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The ineffability of meaning

What can be said at all can be said clearly; and what we cannot
talk about we must pass over in silence.

Ludwig Wittgenstein, *Tractatus Logico-Philosophicus*

Chapter 1 Unweaving a mystery

Like many other species, we are minded creatures: we store representations of the world around us, and of our own internal bodily states. But unlike other species, we also have language: an unheralded means of packaging these representations – our thoughts – and rendering them public. Sometimes we use language for the better – when we share our pearls of wisdom with a friend in their hour of need – and sometimes for the worse, and to our regret – something spoken in the heat of the moment cannot, alas, be taken back, and may not always be forgiven, or forgotten. Making thought public is the hallmark of communication. And while language may, on occasion, be an imperfect means of achieving this, it nevertheless gets the job done. But communication is dependent on something more mysterious, the seemingly ineffable elixir of communication: meaning.

Meaning presents itself in a variety of ways. The dark, menacing clouds slowly creeping by in the sky outside, as I look through my window, *mean* rain. A red traffic signal *means* stop. The ‘recycle bin’ icon on my computer desktop *means* that’s where I place an unwanted file. And the yellow and black colouration of a droning wasp *means* danger: don’t touch.

But having language raises the stakes. Think about it for a second: after all, you’re currently reading marks on paper, or on a computer screen. While you could be watching dark, menacing clouds through a window, or sitting at a stop signal, or contemplating deleting a computer file, the chances are you’re not. You’ve used the orthographic representations that I’ve typed – and that you’ve just read – to conjure up complex ideas – lowering clouds, computers, traffic signals and wasps. For creatures with language – us – meaning appears to arise, in particular and most saliently, in the liminal space between the private world of thought and the

very public shop window of language. I can use it to suggest ideas that you might then call up from your past, such as your first pet, or your first day at school, or your first date, or the first time you kissed; or I can use it to prompt you to think about ideas you're not actually experiencing in the here-and-now, such as a droning wasp meaning danger. We can even use it to suggest imaginative flights of fancy, such as how you might spend your millions if you won the jackpot in the national lottery.

Meaning seems to arise when we understand the ideas conveyed by a word, or sequences of words. But it also involves understanding what a speaker intends by the words – which, paradoxically, might not always be the same as what the words themselves, other things being equal, might actually convey. For instance, the utterance 'lovely to see you!', said with a grimace by your ex after a messy break-up as she or he bumps into you in the supermarket, might not *mean* what it literally says.

The commonplace view of meaning

One view, a commonplace view perhaps, takes language, in all its kingly splendour, as the mover and shaker in our everyday world of meaning. After all, every time we open our mouths and converse with someone – a passer-by in the street, our ex in the supermarket, a colleague over a drink after work, or even a lover during a breathless dinner date – we are performing one of the most remarkable feats that can take place between people; we use language, all the time, to gossip, persuade, seduce; to argue and to make up. Our use of language to communicate – and this is by no means restricted to the spoken variety – might seem, on the face of it, all there is to meaning-making. Words, whether spoken, written, typed or signed, *carry* meanings. And as we have learned what 'our' words mean at mother's breast, scarcely before we can remember remembering, we can join them together in sentences and in larger chunks of discourse, and almost effortlessly when listening to others, or reading a text, unpack their internal

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residue. And in so doing, we *understand* the meaning inlaid in their symbolic essence.

But a moment's reflection reveals this appealingly intuitive view of meaning to be unsatisfactory. For one thing, the self-same word can *mean* many different things on different occasions of use. Take the verb *to kill*, in the following line from Shakespeare's Henry IV, part II: *The first thing we do, let's kill all the lawyers*. This is uttered by Dick the butcher. And his utopian resolution is to murder all of England's lawyers.

While this sentiment may resonate with some contemporary readers – lawyers narrowly follow bankers and politicians among those some of us most distrust – *kill* doesn't always, paradoxically, *mean* 'to kill'. *She dressed to kill*, or *That joke killed me*, clearly don't beckon death – at least, one hopes for something rather different. Nor is *a lady-killer* normally taken to betoken a murderer of women, save perhaps in the Ealing Studios black comedy *The Ladykillers* (1955). We can *kill time*, or say that too much garlic or chilli *kills a meal*. We can *kill* (switch off) *an engine*, or *the lights*; we can *kill (off) a bottle of brandy*, or we can complain that a new pair of shoes is *killing me*, or that fatigue from overwork *kills your love life* and potentially, over time, *the relationship*. A long hike can *kill us*, or rain can *kill plans* for a barbeque. Clearly, each of these different uses of *kill*, and there are many others, seem to be related somehow. But only the first, from Shakespeare, explicitly relates to death.

So, what are we to make of this variation in the meanings associated with a single word? At the level of language, this reveals meaning not to be an all-or-nothing affair. It shakes us out of our commonplace assumption that words neatly package a single discrete meaning and that somehow, during the process of language comprehension, we unpack it, thereby revealing the meaning folded up inside, in much the same way as we might open a suitcase and remove our neatly arranged clothes after a trip.

But variation in meaning can also come in more complex forms. Someone can *buy the newspaper*. Here your gut response might be that *newspaper*, the word, refers to the printed item you

or I purchase from a newsstand, perhaps on our daily route to work. But if you were a tycoon, it could *mean* the publishing company that employs journalists, and produces and prints the daily tabloid we purchase. This second meaning, however – referring to a company, rather than an item of printed text – sounds and feels a little bit more abstract. And this is because *this* meaning draws upon our knowledge of the world – that certain types of companies produce newspapers. This background knowledge – knowledge about how newspapers are produced, and by whom – enables us to use the word *newspaper* to refer, somewhat paradoxically – at least on the face of it – to a type of company, rather than an item of paper, with print, reporting the news. To understand the meaning behind this second use of the word *newspaper*, we have to know that there is a direct relationship between a particular type of publisher and the physical newspaper we buy in a newsagent, or subscribe to online. And in so doing, the physical entity that we might read is, in some sense, standing, in our mental gymnastics, for the newspaper publishing company. But here the meaning is not, apparently, coming from the word itself, but rather from what we know about the world. It relies upon something other, or more, than language.

And this begins to get to the heart of the matter. Language is but the tip of a meaning-making iceberg. Of course, it floats above the surface, and sails into plain view. It is there in front of us, every day, when we interact with strangers, our children, friends, colleagues or lovers. Language is such an impressive feat that some scientists have attributed to it near-godly powers in elevating the human mind – essentially built on the brain-plan of an African ape – to a rarefied state of cognitive splendour, unmatched by the mental capacities of any other earthly being, present or past.

But let's not beat about the bush. In terms of meaning-making, language is indeed but the tip of the iceberg. It is, self-evidently, the visible portion: we hear language around us every time we step outside our front doors and we see it each time we boot up our computers, or switch on our tablets and open an email, or respond to a text message. And, consequently, we might be forgiven for

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assuming that it *is* language that *carries* meaning: that it *is* language that clinches the deal – *enabling* communication.

In this book, I will show you that there is a large infrastructure supporting the creation of meaning, one that's less easily glimpsed beneath the murky surface of the whys and wherefores of words and their complex semantic webs. Language works extremely well because it is part of a larger meaning-making complex. It's dependent upon a suite of other capacities – in particular, a repository of thoughts and ideas that we carry with us, in our minds – upon which language draws each time we open our mouths to speak. Language, together with this mental apparatus, co-conspires to produce meaning, enabling effective communication.

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In fact, *meaning* – the word – itself provides clues as to what this meaning-making complex might amount to. Words, like people, families and nations, have histories – good and bad, unremarkable and momentous, attractive and downright ugly. A word's timeline can provide clues from the past that are relevant for the present, and specifically what the nature of meaning might amount to, and how it might arise. The noun, *meaning*, was derived in the late Anglo-Saxon period from the pre-existing verb *to mean*. Old English was spoken in England roughly until the invasion of England by William the Conqueror of Normandy, in 1066, after which it gradually morphed into the Middle English of Chaucer. While contemporary dictionaries often list 'intend' or 'to make known' as definitions of *to mean*, the Anglo-Saxon verb *mænan*, 'to mean', probably comes from the far earlier Indo-European root **men*, 'think'. And this would have given rise to the Indo-European form: **meino* 'intention/opinion', both forms suggested on the basis of historical reconstruction – there's no hard evidence these word forms actually existed, as Indo-European was spoken sometime in the region of 9,000–6,000 years ago, way before the advent of written records.¹ But assuming something like these

ancestral words existed, this reveals the following. The modern English word, *meaning*, derived, in its distant past, from the idea of ‘thinking’ and ‘thought’. While we doubtless use language to help us think, thinking itself is something done by a mind – as implicitly acknowledged by the very real frustration we may feel, on occasion, at our seeming inability to adequately articulate a deeply held feeling, thought or complex idea via language. Everyday, hackneyed expressions point to this: ‘I can’t quite put it into words’, ‘My words fail me’, ‘I’m at a loss for words’, and a host of others. Meaning, on this evidence, seems to have *at least* as much to do with thought, and the minds that produce thought, as it does with language.

In this book I explore, on the face of it, a simple idea: meaning arises from the confluence of language and mind. Yet trying to figure out its essence – how this confluence gives rise to meaning – has remained, until relatively recently, one of the greatest scientific mysteries of the cognitive and behavioural sciences; after all, trying to figure out its ineffable essence goes to the heart of the scientific study of language, the mind and brain and human behaviour.

While our species, *Homo sapiens*, has an unprecedented capacity for meaning, a reasonable account of the nature of meaning, the respective roles of language and mind in producing it and its evolutionary origins appeared to lie beyond the capability of contemporary science. But over the past couple of decades, things have begun to change. Exciting new discoveries about the mind, language and the way they work together in producing meaning now offer the prospect of a science of meaning. Meaning is central to our lives, and to what it means to be human. And the story of how we create meaning is one of the most fascinating, challenging and even perplexing in the contemporary science of language and mind.

Chapter 2 The alchemist, the crucible and the ineffability of meaning

Dr John Dee (1527–1608 or 1609), was renowned as one of the most learned men of Elizabethan England. While still in his twenties, he was invited to lecture on algebra at the University of Paris. He was a widely respected mathematician and astronomer. He was also one of the age's leading experts on navigation: he trained those who led many of the English voyages of discovery to the Americas. During his lifetime, he amassed one of the greatest personal libraries in all of England. Moreover, his intellectual prowess brought him into the orbit of the court of Elizabeth I, whom he served as scientific advisor.

But John Dee was also a scholar of the occult: his compass included the realms of both science and magic, in a time, before the Age of Enlightenment (1650–1800), when the two were still not clearly separated or distinguishable. Dee was an expert in the mysteries of alchemy – the pseudoscientific study of the essences of materials. His investigations drew on the mystical, such as Hermetic philosophy, which attempts to tap into cosmic consciousness, and primordial wisdom. And in his final years, his research increasingly focused on an attempt to commune with divine beings, including angels, seeking to uncover a universal 'language of creation'.

For Dee, all his research endeavours nevertheless formed part of a coherent intellectual quest to uncover the divine forms that undergird and infuse the visible world of corporeal experience. Dee was, in an important sense, representative of a tradition of mediaeval scholars whose scholarly pursuits both presaged and led to the later development of scientific thought, theory and practice, based on observation rather than divination and the occult.¹

The ostensible goal of alchemy was the transmutation of material form into perfection. One example of this was the quest for the

‘philosopher’s stone’, a substrate that would work on base materials, transmuting them, via a chemical process, into more noble metals, such as silver or gold. In terms of the human form, the search for an ‘elixir of life’ was meant to transmute the human body, providing youth and longevity.² While alchemy dates back to antiquity, it was still widely practised during the mediaeval period, and even into the Enlightenment.

Alchemy was, perhaps, the paradigmatic example of a proto-science: one that incorporates pseudoscience with more rigorous, analytic elements; and it paved the way for the modern discipline of chemistry. Its practitioners pioneered laboratory techniques and an experimental method which led to the emergence of chemistry: the terms *alchemy* and *chemistry* were used interchangeably as late as the seventeenth century.³

For instance, Robert Boyle (1627–1691), the Anglo-Irish philosopher and scientist widely credited as the father of modern chemistry, dabbled in alchemy. He was instrumental in the successful repeal of the 1688 Royal Statute which had prohibited the alchemist’s attempt to manufacture gold and silver.⁴ And his background in alchemy informed his views and methods in developing a more rigorous scientific method based on experimentation and observation.

In contemporary popular culture, the physical symbol of alchemy is the crucible: a vessel manufactured from a refractory material like porcelain or ceramic. Alchemists used a crucible to subject materials to very high temperatures, combining admixtures of different substances in their experiments. The practice was both informed by and, in important ways, sought to reveal aspects of the transcendental.

But the search for the philosopher’s stone, as well as John Dee’s quest to understand the language of creation, were doomed affairs. They were doomed because they amounted to a search for the ineffable: the genuinely unknowable. Until recently, the prevailing view among scientists was that, like the transcendental mysteries that infused alchemy, meaning too is ineffable, and its study made little sense from the perspective of ‘science’. The case of alchemy,

for my money, provides an interesting and illuminating point of comparison with some of the intellectual psycho-drama surrounding the study of meaning in the recent past in the history of ideas.

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During the twentieth century, new disciplines emerged that pioneered, in important and often startling ways, the scientific discovery of the human mind and human behaviour – making strides in charting some of the last great frontiers of the human psyche. The scientific study of language – linguistics – emerged, during the course of the century, as a rigorous and mature academic discipline, offering great insight into the nature of this most complex of human behaviours. Today linguists know how social life gives rise to variation in language use, leading to language change; they have amassed a huge amount of knowledge about how languages diverge and the cultural, experiential and psychological factors that lead to this; they have made great strides in understanding the way the mind processes language when we speak and understand, and, when it goes wrong, some of the reasons why; and, although the debate is still sharply divided, there is an emerging sense of how language is organised in the mind, and the way young infants learn their mother tongue – in *The Language Myth* I intervened in this debate, weighing the various claims for nature versus nurture in giving rise to language.

But as we saw in the previous chapter, in terms of meaning, as it's such a slippery beast, there has been a feeling among many experts that it almost defies scientific analysis. Indeed, despite the advances elsewhere concerning other facets of language and the mind, for much of the twentieth century the scientific study of language swept the study of meaning under the carpet – out of sight is out of mind. One of the twentieth century's truly great linguists, Roman Jakobson, tellingly observed that, in the first part of the last century, 'semantics, or the study of meaning, remained undeveloped, while phonetics made rapid progress and even came