CHAPTER 1

Introduction

The same august presence, the same grace of movement, the same intelligent eyes, the same broad forehead, the divine smile; the only difference was that her body seemed fuller and more youthful . . .

(E. T. A. Hoffmann 1776–1822)

The term doppelgänger was first used by Jean Paul Richter in his novel *Siebenkäs* published in 1796. Jean Paul Richter (Figure 1.1), also known as Jean Paul, was a prominent German writer and humorist of the late eighteenth and early nineteenth centuries. He was born on 21 March 1763, in Wunsiedel, Bavaria, and is best known for his humorous and imaginative novels. Richter's works often combined satire, sentimentality, and whimsy, engaging readers with his wit and wordplay. His other notable works include *Titan* (1800–1803) and *Flegeljahre* (1804–1805). Richter's writing style and inventive language had a significant influence on subsequent generations of German authors. He died on 4 November 1825 in Bayreuth.

The term doppelgänger translates as 'double walker'. *Siebenkäs* is a bildungsroman, a type of novel that focuses on the psychological and moral growth of the main character. The novel follows the story of Leibgeber, an impoverished and mischievous young man who is constantly getting into trouble. Despite his flaws, he is loved by the people around him for his wit and humour. The plot of the novel revolves around Leibgeber's attempts to improve his financial and social status. Along the way, he encounters many obstacles and experiences various emotional and psychological trials, which shape his character and help him to grow and mature. One of the central themes of the novel is the idea of the 'doppelgänger', or double, which Richter introduces as a motif to explore the concept of identity and the duality of human nature. Throughout the novel, Leibgeber grapples with the

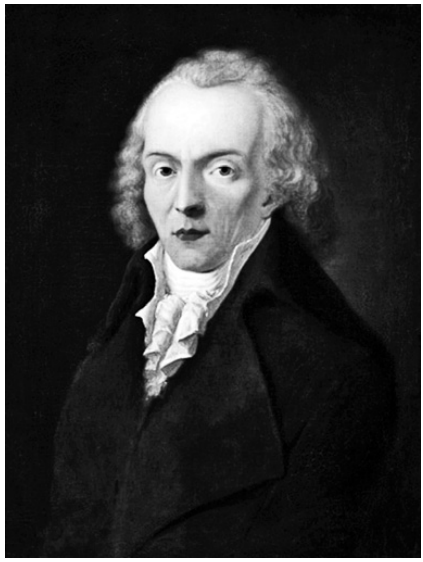

Figure 1.1 Jean Paul Richter 1763–1825 (Public domain)

idea of who he is and what his place in the world is, and the doppelgänger serves as a symbol of the different parts of his personality.

Richter's interest in doppelganger may itself derive from his personal experience. He wrote,

> Never shall I forget that inward occurrence, till now narrated to no mortal, wherein I witnessed the birth of my Self-consciousness, of which I can still give the place and time. One forenoon, I was standing, a very young child, in the outer door, and looking leftward at the stack of fuel wood, – when all at once the internal vision, – I am a Me (och bin win Och), came like a flash from heaven before me, and in gleaming light ever afterwards continued: then had my Me, for the first time, seen itself, and for ever. (Richter, 1863)

In the novel, the protagonist, Siebenkäs, meets with his double, Leibgeber, at his [Siebenkäs] wedding, and this encounter is described as follows:

> So singular an alliance between two singular souls is not often seen. The same contempt for the ennobled childish nonsense of life; the same enmity to the mean, with every indulgence to the little; the same indignation

> against dishonest selfishness; the same love of laughing in the beautiful madhouse of earth; the same deafness to the voice of the world, but not of honor; – these were but the more superficial traits of resemblance that constituted them one soul assigned to two bodies. Neither do I take much into account that they were foster-brothers in their studies, and were nursed by the same sciences, including even the law; inasmuch as similarity of studies is often the best dissolvent and precipitant of friendship. Nor was it simply the want of resemblance, which, as an opposite pole, decided their attraction, was more ready to forgive, to punish; the former was more to be compared to a satire of Horace, the latter to a ballad of Aristophanes, with its unpoetical and poetical dissonances; but like girls who, when they become friends, love to wear the same dress, so did their souls wear exactly the same frock-coat and morning dress of life; I mean, two bodies, with the same cupfuls and collars, of the same color, button-holes, trimmings, and cut. Both had the same brightness of eye, the same sallowness of face, the same height, and the same meagreness; for the phenomenon of similarity of feature is more common than is generally believed, believed, being only remarked when some prince or great man casts a bodily reflection. I wish, therefore, that Leibgeber had not limped, which somewhat distinguished him from Siebenkäs, especially as the latter had cleverly scratched and burnt away, by means of a living toad which he had caused to die on the spot, a mark which, on his side, might have distinguished him from Leibgeber. This mark was a pyramidal mole near the left ear, in the shape of a triangle, or of the zodiacal light, or of a turned-up comet's tail, or, more correctly still, of an ass's ear. (Richter, 1863, pp. 1024–1039)

So was born the modern tradition of doppelganger, a fictional character who is both physically and psychologically identical, save for minor anomalies. As Paul Meehan (2017) puts it in his book *The Ghost of One's Self: Doppelgangers in Mystery, Horror and Science Fiction Films*, 'It's you but it's not you. It's an inverse mirror image, a double, an alter ego, a simulacrum, a clone. It's your shadow self, your evil twin, your most significant other, your dark half. It's your doppelganger' (p. 3).

The term doppelgänger has now come to stand for the existence of a double of a living person. The double is conceived of as an exact but sometimes invisible replica of a person, sometimes of a bird or a beast.

This belief has a long antiquity and is a widespread belief among cultural groups the world over. Other words that refer to related concepts include alter ego, familiar, fetch, and wraith. In ancient Egyptian mythology, the *ka* was seen as a concrete spirit double, and among the Yoruba, in West Africa, it is believed that everyone has an *ìkejì*, an unseen double. In Norse mythology, *vardogers* are ghostly doubles that mimic the actions and behaviours of their living counterparts, and in Celtic culture, *a fetch* is an identical twin that is said to appear at the moment of one's death. In the Icelandic sagas, a fetch (*fylgja*) is literally someone that accompanies, a personal spirit that was closely attached to families and individuals, and often symbolized the fate that people were born with. If it appeared to an individual or others close to him or her, it would often signal the impending doom of that person. Fetches could take various forms, sometimes appearing in the shape of an animal as exemplified in Philip Pullman's *His Dark Materials* where some of his characters have visible demons that are animal-shaped, who accompany them everywhere. In this account of fetches, detachment of these animal forms leaves their human counterparts as empty shells.

Icelandic fetches too tend to be corporeal. In *Eirich the Red's Saga*, Sigrid, who was already ill, went to the outhouse and remarked, 'All those who are dead are standing there before the door'; among them I recognise your husband Thorstein and myself as well. How horrible to see it! . . . 'Before morning came she was dead' (Eiríksson, 1997, p. 663; Smilely, 2005).

It is, perhaps, not surprising that we have a preoccupation with the notion of duplication as there is a duality represented in our bodies: we have two upper and lower limbs, two eyes, two ears, two nostrils, two testicles, and so on. Even those parts of our bodies that appear singular, like our faces, are in two symmetrical halves and our brains are also in two halves. And to complicate matters, our limbs that look superficially identical are, on closer scrutiny, marginally different in size and proportion, as are the two halves of our faces. This gives the impression that the apparent identity of our duplicated organs itself conceals distinctness and difference. Hence, notions of the double, of doppelgänger, work on this assumption of another who is identical but potentially different – different either in physique, personality, or psychology.

Yet, our subjective experience of who we are is that of a singular, unique, unified, and embodied self. This sense of being a single and coherent self, one that is consistent and unified over time and that has a distinct identity, a biography, and physiognomy, a uniqueness, is one of the most profound and fundamental subjective experiences that we all have. I mean by this the feeling of having been oneself, for as long as one can remember, integrated into a recognizable and identifiable body, despite marked changes attributable to physical development and ageing, and to personal growth and emotional maturation.

This subjective experience of a unified and unique self is foundational to who we all are. But it is built on the implicit notion that we experience ourselves as alive, as lively, and as vital. This sense of vitality is closely associated with the sense of being an active agent, one who initiates and executes actions and who has responsibility for these actions, who is distinct from other things and other beings, and who is aware of oneself and recognizes what is *myself* from what is *other*. And has this profound sense of singularity.

We could say that these characteristics of the self are the pillars on which our sense of self is built. More formally, these characteristics are referred to as awareness of unity of the self, awareness of identity of the self, awareness of vitality of the self, awareness of activity of the self, and awareness of boundaries of the self, respectively. They are formal, conceptual properties of the self. They are neither objective nor concrete properties since they do not derive from empirical science or observations. This is a way of saying that the term 'self' is merely a concept, a notion of what it is to be a person and not a thing. Nonetheless, even though the term is not empirically grounded, it is true that subjectively we experience ourselves in these ways, and that these ways of being are fundamental to our self-concept.

What is remarkable is that these characteristics of the self, namely that we are single, unique, and coherent over time, alive, active, and with a boundary that renders us distinct from other beings, seem so obvious, so self-evident that they form the background, implicit structure that makes our subjective experiences possible and comprehensible, at all. We rarely ever doubt these foundational characteristics of ourselves. It is only when these formal characteristics are somehow breached, when they are

undermined by disease or functionally impaired, that we start to recognize the formal structures that make possible normal experiences. When we encounter the ways that these abnormalities are manifest within the clinical space, we are often surprised and intrigued, sometimes perplexed. We may see an individual who complains of seeing his exact double standing beside him, even if briefly. Or we may see a person who believes that he has an exact double acting in the world, who he has yet to meet, but who has advertised his existence by malicious acts committed in the name of the patient. Finally, we may see, even if rarely, a person who exhibits dual or multiple personalities and who inhabits the self-same body. Perhaps, less controversially, we may see people who have contradictory aspects of the self, individuals who, on the face of it, seem pleasant and genial but at other times vicious, callous, and murderous. These clinical scenarios prompt us to recognize, if not admit, that the subjective experiences or foundational beliefs that are so matter of fact, so implicit to how we conceive of our world, may in fact be more complex than we imagine. At the very least, these clinical scenarios set the stage for a re-evaluation of the ordinary ways that we structure our world. The possibility of separation of the self from the body, as an idea, as an experience, or as an experience that is verified by perception, disrupts the accepted ways of looking at the nature of the self, and its relationship to the body. And the possibility that there may be distinct and multiple personalities in a single body or indeed that there are contradictory aspects of the self that are not coherent or well-integrated raises questions about the nature of identity, and of the self too.

This book is about the nature of the double in all its various manifestations, from folklore to literature and cinema, and from clinical psychopathology to clinical neuroscience. The notions and concepts evident in folklore and literature, the actual experiences reported by patients in the clinic, and the experimental evidence from neuroscience all raise serious questions about how the mind and the self are understood in the philosophy of mind and how notions of the embodied self are described in cognitive neuroscience. The issues that the empirical evidence of the double, particularly as drawn from autoscopy, from the delusional misidentification syndromes, and from dissociative identity disorder (multiple personality disorder), raise for philosophy are profound, but they are equally profound for our understanding of what it is to be human.

Concepts of Mind and Self

I want now to turn to some groundwork. I want to explore our current understanding of terms such as mind and self. The term 'mind' has come to stand for all that is peculiarly human. Our capacity for language, for conscious awareness, for music making, for mathematics, for formal logic, and for many more indefinable skills and aptitudes are understood as features of our mind. What is common to these capacities is that they are all examples of mental activity. We could also add that attention, memory, perception, emotion, volition, and affect are further examples of mental activity. I am here drawing attention to the degree to which the nature of mind is at the very least involved in our conception of ourselves as humans. This is to say that the nature of man, of the person, is intertwined with any description that we choose to give of mind. So, if it were to be shown that mind is solely a property of the brain and that a physical description exhausts all that there is to be known about mind, then a person would be no more than a material body, even if a complex material body. On the other hand, a description that grants the mind an existence independent of the brain would at the same time grant man a dimension that is free from the material. These matters are at the very heart of the subject of this book, namely how we can come to understand how it is possible for doubles to exist in the clinic. Are the experiences of doubles that we encounter in clinical psychiatry the only evidence of perturbations in neural circuitry, or do they tell us something more fundamental about the nature of mind, self, and their relationship to the material brain?

The distinction that I have been making is best addressed by Sergio Moravia (1995). He argues that the 'curious, old-fashioned problem of the relationship between mind and body ... raises several crucial questions with respect to knowledge in general and to man and his science'. He asks,

> a) can one posit something that *exists*, and yet at the same time is *non-physical* b) can physicalist knowledge give an adequate description and explanation of 'all that there is' ... or does something exist the cognition of which requires a knowledge which is independent of that provided by

> the physical sciences? c) Do the rejection of 'soul' and the achievements by the bio- and neurosciences oblige us to hold that man is *nothing but body*? (Moravia, 1995, pp. 4–5, emphasis in original)

Moravia's thesis is that 'it is simply wrong to suppose that whatever is not encompassed by a directly or indirectly materialist monism is "inaccessible to human investigation". This would mean reducing human knowledge to solely *physical knowledge*' (p. 7). Moravia is sensitive to the fact that the solution to the mind–brain problem speaks to other problems in philosophy. And, specifically, that any description that privileges the physical over the psychological would in some way reduce man. For Moravia, 'the mental, and on its behalf psychological language, *speaks about man*' (p. 24) (all emphasis in the original). So, Moravia is echoing, albeit in a slightly different language, René Descartes's (1596–1650) theory, namely that we are ultimately thinking beings and that this aspect of us is not extended in length, width, or depth and is not dependent on the body for its existence but is nonetheless real. Descartes's influential theory of dualism argues for the undeniable existence of a thinking mind, one that is immaterial and non-physical. To summarize, Moravia's position is to resist any attempt to materialize or physicalize mind.

Another approach to understanding the nature of mind is that taken by Gilbert Ryle (1900–1976) (Ryle, 1949; 1990). His thesis is that the term 'mind' stands for the unity of all the processes and operations of the brain, including such relatively better understood processes as language, memory, and vision and lesser understood processes such as intentionality and consciousness. He accepts that in everyday use, the word 'mind' behaves sometimes as if mind is a place or a thing, but for Ryle this is simply a way of speaking. When we say 'I have something in mind', we are not referring to a specific place, or when we say 'I will work on it with my mind', we are not referring to an extra tool with which to solve a problem. For Ryle, 'mind' is simply a term that stands for all brain processes and operations. It is, in other words, a concept. It does not refer to a place, a thing, or a tool. It is not a function. If we were to ask if animals have minds, the answer would depend on our conception of animals. There would be no empirical test to validate the response. However, if one were to ask if animals have the use of language, this would be an empirical

question with a possible empirical answer. This way of approaching the mind locates it in the same domain as other words like justice, freedom, hope, and so on.

The mind can be seen as distinct from and independent of the body or as no more than a concept. I will return to these issues later. But for now, what about the term 'self'? There is little doubt that, the way we use this term, it stands both for the subject of experience as well as the initiator of action. Galen Strawson (1997) describes the self as the sense that people have of themselves as being, specifically a mental presence, a mental someone, a conscious subject that has a certain character or personality, and that is distinct from all its particular experiences, thoughts, hopes, wishes, feelings, and so on. And that this connects with the feeling that their body is just a vehicle or vessel for the mental thing that they really are. This approach speaks to the everyday phenomenology of the self. But as with the term 'mind', the term 'self' can also be understood as a concept, only. Dave Hume (1711–1776) in *A Treatise of Human Nature* (Hume & Selby-Bigge, 1789) writes, 'What we call mind is nothing but a heap or collection of different perceptions, united together by certain relations, and suppos'd, tho' falsely, to be endowed with a perfect simplicity and identity' (p. 207).

In other words, Hume's position is that our observations of the world are theory impregnated, and that these theories are formed from habits of mind rather than logically derived. In *A Treatise of Human Nature*, Hume appears to take a phenomenologist approach:

> When I enter most intimately into what I call *myself*, I always stumble on some particular perception or other, of heat or cold, light or shade … I never catch *myself* at any time without a perception, and never can observe anything but the perception. When my perceptions are remov'd for any time, as by sound sleep; so long am I insensible of *myself*, and may truly be said not to exist. (p. 252, emphasis in the original)

> The mind is a kind of theatre, where several perceptions successively make their appearance … There is properly no simplicity in it at one time, nor identity … There are successive perceptions only, that constitute the mind; nor have we the most distant notion of the place, where these scenes are represented, or the materials of which it is compoms'd. (p. 253)

For Hume, the self is an agglomeration of perceptions, the centre of experience but nonetheless an illusory centre of perception in which the sense of unity and identity are fictitious. A clear objection to Hume already resides in the opening line of his famous sentence, 'When I enter most intimately into what I call myself . . .'. Hume has declared both explicitly and implicitly his basic assumption that selves exist and have agency, therefore acting to examine, introspectively, the content of mind. To perceive already presupposes a prior experiencing self.

Despite this weakness in Hume's approach, his scepticism of subjective experience as the basis for making judgements about the nature of mind or of perceptions, for that matter, stands. This bears restating in other words: the relationship between the component parts of a perception, of an object such as a red ball, for example, is not inherent in the object but rather is attributed to the object because of our experience of it. Thus, the actual relations between the disparate elements that make up the red ball may indeed be quite different from our perception of the object. This approach allows us to recognize that our experiences are fallible and that our subjective experiences are not immune from error, no matter how compelling or veridical they may be. This means we may not be able to expressly rely on our subjective experiences of what it is like to be human as the basis for our true knowledge of having a mind or what being a self entails.

Embodiment

So far, I have been looking at philosophical approaches to the nature of self and mind. More recently, there has been increasing interest in the notion of the embodied self, as exemplified in the writings of Raymond Gibbs in *Embodiment and Cognitive Science* (Gibbs Jr, 2005). He describes the embodiment premise as follows:

> People's subjective, felt experiences of their bodies in action provide some of the fundamental grounding for language and thought. Cognition is what occurs when the body engages the physical, cultural world and must be studied in terms of the dynamical interactions between people and the environment. Human language and thought emerge from the recurring

> patterns of embodied activity that constrain ongoing intelligent behaviour. We must not assume cognition to be purely internal, symbolic, computational, and disembodied, but seek out the gross and detailed ways that language and thought are inextricably shaped by embodied action. (p. 11)

This approach prioritizes embodiment as the central element in the subjective experience of the self. It is noteworthy that embodiment is distinct from the body per se. Notions of the self are tightly linked to tactile-kinaesthetic activity, to recurring patterns of kinaesthetic and proprioceptive action. These are novel concepts that resist the temptation to separate mind from body. For example, perception is not something that only occurs through specific sensory organs in conjunction with particular brain areas but is a kinaesthetic activity that includes all aspects of the body in action. Gibbs, again, like Hume, is suspicious of the results of introspection in judging and determining the nature of the relationship between personhood and the body. So, the fact that, as individuals, we feel as if our bodies are mere receptacles for our thoughts, or vehicles for our beliefs, and ultimately that the self and the body are distinct and different does not make them so. For Gibbs, even if one's personhood may be more than the body, there is no self without a body.

The role of the concept of embodiment in creating a sense of self is often overlooked or understated. Yet in the psychopathological conditions that are the focus of this book, the uniqueness of the body in relation to personal identity is fragile and the place of the body in determining perceptual experience is strained. In particular, cases exist, for example in autoscopy, in which the unembodied self is experienced as the source of sensation and perception. This is a most curious possibility in the light of our generally understood reliance on sensory apparatus for perception.

Importance of the Empirical Literature

The scope of this book is the varying notions of the double in folklore, literature, cinema, psychopathology, and finally neuroscience. Ultimately, the aim is to come to a better understanding of the actual experiences that are present in the clinics with a view to examining what this means for our

concepts of mind, self, and the embodied self. Often philosophical theories of mind rely on thought experiments, on imaginary cases. These imaginary cases almost always ignore what is known about the structure and function of the brain, have an erroneous understanding of the neurophysiology of the brain, or are plain impossible. I will be relying on the empirical literature, combining cases drawn from clinical psychopathology and the results of cognitive neuroscience experiments, to elucidate this most complex yet intriguing subject. To make the point clearer, Peter Unger (1990) in his book *Identity, Consciousness and Value* exemplifies the use of imaginary examples in exploring the nature of personal identity. His arguments are based solely on imaginary cases. He argues, for example, that there is a direct mathematical relationship between the coherence of a 'self' and the numerical composition of the brain, such that the gradual removal of cells from the brain and the associated question of how much of the person or the self is left. Essentially, he is arguing that the relationship between 'grain of sand' and 'a heap' is the same as that between 'neurone' and 'self'. This is a ludicrous position to take for all sorts of reasons but principally because it ignores everything we already know about the brain, namely that there are a variety of neural cells, structured in a complex anatomical but also functional manner, and finally that there are different functional sites. In short, not all neural cells are equal. Unger is aware of the risks attendant on his method: he says that when imaginary examples are 'part of a sensibly balanced methodology, a reliance on imaginative cases may be instructive' (p. 11). He adds, 'But, for true instruction to be gained, and as that methodical approach directs, the canvass of cases must proceed with caution' (p. 11). Nonetheless, he is not circumspect in his approach. He describes something that he terms 'spectrum of congenial decomposition' in which the gradual removal of water and cells occurs such that at some point, what remains is not a specified individual. His imaginary example appears to confirm for him that 'we are gradual beings' (p. 60), whatever that might mean. There is no empirical evidence that a gradual removal of any of the constituent parts of the brain will result in a gradually diminishing self. It is quite possible that there is a critical amount of a constituent part of the brain in a particular locus that has to be lost to result in a catastrophic event. Indeed, we already know that in Parkinson's disease, a loss of greater than 80% of the substantia nigra is

needed to produce the features of Parkinson's disease. Thus, the mathematical relationship between the loss of material substance and the phenomenology of abnormal function is an empirical question. Sometimes it is linear, but this is not always the case. The relationship is not logical but empirical. Furthermore, the resulting impairment may have little to do with identity or the nature of self.

I have been arguing that fanciful examples are problematic, if not misleading, in exploring the nature of the self. The role of actual clinical examples in instructing our understanding is far preferable, in my view. Kathleen Wilkes in her book *Real People: Personal Identity without Thought Experiments* (Wilkes & Wilkes, 1988) makes the point: 'Personal identity has been the stamping ground for bizarre, entertaining, confusing and inconclusive thought experiments … These alluring fictions have led discussions off on the wrong tracks; moreover, since they rely heavily on imagination and intuition, they lead to no solid or agreed conclusions, since intuitions vary and imaginations fail' (p. vii).

In essence, Wilkes is making the case that real-life examples are preferable to thought experiments that are unconstrained by the realities of the background conditions that determine what is or is not possible in the empirical world. Clinical cases are unusual and intriguing enough that we need not indulge in fanciful imaginary examples to clarify the nature of mind or self. I will no doubt return to these matters later. In short, the focus of this book is the role that clinical cases have in illuminating our understanding of the nature of the self and mind. The issues traverse terrain that overlaps with that of the philosophy of mind, but ultimately it is a book about psychopathology and not a philosophical treatise.

The Double in Clinical Psychopathology

Autoscopy and Its Variants

Doppelgänger refers to the existence of a double. There are at least two broad conceptualizations of the double in clinical psychopathology, namely experiential and ideational. Autoscopy is a term used to describe the experience of seeing one's body in a location outside of its expected position. There are six variants: the feeling of presence; autoscopic

hallucination; heautoscopy proper; negative autoscopy; inner autoscopy; and out-of-the-body experience. So, it might be profitable to think of the variants of autoscopy as examples of experiential rather than ideational doppelgänger.

The term 'feeling of presence' describes a feeling of the physical presence of another person close to the patient who is not seen but appears to be just out of sight. The patient may, in addition, experience altered or anomalous phenomena regarding their body. Essentially, there may be a feeling of estrangement from the body – a feeling sometimes described as depersonalization.

Autoscopic hallucination involves the pure visual experience of seeing one's own body or its upper parts as if reflected in a mirror. In other words, in autoscopic hallucination, the perception is often, but not always, a mirror image of the patient. The hallucinatory experience is in natural colours and is usually of a motionless perception, or what is seen may imitate the gestures, movements, or facial expressions of the patient.

Heautoscopy proper also involves visualization of the double, but, in addition, there may be other anomalous experiences including a feeling of detachment, strangeness of one's body, as well as feelings of lightness and occasionally the experience of vertigo. The double may appear transparent, grey, or ghost-like. The double may imitate the patient's actions but may also act autonomously, not necessarily mirroring the patient's actions or movements. The characteristics of the double may differ from the patient's own body, such that it might be smaller or bigger, younger or older, and the gender may not be congruent with that of the patient. And surprisingly, the patient may feel that he/she can see the world through the eyes of the double. Some authorities regard the distinction between autoscopic hallucination and heautoscopy proper as superfluous.

Out-of-the-body experience involves seeing one's body from an outside perspective. The core of this experience is the separation of the body from the experiencing self. Typically, the body is observed from a detached and an elevated spatial position. The body is usually motionless during the observation. The surrounding environment is also seen from an elevated perspective. There is an associated strong emotional accompaniment and significance to the experience, and the emotions are more often positive except in cases where the experience is a precursor to an epileptic seizure.

Negative heautoscopy refers to the failure to perceive one's own body in a mirror or when looked at directly. It is often accompanied by depersonalization and the loss of awareness of one's own body, sometimes termed aschematia. Negative heautoscopy can be unilateral, affecting only the perception of one half of the body. Finally, inner/internal heautoscopy refers to the experience of visual hallucination of one's own internal organs outside the body. Both negative and inner heautoscopy are rarely reported.

These phenomena are intriguing enough on their own merit, but they have the added cache of sitting within an age-old dispute within philosophy of mind and cognitive science, namely whether the self is separable from the body. In other words, whether autoscopy, heautoscopy proper, and out-of-the-body experience are clinical and concrete examples of the concept of Cartesian duality, thereby confirming the dual nature of the relationship between the self and the body. This issue points at the importance of autoscopy and related phenomena for illuminating the neural underpinning of the representation of the self. And whatever this neural underpinning might be, it will need to address the apparent facility for the 'self' to be separable from the 'body'

Delusional Misidentification Syndromes

There are other clinical conditions that are dependent on the idea of doppelgänger but not on the actual experience of the double. These conditions are distinct from autoscopy but depend on the implicit assumption that doubles of individuals exist in the world. These include the various forms of delusional misidentification syndromes: Capgras syndrome, Frégoli syndrome, syndrome of intermetamorphosis, syndrome of subjective doubles, delusion of inanimate doubles, and reduplicative paramnesia. These conditions are of great and continuing interest to psychiatrists, neuropsychologists, neuroscientists, and philosophers alike, because of their intriguing clinical presentations and the possibility of linking discrete beliefs to neural and neuropsychological underpinnings.

The Capgras syndrome is perhaps one of the best known and most discussed examples of the delusional misidentification syndromes. It is

characterized by the firmly held but false belief that an impostor has replaced a familiar person. In Frégoli syndrome, the subject believes that an unfamiliar person is really a disguised familiar person, whereas in the syndrome of intermetamorphosis, the subject believes that the unfamiliar and familiar persons are identical because of shared physical characteristics such as hair colour or shape of nose. Sometimes, in the syndrome of intermetamorphosis, there is a dynamic aspect to the experience as rapid and inexplicable changes in identity are observed in real time. The syndrome of subjective doubles is characterized by the belief that a double of the self is abroad in the world acting in such a way as to damage the subject's reputation. Usually, the patient would have never met the double, but the existence of the double is presumed. The delusion of inanimate doubles refers to the belief that inanimate objects have been duplicated and replaced, whereas reduplicative paramnesia refers to the belief that places have been duplicated.

The concept of the double is important in popular culture and as a device in literature because of the implications regarding the fragility of identity by way of facial recognition and because of the challenges it posits to our notion of the physical uniqueness of persons, a uniqueness that is only truly put under strain in the case of identical twins. The possibility that persons, objects, places, and even time might not be unique is at the core of delusional misidentification syndromes. This idea that duplication is possible and even probable and that against better judgement it can be firmly held as self-evident and established even in the face of counterargument and factual impossibility raises a welter of queries, as much about normal processes as about abnormal phenomena. But the phenomenon also exploits extant, often implicit, beliefs in wider culture about the fact of doubles. Among the many questions is how we come to recognize faces, people, objects, places, and so on. And how we come to mark them as unique examples of a class even in the context of marked changes over time. I mean by this the fact that we continue to identify an individual from cradle to grave as the same person, despite significant changes in physical appearance over time. The urgent and continuing fascination with the delusional misidentification syndromes derives at least from the many theoretical, philosophical, and empirical matters that they raise. There is the added underlying assumption that these conditions may

provide the basis for examining and investigating the neurological basis of delusions in general, but evidently also they provide the basis for examining the nature of identity, the features that determine the identification of persons, objects, and places – the distinction between identification and recognition. The uncanny feeling that is provoked when we come face-to-face with identical twins but that is not triggered when we are in the presence of a flock of birds, such as geese, or a garage full of the same make of cars in the same colour.

Finally, dissociative identity disorder (multiple personality disorder) raises the intriguing possibility that a single body may house more than one personality and that a duplication, triplication, or infinite multiplication of personality is possible. This possibility includes the notion that the personalities may be so distinct as to be unique identities, with unique biographies, preferences, and attitudes. This condition has entered the public domain and greatly influenced the notion of the double in fiction, and cinema. Even in its less pathological aspect, where there is an absence of distinct personalities, but merely contradictory aspects of self, this notion of the double is influential and is often used as a doppelgänger device, at least in cinema.

Summary

The concept of the double is well-established in human culture. This is evident in folklore and the various manifestations of this concept of the double, driven, as it possibly is, by the duplication of our physical parts and our presumed dual nature as matter, spirit, and embodied spirit. In the following chapter, I will explore the continuities and discontinuities in the concept of the double as it flows through from antiquity to the modern period.