There were detailed unpublished talks on genius and on suicide, plus some lectures, on-line in French, about autism and obesity.³ I coined two slogans. The first one, ‘making up people’, referred to the ways in which a new scientific classification may bring into being a new kind of person, conceived of and experienced as a way to be a person.⁴ The second,

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¹ *Rewriting the Soul: Multiple Personality and the Sciences of Memory* (Princeton, 1995). *Mad Travelers: Reflections on the Reality of Transient Mental Illnesses* (Charlottesville, VA, 1998; Cambridge, MA, 2002).

² One example of each topic: ‘Criminal behavior, degeneracy and looping’, David T. Wasserman and R. T. Wachbroit (eds.), *Genetics and Criminal Behavior* (Cambridge, 2001), pp. 141–67. ‘The Making and Molding of Child Abuse’, *Critical Inquiry*, 17 (1991), 253–88. ‘Façonner les gens : le seuil de pauvreté’, J.-P. Beaud and J.-G. Prévost (eds.), *L'ère du chiffre: Systèmes statistiques et traditions nationales* (Québec, 2000), pp. 17–36.

³ In the lectures for 2004–5 at <www.college-de-france.fr/site/phi_his>. I intend to publish some of this material in English, under the titles, ‘Where did the BMI come from?’ and ‘The many faces of Autism’.

⁴ ‘Making Up People’, T. Heller *et al.* (ed.), *Reconstructing Individualism* (Stanford, CA, 1986), pp. 222–36. This talk, given at Stanford in the fall of 1983, is reprinted in my *Historical Ontology* (Cambridge, MA, 2002), pp. 99–114.

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the ‘looping effect’, referred to the way in which a classification may interact with the people classified.⁵ Right from the start, I said that there is ‘no reason to suppose that we shall ever tell two identical stories of two different instances of making up people’.⁶ But some generalisations are possible. I shall now propose a framework within which to think about making up people and the looping effect.

Many kinds of people fit into this framework, but I shall not be concerned with every kind. This is because I am especially interested in the ways in which the social, medical and biological sciences create new classifications and new knowledge. Many of the kinds of people I want to discuss are new kinds, or kinds that may bear old names but have acquired new meanings in the light of new knowledge. Some kinds have been with us always. Sex, race and gender: these categories have been intensely examined these many years, especially in the light of gender studies and post-colonial histories. Since I shall say little about them here, I should explain why not.

Some kinds of people that I shall not discuss

I do not want, for example, to examine the various classifications that at present we politely call ‘ethnic’. A good old word taken from the Greek, betokening other kinds of people, nations, or, in New Testament Greek, gentiles or heathen, the matching concept for the Hebrew goyim; in short, the others. *Others* have been alongside us always. Human beings are said to be social animals. A society includes—and excludes. Societies imply other people, the excluded. The speculations of evolutionary psychology or the more systematic studies of comparative anthropology confirm that, but history as written down suffices. Amidst the ruins of the ancient city of Persepolis there still stand the real-life sentiments of Shelley’s imagined Ozymandias. Proclamations in three languages abound, in Old Persian, Elamite, and Babylonian. My guide book translates one sentence as: ‘I am Xerxes the great King, King of Kings, King of the countries having many kinds of people.’⁷ Twenty-three of these kinds of people are

⁵ ‘The Looping Effects of Human Kinds’, D. Sperber, D. Premack and A. Premack (eds.), *Causal Cognition. An Interdisciplinary Debate* (Oxford, 1995), pp. 351–83.

⁶ ‘Making up People’, p. 223; reprint, p. 114.

⁷ Ali Sami, *Persepolis (Takht-i-Jamshid)*, trans. R. Sharp, 9th edn. (Shiraz, 1977), p. 35; for almost identical sentences found in other parts of the city, see pp. 21, 51. For full texts and the standard scholarly translations, see the microfiche edition, *Persepolis and Ancient Iran*, compiled

illustrated by carvings on the Great Staircase, beginning with the Medes and ending with the Ethiopians.⁸ A carved stereotype of each kind is shown, one or more men bearing or leading their characteristic tribute of wares, foodstuffs, or animals.

Xerxes ruled the Persian Empire at its apogee and on its way out, but in this respect it was no different from any other. A recent exhibition at the Royal Academy in London displayed a scroll, 'Qing Imperial Illustration of Tributaries', namely, 'Minorities from Yunnan, Guizhou, Guangxi'. Sixteen metres of beautifully drawn examples of subject peoples were on display.⁹

The conceptions of Christians were the cruellest. At Vézelay in Burgundy is a Romanesque cathedral from which two world wars were launched, the second and third crusades. It has a great porch where the pilgrims were received. There is a prodigious sculpture in the tympanum on the nave side of the narthex, said to represent the holy spirit flowing from Christ, first to the Apostles but in due course even to the unconverted gentiles. Once again there is a sculpted procession of these others. To cite another guide book, 'the little personalities sculpted on the lintel are from the pagan peoples (men whose heads are dogs' heads, or with enormous ears, pygmies, etc.) walking towards Christ in a movement that represents their conversion'.¹⁰

It has been said that 'the category of race—denoting primarily skin colour—was first employed as a means of classifying human bodies by François Bernier, a French physician, in 1684'.¹¹ Perhaps Europeans did not get their colour-coded geographically based concept of race until the great voyages, but racial classification, more generally understood, has been with us always. Classifying kinds of subject people is an imperial imperative. How else did the science of anthropology begin, than as the science of European powers that studied tributary peoples?

by Ursula Schneider (Chicago, 1976). An excellent on-line version is readily available. I use my guidebook rather than the best scholarship because it is in itself a splendid multi-imperial artefact. Its publication date is given as 2535 Shahanshahee, and the translator is identified as 'The Reverend R. Sharp, M.A., Cantab'.

⁸ *Ibid.*, pp. 31–3. A tablet listing 29 provinces ruled by Xerxes, overlapping with the kinds of people, is given on pp. 66ff. Photographs of the carvings are found in the University of Chicago publication.

⁹ E. S. Rawski and J. Rawson, (eds.), *China, the Three Emperors, 1662–1795* (London, 2006), plate 77. Original in the Palace Museum, Beijing, Gu 6306.

¹⁰ *France, Guides Bleus* (Paris, 1990), p. 299.

¹¹ Cornel West, 'A Genealogy of Modern Racism', *Prophesy Deliverance! An Afro-American Revolutionary Christianity* (Philadelphia, 1982), pp. 47–65, on p. 55.

The idea that peoples just separate naturally into overarching racial, ethnic, or linguistic groups is largely a product of a recent invention, the nation state. In a vast region such as Mesopotamia, the site of invasion, conquest and trade from time immemorial, people do not simply come sorted. Families, tribes and local regimes are what count, a human eye's view of the population rather than the vision of a hegemonic power. Xerxes's father Darius imposed a structure of satrapies on the empire created by Cyrus. The peoples, that is, the different classes of inhabitants of these administrative districts, were exactly what the Greeks referred to as the different 'ethnos' of the Persian Empire.

All of this suggests a model for 'making up people'. We can well imagine that Darius's captains chose to categorise his subjects for the convenience of administration. The subjects were not classified in exactly this way before they were conquered. Geography, language, allegiances, previous social cohesion, bodily structure, and skin colour would all have been grounds for forming classifications, and in some cases, those kinds of people would not have existed, *as a kind of people*, until they had been so classified, organised and taxed. Others were cemented as kinds of people by classification and administration, and also by revolt, for a people has to solidify in order to throw off the imperial yoke.

The framework of such a story has five primary aspects. There is (a) the *classification* into kinds of people. Classification is usually within a category, a most general principle of classification. Here the category is subject peoples of the Persian Empire. There are *classes* that fall under this category, here called Armenians, Bactrians, and so on. These are the many kinds of people of which Xerxes boasts.

There are (b) the *individuals* and *peoples* in the various classes. In traditional logic, they are in the extensions of the classes defined in (a). In real life they are the flesh and blood individual men, women and children, or socially cohesive groups of them. There will be many borderline cases, individuals or smaller groups who are not so clearly of the main ethnicities such as 'Pointed-capped Sythians' or 'Somali'. With the course of empire the individuals will increasingly be filed in one class or another and, for at least some purposes, they will self-identify in that way.

There are (c) the *institutions*, for example those that manage tribute, taxation and recruitment. They firm up the classifications. The tax collectors and recruitment officers work within structured bureaucracies. By institutions I chiefly mean established organisations, rather than matters of practice or custom, although of course organisations have their own practices and affect the habits of people with whom they interact.

Most institutions that matter on a day-to-day basis are not exactly imposed from the top down. Empires can succeed only if they foster quasi-autonomous local administrations that are run by the peoples themselves.

A fourth primary aspect of the framework is (*d*) *knowledge* about the kind of people in question, their characteristics, fierce or docile, artistic or warlike, skilled artisans or able hunters. Some of this knowledge will be precise matters of detail known to (*e*) *experts* in the administration, local officers on the ground, their regional allies, collaborating Scythians or Somalis. Some of the knowledge will consist of more traditional facts well known to the classified people themselves. Some will be imperial myths that over the years become concretised facts.

Classification tends to invite *stereotypes*, handily illustrated by the images sculpted on the frieze on the staircase, in which each people brings its most desired produce, be it materials, animals, or craftsmanship. My guidebook tells us what has always been the official story, which we now read with irony:

The offering of the best produce and works of art of each country to the Court, and the presentation of these gifts to the King was not only a ceremonial act, but was beneficial in stimulating the products of each land and developing its arts and crafts. Every year the craftsmen tried to prepare and present to the King articles that were finer and more beautiful than in previous years.¹²

Moreover the artisans modify their wares, and that alters their stereotype. Were the Ethiopians who are shown bringing tusks and giraffes about to present elegantly carved tusks and even more exotic species? This is a benign example of the looping effect: the classified people enhance and adjust what is true of them. (Think of recent Inuit soapstone carving, and present aboriginal Australian art. These combine traditional practices and shrewd marketing by art dealers. They are changing conceptions of who the peoples are, both for ‘us’ and for ‘them’.)

We have become all too aware of the evil effects of stereotypes. The stereotypes of American slaves became essential properties not only in the eyes of the masters, but also were experienced by the victims as true of themselves. When there is revolt and black power, a new self-conception is fostered, and there is an attempt at looping, in order not only to

¹² Sami, *Persepolis*, n. 1, p. 35. I do not know if the notes were written by the author or the translator.

upgrade self-conceptions and raise consciousness, but also to change the knowledge of the powerful about the oppressed.

All that provides many tidy illustrations for my slogans, making up people and the looping effect. Despite the way they fit my framework, ethnicity and its kin are not my topic here. The imperial organisation of kinds of people is in the end very much a matter of brute power, which, in the present context does not concern me. I am interested in the classifications that are studied in the sciences, where the knowledge is not simply instrumental. Michel Foucault has led many of his readers to think of the power-effects of seemingly innocent or inevitable scientific classifications. That is not the path I shall take in this lecture, although it has by now been so well trodden that readers will not fail to notice it.

But was there not explicit race science that I should take into account, just as there is a welter of sex sciences practised around us right now? Yes, there was. Race science began at the dawn of the nineteenth century. It is one of the first sciences of man, the one that Steven Jay Gould called *The Mismeasure of Man*. The doctrine that there are exactly five races became fixed in the 1790s. It was fostered by Kant's friend Johann Friedrich Blumenbach, once thought of as the first comparative anthropologist, thanks to his meticulous measurements of sixty human crania from around the world. Kant himself was publishing his *Anthropologie* and had introduced the question, *What is Man?* into his annual logic lectures about that time. That is also when sociology begin to stir. The collection of statistics of suicide, crime, and many other deviations was the beginning of numerical sociology. Counting, and making the numbers public, began in earnest after 1815; serious correlating began about 1870. One fruit was Durkheim's 1897 *Suicide*, the culmination of eighty years of reflections on new knowledge about suicide.¹³ Francis Galton's type of race science, which he called eugenics, gave us the foundational ideas for modern statistical inference, namely correlation and regression. Race science has thus been historically connected, in an intimate way, to topics that I shall address later. But ideas of race and of 'others' began long before the sciences of race, and will probably outlast them. They have a life of their own (as do ideas of sex), that is far more entrenched than any science, and hence they are not my immediate topic.

¹³ I. Hacking, 'How Numerical Sociology Began by Counting Suicides: From Medical Pathology to Social Pathology', I. B. Cohen (ed.), *The Natural and the Social Sciences* (Dordrecht, 1993), pp. 101–33. For a more extensive treatment of such topics, see my *The Taming of Chance* (Cambridge, 1990).

I do not say so because of the comfortable doctrine that there is no such thing as race—and hence that there cannot be a viable race science. That is not my reason for wanting to exclude race from these studies. Indeed I believe that legitimate sciences of race are evolving right now. The complacent denial of race as a scientific concept is outmoded.¹⁴ Developments in epidemiology and genetics lead to what the anthropologist Paul Rabinow has called biosociality, which in turn leads to biosocial identities, the linear descendant of racial identity.¹⁵ There we have some kind of making up of identities in abundance, but I still do not want the category of race, simply because it has, like sex, been with us humans since the beginning. Race science itself is tangential to the formation of conceptions of race and ‘the other’, a mere moment in an unending history.

Human kinds (not)

When I started this work long ago, I used a horrible label to characterise my subject: ‘Human kinds’. That matched the natural-kind concept that English philosophers derived from John Stuart Mill.¹⁶ Thanks to Saul Kripke and Hilary Putnam, there was an explosion of interest in natural kinds during the 1970s and later. It took me all too long to realise that my notion of a human kind was totally confused. I was helped in jettisoning the term by the collapse of the idea of natural kinds itself.¹⁷

¹⁴ One of the themes of my, ‘Why race still matters’, *Daedalus*, 134 (2005), 102–16.

¹⁵ P. Rabinow, ‘Artificiality and Enlightenment: From Sociobiology to Biosociality’, in Jonathan Crary and Sanford Kwinter (eds.), *Incorporations* (New York, 1992); reprinted in his *Essays on the Anthropology of Reason* (Princeton, 1996), pp. 91–111. I. Hacking, ‘Genetics, Biosocial Groups, and the Future of Identity’, *Daedalus*, 135 (Fall, 2006), 81–95.

¹⁶ Thus I so used the label in print in ‘A Tradition of Natural Kinds’, *Philosophical Studies*, 61 (1991), 106–26. It was taken up by other writers after my, ‘The Looping Effects of Human Kinds’, a talk given in 1993 and published in 1995. I do not recall when I started talking about ‘human kinds’: I gave a talk at MIT with that title in 1979.

¹⁷ I. Hacking, ‘Natural Kinds: Rosy Dawn, Scholastic Twilight’, A. O’Hear (ed.), *Philosophy of Science* (Cambridge, 2007), 203–39. A simple deduction: there is no such thing as a natural kind, *a fortiori*, there is no such thing as a human kind. Rachel Cooper in my opinion did not get to the root of the evil in her astute paper, ‘Why Hacking is Wrong about Human Kinds’, *British Journal for the Philosophy of Science*, 55 (2004), 73–85. She opposes what she calls my ‘central claim that human kinds and natural kinds are fundamentally distinct’. In fact, there do not exist two classes (of the sort indicated) that can be defined sufficiently clearly to be either distinct or not distinct.

The philosopher of biology John Dupré also used ‘Human Kinds’, but only for the title of a paper, and not in the paper itself.¹⁸ The label has, however, turned out to be useful to other writers, for exactly what I did not intend. Lawrence Hirschfeld, an anthropologist steeped in developmental cognitive psychology, used it for racial classifications.¹⁹ This little meme, ‘human kinds’, has recently been absorbed in a most interesting book written by David Berreby for a popular audience. He chose the telling title, *Us and Them*.

Categories like Americans and Iranians, Muslims and Christians, blacks and whites, men and women, southerners and northerners, doctors and lawyers, gays and straights, soccer moms and NASCAR dads, outgoing people and shy types, smart ones and lucky ones. Those—and all the other labels that define more than one person but fewer than all—are what I (following the philosopher Ian Hacking and the psychological anthropologist Lawrence Hirschfeld), call “human kinds”.²⁰

The listed labels all have standard uses as Us-and-Them epithets.

I am glad that my (former) term ‘human kinds’ has become a tool with which to analyse the Us-and-Them use of names for groups of people. It takes us back to the beginning, to the *other*, to the Greek word from which hails our tight-lipped ‘ethnic’. But it is a not a term that I myself will continue to use.

Human sciences

We think of many kinds of people as objects of scientific inquiry. We do so sometimes to control them, as with prostitutes, and sometimes to help them, for example to stop potential suicides. Sometimes the aim is to organise and to help, but at the same time to keep society safe, as when prosperous people or the state aid the poor or the homeless. Sometimes

¹⁸ J. Dupré, ‘Human Kinds’, J. Dupré, *The Latest on the Best* (Boston, MA, 1987), pp. 327–48; reprinted in J. Dupré, *Humans and Other Animals* (Oxford, 2002), pp. 127–50. Dupré was studying what, if anything, evolutionary psychology might teach about cultural characterisations of groups of people. (Short answer: nothing.) His usage of ‘human kind’, to refer to human groups picked out by social characteristics, is not so far from the us-and-them use about to be mentioned.

¹⁹ L. A. Hirschfeld, *Race in the Making: Cognition, Culture, and the Child's Conception of Human Kinds* (Boston, MA, 1996). Hirschfeld was present at the Paris conference where I presented ‘Looping Effects’ in 1993.

²⁰ D. Berreby, *Us and Them: Understanding your Tribal Mind* (New York, 2005), pp. 14ff.

we try to change others for what is deemed to be for their own good: the obese furnish an example that I shall use later. Sometimes we study a kind of person just to admire, to understand, to encourage and perhaps even to emulate, as (sometimes) with genius. We think of these kinds of people as given, as definite classes defined by definite properties. As we get to know more about these properties, we will be able to control, to help, to change, or to emulate them better. But it is not quite like that. They are moving targets because our investigations interact with the targets themselves, and change them. And since they are changed, they are not quite the same kind of people as before. The target has moved. That is the looping effect. Sometimes our sciences create kinds of people that in a certain sense did not exist before. That is making up people.²¹

All this may seem closer to sociology than to philosophy, and indeed I have a sociological hero, Erving Goffman, whom I invoke from time to time, but not here.²² I am concerned with the sciences of man, but not in the style of the sociologist. My target is broader than the social and the human sciences, for I count psychiatry and much of clinical medicine among the sciences of man. What shall we call this family of sciences without sounding sexist? 'Sciences of human beings' is pedantic and ugly. I shall call them the human sciences: for although that label has a fairly clear denotation in French, it is not systematically used in English. The human sciences, thus understood, include many social sciences, psychology, psychiatry, and a good deal of clinical medicine. The 'kinds of people' of my title are those studied by the human sciences. I am only pointing, for not only is my definition vague, but specific sciences should never be defined except for administrative and educational purposes. Living sciences are always crossing borders and borrowing from each other.

I shall later list some of the engines used in these sciences. They are engines of discovery, which have side-effects that are seldom noticed: for they are also engines for making up people. Statistical analysis of classes

²¹ After giving up on the notion of a 'human kind', I still accepted some idea of a natural kind, and thus clung to the idea that there was a definite class of 'kinds' which I called 'interactive kinds', as opposed to 'indifferent kinds'. See my *The Social Construction of What?* (Cambridge, MA, 1999), chap. 4. Interactions among classifications, people, institutions, knowledge and experts are essential to the explanation of the looping effect and making up people, but there is no well-defined type of classification of people worth calling interactive or human kinds. Interaction, yes, but interactive kinds as a distinct class, no.

²² 'Between Michel Foucault and Erving Goffman: Between discourse in the abstract and face-to-face interaction', *Economy and Society*, 33 (2004), 277–302.

of people is a fundamental engine. Likewise we constantly try to medicalise: doctors attempted to medicalise suicide as early as the 1830s. The brains of suicides were dissected to find the hidden cause.²³ More generally, we try to biologise, to recognise a biological foundation for the problems that beset some class of people. More recently, we hope to geneticise as much as possible. Thus obesity, once regarded as a problem of incontinence, or weakness of the will, became the province of medicine, then of biology, and at present the search is on for inherited tendencies to become very fat. A similar story can be told of the search for the criminal personality.

Nominalism

Is this philosophy? Yes it is. These reflections on the classification of people are a species of nominalism. I would love to place them in the grand tradition of British nominalism, of Ockham, of Hobbes, of Locke, of Mill, of Russell, of Austin. But traditional nominalism is wholly static. Mine is dynamic, for I am interested in how names interact with the named.

For precedents we have to move to the Continent. The first dynamic nominalist may have been Friedrich Nietzsche. An aphorism in *The Gay Science* begins, ‘There is something that causes me the greatest difficulty, and continues to do so without relief: unspeakably more depends on *what things are called* than on what they are.’ It ends, ‘. . . creating new names and assessments and apparent truths is enough to create new “things”’. This section is headed *Only as creators*, the point being that we can undo a named idea only by creating some positive concept. Deconstruction for its own sake is self-indulgent play. ‘Only a fool’, Nietzsche continues, ‘would think it was enough to point to this misty mantle of illusion in order to *destroy* the world that counts as essential . . .’²⁴ Making up people is a special case of Nietzsche’s phenomenon. My concern is less sweeping than his but it has caused me the greatest difficulty these twenty years.

I do not believe that ‘more depends on what things are called than on what they are’. My sense of reality is too strong to go down the road

²³ See my *Taming of Chance*, chap. 8.

²⁴ Friedrich Nietzsche, *The Gay Science: with a Prelude in Rhymes and an Appendix of Songs*, translated by Walter Kaufmann from the 2nd edn. (1887), (New York, 1964), § 58.

towards linguistic idealism. And there is something else wrong with Nietzsche's text, because it sounds as if names work their magic by themselves. As Nietzsche well knew but did not bother saying, names are only one part of the dynamics. In the case of kinds of people, there are not only the names of the classifications, but also the *people* classified, the *experts* who classify, study and help them, the *institutions* within which the experts and their subjects interact, and through which authorities control. There is the evolving body of *knowledge* about the people in question—both expert knowledge and popular science. Here I repeat the framework of five interacting aspects of making up people mentioned in connection with race.

Michel Foucault was a more recent practitioner of dynamic nominalism. Only very recently did I notice this passage, found in his review, in a daily newspaper, of Kenneth Dover's well known book about Greek homosexuality.

Dover clears away a cluttered conceptual countryside. You still find pleasant people who think that, all in all, homosexuality has always existed. They cite in evidence Cambacérès, the Duke of Crequi, Michelangelo or Timarchus. Dover offers such naïfs an excellent lesson in historical nominalism. Relations between two persons of the same sex are one thing. But to love someone of the same sex for himself, to take pleasure with him, is something else, a whole other experience, with its own objects and their values, together with the way of being a subject and the awareness that he has of himself.²⁵

Homosexuality, as understood by Foucault, is a way of being, of experiencing, a very specific way to be a person. 'The homosexual' is a kind of person that exists only in a particular historical and social setting, for example now, but not in ancient Athens. The homosexual 'as a kind of person' did not exist then, although there were plenty of same-sex acts with complex codes about which acts were right and which were wrong.

Historical nominalism is only half the cake. My nominalism is historical, but it is also Nietzschean; it is dynamic; it is about the interaction between names and things, or rather names and people. I learned that way of thinking from Michel Foucault, even if he did not in fact propose my name for this philosophy.

²⁵ Michel Foucault, review of John Dover, *Homosexualité grecque*, the translation of *Greek Homosexuality*, in *Libération*, 1 June 1982. Reprinted in *Dits et Écrits*, 4 vols. (Paris, 1994), 4, 315–16. (No. 314.)

An easy example

It is essential to have examples in mind, to put flesh on abstract statements. I should briefly mention my first example of making up people and the looping effect, multiple personality. It is written up in *Rewriting the Soul*. It seemed misleadingly easy. Around 1970 there arose a few sensational paradigm cases of strange behaviour similar to phenomena discussed a century earlier and largely forgotten. A few psychiatrists began to diagnose multiple personality. It was rather sensational. More and more unhappy people started manifesting these symptoms. At first they had the symptoms they were expected to have. But then they became more and more bizarre. First a person had two or three personalities. Within a decade the mean number was seventeen. This fed back into the diagnoses, and entered the standard set of symptoms. It became part of the therapy to elicit more and more alters. The psychiatrists cast around for causes, and created a primitive, easily understood pseudo-Freudian aetiology of early sexual abuse, coupled with repressed memories. Knowing this was the cause, the patients obligingly retrieved the memories. More than that: this became a way to be a person. In 1983 I confidently said that there could never be split bars, analogous to gay bars. In 1991 I went to my first split bar.

A framework for analysis

These events can be placed in the same five-aspect framework of interacting elements that has been mentioned twice already. We have (a) a *classification*, multiple personality, associated with what at the time was called a 'disorder', Multiple Personality Disorder. This is the *kind* of person that is a moving target. We have (b) the *people*, those people I refer to as unhappy, unable to cope. We have (c) *institutions*, which include clinics and the International Society for the Study of Multiple Personality and Dissociation. Afternoon talk shows on American television are another type of institution: Oprah Winfrey and Geraldo Rivaldo made a big thing of multiples, once upon a time. I attended some weekend training programmes for therapists, in order to study yet another type of institution. As usual, when I speak of institutions, I mean deliberately organised and structured entities, not mere practice and custom.

There is what is commonly (but not by most analytic philosophers) called (d) *knowledge*. I do not mean justified true belief, but something

more like Popper's sense of conjectural knowledge. More specifically, there are the presumptions that are taught, disseminated, refined and applied within the context of the institutions. Especially there are what are presented as the basic facts, for example that multiple personality is caused by early sexual abuse, that five per cent of the population suffer from multiple personality, and the like. Basic assumptions that we later regard as ghastly mistakes interact with people and classifications just as much as the facts that we hold to be stable, true, and beyond controversy. Knowledge, or at any rate what is experienced as knowledge at some time, is of two kinds that shade into each other. There is expert knowledge, the knowledge of the professionals, and there is popular knowledge that is shared by a significant part of the interested population. Some expert knowledge is always esoteric, but in the more flagrant cases of making up people, the expert quickly becomes exoteric. There was a time, partly thanks to those talk shows and other media, when 'everyone' believed that multiple personality was caused by early child abuse.

Finally there are (*e*) the *experts* or professionals who generate or legitimate the knowledge (*d*), judge its validity, and use it in their practice. They work within (*c*) institutions that guarantee their legitimacy, authenticity, and status as experts. They study, try to help, or advise on the control, of the (*b*) people who are (*a*) classified as of a given kind.

This is a truly banal framework of five elements. Their roles and weights will be different in every case. There is 'no reason to suppose that we shall ever tell two identical stories of two different instances of making up people'. This trite framework discourages an excess of philosophy. Serious students of society need no such structural reminders, but philosophers, including both Nietzsche and myself, do. We tend to pay too much attention to words and things—to write as if the interactions involve only the names and the people named, or the classification and the people classified. This is not so. Names of classes, and the people who fall under them, interact through larger interactions in the thriving world of institutions, experts, and their knowledge (as well as much else). One of the many things we learned from Michel Foucault is the capital role that knowledge itself plays in this process.

There are many complications. For example, there are competing schools of thought. In the case of MPD, there was the multiple movement, a loose alliance of patients, therapists and psychiatric theorists on the one hand, who believed in this diagnosis and in a certain kind of person, the multiple. There was the larger psychiatric establishment that rejected the diagnosis altogether. I recall a doctor in Ontario who, when

a patient arrived announcing she had multiple personality, demanded to be shown her Ontario Health Insurance card (which has a photograph and a name on it). ‘*This is the person I am treating, nobody else.*’ Thus there are rival frameworks. Hence reactions and counter-actions between the two frameworks further contribute to the working out of this kind of person, the multiple personality. If my sceptical colleague convinces his potential patient, she will very probably become a very different kind of person than if she had been treated for multiple personality by a believer.

Here, to repeat, are the interactive elements of my framework. All five of the elements listed—and more—are players, usually key players, in looping effects and making up people:

- (a) classification
- (b) people
- (c) institutions
- (d) knowledge
- (e) experts.

As usual the choice of a framework represents a decision. One could add Nicholas Jardine’s questions, or perhaps even replace knowledge by questions.²⁶ Jardine defined inquiries by the questions that make sense. Others, taking Foucault at his word, would prefer to emphasise the questions that are actually asked. It might be wise to replace ‘experts’ by Ludwik Fleck’s *thought collective*, and the ‘knowledge’ by his *thought styles*.²⁷ One virtue of (a)–(e) is, nevertheless, that it is a nicely positivist list. Any diligent empirical study will show who the experts are, which institutions are important in which ways, and what counts as knowledge, either among experts or in larger publics.

Making up

A wholly new kind of person came into being, the multiple, with a set of memories and a set of behaviours. She is reminiscent of previous ways of

²⁶ Nicholas Jardine, *The Scenes of Inquiry: On the Reality of Questions in the Sciences* (Oxford, 1991).

²⁷ Ludwik Fleck, *Entstehung und Entwicklung einer wissenschaftlichen Tatsache. Einführung in die Lehre vom Denkstil und Denkkollektiv* (Basel, 1935; Frankfurt, 1980). Translated as *Genesis and Development of a Scientific Fact* (Chicago, 1979).

being a person. There was double consciousness in the 1880s.²⁸ Some compare multiple personality to trance or to possession. Notice a certain kind of rhetoric. When we maintain that many people of long ago and in different places are of the kind that interests us, it makes our kind seem more genuine. The search for earlier manifestations of multiplicity was a way to legitimate a contested classification.

The multiple personality of the 1980s was, in my judgement, a kind of person unknown in the history of the human race. That is not an idea that we can comfortably express. It is familiar enough to novelists and to social historians, but careful philosophical language is not prepared for it. Pedantry is in order. Distinguish two sentences:

(A) There were no multiple personalities in 1955; there were many in 1985.

(B) In 1955 this was not a way to be a person, people did not experience themselves in this way, they did not interact with their friends, their families, their employers, their counsellors, in this way; but in 1985 this was a way to be a person, to experience oneself, to live in society.

In my opinion, both are true, but A is too brief and contentious. Our topic is B.

To see that A and B are different, an *enthusiast* for what is now called Dissociative Identity Disorder will say that A is false, because people with several 'alter personalities' undoubtedly existed in 1955, but were not diagnosed. A *sceptic* will also say that A is false, but for exactly the opposite reason: multiple personality has always been a specious diagnosis, and there were no real multiples in 1985 either. The first statement, A, leads immediately to heated but pointless debates about the reality of multiple personality, on which I have spilt too much ink and to which I shall never again return. But open-minded opponents could peacefully agree to B. When I speak of making up people, it is B that I have in mind, and it is through B that the looping effect occurs.

²⁸ Curious phenomena such as double consciousness were sensational at the end of the nineteenth century. William James was fascinated by them. I wrote about this as a historical problem, before I realised that an epidemic of multiple personality was under way under my nose. 'The Invention of Split Personalities', A. Donegan *et al.*, (eds.), *Human Nature and Social Knowledge* (Dordrecht, 1986), pp. 63–85.

Harder cases

Multiple personality was renamed Dissociative Identity Disorder. That was no mere change in name, no mere act of diagnostic house-cleaning. Symptoms evolve, patients are no longer expected to come with a roster of altogether distinct personalities, and they no longer do. This disorder is an example of what in a second book, *Mad Travelers*, I called a transient mental illness: transient not in the sense of affecting a single person for a while and then going away, but in the sense of existing only at a time and at a place. I offered an analysis of transient mental illnesses in terms of ecological niches in which they can appear and thrive. Transient mental illnesses are easy cases for making up people, precisely because their very transience leads outsiders to suspect they are not really real, and so could plausibly be said to be made up.

Now turn to less transient problems. I work with two sorts of examples. There are the old ones, wholly closed, apparently finished history, such as fugue, the fancy name for mad travelling. All the facts are in: you can get as good a grip on the totality of events as the archive can provide. Then there are the current ones, very live examples that are under intense discussion, both popular and scientific, right now. Multiple personality was such an example when I started on the topic, with new events coming in almost every week. I turned to child abuse early in my game when I asked a distinguished feminist sociologist, Dorothy Smith, for an example of a kind of person who is changing before our eyes. 'Child abuse' was her slow and weighty answer.

It is important to have different types of illustrations, so as not to suffer from the vice of too slender a diet of examples, as Wittgenstein put it. Let us choose autism as the primary example and let obesity be a contrast case. These two examples are obviously current, obviously different. We now read of an autism epidemic and an obesity epidemic, just as we used to read about the multiple personality epidemic and an epidemic of child abuse. I am an unhappy Midas; as soon as I touch a topic it turns into an epidemic. I shall say a few words about autism.

Autism

The conception of autism has evolved. Dictionaries are not very good at keeping up. Their stately attention to change in meaning, always behind the times, is a dignified reflection of what has already happened. One

large reliable desktop dictionary that tries to keep in touch is *The American Heritage Dictionary of the English Language*. In 1992 it defined autism as:

1. Abnormal introversion and egocentricity; acceptance of fantasy rather than reality. 2. Psychology: Infantile autism.

In 2000 it gave:

A psychiatric disorder of childhood characterized by marked deficits in communication and social interaction, preoccupation with fantasy, language impairment and abnormal behavior, usually associated with intellectual impairment.

Something has happened to prompt so radical a change in definition. The word 'autism' was invented by the great Swiss psychiatrist Eugen Bleuler in 1908. He meant the 1992 dictionary's first sense of abnormal introversion (and self-absorption). It was one type of behaviour associated with the group of schizophrenias, another word Bleuler introduced at about the same time. The second 1992 sense, infantile autism, was a transfer from the first sense. It was introduced in 1943.

The 2000 definition is about as good as you can do with so small a number of words. It could have added the obsession with literalness, the obsession with order and keeping things the same, the terrible tantrums, biting and hitting that follow when things cease to be the same. Since dictionaries of any size provide masses of empirical as opposed to semantic information, it could have added that most people with autism are male, in a ratio of 4 out of 5. It could have added the habit of echoing what has been said, rather than speaking. In short it could have added lots more, but the definition, in so small a number of words, is not bad.

The one thing that is certainly wrong in the definition is that autism is not just a childhood disorder. Autism is almost always for life. It is a developmental disorder that can be recognised very early, usually no later than 30 months, for which there is no known cause and for which there is no known cure. At most, it is widely believed, a child can learn to compensate for the deficits, although there are some remarkable recoveries. Another aspect of the definition at which many would protest, is regarding autism as a 'disorder', now the standard euphemism for mental illness. Many advocates for autism insist that it is neither a disorder nor an illness but a disability.

One could add more. The problem is almost certainly some combination of neurological, biological, and genetic abnormality. Unfortunately, for all the hype one reads from time to time, we have no idea what. One

could add that the only treatments that are known systematically to help a child to compensate for autism are behavioural. They are the purest operant conditioning, B. F. Skinner in action, except that they work best in an environment of loving care.²⁹

In 1943, indeed in 1973, autism was a rare developmental disorder with a quite definite, narrowly characterised stereotype. A figure of 4.5 children per ten thousand was derived from school and social services in Camberwell, London. But this proportion has been growing rapidly in recent years. Prevalence rates of ten times as many are now cited. There are doubtless many reasons for this. One is that schools, social workers and health services have been alerted to symptoms of autism. We are noticing a change in *reporting*. Another reason is that we have moved from a conception of core symptoms, used in such early surveys, to the ‘autistic spectrum’. This is a change in *criteria*. Thus we now have high-functioning people with autism. We have Asperger’s. This name was introduced into English in 1981 by the British child psychiatrist, Lorna Wing. It is adapted from a diagnosis made in 1944 in Vienna by Hans Asperger, a distinguished paediatrician in the German-speaking world, whom Wing made prominent in English. It now tends to refer to people with autistic symptoms who had few difficulties acquiring language, but have all the other problems. It is often loosely synonymous with high-functioning autism.

Let us return to making up people. Consider a certain kind of teenager or adult, the high-functioning autistic. I shall leave Asperger out of it. The typical case is someone who grew from an autistic child into an adult with full or almost full possession of language, and some residual eccentricities of an autistic sort, some of which are socially disadvantageous, some possibly advantageous. Temple Grandin is the most famous example. She emphasises her empathy with animals, urging that her way of seeing the world is closer to animals than to most humans. She has had a significant effect on American slaughterhouse techniques.³⁰ Many read-

²⁹ One excellent guide to autism states that: ‘Today the treatment of choice is that based on the behavioral model. In fact, behavioral treatment is the only treatment that has been empirically demonstrated for children with autism.’ Laura Schreibman, *The Science and Fiction of Autism* (Cambridge, MA, 2005), p. 133. See Lovaas, note 40, for the classic operant conditioning method.

³⁰ Temple Grandin, *Emergence, labeled autistic* (New York, 1986). *Thinking in pictures: and other reports from my life with autism* (New York, 1995). *Animals in translation: using the mysteries of autism to decode animal behavior* (New York, 2005). I much like Donna Williams, *Nobody nowhere: the extraordinary autobiography of an autistic child* (New York, 1990);

ers will know the hero of the novel *The Curious Incident of the Dog in the Night-Time*.³¹ High-functioning autists are beginning to crop up in thrillers and cheap novels, much as multiple personalities did twenty years ago. (Thank goodness they have exited.) Some high-functioning autistic people talk of forming an autism liberation front. Stop trying to make us like you. We do some things better than you, and you do some things better than us, so leave us be.

Now consider A and B again, this time for autism:

(A) There were no high-functioning autists in 1950; there were many in 2000.

(B) In 1950 this was not a way to be a person, people did not experience themselves in this way, they did not interact with their friends, their families, their employers, their counsellors, in this way; but in 2000 this was a way to be a person, to experience oneself, to live in society.

I said that in my opinion, A is *true* for multiple personality: it is a transient mental illness, after all. Multiple personality advocates will have disagreed with me. My opinion about A for high-functioning autism is quite different: it is absolutely false. It is almost as absurd as saying that infantile autism did not exist before 1943, when Kanner introduced the name. But B is plausible enough. Before 1950, maybe even before 1975, high-functioning autism was not a way to be a person. There probably were a few individuals who were regarded as retarded and worse, who recovered, retaining the kinds of foibles that high-functioning autistic people have today. But people did not experience themselves in this way, they did not interact with their friends, their families, their employers, their counsellors, in the way they do now. Later this did become a way to be a person, to experience oneself, to live in society.

It is easy to see why there could not have been high-functioning people with autism, in the sense of B, until some time after autism itself had been diagnosed. That was simply not a way to be a person. The first such individuals to be aware of themselves in that way had first to be diagnosed as autistic—impossible before 1943—and then somewhat mysteriously to ‘recover’. They had to grow out of it, to acquire social skills, to be able to understand what other people are thinking and feeling, to overcome, or at any rate to live unproblematically with, the obsessive need for

Somebody somewhere: breaking free from the world of autism (New York, 1994). The latest autistic autobiography is Kamran Nazeer, *Send in the Idiots: Or how we grew to understand the world* (London, 2006). See my review essay in the *London Review of Books*, 11 May 2006, 3–7.

³¹ Mark Haddon *The Curious Incident of the Dog in the Night-Time* (London, 2003).

literalness. This was a looping effect: a few of those diagnosed with autism developed in such a way as to change the very concept of autism. They brought into being the idea of a high-functioning autistic person.

Once there were such ‘recovered’ autists, it was possible for other adults, who had never been diagnosed as autistic, to be seen as having similar difficulties, even if their childhood was not as bad. They could see themselves in that way: ‘That’s me!’ A wholly new way of experiencing oneself came into being. Hence the class of high-functioning autists rapidly expanded. Some such individuals will have strengths in one direction, some strengths in another.

The conceptual evolution of the high-functioning autistic thus arises from interactions among the five elements in our framework. We have (a) a new classification, a new kind of person whom it is possible to be. (b) Individual people themselves change, as they are recognised to be of that type, or see themselves as high-functioning autists. (c) All of this requires institutions, including schools, social and health services, which disseminate and revise the current (d) knowledge. And there are the (e) experts, including Lorna Wing. The institutions are vastly more ramified and the experts from more diverse fields than was the case with multiple personality.

What about A and B for autism itself? Statement (A) would assert that there were no autistic children before 1943, the year that Kanner introduced the diagnosis of infantile autism. That is plainly false.³² Of course there were autistic children before Kanner singled them out. Nevertheless, I urge you to reflect on B: before Kanner, autism was not a way to be a person. But if, as is widely supposed, autism is a congenital neurological deficit, then there were certainly autistic children who were dismissed as retarded, feeble-minded, and so on, a long previous litany of dismissive epithets.

³² But there is still the rhetorical need, mentioned above in connection with MPD, to ask: Where were all the autists before 1943? One of the leading British autism researchers, Uta Frith, addresses the problem squarely. She has suggested that autistic children were put out in woods and fields to fend for themselves. Most died. The numerous ‘wild children’ are, then, the lucky ones who survived. Uta Frith, *Autism: Explaining the Enigma* (Oxford, 1989). She also diagnoses historical figures as autistic, e.g. R. A. Houston and Uta Frith, *Autism in History: The Case of Hugh Blair of Borgue* (Oxford, 2000). The hypothesis of feral children is attractive until seen in the wider context of the uses that have been made of them. See Adriana S. Benzaquén, *Encounters with Wild Children: Temptation and Disappointment in the Study of Human Nature* (Montreal and Kingston, 2006).

Engines of discovery

How does making up people take place? That is a question for psychology and sociology, but a first answer has to be, in many ways. Long ago 'hip' and 'square' became common names in white middle-class culture. By a parody of Nietzsche, two new kinds of people came into being, the hip and the square. In this case, more does depend on what those people are called than on what they are! The truly square did not care much, but those at risk of being called square did their best to be hip, while the hip moved on, leaving hip to the square. As is the way of slang imported from another social class, both kinds had short built-in shelf lives, but there is certainly a social history to be told of the ways in which these kinds of people were made up, and how the looping effects led these categories to self-destruct. Systematic knowledge of the sort we call scientific had no part to play in this story.

The kinds of people that concern us are those who are studied in the human sciences, from sociology to medicine. Here knowledge, one aspect of my five-part framework, plays a central role, along with the experts who generate it and the institutions within which it is produced and applied. There has been making up of people in all times and places, but only in the past two hundred years have the sciences been so central to the human understanding of who we are. We make ourselves in our own scientific image of the kinds of people it is possible to be. But science is not one thing, nor is scientific method. The human sciences have been driven by several engines of discovery. These are thought of as finding out the facts, but they are also engines for making up people. Here are seven of them, ordered roughly according to the times at which they became effective. Thus we classified and counted different kinds of people (Engine 1) long before we were able to look for genetic markers (Engine 7).

I present these engines as imperatives for those who want to find out. It is taken for granted within the human sciences that to understand some kind of person, one must first classify. That is a sort of prior imperative. After that, almost the first step is to count people of the relevant kinds. The most recent imperative is genetic, so that today, if you want to understand autism or obesity, you must search for genetic correlates of these abnormalities. The most striking and most general of the scientific imperatives are:

1. Count!
2. Quantify!
3. Create Norms!

4. Correlate!
5. Medicalise!
6. Biologise!
7. Geneticise!

These seven engines of discovery are not the only engines that drive both knowledge and the making up of people. Here are three more that I shall presently explain. The eighth is an engine of organisation and control. The ninth is an engine of administration. They are often what readers of Foucault have in mind when they talk about the power effects of knowledge. The tenth engine has been increasingly powerful of late. It involves resistance by the known to the knowers, and it has become the source of many looping effects.

8. Normalise!
9. Bureaucratise!
10. Reclaim our identity!

The seven engines at work

The success of the seven engines of discovery has been astonishing. Nor is it any criticism to say that they have side effects, so that they sometimes bring new kinds of people into being, in the modest sense of propositions of type B. Nor is it any criticism to say that they affect the kinds of people they study, affect both the 'kinds' and the 'people', that is, (*a*) the classifications themselves and (*b*) the individuals and groups that are studied. How the engines can achieve these effects prompts many questions. They have to be fuelled by talent, which we hope the (*e*) experts will possess, and by money. A modicum of popular support is needed to keep the (*d*) institutions running. How the fuel of talent and wealth is consumed, is a proper topic of the sociology of scientific knowledge.

Here I strive, once again, for the banal, for reminders about engines of discovery. Again the question, why go for the obvious? The answer is, in order to assert what is seldom noticed, that the engines of discovery are also engines for making up people. It is thanks to the success of these engines that the rate of interaction among the five elements of our framework has accelerated to its present breakneck pace.

Here are some brief remarks suggesting what each of the seven engines involves. Autism and obesity furnish convenient contrasting illustrations for all seven. Often the way in which an engine has led to interactions involving autism is very different from the way it has worked on

obesity. With these two very different examples as models, it becomes easier to carry on in depth with other examples.

1. Counting

People have long been counted for purposes of taxation and recruitment. There are five biblical references, ranging from Exodus 38:26 to Luke 2:2.³³ But counting kinds of people for other purposes is mostly post-Napoleonic, part of what I call the avalanche of printed numbers.³⁴ The first attempts to count autistic children gave rates, as we have seen, of about 4.5 per 10,000. There are now about eighty published countings, and growing, as is the proportion of autism which some find as high as six per 1000. A report by the US Center for Disease Control led the media to state in headlines that autism is now ‘common’ among American children between the ages of 4 and 18.³⁵

We have all heard the horror figures for obesity rates. The rate really has increased all over the world in the past two decades. Autism is a contrast. There we debate whether the swollen figures for autism show that the prevalence of autism is increasing, or only that we have expanded definitions and are more alert for possible diagnoses. That type of debate is not on the cards for obesity: however we define obesity, there are more obese people in the world than there ever were before, and this is as true of poor and under-developed regions as it is true of the rich and prosperous ones.

³³ The census has always been part of imperial administration—The New Testament teaches that Jesus was born in Bethlehem when his parents were complying with the rules for a census. (The higher criticism is sceptical about the history here.) In the modern period, the first censuses were in the colonies—Quebec, Peru, Virginia, Iceland. When the census and related tabulations start enumerating new kinds of people or their characteristics, they may inaugurate a new kind of person that had not been self-conscious before. Ian Hacking, ‘Biopower and the Avalanche of Printed Numbers’, *Culture and History*, 4 (1983), 279–95. For a sustained study of the interaction of the census with kinds of people, see Alain Desrosières, *The Politics of Large Numbers* (Cambridge, MA, 1998). This book is an insider job, for Desrosières has a senior post at INSEE, the main French agency for demographic and economic analysis.

³⁴ See my *Taming of Chance*, chap. 4.

³⁵ The *Morbidity and Mortality Weekly Report* of the Center for Disease Control, 4 May 2006. The media seldom mentioned the question which led to this statistic. A great many parents were asked, ‘Has a doctor or health care provider ever told you that [your child named so and so] has autism?’

2. Quantity

In the case of obesity, quantity is built in. We have our bathroom scales. In 1903 the Society of Actuaries and the Association of Life Insurance Medical Directors of America defined ‘overweight’ as weighing more than the average for insured people of one’s own age, height, and sex. At that time, they said that, ‘Obesity is defined as an excessive accumulation of body fat’. Thus at the beginning of the last century, fat was already being distinguished into a lesser and a greater evil, overweight and obesity. During the 1970s the Body Mass Index took hold, a quantity defined as the ratio of the weight of a person in kilograms divided by the square of the height in metres. Only in 1998 (!) did the World Health Organization, in company with numerous national bodies, define overweight as a BMI of over 25, and obesity as a BMI of over 30. Thus quantification has an intrinsic tendency to generate new classifications of people. For a sense of what these numbers mean, James Joyce’s Bloom had a BMI of 23.8. Marilyn Monroe varied between 21 and 24. ‘Underweight’ is defined as below 18.5. During the past twenty years models in *Playboy* have gone down from 19 to 16.5. Fauja Singh, the British marathon man, aged 94, fastest man on earth over 90 years of age, has a BMI of 15.4.

Autism resists quantity. There are many diagnostic questionnaires, but it is hard to quantify deficits. Nevertheless we now speak of the autistic spectrum, with the implication of a quantitative range of disabilities.

3. Norms

Quantitative norms followed Adolphe Quetelet’s *homme moyen* in mid-century. Georges Canguilhem’s classic study of the normal and the pathological showed how medicine acquired the concept of normalcy not long after 1800.³⁶ We have ‘the normal range’ for the Body Mass Index, 20 to 25. Many of our examples are deviations from the norm, for better—genius—or worse—obesity. Canguilhem addressed the question, which comes first, normalcy or deviance? There is no general answer. Sometimes one, sometimes the other, often hand in hand. Canguilhem favoured the idea that pathology tends to define good health. But the diagnosis of

³⁶ Georges Canguilhem, *Le Normal et le pathologique* (Paris, 1966). *On the Normal and the Pathological* (Dordrecht, 1978). For my own account, which starts with Canguilhem, see I. Hacking, ‘Normal People’, D. R. Olsen and R. Torrance (eds.), *Modes of Thought* (Cambridge, 1996), pp. 59–71, and *The Taming of Chance*, chap. 19.

infantile autism in 1943 followed the growing emphasis, during the 1920s, on normal development for children.

4. Correlation

This is the fundamental engine of the social sciences. It began around 1870 when Francis Galton devised the correlation coefficient. Quetelet had the mean, but Galton made deviation from the mean the core of his social philosophy, and so devised the correlation coefficient. The rest is history.

We try to correlate autism with everything, not excluding the relative lengths of the mother's fingers and testosterone in the foetus.³⁷ The less we know, the more we search for correlations in the hope that they will direct us to something important. Some correlations need no statistical theory or analysis: four out of five children with autism are male. On the other hand, excess weight needs subtle statistics. A Body Mass Index between 25 and 30—which now defines 'overweight'—is said to be bad for you because of significant correlation with numerous risk factors, which are themselves statistical entities. It is a strange situation. Being overweight, unlike being obese (BMI > 30), does not importantly affect your life expectancy, although unless you are a body builder or rugby forward, it will make you less attractive in current society, less physically active and so forth. Unlike obesity, being overweight correlates with risk factors, not with death rates. These really are two kinds of people, the obese and the overweight, defined in the first instance by the imperative to quantify.

5. Clinical medicine

We medicalise kinds of deviant people relentlessly, not always with success. The modern concept of child abuse was introduced by doctors around 1960, but there have been substantial battles over the so-called 'medical model' ever since.

There have always been fat people, some of them ill. But stout, plump persons have often been in fashion, as the works of Rubens or Renoir attest. 'Let me have men about me that are fat, sleek-headed men and such as sleep o' nights.' Today we treat the stout as having medical problems, and the obese as sorely needing medical instruction. A new generation of

³⁷ S. Lutchmaya, S. Baron-Cohen, P. Raggatt and J. T. Manning, 'Maternal 2nd to 4th digit ratios and foetal testosterone', *Early Human Development*, 77 (2004), 23–8.

anti-craving medicines is about to make a fortune.³⁸ Autism was regarded as a diagnosis made by a child psychiatrist, and so it is filed as a mental disorder and hence in the end as a medical problem. But if activists succeed in turning it from a disorder into a disability, it may seem less and less medical.

6. Biology including neurology

Autism almost certainly has biological causes, specifically neurobiological. One of the great moral benefits of biologising what used to be a vice is that it relieves a person of responsibility. Overeating attributed to chemical imbalance ceases to be a moral defect. A retarded child is a liability and a shame for the family. Today an autistic child is a human being somewhat different from most, but a person to understand, love, and help.

7. Genetics

There is now a steady drive to trace the medical to the biological, and the biological to the genetic. There is a vast research programme to find the genetic causes for autism—it is almost an act of faith in the research community that there must be one. A less extensive programme tries to discover kinds of obesity that are genetic. This confidence in the heritability of deviance is not new. A century ago there was a great push to discover the genetic origins of criminal behaviour and ‘the criminal personality’. This programme has returned today in more cautious forms.³⁹

Control, bureaucracy and resistance

The engines of discovery are of a piece. Counting is ancient, genetics is recent, but all seven engines aim at the production of knowledge, understanding, and the potential for improving or controlling deviant human beings. We turn finally to three engines of a different sort, each deriving

³⁸ For Sanofi-Aventis, which is now the third largest drug multinational. It was formed to market *Accomplia*, an anti-eating, anti-smoking product. The French Sanofi had the chemical know-how and the German Aventis had the American marketing clout, so they merged.

³⁹ The current drive to criminal genetics curiously recapitulates, on what is thought to be a sound scientific basis, the doctrine current at the end of the nineteenth century, according to which criminal and other undesirable behaviour, such as alcoholism, were forms of inherited degeneracy. See Hacking, ‘Criminal behavior, degeneracy and looping’.

from the engines of discovery and the knowledge that they produce, but each acting in its own specific way.

8. Normalisation

In many cases, we try to make unfavourable deviants as close to normal as possible. That is the point of the behavioural therapies for autism; that is the point of anti-craving drugs for obesity. A perspective different from mine would emphasise that this is where all the action is. It is not ideas that change people, but treatments, be they behavioural or pharmaceutical.

9. Bureaucracy

Some schools of thought speak of bureaucratic power as if that were always a bad thing. So let us emphasise the positive. Most prosperous nations have quite complex bureaucracies that pick out children with developmental problems in the early years of schooling, and assign them to special services. The system sees itself as an objective way to determine who needs help, but the relation is reciprocal. The criteria used by the system in turn define what it is to fall under various categories such as autistic. This is an ongoing feedback effect. Autism is among other things a bureaucratic concept, used in the administration and management of awkward schoolchildren.

Once again obesity is a contrast case, for it has not been much bureaucratized. But let us not forget that it was penalised by bureaucracies in the form of life insurance companies. That goes back to the dawn of the twentieth century. The insurers defined the first standards because they were convinced that fat people were bad risks.

10. Resistance

Kinds of people who are medicalised, normalised, and administered, increasingly try to take back control from the experts and the institutions, sometimes by creating new experts, new institutions. The famous case is homosexuality, so highly medicalised from the time of Krafft-Ebing late in the nineteenth century. That was the very period in which legal institutions became active in punishing it. Gay pride and its predecessors restored to homosexuals control of the classifications into which they fall. There are always twists and turns in the tales of making up people, few more striking than the attempts to geneticise male homosexuality, to find the gay gene.

I mentioned moves towards an ‘autism liberation front’, something that would make high-functioning autistic people the experts on their condition. There are a number of organisations of overweight and obese people trying to re-install pride and dignity in heavy bodies. I like, both for its acronym and its activities, a rather modest and cautious French organisation: Groupe de Réflexion sur l’Obésité et le Surpoids, or GROS.

Moving targets

All ten engines produce effects on the kinds of people to whom they are applied. They change the boundaries. They change the characteristics. This in no way detracts from the fact that seven of these are engines of discovery. Conjectures about causes, treatments, and cures, both for obesity and autism, abound. Fortunately there is competition. Different groups have different guesses about which one will be corroborated. We might find that there is no genetic basis for autism, and none for all but a small proportion of obese persons. Or we might find that most obesity and all autism is linked to a certain organisation of genetic anomalies. It is important to know. We try to find out by using all seven listed scientific engines. I observe that we tend to think of them as directed at fixed targets. I suggest that the engines modify the targets. This in no way queries their objectivity.

Kinds of people

I have rejected the idea that there is a distinct and definable class of ‘human kinds’ or ‘interactive kinds’. But we do certainly have the idea of different kinds of people. Some of these kinds are Us-and-Them kinds, as when Xerxes boasted of ruling the different kinds of people. Talk of ‘the Negro sense of rhythm’ or ‘the Arab mind’ have become absolutely insupportable. But when we turn to the kinds of people investigated by the human sciences we are rather ready to go into the species mode, ‘the X person’, as in ‘the autistic child’. There are book titles, *The Autistic Child*, and *The Obese Child*.⁴⁰ Grammatically speaking, this is the construction we use when speaking of species, the whale is a mammal.

⁴⁰ Thus we have titles, Igor Lovaaas, *The Autistic Child: Language Development through Behavior Modification* (New York, 1977); I. N. Kugelmas, *The Autistic Child* (Springfield, 1970); Milada

Some autism advocates strongly object to ‘the autistic child’ and prefer, ‘children with autism’, and one can sense what they are opposing.⁴¹ To speak in the species mode about people is to depersonalise them, to turn them into objects for scientific inquiry. For other thoughtful people, ‘autistic child’ is right. For example a parent who founded the Autism Society of America, and wrote one of the first books about the topic, does so because, ‘Autism is who his son is, not just a characteristic’.⁴² Many philosophers would say that autism is an essential property of his son. It is part of his nature to be autistic.

Except in very rare cases, I am disinclined to say the same thing of an obese person, but the sixth and seventh engines of discovery may be driving us in that direction. There are, it is argued, people whose nature or essence it is to be obese, thanks to their genetic inheritance. This is an important theme now being argued by ‘resisters’, obesity activists who are trying to remove the stigma attached to the condition. We can almost hear, ‘Obesity is who I am!’

In the case of overweight, as opposed to obesity, so many people are overweight—as defined in terms of BMI in 1998 by the World Health Organization—that such a move is less plausible. Being overweight but not obese is usually just a characteristic of a person. Overweight is almost never who the stout man is, it is just one of his enduring, and maybe endearing, properties.

John Stuart Mill, progenitor of the doctrine of natural kinds, left us a possible way to distinguish autism and obesity, on the one hand, from overweight on the other, in this respect.⁴³ He thought that there are endless characteristics that are associated with some classifications—he gave *horse* and *phosphorus* as examples. Horses and phosphorus have innumerable features in common, in addition to their being horses or phosphorus. White things, in contrast, have nothing much in common except that they are white. He said that *Horse* was a ‘real Kind’ (of animal), what

Havelkova, *The Autistic Child: A Guide for Parents* (Toronto, 1994); P. L. Girogi, R. M. Suskind, and C. Catassi, *The Obese Child* (New York, 1992).

⁴¹ Laura Schreibman notes and explains this in her preface, and opts for both expressions indifferently: *The Science and Fiction of Autism*, p. 5.

⁴² Schreibman, *ibid.*, speaking of Bernard Rimland, author of virtually the first book about autism, namely *Infantile Autism: The Syndrome and its Implications for a Neural Theory of Autism* (New York, 1964).

⁴³ J. S. Mill, *A System of Logic, Ratiocinative and Inductive: Being a Connected View of the Principles of Evidence and the Methods of Scientific Investigation*, 1st edn. (London, 1843); vols. VII and VIII of J. Robson (ed.), *Collected Works of John Stuart Mill*, 28 vols. (Toronto, 1965–83), book I. chap. vii, § 4.

philosophers later came to call a natural kind. ‘White’ was a merely finite kind. He worried about whether the races and sexes were real or finite Kinds. That was a matter to be decided by scientific inquiry, mostly biological. But he expected that the members of a given race would have little in common except the superficial features that were the marks of their race: just as Christians have nothing in common but their faith. The races—and, he thought, the sexes—would therefore turn out not to be real Kinds.

Mill’s distinction well expresses the idea I quoted, that ‘autism is who my son is, not just a characteristic’—without committing us to any sort of essentialism.⁴⁴ Autistic children have a wide range of characteristics in common, distributed on a spectrum, or, I would prefer to say, in a space that is at least three-dimensional—language problems, social problems, and obsession with order and literalness. Some of these types of features are what we look for on diagnostic interview schedules. Many others are unknown, and are thus far hidden in bio-neuro-genetic space. Essentialism leads to all sorts of harmful stereotyping. Yet the insistence by the father I have quoted, that the autism is no mere characteristic, may be captured by Mill’s nominalist and empiricist account of ‘real Kinds’, without the noxious connotation of essences.

In contrast to autistic people, overweight people have nothing much in common except that they are rather plump. Obese people may, however, have more in common than that they are fat—they tend to have shorter lives, to have diabetes, and the like. There *may* be subclasses of obese people who have a distinct biological cause for their having a Body Mass Index in the very high range. Whatever that is, it may be part of their nature, and may bring in a host of other characteristics. Such a subclass would come close to being what Mill called a real Kind. That is a way of saying that obesity may be more than a mere characteristic of a person, without the stereotyping implications of essence.

⁴⁴ Mill’s distinction now seems rather simplistic, but I think it does the job here while the battery of different theories of natural kinds now in competition leads both to excess sophistication and conceptual confusion. My doubts about present conceptions on natural kinds are to be found in ‘Natural Kinds: Rosy Dawn, Scholastic Twilight’.

In brief: the poverty line

My probes pay more attention to the rich detail of examples than is the wont of most analytic philosophers. They are nonetheless driven by general speculation, even if the chosen topics do not lend themselves to generalisations. Every case is different, but certain phrases fit, for example, the changing faces of autism, the changing faces of obesity, the changing faces of suicide and even of poverty. The poor have been with us always, but the introduction of the poverty line in the 1890s, later used to define the poor, has made a difference.⁴⁵ We use ‘the poor’ in the species sense; we have the working poor. In France there is a guaranteed minimum income, the *revenus minimum d’insertion* or RMI (ehr-em-ee). The French love acronyms, so now there is a new kind of person, the *rmiste* (ehr-em-ee), an expression regularly used by the media and in conversation. That is no more a real Kind, in Mill’s sense, than the overweight, but we do have a tendency to stereotype, and to treat them as ‘real’.

In brief: suicide

It is part of our scientific attitude that what we find out about people using any of the seven engines of discovery, and more, is a fixed target that we hit. Of course we hit! And what we find out is for the most part true, or not far from the truth. Yet the target is often where it is because of the interaction between our five elements, ranging from classifications through people to experts. These interactions are driven by the seven engines of discovery and hence by the growth of knowledge. Sometimes this breeds conceptual confusion. There may be no better example than the changing faces of suicide.

Suicide is now tied to depression. ‘An attempted suicide is a cry for help.’ Nothing is more shattering than the suicide of a friend. Nothing more smashes the spirit of a psychiatrist than the suicide of a patient. Nothing seems more awful than for young people to kill themselves. When a wave of suicides passes through an adolescent cohort in a native village in northern Canada, the entire nation is steeped in shame and guilt. This wholly modern feel to suicide, and the gamut of associated meanings, is a product of interaction with statistical and medical sciences,

⁴⁵ See Hacking, ‘Façonner les gens : le seuil de pauvreté’.

a family of interactions that began around 1825. This modern arrangement of intense feelings and meanings makes us totally confused when we think about either euthanasia or the suicide weapon.

The latter is a ruthless and terrifying weapon that is often callously exploited by older men who have no intention of killing themselves. It is nevertheless a remarkable response of angry impotent Muslims when faced by omnipotent hegemony. It can be used by anyone: the Tamil Tigers developed much of the early technology. The suicide weapon is the polar opposite of the invincible nuclear weapon. But they are an exact match, equally indifferent to the people whom they kill.

We have great difficulty thinking about the suicide weapon because of our established scientific knowledge about suicide. That knowledge is true knowledge about the people among us, the suicides and those who meditate self-destruction. They have grown through their lives to conform to the meanings and the stereotypes that the knowledge teaches. But what we know about suicide is not a human universal; it is something that has become true of Westerners rather recently.

In brief: genius

I should end on a more cheerful note. Genius has put on an amazing number of masks since the very word was used with such effect in antiquity, notably in Athens. The word—I hardly dare to say the concept, but perhaps one could say cluster of associated ideas—maps the fantasies of the age—be it Athens in its prime, Elizabethan England, Romantic Germany, *fin-de-siècle* (the nineteenth century) France, Wittgenstein and ‘the duty of genius’.⁴⁶ But genius is not a serious concept in our day. It has quite lost the allure of the Romantic era. That is because we now measure it, and genius of its nature abhors a measure.

Starting with Galton’s *Hereditary Genius*, we have gradually made intelligence statistical, with norms. Indeed the usual IQ tests are so statistical that the questions are designed so that a curve of scores forms a normal distribution with a mean of 100. When the tests were first applied to women, they scored higher than men, with a mean of about 105, so the questions had to be modified to make them harder for women. They were adjusted until the mean score for females was also 100.

⁴⁶ The title of Ray Monk’s biography, *Wittgenstein, the Duty of Genius* (London, 1990).

IQ tests are excellent at evaluating the ability of a child to prosper in our times, numerate, technical, and with a new kind of literacy. At the top end, genius is forced on to a linear scale and hence off the map. There are batteries of tests that make more delicate distinctions among people who score highly on a standard test, and the numbers can be read off as near-genius, genius, and their ilk.

Galton aimed at measuring genius but in fact he expelled it from our culture. In the United States the MacArthur Foundation awards annual prizes for outstanding non-standard contributors to the collective artistic, intellectual, scientific and social good. But they are not simply for success: in principle they are given to those who are, or who began, on untrodden tracks and who had personal or social hurdles to overcome. The press call the MacArthur prizes the genius prizes. I recently had the privilege of being asked to evaluate two nominees. They are truly exceptional, very different in style and demeanour, as well as in their contributions. I suspect neither has ever been called a genius, and both would shudder at the idea.

It is part of the deep, ultimately Socratic, notion of genius, that when genius is measured on scales that stem from Galton, and were refined in 1917 by the United States army for evaluating recruits, true genius—I do not hesitate to use that phrase—will be living somewhere else. Rejecting classification, it will blithely refuse to interact with questionnaires, institutions, experts and knowledge. Ah—I have just bought into the romantic face of genius.

