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"Kinds of People: Moving Targets"

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Note to the reader: This is the text of my talk on Tuesday evening, 11 April. It will be enlarged and I hope improved for publication in the *Proceedings of the British Academy*. I would very much welcome comments, questions and above all criticism <u>received before 11 May 2006</u>. You may use my e-address, ian.hacking@college-de-france.fr, or write to me at: Collège de France, 11 place Marcelin Berthelot, 75213 Paris cedex, France.

A long review article to appear in the issue of the *London Review of Books*, dated 11 May 2006, provides more information about the changing faces of autism than I give in this lecture.

<div align="right">Ian Hacking, Paris, 12 April 2006</div>

KINDS OF PEOPLE: MOVING TARGETS

Madame President, Ladies and Gentlemen,

First I wish to thank the British Academy for the rare, and for me sentimental, pleasure of this lecture. I say sentimental because my first lecture to the B.A. was a Dawes Hicks lecture in 1973, when I was quite a young man. It will give you a sense of time when I say that Father Copleston was in the chair. I began with the words, 'Leibniz knew what a proof is. Descartes did not.' I ended by saying that we must find our way out of the flybottle, but that only archaeology could display its shape – thereby displaying my allegiance to both Ludwig Wittgenstein and Michel Foucault. That allegiance is still firm. One of the odder reminders of the passage of time was that, as you know, the flybottle was Wittgenstein's 'What is your aim in philosophy? I want to show the fly the way out of the flybottle'. [1] In German *Fliegenglas*. When this lecture was being translated into German, the translator wrote asking me what on earth a flybottle is – we do not have such a concept in our language.

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. [2] Articles about old criminology, and about contemporary child abuse, a study of the very idea of the poverty line, about race, and about what Paul Rabinow and Nikolas Rose call biosocial identity. [3] Extended but unpublished lectures on genius and on suicide. Some lectures, on line in French, about autism and obesity. [4] 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. [5] The second, the 'looping effect', referred to the way in which a classification may interact with the people classified. [6] 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'. [7] But some generalizations are possible. Today I shall propose a framework within which to think about making up people and the looping effect.

There is a grave danger here, for I am constantly tempted to refer to my examples and analyses. I cannot possibly fill them out in a single lecture. I fear that I shall sound a little ridiculous, 'Look on my works, ye mighty, and despair'. I shall try not to be ridiculous.

We think of many kinds of people as objects of scientific inquiry. Sometimes to control them, as prostitutes, sometimes to help them, as potential suicides. Sometimes to organize and help, but at the same time to keep ourselves safe, as the poor, or the homeless. Sometimes to change for their own good and the good of the public, the obese. Sometimes 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 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.

You may think all this is closer to sociology than philosophy, and indeed I have a sociological hero, Erving Goffman, whom I invoke from time to time, but not tonight.[8] Yes, I am concerned with the sciences of man. These include not only 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 speaking loosely, 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 but also engines for making up people. Statistical analysis of classes of people is a fundamental engine. We constantly try to medicalise: doctors tried to medicalise suicide as early as the 1830s.[9] The brains of suicides were dissected to find the hidden cause. 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 overweight and obesity, once regarded as a problem of incontinence, or weakness of the will, become the province of medicine, then of biology, and at present we search for inherited genetic tendencies to become fat. A similar story can be told in the search for the criminal personality.

Nominalism

Is this philosophy? Yes. 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".'[10] Making up people would be a special case of this phenomenon. My concern is less sweeping than Nietzsche's 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 – I will not use the tawdry philosophers' word 'realism' – is too strong for that tendency towards linguistic idealism. And there is something else wrong with Nietzsche's text, because it sounds as if names work their magic by themselves. In fact the aphorism is headed *Only as creators,* the point being that we can undo a named idea only by being creative, 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 …'

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.

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. [11]

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, yes, but it is also Nietzschian, 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.

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*, published eleven years ago.[12] 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 17. This fed back into the diagnoses, and became part of 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 1986 I confidently wrote that there could never be split bars, analogous to gay bars. In 1991 I went to my first split bar.

A framework for analysis

This story can be placed in a five-part framework. 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 call unhappy, unable to cope, or whatever relatively non-judgemental term you might prefer. We have (c) *institutions*, which include clinics, annual meetings of the International

Society for the Study of Multiple Personality and Dissociation. Afternoon talk shows on American television – Oprah Winfrey and Geraldo Rivaldo made a big thing of multiples, once upon a time. Weekend training programmes for therapists, some of which I attended.

There is (d) the *knowledge*, by which I do not mean justified true belief, once the mantra of analytic philosophers. I mean it more in Popper's sense of conjectural knowledge, but more specifically, the presumptions that are taught, disseminated, refined, within the context of the institutions. Especially the basic facts (and I won't say so-called facts, or 'facts' in scare-quotes). For example that multiple personality is caused by early sexual abuse, that 5% of the population suffer from multiple personality, and the like.

Knowledge 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. 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 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'. The banal is required to eliminate the idea that the interactions involve only the name and the people named, or the classification and the people classified.

There is the obvious complication. There are different schools of thought. In this first example, there was the multiple movement, a loose alliance of patients, therapists and psychiatric theorists on the one hand, who believe in this diagnosis and in a certain kind of person, the multiple. There was the larger psychiatric establishment that rejected the diagnosis altogether. A doctor in Ontario who, when a patient arrived announcing she has 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, then, are the interactive elements of my framework:

        (a) classification

        (b) people

        (c) institutions

        (d) knowledge

        (e) experts

Like many frameworks, this list represents a decision. Others would add Nicholas Jardine's questions, or perhaps even replace knowledge by questions.[13] The questions that make sense, or maybe the questions that are actually asked. Others might wisely replace 'experts' by Ludwik Fleck's *thought collective*, and the 'knowledge' by his *thought styles*.[14] Every time I reread Fleck, who published in 1935, I am sorely tempted. One virtue of (a)-(e) is, nevertheless, that it is a nicely positivist list. A merely competent sociologist can determine

just who the experts are, which institutions are important in which ways, what counts as knowledge either among experts or in larger publics.

Why bother with such a framework? To use, but also to counter Nietzsche and my former self. Making up people and the looping effect are not solely a matter of interactions between names and the thing named, between what people are called and what they are, between kinds of people and people of that kind. All five of the elements listed – and more – are players, usually key players, in the interactions.

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 being a person. There was double consciousness in the 1880s. Some compare multiple personality to trance or to possession. Notice a certain kind of rhetoric. When we maintain say 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 is a way to legitimate a contested classification.

I contend that the multiple personality of the 1980s was a kind of person unknown in the history of the human race. That is not an idea that we can comfortably express. It is simple, familiar to novelists, but careful philosophical language is not prepared for it. Pedantry is in order. Distinguish three 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.

> (C) Multiple personality, as a kind of person, did not exist in 1955, it did exist in 1985.[15]

In my opinion, all three are true. But C puts too much weight on the idea of a kind of person, and A is contentious. My topic is B, which I regard as an explication of C.

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 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, namely that 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 in my opinion our opponents can 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.

I shall return at the end of the lecture to the obscure but important notion of a kind of person used in C. I utterly reject idea that there is a distinct notion of human kinds, or 'interactive kinds'. There is no clear and distinct class of human kinds, there is no useful vague class either. My former human kind terminology was patterned on the philosopher's notion of a natural kind. Some classifications are more natural than others, but there is no clear and distinct class of natural kinds, and there is no useful vague class either.[16] We

learned a lot from the philosophical tradition of natural kinds, but as far as I am concerned, may it rest in peace. And if no class of natural kinds, a fortiori, no class of human kinds.

Harder cases

Multiple personality was renamed Dissociative Identity Disorder. Even 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 don't. 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 people 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. 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. Today autism will be the primary example and obesity will be a contrast case. My two examples today 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 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.*

The word 'autism' was invented by the great Swiss psychiatrist Eugen Bleuler in 1908. It had 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 recognized 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 not a disorder 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.[17]

In 1943, indeed in 1973, autism was a rare developmental disorder with a quite definite, narrowly characterized stereotype. Today we have the autistic spectrum. We have high-functioning people with autism. We have Asperger's. This name was introduced into English in 1981 by the British psychiatric social worker, 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.

Consider a certain kind of teen-ager or adult, the high-functioning autist. I shall leave Asperger out of it. The typical case is someone who grew from an autistic child into an adult who had 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 emphasizes 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.[18] Many of you will know the hero of the novel *The Curious Incident of the Dog in the Night-Time.*[19] High-functioning autists are beginning to crop up in thrillers and cheap novels, much as multiple personalities did 20 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.

For brevity I am inclined to assert C, this kind of person did not exist until (to be safe) 1950. But that is ambiguous between A and B. Let us set them out 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.

(C) High-functioning autism, as a kind of person, did not exist in 1950, it did exist in 2000.

I said that in my opinion, A is *true* for multiple personality: it is a transient mental illness, after all. But A is absolutely *false* for high-functioning autism. It is almost as absurd as saying that autism did not exist before 1943, when Kanner introduced the name.

I shall presently explain that C has a useful sense in which it is true, and roughly means B. What I assert is B: 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.

I suggest that there could not have been high-functioning people with autism, in the sense of B, until some time after autism itself had been diagnosed. For the first such individuals had to be diagnosed as autistic and then somewhat mysteriously 'recover', 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 literalness.

Once there were 'recovered' autists, other adults, who had never been diagnosed as autistic, could be seen as having similar difficulties, even if their childhood was not as bad. Hence the class of high-functioning autists rapidly expanded. Some will have strengths in one direction, some strengths in another.

Evidently the evolution of the high-functioning autist fits into the framework of (a) classification, (b) people, (c) institutions, (d) knowledge and (e) experts. The institutions are vastly more ramified than in the case of multiple personality. I could go on for another hour simply talking about the educational institutions that are involved in autism.

What about A, B and C for autism itself? I have already said, in the strongest possible terms, that statement A is just plain false for autism.[20] 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.

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. As is the way of slang imported from another social class, both kinds had short built-in shelf lives. More does depend on what those people are called than on what they are! But I am concerned with the human sciences, from sociology to medicine. They are driven by several engines of discovery. These are thought of as finding out the facts, but they are also engines for making up people. The first seven engines in this list are for discovery, ordered roughly according to the times at which they

became effective. The eighth is an engine of practice, the ninth of administration, and the tenth is resistance to the knowers.

1. Count!

2. Quantify!

3. Create Norms!

4. Correlate!

5. Medicalise!

6. Biologise!

7. Geneticise!

8. Normalise!

9. Bureacratise!

10. Reclaim our identity!

The success of the seven engines of discovery has been astonishing. It is no criticism to say that they have side effects, that they sometimes bring new kinds of people into being, in the modest sense of proposition B, and that they affect the kinds of people they study. How they do this is another question, or rather many questions. The engines have to be fuelled by talent and money. How the fuel burns 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? To assert what is seldom noticed, that the engines of discovery are also engines for making up people. Here are some brief illustrations of what I mean by each of my ten engines, in then hope that you can carry on in depth with your own examples. I shall use autism and obesity as contrasting illustrations.

1. *Counting*. People have long been counted for purposes and taxation and recruitment. Five biblical references, ranging from *Exodus* 38:26 to Luke 2:2.[21] But counting kinds of people for other purposes is mostly post-Napoleonic, part of what I call the avalanche of printed numbers.[22] The first attempt to count autistic children was in London, getting a rate of 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 40 per 10,000. You will know the horror figures for obesity rates.

Whether obesity is as bad as it ought to be or not, 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 debate is not on the cards for obesity.

2. *Quantity*. In the case of *overweight*, 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'. During the1970s 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. For a sense of what these numbers mean, James Joyce's Bloom had a BMI of 23.8. Marylyn 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. Rauja 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.

(3) *Norms*. Yes, we have 'the normal range' for the Body Mass Index. Georges Canguilem's *The Normal and the Pathological* showed how medicine acquired the concept of normalcy not long after 1800.[23] 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. Quantitative norms followed Adolphe Quetelet's *homme moyen* in mid-century.

(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.[24] Some correlations need no statistical theory or analysis: four out of five children with autism are male. On the other hand, overweight needs subtle statistics. A Body Mass Index between 25 and 30, 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, 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.

(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 remind us. 'Let me have men about me that are fat, sleek headed men who sleep o' nights.' Today we treat the stout as having medical problems, and the obese as severely needing medical instruction. A new generation of anti-craving medicines is about to make a fortune.[25]

Autism was regarded as a diagnosis made by a child psychiatrist, and so it is filed as mental disorder and hence in the end as a medical problem. But if we regard it more and more as a disability, it may seem less and medical.

(6) *Biology including neurology.* Autism is a disability but it has biological causes, specifically neurobiological.

One of the great moral benefits of biologising is that it relieves a person of responsibility. Overeating attributed to chemical imbalance ceases to be a moral defect.

(7) *Genetics.* Our era is one in which there is a constant drive to trace the medical to the biological, and the biological to the genetic. This is not wholly new. A century ago there was a great push to discover the genetic origins of criminal behaviour, of the criminal personality and so forth.[26]

(8) *Normalisation.* We turn finally to three engines of a different sort. 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. Once again obesity is a contrast case, for it has not yet in any important way been bureaucratised.

(10) *Resistance.* Kinds of people who are medicalised, normalized, 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 a control of the classifications into which they fall. There are always twists and turns in the tales of making up people, few more striking that the attempts to geneticise male homosexuality, to find the gay gene.

I mentioned motions towards an 'autism liberation front', something that would make high-functioning autistic people the experts on their condition. There are a number of organizations 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.

Finding out

All ten engines produce effects on the kinds of people to which they are applied. They change the boundaries. They change the characteristics. This in now way detracts from the fact that seven of these are engines of discovery. My names and my sorting of modes of inquiry may be eccentric, but they are readily recognizable.

Conjectures about my examples, 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 organization of genetic anomalies. It is important to know. We know thanks to using all seven listed scientific engines. I do observe that we tend to think of them as directed at fixed targets. I suggest they are more like moving targets. This in no way queries their objectivity.

I invite you to begin to think, in connection with whatever examples are most familiar to you, how each engine makes for interactions between the five elements in my framework. There may be, in the genetic make-up of human beings, a rather rare set of genetic anomalies that is responsible for most cases of autism. If so, it is a fixed target at which we aim, although we do not know what it is. But it, the anomaly, is not autism. I urge you to think about the ways that the disability we call autism has changed its contours and its lived experience during the past sixty years. That is the moving target, and of course what scientific research seeks to understand.

Kinds of people

There is an idea that I believe is sound, but which I have not been able to get clear to my own satisfaction. I put in my title, the idea of a kind of person. It comes out in my C. It is not at all necessary to think of kinds of people coming into being, or in my stories of the human sciences, being made up, but it may help to sharpen questions. So let us look again at my schema A-C.

(A) There were no X (people) before time t: there were many after time *t**.

(B) Before time *t*, X 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 after time *t**, this was a way to be a person, to experience oneself, to live in society.

(C) The X person, as a kind of person, did not exist before *t*, but did after time *t**.

Note that in trying to generalize I have gone into the species mode, 'the X person', as in 'the autistic child'. There are book titles, *The Autistic Child*, and *The Obese Child.*[27] I speak of the species mode because, grammatically, this is the construction we use when speaking of species, the whale is a mammal. Some autism advocates strongly object to speaking of 'the autistic child' and prefer, 'children with autism', and one can sense what they are opposing.[28] 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'.[29] Many philosophers would say that autism is an essential property of his son. It is part of his nature to autistic.

Except in very rare cases, I am disinclined to say the same thing of an obese person. Being overweight is almost always just a characteristic of a person. Overweight is 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 good way to distinguish the two, autism and obesity, in this respect.[30] He thought that there are endless characteristics that are associated with some classifications – he gave *horse* and *phosphorus* as examples. Horses and phosphorous 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 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, and opted for members of the different races having no more in common than their race, than Christians have in common except their faith. The races and sexes are therefore not real Kinds. Mill wrote in this way partly to escape the scholastic notion of essence, which John Locke had already demolished, and which lay in dormancy in the English-speaking world until, alas, Kripke brought it back to life.

It seems to me that Mill's distinction well expresses the idea I quoted, that 'autism is who my son is, not just a characteristic'. Autistic children have a wide range of characteristics in common, distributed on a spectrum, or, I 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.

In contrast, overweight people have nothing much in common except that they are rather plump. Obese people have a little 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 it is may be part of their nature, and may bring in a host of other characteristics. That subclass would come close to being what Mill called a real Kind.

In brief: the poverty line

My probes pay more attention to the rich detail of examples than is the wont of most analytic philosophers. But they are driven by general speculation. Yet the topics do not lend themselves to generalizations: every case is different. Certain phrases fit: the changing faces of autism, the changing faces of obesity, the changing faces of suicide. Even 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.[31] 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-eest), an expression regularly used by the media and in conversation. That is no more a real Kind, in Mill's sense, than the obese, but we do have a tendency to stereotype, and to treat as 'real'.

A vigorous school of cognitive science argues that the tendency to treat kinds of things and kinds of people as if they had essences, is innate in the human mind. It is not asserted that there are metaphysical essences, but that that we innately think and act *as if* there were. I am sceptical. Perhaps this tendency is something better studied under the heading of the historical anthropology of scientific reason. That is the title of an important and I hope innovative small week-long conference this summer, organised by my colleague Philippe Descola and my friend Bruno Latour. The cognitivists will protest that their results are confirmed cross-culturally and apply to six year olds. Yes, to six year olds who grow up, anywhere, in the world of scientific reason, what Marshall Sahlins calls 'the world system'.

In brief: suicide

Leaving aside such abstruse speculation, 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. 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, 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 indeed 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 19th century) France, Wittgenstein and 'the duty of genius'[(32)] – or today. 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 so designed 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.

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 indeed 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. In Los Angeles, at least when my children went to school there, those high on the scale were called MGM, Mentally Gifted Minors. One was never sure whether this was a tribute to Galton or Hollywood. Is a Mentally Gifted Minor a kind of person?

Galton aimed to measure 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 not simply for success: in principle to those who are, or who began, on untrodden tracks and who had personal or social hurdles to overcome. The press call the MacArthur prises the genius prizes. Just before this lecture was scheduled, I had the privilege of being asked to evaluate two nominees. They are truly exceptional, very different n 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 – yes I do not hesitate to use that phrase – will be living

somewhere else. It will blithely refuse to interact with questionnaires, institutions, experts and knowledge, rejecting classification. Ah – but you see, I have just bought into the romantic face of genius.

REFERENCES

1. *Philosophical Investigations* § 309.

2. *Rewriting the Soul: Multiple Personality and the Sciences of Memory*. Princeton: Princeton University Press, 1995. *Mad Travelers: Reflections on the Reality of Transient Mental Illnesses*, Charlottesville, University Press of Virginia, 1998, and, in paperback, Cambridge, Mass., Harvard University Press, 2002.

3. One example of each topic: 'Criminal behavior, degeneracy and looping', *Genetics and Criminal Behavior*, ed. David T. Wasserman and R. T. Wachbroit, Cambridge: Cambridge University Press, 2001, 141-167. 'The Making and Molding of Child Abuse', *Critical Inquiry*, 17 (1991): 253-288. 'Façonner les gens : le seuil de pauvreté', *L'ère du chiffre : Systèmes statistiques et traditions nationales*, sous la direction de Jean-Pierre Beaud et Jean-Guy Prévost. Presses de l'Université de Québec, 2000, 17-36. 'Why race still matters', *Daedelus* 2005 (134): 102-116. 'Biosocial identity', *Daedelus*, forthcoming, 2006.

4. In the lectures for 2004-5, on-line at http://www.college-de-france.fr/site/phi_his

5. 'Making Up People', *Reconstructing Individualism*, ed. T. Heller et al., Stanford University Press, l986, 222-236. This talk was given in the fall of 1983. Reprinted in my *Historical Ontology*, Cambridge, Mass: Harvard University Press, 2002, 99-114.

6. 'The Looping Effects of Human Kinds', *Causal Cognition: An Interdisciplinary Approach*, edited by D. Sperber, D. Premack and A. Premack, Oxford: Oxford University Press, 1995, 351-383.

7. 'Making up people', page 23; reprint page 114

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

9. See my *Taming of Chance,* Cambridge: Cambridge University Press, 1990, ch. 8.

10. 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: Vintage Books.

11. Michel Foucault, review of John Dover, *Homosexualité grecque*, the translaton of *Greek Homosexuality* in *Libération*, 1 June 1982. Reprinted in *Dits et Écrits*, Paris : Gallimard, 4 vols., 1994, Vol. IV, pp. 315-6. (No. 314.)

12. Henceforth, when a title is mentioned but no reference is given, the reference will be found in notes 2-6.

13. Nicholas Jardine**,** *The Scenes of Inquiry : On The Reality of Questions in the Sciences*, Oxford: Clarendon Press, 1991.

14. Ludwik Fleck, *Genesis and Development of a Scientific Fact*, Chicago: University of Chicago Press, 1979. (German original 1935.)

15. Scholars know about curious phenomena such as double consciousness, reported at the end of the nineteenth century, and most easily found in William James. I wrote about this, as an historical problem, before I realized that the multiple personality epidemic was under way.

See 'The Invention of Split Personalities', *Human Nature and Social Knowledge*, ed. A. Donegan et al., Dordrecht, 1986, 63-85.

16. I argued this at a meeting of the Royal Institute of Philosophy, 17 February 2006 : 'The Decline and Fall of Natural Kinds'. To appear in *Philosophy.*

17. '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, Mass.: Harvard University Press, 2005, p. 133. See Lovaas, note 27 below, for the classic operant conditioning method.

18. Temple Grandin, *Emergence, labeled autistic*, New York: Arena Press, 1986. *Thinking in pictures: and other reports from my life with autism* New York : Vintage, 1995. *Animals in translation: using the mysteries of autism to decode animal behavior.* New York: Scribner, 2005. I much like Donna Williams, *Nobody nowhere: the extraordinary autobiography of an autistic child.* New York, Times Books, 1990. *Somebody somewhere: breaking free from the world of autism.* New York, Times Books, 1994. The last autistic autobiography is Kamran Nazeer, Send in the Idiots: Or how we grew to understand the world, Bloomsbury, 2006, which I review in the *London Review of Books*, 11 May, 2006.

19. Mark Haddon *The Curious Incident of the Dog in the Night-Time,* London: Jonathan Cape, 2003.

20. 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 suggests e.g. that autistic children were put out in woods and fields to fend for themselves. Most died. The numerous 'wild children' are the lucky ones who survived. Uta Frith, *Autism: Explaining the Enigma*, Oxford: Basil Blackwell, 1989. She also diagnposis historical figures as autistic, e.g., R. A. Houston and Uta Frith, *Autism in History: The Case of Hugh Blair of Borgue*, Oxford: Blackwell, 2000.

21. The census has always been part of imperial administration – it is why Jesus was born in Bethlehem. In the modern period, the first censuses were in the colonies – Quebec, Peru, Virginia. When the census and related tabulations start doing new kinds of people or their characteristics, they may inaugurate a new kind of person that had not been self-conscious before. See my 'Biopower and the Avalanche of Printed Numbers', *Culture and History* 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, Mass.: Harvard University Press, 1998. This is an insider job, for Desrosières has a senior post at INSEE, the main French agency for demographic and economic analysis.

22. Hacking, *Taming*, ch. 4.

23. My own account is given in ch. 19 of *Taming* and in 'Normal People', *Modes of Thought*, edited by D. R. Olson and N. Tarrance, Cambridge: Cambridge University Press, 1996, 59-71.

24. 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): 23-28.

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

26. See my 'Criminal Behavior'. The current drive to genetics curiously recapitulates, on a sound scientific basis, the end of the nineteenth century idea that placed criminal and other undesirable behaviours, such as alcoholism, under the heading of inherited degeneracy.

27. Thus we have titles, Igor Lovaaas, The autistic child : language development through behavior modification, New York: Ivington Pulblishers, 1977.   I. N. Kugelmas, *The Autistic Child*, Springfiled: C. C. Thomas, 1970. Milada Havelkova, *The Autistic Child: A Guide for Parents*, Toronto: Canadian Mental Health Foundation. P.L. Girogi, R.M. Suskind, C. Catassi, *The Obese Child*, New York : Karger, 1992.

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

29. Schreibman, *ibid*, speaking of Bernard Rimland, author of *Infantile Autism: The Sydrome and its Implications for a Neural Theory of Autism*, New York: Appleton-Century-Crofts, 1964.

30. J. S. Mill, *A System of Logic, Deductive and Inductive,* London : Longman, 1843, and seven subsequent editions. Book I, ch. vii, § 4.

31. See Hacking, 'Façonner les gens : le seuil de pauvreté'.

32. The title of Ray Monk's biography, *Wittgenstein: The Duty of Genius*, London: Jonathan Cape, 1990.