

## Exoepistemology: On Knowing Without a Knower.

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The word *epistemology* is of surprisingly recent date. It arises in English in 1847 as a translation, mostly into Greek, of Fichte's *Wissenschaftslehre*, itself newly minted ('Jean Paul' 1847, 296). Just as there seemed to be no word for what a lot of people had been up to for a long time before the arrival of the word epistemology, so there seems to me to be no word for what has also been a strongly pervasive phenomenon, namely the production and development of complex states of feeling and imaginative projection in relation to knowledge. *Epistemopathy*, the uncomely term I mean to employ for this, would need to be broader and fuzzier in its application than epistemology, precisely because it would not aim at exact knowledge as such, but rather at the spectrum of feeling exacted by the idea, the ambition and even, we must often feel constrained to say, the fantasy of knowledge, whether exact or not. So it must encompass, not just questions of what can be known for sure and how, but the investments in all the accessory and executive functions of knowing, for example, wondering, enquiring, discovering, arguing, reasoning, teaching and learning. Epistemopathy's concern, in short, will be with the concern with knowledge. 'All men naturally desire knowledge', Aristotle writes in the opening words of the *Metaphysics*. (Aristotle 1933, 3). Epistemopathy has a care for that desire, along with passions incident to it and its absence – because ignorance too, is no mere omission, or remission of knowledge, but itself a kind of mission, or even, as Lacan observes, a passion (Lacan 1998b, 121). Epistemopathy does not mean a kind of feelingful knowledge, a knowledge impelled and palpitant with affect (maybe all knowledge is of this kind). Rather it is knowledge-feeling, the feelings we build and sustain about knowledge and knowing as such. Knowing-feelings will include irritation, rage, envy, lust, misery and melancholy just as much as satisfaction, assurance, excitement and sadistic triumph. Epistemopathy is therefore the *mattering of knowledge*, rather than the mere matter of its facts.

Epistemopathy is concerned with the workings of fantasy. My understanding of this term is broadly psychoanalytic, always bearing in mind that psychoanalysis must itself be regarded as a vast and variegated carnival of fantasy-formations with respect to its own knowledge, or things it wishes were knowledge, or the delirious things it is determined to have taken as knowledge. For psychoanalysis, fantasy is not the opposite of truth, or not necessarily. A fantasy is not necessarily something false, but rather something invested as true, something the truth of which matters to us, in the process that Freud called *Besetzung*, translated by Strachey with the invented Greek word *cathexis*, a word that, like epistemophilia is plumply and moistly epistemopathic in its very effort to appear drily technical or psychochemical. So it is silly to counterpose fantasy to truth, because nothing is more saturated with fantasy in the understanding of the term I have pilfered from psychoanalysis than the truth.

Many of our most austere exercises in logical reflection can be regarded as the progeny and provender of knowledge's fantasy of its own auto-generative power. In epistemopathic terms, the function of the more metaphysical kind of theological thinking that has kept the universities busy for centuries has been to allow for the impassioned and sustained elaboration, at once untrammelled by experiment or experience, yet also subject to ferociously austere internal logical constraints, of a kind of artificial intelligence or epistemotechnic, a miracle-making kind of thinking in thin air. Theology, the elaboration of knowledge-systems concerning inexistent objects and relations of fantastic complexity (literally fantastic, in the sense that they permit the development of a fantasy of complexity itself), is an epistemology that, in the absence of anything but imaginary objects, and in its joyously earnest capacity to multiply those objects and their relations without limit, is unalloyed epistemopathy, or the apotheosis of epistemic fantasy, the rapturous onanism of knowledge feeling and feeding its own powers of self-reproduction.

The metaphysics of the medieval schoolmen anticipates the vast formalisation and autonomisation of knowledge, in the forms of expertise and information, in our modern period. The coming of electronic forms of information technology is only the most recent stage of this. We may say that modern epistemopathy is characteristically concerned with the negotiation of the growing gap between personal knowledge, the knowledge embodied in subjects who know their knowing (or think they do) as consciousness, and the various forms of artificial intelligence, or knowledge that need not know, or need to know, itself. It is the gap between knowledge as existed, and *exopistemology*. In one sense, it is the tension between the *-pathic* and the *-logical*, the feeling of knowing, and knowing without feeling.

The phrase 'artificial intelligence' implies that there might be some other kind. The fears and the exhilarations attached to the idea of knowerless knowledge rest on the conviction that we by contrast not only know, but also know that we know, know what we know, and know how we know it.

We tend to distinguish knowledge from ignorance as its opposite and fantasy as its contrary. But knowledge has its own unconscious, defined not as that which is hidden from knowledge, but as the knowledge of itself that knowledge hides from itself. What remains largely unavailable to knowledge is the force of fantasy that weaves and unravels it. We fear knowledge machines that go mad, all the while unaware of the often delirious workings of madness in our relation, or, more accurately, our non-relation to our own knowledge. It is this incapacity to know the force of the will to knowledge which ensures that all intelligence is artificial, alienated from its knower.

A thought, we say in English, 'occurs' to me. Or I may find myself, as we say, 'lost in thought'. It seems to be intrinsic to thinking that I cannot precisely coincide with it. When anyone has ever said 'a penny for your thoughts', it has always left me at a loss and penniless. In part it is because I don't really seem to have things I could call 'thoughts' unless I am marshalling my mental activity into the form of propositions, like this. And yet, at the same time, thoughts seem like things, they seem to be

productions of some kind, and not just processes. My thoughts seem, like my words, to be separate from me, once they have been, as I say, as I find myself saying, had.

Much of epistemology seems to be taken up with the question of how we can be sure of what we know, and what we can know, where 'being sure' presumably means not having to check every time. Epistemopathy, the feeling of having knowledge, and the feeling we may have for knowledge more generally, operates in this space, in which knowledge is always to be had, as it were, on account. Like so much else, my knowledge is actually a matter of conjecture or probability: to say I know something is to say only that I take there to be a high chance of my being able to invoke or deploy it as required. So, I am not only surrounded by people who I assume have knowledge, and are assumed by other people to have certain kinds of knowledge, I represent for and to myself what Jacques Lacan calls the *sujet-supposé-savoir*, the *subject-supposed-to-know* (Lacan 1998a, 232). I seem not to be inward with the knowledge I nevertheless suppose to be somewhere inside me. The knowing of the knowing subject must be supposed, which is pretty much the same word as substituted, put under, or even understood, in the sense in which an absent part of speech in a sentence may be said to be understood. All this supposition and presumption makes knowing itself subject to the work of fantasy and is perhaps inextricable from it. The thing I will be calling fantasy is what helps me suppose that I am the person that I am supposed to be, and that I know roughly who or what that is.

If it is hard to be quite sure what it means, or what it is like, for an individual subject to know something, it is even harder to understand what kind of experience there could be of collective knowing. In this respect, collective knowing is like collective memory or collective feeling, in that there is no conceivable way for knowledge to be known collectively, in the absence of something like a collective subject to do the feeling or remembering. We must say that collective knowledge requires, not just a subject supposed to know, but a supposed collective subject of knowing.

And yet it feels as though there is something essentially collective about all knowing. Human beings find it almost intolerably difficult to keep any kind of knowledge to themselves. Like a joke, knowledge needs to be transmitted, or made intelligible. Of course, there is such a thing as secret knowledge, but even that is usually held in common by a cabal or select group, rather than by an individual.

The collectivity of knowledge is suggested by the very elusiveness of the experience of knowing. I know what it is like to recognise something that I know, and I know what it is like to think I know something (I think), but the things I know seem somehow to be withdrawn from the possibility of being experienced; to know something means to know it without having to know you know it, which is why we rely so much on various acts of telling or spelling out to provide the proof that we do indeed know what we know, and also know that we know it. And this doubling, in knowing that we know that, means that our knowing must be able to go beyond us. The fact that this telling or spelling out is necessarily in a language that is not our own – otherwise it would not itself be intelligible or even perhaps known to be a language – may suggest to us that

knowledge can neither originate in or remain with us, but must precisely be part of what ‘we know’. If we are *homo sapiens*, the very existence of such a phrase makes it clear that, if we have knowledge it is a knowledge held in common and capable of being preserved and passed on.

It is commonly assumed that, if divinity has been dispelled by knowledge, then knowledge may supply the place of that absconded or ostracised divinity. There is at least one sense in which knowledge retains its divine features. Paul writes to the Colossians that in God ‘are hid all the treasures of wisdom and knowledge’ – πάντες οἱ θησαυροὶ τῆς σοφίας καὶ γνώσεως ἀπόκρυφοί (Colossians 2.3). The idea that God is a kind of infinite archive of knowledge beyond human knowing, and that religious faith involves what the King James rendering of Paul’s Greek calls the ‘acknowledgment of the mystery of God’ (ἐπίγνωσιν τοῦ μυστηρίου τοῦ Θεοῦ), suggests in advance the possibility of a kind of deification of knowledge, that, in modernity, may survive the dissolution of the idea of God as its carrier or container, while retaining its occult and unencompassable character. Perhaps all this survives in a vestigial way in the exaltation implied in the phrase ‘look up’, in the sense of consult, or search for, recorded from 1632.

More than ever before, we have the sense of a collective archive of knowledge, maintained for the use of, and accessible by the ‘we’ I have just invoked, which is at once transcendent of any individual, and yet in some abstract sense available to them. In the place of religious faith, yet isomorphic with it, there is the faith in knowledge, the assumption amounting itself almost to certainty of the prodigious extent of the things that, as we so often say, ‘we know’. Though this knowledge is only known by this abstract ‘we’, the knowing we, or first-person-plural-supposed-to-know is itself only the hypostasis, the imaginary bearer or, literally, ‘understander’ of the knowledge itself.

Epistemopathy allows us to recognise that there must be an element of imposture in all knowing. Epistemopathy can help make sense of the ways in which we play at knowing, or, put somewhat less dismissively, act out the various games of knowledge. The theatrics of knowing require scenery and properties, both rhetorical – as in the formalised exchanges involved in interrogation and answer, for example, and the scenes, spaces and occasions of knowledge. Knowing is inseparable from some kind of theatrical production. Knowledge is never quite here or there, at the point where it is supposed to be: libido must supply the place of that *ibid*. It requires staging, ceremonies, impersonations, transmissions, tableaux and libretti, pageants and puppet plays, to stand in for its always truant here and now. The desire to know that Aristotle assumed was primary is endlessly deflected into the desire to make knowing knowable and narratable in some form. There must always be some form through which knowledge whether in the Faustian phantasmagoria of the chalked circle commanding the macrocosm, the soul-searching and psychic surgery in the private chambers of psychoanalysis, the mystery plays and smoky places of secrecy, the adversary courts and show trials in which knowledge is made to own up to itself, the wastes and wilds, the fogs and fens and cunning corridors of unknowing, the studies,

schoolrooms, libraries, laboratories and lecture-halls in which the show is stopped, or must go on, and all the many ways and means in which we may be said to ‘invest’ in knowledge, sartorial, psychological, military and economic. To this can be added the phantasmagoric space-time of the book, which parses knowing into its places, occasions and parts of speech, spinning out its suppositions, prepositions and postponements.

Perhaps the greatest conundrum thrown up by the contemporary examples of the knowledge society has been the separation of knowledge from human knowing brought about by computational technology. Artificial intelligence has been with us for a long time, perhaps even, as people nowadays say when referring to periods of more than about a week, ‘the longest time’, because all intelligence is artificial, since all intelligence (in the sense of a capacity for judgement) requires to be externalised in the form of intelligence (as the giving of report). What is knowledge for? Knowledge is to be communicated. If there is a strong urge to keep certain kinds of knowledge hidden away, this may be because the urge or imperative to communicate knowledge is otherwise so intrinsic to it. The word ‘intelligence’ lets on about this sufficiently: to be intelligent is to have some intelligence to pass on. Something similar applies to the word ‘information’: information is not just a given, it is something that must *be* given. Indeed, if the principle holds that ‘I do not know what I think until I see what I say’, then I do not know that I know something until I can tell it to myself. I can only cognise something I can recognise. The drive to know, if such there be, is a drive to be able to tell of what one knows, in order that one may be one taken to know. It does not ever seem to be enough to know: one must impart the news of what one knows, or at the very least, secure it from theft or forgetfulness, so that it may be recalled at need.

But something unexpected happens when one tells what one knows. For that very process, which brings knowing into focus and fulfilment, also begins to separate me from my knowledge. As a consequence, I am much more likely to forget something to which I have given written form. Understandably, and politely, people sometimes ask me to represent the views or arguments that are articulated in things I may have written. Having externalised what I know, or my processes of coming to know, in written form, I am then asked to personify that knowledge, to act as convincingly as I can as the SsS, or *Sujet-supposé-Savoir* of the knowledge. But the mere fact of having articulated the knowledge in some way that makes it intelligible means that the knowledge is no longer quite mine, and must become less and less mine as time passes. This is why, when people pay me the compliment of asking me to explain what I may have meant by something I have written, I have to put myself in their position, by reading it.

So there is no knowing without telling, and especially the kind of repeatable telling that is writing; but this writing is the ablation of my knowledge, even, as Socrates feared, the very vehicle of my amnesia. Every telling is a taling, a reckoning up; but it is also a tailing off. I act and sometimes speak as though I thought that I were stockpiling what I know in what I write, laying up knowledge against the day when knowledge may have gone from me, or I have slipped away from it. But the more

knowledge I accumulate in this way, the less actual knowing there is in me, of me. The knowing will always have to be in what I have written, in the warrant it provides for the fantasy of the one supposed by the writing to know; the one, that is, that provides the imaginary support for the writing that might otherwise impossibly seem to come from nowhere and rest on nothing, but which actually is itself the support for this supposition. How telling it is that I must always have something to rest on when I write, some support or literal hypothesis – a desk, a table, a lap, my palm, even a friend’s accommodating back. It is the necessary support for the writing that provides my support, my supposition, that stands under my understanding.

The desire to automate thinking has been recurrent throughout the history of thought about thought. This is perhaps a logical extension of the feeling that reason is itself a kind of mechanical operation to which mind submits itself. Sometimes, as in Francis Bacon’s remarkable proposal in his *New Organon* (1620) this seems to promise a purging from knowledge of the more dubious operations of mind

There remains one hope of salvation, one way to good health: that the entire work of the mind be started over again; and from the very start the mind should not be left to itself, but be constantly controlled; and the business done (if I may put it this way) by machines [*ac res veluti per machinas conficiatur*]. (Bacon 2000, 28)

For others, the mechanisation and therefore exteriorisation of calculative mental operations held out the promise of freeing capacity for other kinds of cognitive activity. Mary Boole, the wife and collaborator of mathematician George Boole, whose work on algebraic logic provides the foundation for all internet searching, wrote in 1883

if I were asked to point out the two greatest benefactors to humanity that this century has produced, I think I should be inclined to mention Mr. Babbage, who made a machine for working out series; and Mr. Jevons, who made a machine for stringing together syllogisms. Between them they have conclusively proved, by the unanswerable logic of facts, that calculation and reasoning, like weaving and ploughing, are work, not for human souls, but for clever combinations of iron and wood. (Boole 1883, 246-7)

But this confidence in the cognitive powers that are to be liberated by the automation of calculative reason must also cope with the possibility that external systems might also be able to accede to these higher or more essentially human kinds of intelligence. In September 2017, Google’s Deep Mind group reported at a conference in Jesus College, Cambridge entitled ‘Memory and Imagination in Humans and Machines’ on work with neural networks that they hoped would begin to allow machines to develop some of the capacities that are referred to as ‘imagination’. The discussions at the conference were characterised by a certain optimistic humility on the part of those describing computing developments and peevishly defensive responses from those who regarded themselves as representing the humanities, for some of whom this represented a presumptuous attempt to appropriate the territory they held to be their inheritance. Both sides seemed to display a naïve positivism about the nature of

‘imagination’, as though it were perfectly clear what this was, even as it proved necessary to maintain in its definition a certain degree of ineffability.

What we mean by imagination is not just what it denotes, but what we do with that word. What we do with that word, as opposed to what the word denotes, is to add fantasy to denotation. It is possible to agree with the opponents of computing that the idea of machine-imagination is a fantasy, not because the way in which a machine may be said to imagine must always fall short of, or be qualitatively different from human imagination, but because the idea of human imagination is itself made up in large part of fantasy. We depend on imagination to decide what imagination means. What is more it is an ongoing work of fantasy, that is still in process – with the idea of machine-imagination in fact being part of that process. The fantasy of mechanical imagination is part of the process of imagining human imagination. This is prosopopoeia, that is, the ‘the fayning of a persone’ (1561). Just as our thinking about the entities we are accustomed to think of as ourselves, there is prosopopoeia. In both cases there is function plus fantasy.

English has a rhetorical advantage over some other languages, because it is a combination of Latinate and Germanic (to use its Latin name), two lexical streams that, for historical and political reasons flowing from the conquest of Britain by a Latin-speaking people, the Normans (to use their German name), is equipped with a ready-made machine-code for translating between the sensible and the intelligible, or (in German) the felt and the known (you can play this game all day.) Since English conjoins a feeling-lexicon and a knowing-lexicon, it can provide a sensitive register of the alternations between feeling and knowledge, along with their recursive nestings (what, for instance, we feel about what we think we know about feeling).

One might think in particular of the fortunes of words that begin as knowing-words and become suffused with certain kinds of feeling. One would be the term *data*. A couple of decades ago, ‘data’ tended to mean the results of experimental procedures usually having a numerical form. Data was therefore the product of certain kinds of systematic investigation aimed precisely at the formation of data. So data was not in any sense what the word suggests it might be, things simply given to us; data had to be formed and captured in specific and deliberate ways, and in determinate contexts. But over the last two decades or so, the spread of personal computing has meant the production of large amounts of pre-coded data, which is immediately available for processing operations, which can, of course, include surveillance, marketing and identity-theft, because, although data still needs to be produced, it is also spontaneously emitted by many of our personal actions and interactions precisely because they are mediated. Many human societies in the past have been extremely anxious about the magical uses that can be made of hair, fingernails and other kinds of personal exuviae; our concern nowadays is with the products of our data-excretion. The enormous growth in the shredding industry testifies to this concern about the risk posed to us by our involuntary sheddings. Data is not so much given, as the word suggests, as incontinently *given off*.

Another word that oscillates feverishly between cognitive and affective registers is ‘algorithm’. An algorithm is a computational procedure. As such, it is one of the most familiar operations in all human life. You operate an algorithm every time you measure a wall and decide how many rolls of wallpaper you are going to need and every time you fry the onions at the beginning of cooking spaghetti bolognese, rather than putting them in at the end. If I look up the word ‘algorithm’ in the OED, I operate an algorithm to do it. The usefulness of an algorithm is precisely that it is a mixture of the purposive and the automatic: I don’t have to devise a procedure for performing these actions every time I do them.

Algorithm, often in the form *algorism*, *algorym* or *augrim*, was in use from at least the 13<sup>th</sup> century, to signify the Arabic system of decimal numbering and calculation, as distinguished from *abacism*, or the use of the abacus. It owes its name to the fact that the first arithmetical treatise translated from Arabic into Latin to explain the use of Hindu numbers was of a 9<sup>th</sup>-century work by the Persian mathematician al-Khwārizmī, the Latin rendering of whose name, for example in the *Liber Algorismi de numero Indorum*, became the name for the practice he explained. *The Crafte of Nombrynge* from the early fifteenth century begins with the words ‘This boke is called þe boke of algorym, or Augrym after lewder vse. And þis boke tretys of þe Craft of Nombryng, þe quych crafte is called also Algorym’ (Steele 1922, 3). The word seems to have blended with the Greek *algorithmos*, number, and perhaps also to have been influenced by the word *algebra*, on which al-Khwārizmī also wrote and which also derives from his name. There is no etymological connection with *augury*, which is from Latin *avis*, bird and Indo-European *-gar*, to call or make known, though the existence of forms like Anglo-Norman *augorime* for *algorism* suggests that it is not impossible for the words to have influenced each other. No doubt Greek ἀριθμός, number and the rise in the sixteenth century of the word *rhythm*, from Greek ῥυθμός, measured time, recurring order, will have contributed something to the magical overtones of the word.

Some of these mystical overtones seem to have been reawoken in contemporary uses of the word algorithm. For some time, automated cognitive procedures, some of them mechanical, but mostly electronic, have been becoming faster, more complex and autonomous of human beings. The word algorithm had been a part of the technical vocabulary of programmers and computer scientists, but has moved into cultural and political life, with the growing awareness of a world of automatic calculations, making decisions in an unregulated manner, in areas as diverse as financial trading, medical diagnosis, battlefield biometrics and the ordering of taxis and takeaway meals, along with the concern about the way in which search engines provide information to users selectively through the use of algorithmic filters, meaning that the transmission of human knowledge is itself being governed by nonhuman mechanisms (though we should be careful about the word nonhuman, a word which positively hums with fantasy). Not only has the idea of the algorithm been the subject of increasingly frequent and intense cathexis, calculative procedures are increasingly able to be brought to bear to form and transform human feelings and perceptions, making for a



rapid and somewhat unpredictable interchange between what we know, what we feel about what we know, and what we know about what we feel about what we know.

An important part of our understanding and inhabitation of this system is the overheated cathexis of the idea of abstract system itself and the law of magical exception that systematically operates through it – that is, the law ensuring that one can never be fully assimilated to a system that one is able fully to explicate. We perhaps have need of an idea we might call *exopistemopathy* as the response to the prospect of exopistemology, the mechanical rage against the machine of artificial systems for their theft or usurpation of what we just know (instinctively, that is, automatically) are properly human powers of knowing, learning and understanding. There is an unstable compound of fascination, delight and dread in the idea of a knowledge that operates without our knowing it, perhaps partly because *that is a feature of all our knowledge*. Such systems constitute what I have previously called a dream machine, a machinery for producing dreams of machines and what they are capable of doing to us (Connor 2017). Many fantasies of artificial intelligence can be seen as alien abduction fantasies. Indeed such fantasies may themselves be a kind of artificial intelligence.

The most important thing to understand about the kind of knowledge characteristic of knowledge societies is that it is less and less embodied in knowers and exists ever more in the capacity for passage and exchange, and cycles of information propagation and decay. The epistemic has become epidemic in its structure, production and rhythm. This has because knowledge has become ever more mediated, even as it has also become more immediately available. Mediation removes responsibility, immediacy makes it very difficult to limit effects. The most important principle of knowledge therefore, is that it has become mobile. As long as ‘knowledge’ is arbitrarily restricted to the sort of thing that we would wish not to see restricted for the benefit of one group and the disadvantage of another, this mobility will seem desirable. But if knowledge includes every kind of information, true or false, dangerous or safe, useful and useless, enriching and debasing, it is naïve to see the uncontrollable acceleration of its dissemination as an absolute good. Knowledge in the complimentary sense articulated in the UNESCO report *Towards Knowledge Societies* requires detachment and delay: while the very means of growing knowledge societies closes every possibility of delay, deferral or distance.

There are many dangers in the idea of a knowledge society, or epistemocracy. There is the terrifying prospect of the deepening disadvantage of the ignorant, which will paradoxically become more cruel and injurious for those subjected to it the more that knowledge and education spread. It is much worse to be part of a 20% minority of the illiterate than a 40% majority, and to be part of the 2% almost removes one from anything that could be called human existence altogether. The growth of a knowledge society cannot help but deepen the disadvantage to those not in the know. Poverty can be relatively speedily remedied by money, and even violence is susceptible to certain kinds of social and legal mitigation. But ignorance and the increasingly catastrophic exclusion from human life it implies, is much more expensive to remedy and beyond a certain point may be irremediable. To be accounted stupid is already in most societies

he most vicious and pitiless exclusion from participation in social life that is imaginable. A knowledge society has a capacity to create non- or prehumans that is much more powerful than any other set of power relations.

We can expect power to continue to leak away from the rich, the male, the white, and possibly even the beautiful (always the last form of unearned advantage to come under investigation), and to accrue steadily and in spades to the smart, or maybe the merely fly. The incurious kowtowing to knowhow in an epistemocracy may make it harder than ever to appreciate how long the list is of things that are worse than ignorance (cowardice, malice, pride, selfishness, treachery, indolence, unkindness, rage, cruelty, addiction, and so on) and how considerable and precious too the back-catalogue of human graces and virtues that need have no necessary relation to intelligence, though it would be intelligent of us to honour and foster them (endurance, courage, resilience, loyalty, fairness, adventure, cheerfulness, tenderness, friendliness, forgetfulness, devotion, generosity, vivacity, joy, love, sentimentality, hesitation, humour, mercy, care). I have wanted to try to suggest how complicated, irrational, unlovely and even sometimes dangerous the human infatuation with its own actual and imagined powers of knowledge can be.

The other danger of epistemocracy is the door it opens gapingly wide for intensified conflict, as knowledge becomes a battleground, not just as a resource to be fought over, but also as a vehicle to be fought through and with. The principle that knowledge is power has been taken to mean, either that knowledge is a means for 'Power', meaning established or state powers of various kinds, to assert its dominion, or it is a means whereby the power that can be heroically stood up to. But it is important to recognise that, with knowledge increasing on all sides, knowledge is power everywhere and for everybody who has it. The growing tensions and conflicts over intellectual property rights, for example, as they concern drug patents, software and the ownership of music and other cultural productions are already far too complex and involve too many competing interest groups to be reduced romantically to a struggle between corporations and the commons (Haunss 2013). In the absence of a willingness sometimes to sacrifice truth for peace, it is hard to see what will intervene to prevent the escalation of the epistemic rivalry and spite that had already, even before the election of Trump and the British vote to leave Europe, become a feature of recent election campaigns. The Enlightenment aim of replacing *doxa* with *logos* will have to be given up in the face of the multiplication of every conceivable kind of doctrine and doxological adherence. The growth of knowledge is likely to take place not just through increasing what individuals know and know how to do. It will also increase the opportunities and desires for making known, in the sense both of disclosing and of producing. The chances of epistemocracy in Nicholas Taleb's sense, of a prudently and pragmatically self-limited mode of knowledge, a knowledge capable of inhibiting as well as inhabiting its own excited investments and exaggerations (Taleb 2007, 190), seem currently limited.

The phrase 'knowledge production' has strangely ceased to sound strange over the course of my lifetime. Not all human eras and communities have believed in the

infinite producibility of knowledge, which is precisely why most human groups have devoted so much attention to its reproduction. Indeed, it seems likely that most human groups that have had any abstract conception of the temporality of knowledge have tended to see it steadily occupying more and more of a finite space of the knowable, or adequating nature to the human, rather than expanding outwards into an infinite space that it itself forms as it goes, like a locomotive laying down its own track before it. It seems strange that such a conception should have come to seem natural in the very period in which we are having to make such painful adjustments to the idea of the finitude of every other earthly resource that we had previously assumed to be without limit. One must surely suspect some principle of epistemopathic compensation here, as though knowledge needed to conjure up a superpower-equipped fantasy-double of itself, to make up for what it has glumly been forced to come to know of finitude. The prospect of the infinite horizon for knowledge-production is probably a proxy for the godlike fantasy of boundlessly giving rise to oneself, an intoxication that, instinct though it seems in us, has not always turned out well. In past eras, human beings struggled with the question of how to overcome their ignorance. In our era, the pressing question is what we are to do with our knowledge-glut: who ever thought that there could be such a thing as epistemic obesity?

None of this is any kind of argument for not continuing to invest in education and the growth in knowledge. Indeed, our social dependence on knowledge, in all its diversifying modes of operation, makes ignorance more of a deprivation now than at any other time. But it ought to suggest that we might be more curious than we are about the kinds of affective investment we have already made in the idea of knowledge.

We are confident of knowing something about unconscious knowledge, but have scarcely begun to grasp the unconscious of knowledge. The madness of knowledge takes many different forms, but perhaps they all fix around one form of insanity, in the literal sense of the word *sanus*: not being sound, whole, *integer* or all of a piece. It seems right, in this city that was home both to the formation of Goethe's *Faust* and to Nietzsche's final broken years, to end with the opening words of Nietzsche's *Genealogy of Morality*: 'Wir sind uns unbekannt, wir Erkennenden, wir selbst uns selbst' (Nietzsche 2013, 3): 'We are beyond our own ken, our selves unknown to ourselves, we would-be knowers'. The more knowledge we have, the less we knowers seem to know of it. This may be the irremediable unintegrity of a knowledge that will always put us beside ourselves, since for it to have done with itself would be to have done with our selves.

## References

Aristotle (1933). *The Metaphysics: Books I-IX*. Trans. Hugh Tredennick. Cambridge MA: Harvard University Press; London: William Heinemann.

Bacon, Francis (2000). *The New Organon*. Ed. Lisa Jardine and Michael Silverthorne. Cambridge: Cambridge University Press.

Boole, Mary Everest (1883). *The Message of Psychic Science to Nurses and Mothers*. London: Trübner and Co.

Connor, Steven (2017). *Dream Machines*. London: Open Humanities Press.

Haunss, Sebastian (2013). *Conflicts in the Knowledge Society: The Contentious Politics of Intellectual Property*. Cambridge: Cambridge University Press.

‘Jean Paul’ (1847). *English Review*, 7, 276-313.

Lacan, Jacques (1998a). *The Seminar of Jacques Lacan, Book XI: The Four Fundamental Concepts of Psychoanalysis*. Ed. Jacques-Alain Miller. Trans. Alan Sheridan. New York and London: Norton.

----- (1998b). *The Seminar of Jacques Lacan, Book XX: Encore: On Feminine Sexuality, The Limits of Love and Knowledge, 1972-1973*. Ed. Jacques-Alain Miller. Trans. Bruce Fink. New York: Norton.

Nietzsche, Friedrich (2013). *Zur Genealogie der Moral. Götzen-Dämmerung. Philosophische Werke, Vol. 6*. Ed. Claus-Artur Scheier. Hamburg: Felix Meiner.

Steele, Robert, ed. (1922). *The Earliest Arithmetics in English*. London: Humphrey Milford/Oxford University Press.

Taleb, Nassim Nicholas (2007). *The Black Swan: The Impact of the Highly Improbable*. London: Penguin.