



**THE**

**VOICES**

**WITHIN**

ALSO BY CHARLES FERNYHOUGH

NON-FICTION

Pieces of Light  
The Baby in the Mirror

FICTION

A Box of Birds  
The Auctioneer



**THE**



**VOICES**



**WITHIN**



**THE HISTORY  
AND SCIENCE OF HOW WE  
TALK TO OURSELVES**



**CHARLES  
FERNYHOUGH**

**P**  
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For Jim Russell



‘We think not in words but in shadows of words’  
– Vladimir Nabokov





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## FUNNY SLICES OF CHEESE

It is an autumn day in West London. I am on a Central Line train on my way to a lunch meeting. The midday rush has not yet started, and I have managed to find a seat in one of those carriages where you sit in two facing rows, close enough to skim the front page of whatever newspaper is being read opposite you. The train has stopped between stations and we are waiting for an announcement. People are reading paperback novels, the junk newspapers, those strange technology manuals which you only ever see being studied on the Underground. The rest of us are staring at the obscurely colour-coded pipes that vein the tunnel just outside the carriage window. Holland Park is probably still a quarter of a mile away. I am not doing anything unusual; in fact, I am not doing anything at all. It is a moment of faintly self-conscious peacefulness. I am an ordinary man on the wrong side of forty, in sound mental and physical health. I have had slightly too much sleep, slightly too little food, and I am looking forward to lunch in Notting Hill with a pleasant sense of appetites not yet satisfied.

Suddenly I burst out laughing. A moment ago I was an anonymous Oyster-validated passenger; now I am blowing my

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cover with a more-than-audible snigger. I am a frequent visitor to the capital, but I am not used to having so many strangers looking at me at the same time. I have enough presence of mind, and consciousness of my audience, to rein in my laughter before a private joke turns into a public embarrassment. It is not what I am laughing about that is interesting, so much as the fact that I am laughing at all. I have not gatecrashed someone else's joke or overheard a funny snippet of conversation; I have done something much more mundane. You could say that I have just had the most ordinary experience that a person can have on a Tube train. I have had a thought.

It was a pretty unremarkable thought that set off my laughter that day. This wasn't one of those moments when a thinker finally divines the solution to an important problem, gives birth to an idea that will revolutionise her industry, or finesses the opening lines of his greatest poem. Thoughts can make history, but they usually don't. At that moment between Underground stations, I was thinking of a short story I had been working on. It was a rural tale of community and post-agricultural disharmony, and I wanted my ex-farmer hero to have an extramarital liaison. I had been turning over the possibilities of him having an affair with the woman who drove the mobile post office, consummated behind the closed shutters of a specially equipped Ford Transit. They would meet on Thursday afternoons, after the weekly hour's business in the village. The door would be locked, the two-way radio switched off, and they would discover each other on the counter scuffed by hundreds of small-change transactions. As I constructed the scene in my mind's eye, I had an image of a bright red Post Office van parked on a country lane, closed down and silent to all who might pass by, then beginning to rock, with an insistent squeak of suspension springs, *as the bodies inside began to seek friction ...*

It was at this point that I laughed out loud. These words came into my head, and they amused me. They didn't have

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that effect on anyone else, because no one else had heard the punchline. But my fellow passengers knew that there *was* a punchline. They didn't laugh at my private joke (because they couldn't hear it), but they also didn't laugh at me for laughing. They understood that I, like most of the people in that Tube carriage, was busy with thoughts, and they knew that thoughts – wild thoughts, mundane thoughts, musings sacred or profane – can occasionally provoke laughter. Talking to yourself in your head is an ordinary activity, and regular folk recognise it when they see it. Not only that, but they also recognise its private qualities. Your thoughts are your own, and whatever happens there takes place in a realm to which other people are not admitted.

I never fail to be amazed by this quality of consciousness. Not only is our experience compelling and vivid for ourselves, it is so *only* for ourselves. In the second or two following my outburst, I realised that I was trying to send out social signals to excuse my behaviour. You don't laugh out loud in front of a nearly-full train compartment without feeling at least some faint embarrassment. I didn't want to pretend that my laughter hadn't happened, perhaps by trying to cover it up with a coughing fit, but I was still concerned to put out certain messages: that I was not mad; that I was quickly back in control; indeed, that it was already over – the moment of hilarity had now passed. I found myself concocting an expression that was something like a smile, mixing knowingness, complicity and embarrassment. Another thought arose to accompany it, a voice in my head that said, *They can't think I'm laughing at them, can they?* Laughter is a social signal, but this joke had been a private one. I had broken one of the rules of human interaction, and I needed to make some statement to acknowledge this fact.

I needn't have bothered. The other people in the carriage, unless they were small children, Venusians or certain kinds of psychiatric patients, would have understood. So strong is our conviction about the privacy of our inner experience

that its alternatives – mind-reading, telepathy and thought invasion – can be sources of humour or horror. Strangers on a train will quickly recognise the ramifications of this feature of thinking; they will, after all, have had similar experiences themselves. I had just had a striking reminder of my thoughts' privacy, at the same time as I was made powerfully conscious of their immediacy *for me*. My brain was certainly active at that moment – I could never have conjured up the image of the rocking Post Office van otherwise – but I was also *aware* of this internal pageant of ideas. That's what having a brain gives you: a ringside seat for a show meant for you alone.

It was this vivid inner performance that had made me laugh out loud. Although much of our mental activity goes on below the threshold of awareness, plenty of it is made known to the person it is happening to. When we struggle with a problem, recite a telephone number or reminisce about a romantic encounter, we have an experience of doing these things. It is unlikely to be a complete or accurate picture of the cognitive mechanisms involved – we are far from reliable witnesses to what our brains do – but it nevertheless makes for a coherent experience. In the expression favoured by philosophers, there is 'something that it is like' to be conscious inside a working brain. Getting busy with a train of thought, like diving into a swimming pool or grieving for a loved one, is an experience that has particular qualities.

But there is another important thing we can say about our inner experience. Plenty of popular science books have conveyed, often admirably clearly, what we know about how consciousness works. They tend to focus, though, on the wonder of perceptual and affective experience: how that white lily can have that characteristic fragrance; how the aftermath of a family row can open up so many bittersweet emotional possibilities. In other words, their treatment of mental experience is usually focused on a brain's responses to events in the outside world. When we start thinking about thinking, we have to

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explain how consciousness can put on its own show. We are in charge of our thoughts, or at least we have the powerful impression that we are. Thinking is active; it is something that we *do*. Thought moves itself, creates something where there was previously nothing, without requiring any direction from the outside world. This is part of what makes us distinctively human: the fact that, without any external stimulation, a man in an empty room can make himself laugh or cry.

What is it like to have these kinds of experience? The very ordinariness of thinking may mean, paradoxically, that we don't give much thought to how it works. The laws of mental privacy also keep the experience hidden from view. We can share our thoughts' content – we can tell people what we are thinking *about* – but it is harder to share the quality of a phenomenon that is meant for ourselves alone. If we could listen in to other people's thoughts, would we find that they are like our own? Or do thoughts have a personal style, an emotional atmosphere that is distinctive to the thinker? What if people *had* been able to read my mind on the Tube that day? What would a mental eavesdropper hear if they were able to listen in to your thoughts right now? The philosopher Ludwig Wittgenstein remarked that, if a lion were able to speak, we would not be able to understand it. I suspect that something similar might apply to our everyday stream of consciousness. Even if we could somehow make our thoughts heard, it is likely that other people would struggle to make sense of them.

One reason for this is that thinking makes use of words in a very particular way. Imagine if I were to ask you, for example, what language you think in. My guess is that you may not be able to answer the question truthfully for *every* thought that you have, but you would acknowledge that the question made sense. Many of us would agree that thinking has a linguistic quality. If you are bilingual, you might even have an option about which language to do your thinking in. Nevertheless, there are varieties of thought whose linguistic properties are

not always obvious. When you are thinking, there are things you don't need to communicate to yourself, because you already know them. The language can be stripped right down, because the message is meant for you alone.

Another reason why our thinking might not be intelligible to others is that words are usually not the only thing going on. At that moment on the Tube, I had a song from *High School Musical* in my head, to go with all my other bodily and emotional feelings. While my retinas locked aimlessly on to the wiring in the tunnel outside the window, my mind's eye was busy conjuring up the image of the mobile Post Office van. Some of these sensations were connected to the thought; others were mental wallpaper. The point is that thinking is a multi-media experience. Language has a big role to play in it, but it is by no means the whole story.

In this book, I want to ask what it is like to have this sort of thing going on in your head. I want to investigate how it feels to be caught up in the flow of impressions, ideas and internal utterances that make up our stream of consciousness. Not everything that our minds and brains can achieve will qualify as this kind of experience. Many of the really clever things a human being can do, such as catching a cricket ball or navigating across the Pacific by starlight, can be performed without any conscious awareness of how they are done. In one sense, 'thinking' just refers to everything that our conscious (as opposed to unconscious) minds do. But that is still too broad a definition. I would not want to include those unglamorous mental computations, such as counting a handful of pebbles or rotating a mental image, which mostly rely on highly automated, specially evolved cognitive subsystems. One reason for not including these processes is that their start and end points are clearly defined. Part of the magic of thinking is that it can be pointless, circular or directed towards an ill-defined target. On the Tube that day, I didn't know where I was going with my story-making. Sometimes thinking is indeed 'goal-directed',



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as in the case of solving certain types of intellectual problem. But the stream of consciousness can also meander aimlessly. Thinking often does not have an obvious starting point, and it also often requires us to arrive at its goal before we really understand what that is.

This, then, is the kind of thinking I am interested in. It is *conscious*, in the sense that we know what we are thinking, but also in possessing what philosophers call a phenomenal quality: there is something that it is like to be doing it. It is *linguistic* and, as we will see, often more closely tied up with language than it initially appears to be. Imagery is involved, as are many other sensory and emotional elements, but they are only parts of the picture. Thinking (in words or otherwise) is also *private*: what we think is thought in the context of certain firm assumptions about its imperceptibility to others. Thoughts are typically *coherent*: they fit into chains of ideas which, in no matter how haphazard a fashion, are connected to what has come before. Finally, thoughts are *active*. Thinking is something that we do, and we usually recognise it as our own work.

I'm not the first to be interested in the role that words play in our mental processes. Philosophers have argued for centuries about whether language is necessary for thought (while often being a bit vague about what exactly they mean by 'thinking'), and animal behaviour researchers have conducted ingenious experiments to find out what kinds of thinking animals can do, including whether they can be taught language. All of these findings are relevant to my inquiry. But my approach is slightly different. I want to begin with a simple fact of the matter: that when we think about our own experience, or when we ask other people to report on what goes on for them, we find our heads are full of words. That doesn't mean that everyone reports such verbal streams of thought: the fact that some of us do not will need explaining. Asking that question in the right way might prove to be very informative about the relation between language and thinking.

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If we were mind-readers, we would be able to go about this task by simply listening in to the thoughts of the people around us. But mental privacy is the reality, and so we need to take a different tack. One thing we can do is make use of all the different ways in which people communicate their thoughts as they talk, write, blog, tweet and text about what is going on for them. We can look at how authors have written about inner experience, and how psychologists have documented people describing it. We'll get a helping hand from neuroscience, which will give us a scanner's-eye view of how thoughts form in the brain. We can look at how thinking develops in childhood, and what happens when it goes wrong. My starting point, though, is a lot closer to home. It is not as though I am trying to portray anything alien or unfamiliar, like the consciousness of the family pet or what it is like to be a newborn baby. I *know* what it is like to have this stuff going on in my head. I just need to find a way of putting it into words.

*You get funny slices of cheese at Terminal One.*

It is not the most momentous bit of thinking I have ever been responsible for. I pick on it at random, offering it not as a life-changing piece of wisdom but as an example of this morning's stream of consciousness. It was in my head when I awoke, but I'm not aware that I was dreaming in the moments immediately before, or that the utterance was connected in any way. *You get funny slices of cheese at Terminal One.* That's all. I still don't know which airport my thought was referring to, or what cheese had to do with anything. But I know that it was there, like the utterance of some small internal voice, and that it felt real to me. I claim that I don't know where it came from, and yet I kind of do. It came from me. With my rational psychologist's hat on, I would say that it was one of those sentences that habitually flit into my mind, just another bit of the mental fecundity that keeps the stream of consciousness flowing.

Claire also has sentences that pop into her head. Her mental

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voices speak quietly and insistently, and they say things like, ‘You’re a piece of shit’ and, ‘You’ll never achieve anything.’ Claire is suffering from depression. She is having cognitive behavioural therapy to tackle these intrusive, unwanted verbal thoughts: to document them, to examine them scientifically, and thus undermine them to the extent that they will (it is hoped) ultimately go away.

Jay has words that come into his head as well. These are of a different quality to Claire’s. Much of the time they actually sound like a person talking to him. They can have an accent, a pitch, a tone of voice. Sometimes they speak in full sentences; sometimes their utterances are more fragmentary. They comment on Jay’s actions and instruct him to do things: harmless things, like going to the shop to get some milk. At other times they are much more difficult to define. Jay has told me that he can know that a voice is there even when it is not actually speaking; on these occasions it is not so much a voice as a presence in his head. What is a voice that doesn’t speak? A few years ago Jay was diagnosed with a psychiatric illness, and now he has what is known as a ‘recovery story’. He has come back from something which some people think of as a degenerative brain disease. He still hears the voices, but he now feels differently about them. He lives with them, not in fear of them.

One voice-hearer who has written eloquently about her experience has also forged a new understanding with her voices. In a 2013 TED talk which, at the time of writing, has been viewed more than 3 million times, Eleanor Longden describes how her voices became so aggressive that she hatched a plan to drill a hole in her head to let them out. Several years on, Eleanor’s relationship with her voices, like Jay’s, has changed radically. Although they are occasionally still very troublesome, she now sees them as remnants of a ‘psychic civil war’ resulting from repeated childhood trauma. With appropriate support, it seems that many people can change their relationship with their voices and learn to live quite comfortably with them. The assumption

that voices are always a sign of severe mental illness is a limiting and damaging one, which is why I prefer the more neutral term ‘voice-hearing’ to the negative connotations of ‘hallucination’.

If the experiences of Jay and Eleanor really are different from my own mental voices, then exactly *how* are they different? My ‘voices’ often have accent and pitch; they are private and only audible to me, and yet they frequently sound like real people. But at some level I recognise the voices in my head as my own, while Jay’s seem alien to him. He says he can usually distinguish between his thoughts, which feel as though they are his own creations, and these other experiences, which seem to come from somewhere else. At other times the distinction is much more blurred. Another voice-hearer, Adam, whose primary voice has a very distinctive, authoritarian personality (so much so that Adam has dubbed him ‘the Captain’), told me that he can nevertheless sometimes get confused about whether he is experiencing his own thoughts or those of his voice. I have heard voice-hearers describe how the onset of their unusual experiences was like tuning in to a soundtrack that had always been there, as though they represented some background noise of consciousness to which, for some reason, the individual suddenly started paying attention.

One reason why voice-hearers attribute their experiences to something outside themselves is that the voices say things the hearer feels she could not possibly have said. One woman told me that her voice says such horrible and disgusting things that she knows they can’t be of her making. But it can work the other way round, too. I have heard voice-hearers laugh out loud at something their voice, utterly privately, has just said to them. Another voice-hearer, explaining how she understood that her wisecracking mental visitor wasn’t ‘her’, told me, ‘It can’t be me. I could never come up with anything that funny.’

It matters that we understand these experiences better. My verbal thoughts and a voice-hearer’s voices may be utterly