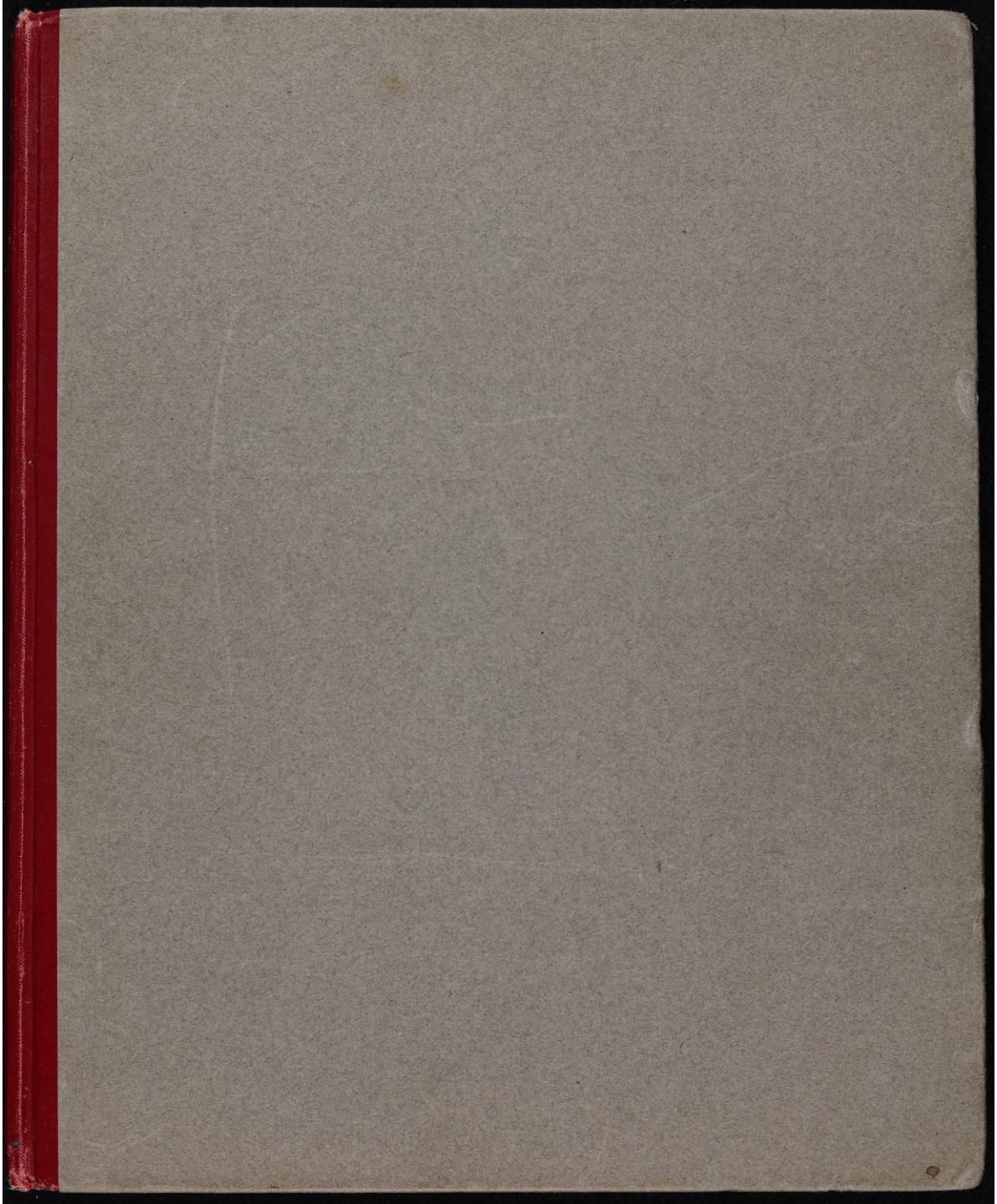


An Unconventional Portrait of Yourself — 1941

A few pages from the manuscript. After *The Meaning and Beauty of the Artificial* (1935), this was the next book Harding wrote on the subject 'What am I?'. Neither of these books were published at the time (both are available now on Amazon). It was only two years after this book that Harding saw he was headless. Then the next seven years were taken up writing *The Hierarchy of Heaven and Earth*.



CHAPTER - I

THE PORTRAIT WITHOUT A SITTER

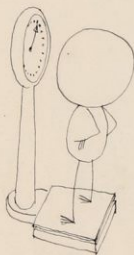


What are you?

Let us try to answer this question plainly and simply, dispensing with frills. Let us appeal to common-sense.

Common-sense says you are your body. The way you talk about yourself makes this evident. For example, if you have a pain in the stomach you say "I am ill." If a man hits you on the nose, you say "He hit me." When a man's body dies you say "He died." Even a philosopher says he has had a good meal, instead of telling you how well his body dined.

Obviously we look upon our bodies as ourselves. Common-sense says that, whatever else you may be, you are your body and your body is you.



What is your body?

According to common-sense it is a mass of flesh and bone weighing a hundred and fifty pounds or so, some five or six feet tall, and furnished with legs, arms, and so forth. The details of your inside can be left to your doctor -- they are his business. As far as you are concerned, your body is what it seems to be. You know what it is.

Look at your hand. There it is out there, a solid object about a foot away from your eyes, a familiar sight with nothing very mysterious about it.

But let us consider the way you see your hand.



Light falls on your skin, and from there travels to your eye, where it hits the screen at the back of your eyeball and makes a picture of your hand. There is your hand inside your eyeball, tiny, flattened out and hanging upside down.

Though still recognisable, your hand is not what it was when it started out. But more drastic changes are yet to come. Seeing does not end with inverted pictures inside your eyes. The pictures have to be translated into a sort of code and telegraphed to your brain. And then your brain has to decipher the message and construct an entirely new kind of picture, a mental picture of your hand, apparently made solid again, pushed out of your head and a foot distant, enlarged to full size, and turned the right way up. When you make this mental picture you 'see your hand.'

No doubt none of this is new to you, especially if you are an amateur photographer. But have you realised that the well-known facts of sight make nonsense of common-sense? If you have, the world will never be quite the same place for you as it was before.

Let us go over the process of seeing, this time rather more carefully.



In the first place, we say that what links the hand out there with the hands inside your eyes is light. What is light? We are in the habit of thinking that because we have given something a name and observed some of its habits we understand what it is. Admittedly scientists have theories about the way in which light jumps from this place to that; they know how fast it travels, and under what circumstances it turns corners. But they cannot tell what light is. Or,

if they can, they do so by explaining it in terms of some equally profound mystery like photons or ether waves.

What is it that goes on in the gap between the hand out there and the hand in your eyeball?

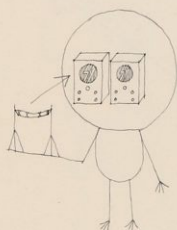
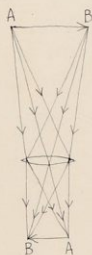
Something or other, it seems, must travel the gap, but that something or other certainly is not your hand, or even an image or picture of it. Whatever it is that makes the journey is apparently unlike what exists at the starting point and at the destination. It is as if your hand were to broadcast a detailed description of itself in Morse code which your eyes pick up, decipher, and use as directions for making a painting.

At school we drew diagrams to show how light behaves, and supposed we had explained something. The straight lines and arrows had a satisfying appearance, a look of finality. It never occurred to us that we could no more draw a diagram explaining how A-B got to B-A than we could draw a diagram explaining how pleased we were when the holidays came round.

But if we know next to nothing about the way in which information crosses the gap between your hand and your eye, and how the journey is accomplished, what guarantee have we that there are no mishaps en route? How do we know that the original message was correctly translated into code? How do we know that the message tells the whole story about your hand? How do we know that the picture in your eye is not distorted in the making?

We know it is distorted -- to the extent of being upside-down, flat and undersized. We have no guarantee it has not been distorted in many other ways.

Anyhow, there they are for what they are worth -- the coloured portraits of your hand at the back of your eyes, and



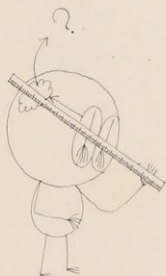
somehow your brain has got to get into touch with them.



How this done is a mystery. Even the experts know almost nothing about how the immensely complicated details of the pictures in your eyes are turned into a sort of description or report, and how that report is sent off along the telegraph wires to your brain. To refer to electro-chemical changes in the nerve fibres (say) may be impressive -- it is certainly not an explanation. Explanations which add to the mystery may be both interesting and important, but they are not explanations.



What happens on the way, though obscure enough, is almost comprehensible compared with events at the terminus. There the brain picks up the code message sent out by the eye, gets busy, and builds an idea. The idea is of your hand, seemingly a foot away, right-side-up, and solid-looking.



Something very odd indeed has happened. Up till now, events have been occurring in space -- the original hand was about eight inches long and four inches broad; light travelled a foot from your hand to your eye; the picture in your eye was so many hundredths of an inch long; the connecting link of nerve fibres between your eye and your brain can be seen and measured; and, finally, the region of your brain which deals with seeing fills a definite number of cubic millimeters. All these things can be measured, but they lead to something that cannot be measured, because it does not occupy any space at all.

The mental picture you make of your hand is not inside your head. Nor, for that matter, is it outside your head, though I have drawn it that way in the diagram. The mental picture exists, but it is nowhere. It is not domiciled in space at all, and is no more inside your brain-pan than fifty miles away. (If you find it difficult to believe in a real thing which does not take up any room, I see no special harm in thinking of it as

filling the entire Universe, as situated at the same time in your head, on the dome of St. Paul's, and in the space between the stars -- as, in fact, anywhere).



Since your mental picture of your hand is strictly speaking nowhere, it can be neither big nor little. When you think of a grain of sand your thought is not small, any more than looking at elephants gives you a swelled head. Your mental picture of your hand is not eight inches long, though it is of such an object -- which is not at all the same thing.

If by some miracle you were able to look inside your own eye at this moment, you would see the print of this page hanging upside-down, like a tiny poster stuck on the rear wall of your eyeball. But if, more miraculously still, you were able to vivisect your own brain, you would never find printing or page, or pictures of either, however long you looked for them. They are not there. The book and the hand of your experience are not something outside your body, neither are they something inside your eyes or your brain. They are mental things, objects which are nowhere, yet real.



Fantastic? Of course it is fantastic, and appears more so the more you think about it. Looking at your hand seems to be the simplest process in the world, but once you cease to take seeing for granted, and start on the most elementary investigation, you find miracles that make the cleverest saint in the Calendar look like an incompetent amateur. If you knew exactly how you see your hand you would probably know everything.

Our ignorance of the whole matter is profound. For instance, we have no idea to what extent, if any, your mental picture is like your hand out there -- the original hand, so to speak. Can you think of the pinkness of the original hand

getting itself put into code, flying invisibly through space to your eyeball, getting itself de-coded, and then put into code again along quite different lines, and finally advancing to your brain where it is used by some mysterious painter to help him to colour something which has no size and is nowhere in particular? It certainly sounds like the most arrant nonsense.

The truth is that you have a clear mental picture of your hand and its pinkness, and that is all you can be quite certain of. If you think you know what it is out there which corresponds to the pinkness of the hand you see, then you deceive yourself.

And that leads us to a bigger question. If the colour of your hand is a creation of your mind, what about its shape? What about its very existence?



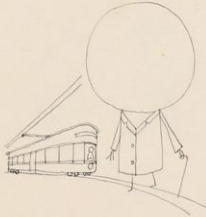
You cannot be aware of things with your eyeballs, or with your brains, or with any other part of your body. You can only know with your mind, and seeing is one kind of knowing. All the things you see, from your hand to the Milky Way, are in your mind. They are mental pictures. The size and shape and texture and colour of the things you see, and even their existence, are, for you, ideas. All the people and buildings and flowers and trees and stars you have ever laid eyes on have been pictures in your mind. How else could you have seen them?



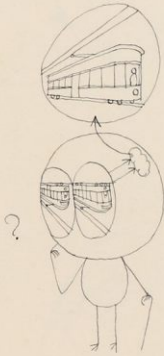
It is unnecessary to go so far as to say that your hand and people and buildings, and so on, exist only in your mind. What we can say is that you have no means of finding out what these things are like in themselves, out there. Your mind can only appreciate what gets through to it (so to speak), and when you consider all the chopping and changing that goes on in the process of getting through, it is fairly certain you can have no notion of what is there at the start.

If this is the first time you have thought about such matters, you are probably undecided whether to look on these

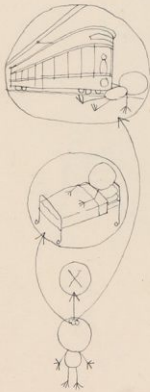
arguments as useless mystification or verbal trickery. You suspect a line of thought that ends up by undermining your whole world, making the 'real' seem unreal.



Suppose you are walking down ~~in~~ the middle of the street, and a large, red, and dangerous tramcar is rushing towards you, making a great deal of noise. Do you gaze calmly upon the tramcar and say to yourself: "In the first place there is not just one tramcar. There are no fewer than four tramcars -- the apparently solid one out there, two small ones, upside-down and flattened, within my eyes, and another in my mind which belongs to a different sort of world altogether and is nowhere -- and of these four the last is the only real one for me"? You do not. You get out of the way as fast as you can. If you stayed to investigate the first tramcar's reality or unreality, you would get an unpleasantly vivid demonstration -- but of what, exactly?



You would probably get killed, of course. But would this fact prove that, as far as you are concerned, the tramcar is not a mental tramcar? It would not. Your pain as the tramcar hit you, would, like all pain, be a mental experience. Your injuries, as you looked upon them and thought about them, would be present in your mind. And your death would be a mental switching-off, or at any rate a change of some sort in your mind. The incident would have demonstrated, not that the tramcar was not a mental picture, but that the vivid idea of a tramcar descending upon you, when followed by the vivid idea of your not getting out of the way, leads up to the all-too-vivid idea of pain and finally to a switching-off of all ideas. The whole series of events is mental.



You know that this unpleasant mental sequence is more or less inevitable unless you change it by introducing the vivid idea of dodging the tramcar. And that is what you do.



Supposing we admit that seeing is by itself an unreliable guide to what exists out there one foot in front of you, are there not other clues, other channels by which information may be received? When you snap your fingers you hear the sound they make; with one hand you can feel the shape of the other; if you were eaten by a tiger, your hand would have, for the tiger, both taste and smell. Is not the evidence of all the senses, when taken together, sufficient to establish what your hand is really like?

What happens when you hear your fingers snap?



Waves are set up, which travel through the air to your ear where they beat against your ear-drum and make it vibrate. The vibrations are at once transmitted to a vessel that is like a tiny piano full of liquid. When the liquid is set in motion some of the 'piano wires' (there are about 10,000 of them) vibrate in sympathy, and a message saying which wires are vibrating is telegraphed to your brain. The result is that you 'hear a sound.'



Where is this sound that you hear? It is not in your fingers; it is not in the air that bridges the gap between your fingers and your ear; it is not in the vessel behind your ear-drum nor in the piano wires; it is not in the message that travels from the piano wires to your brain; and, finally, it is not in your brain. It is 'in' your mind. The outside world, and all the immensely complicated events in your head, are silent. It is your mind that provides the sound.



Similarly with feeling, smell and taste. They are mental things. No doubt something in the 'outside' world has given rise to them, but whatever that something is, it is certainly nothing like your sensations.

It is your idea of your hand which you know, which is vividly real to you as a shape, as a patch of colour, as a thing which can be felt and heard. The hand out there, the thing as it actually is in itself, you cannot know.



And the same is true of your entire body. Common-sense thinks it knows what your body is, but it is mistaken. What you call your body is an idea, or rather an extremely elaborate system of ideas, in your mind. If the hundred and fifty pounds of flesh and bone can be said to have any kind of existence on its own account, apart from your mind and mine, the nature of that existence is entirely hidden from us.

It follows that when common-sense says you are your body as it exists out there in itself, common-sense is really saying that you are unknown and unknowable.

CHAPTER - II.

T H E W A L K I N G C I T Y .



We set out to paint a portrait of you -- but the sitter vanished.

"Which," adds common-sense, "does not get one very far... After all, every man behaves as if he knows what he is and what the world around him is like. And, though these assumptions may be unjustified, they seem to work. If this 'idea' we have of our bodies is good enough for men in general and for scientists in particular (and scientists ought to know) it is good enough for me. Philosophy leads nowhere, whereas common-sense, and science which is only common-sense developed, accepts the world we know, and, having done so, goes a long way towards explaining it. If you want to know what you are, ask the scientist, not the philosopher."



Let us then, for the moment, ignore the conclusions of the previous chapter, and again ask the question: What are you?

Common-sense replies that you are one body, endowed with one life, an individual.

How does this life arise? From what does this individuality spring? What is the basis of your existence as the man you are?

If we try to answer these questions by examining your bodily structure, can we, by careful searching, strip you of



non-essentials and find somewhere the real you, the core and centre of your being? However long we search we can find no such thing. We find only -- a vast animal population.

These millions and billions of animals are not intruders, or casual inhabitants, or even paying guests -- they are you. You are, in fact, a walking city.

Let us glance at the way this city functions.

The citizens, which are called cells, are of many shapes and sizes, each being fitted for the work he does. Some of them move around your body taking nourishment by the way and behaving almost as though they were loose in a pond. Others -- they are in the majority -- lead a sedentary life and sit at home getting on with their jobs and having their food brought to them.



Just as a town's life can only go on properly if its citizens make bread, and attend to the drains and the roads, and repair the old buildings and put up new ones, so do you live only if your millions of citizens do their jobs conscientiously. They little realise, of course, that by scavenging, and operating telephones (so to speak), and doing building work, and fetching and carrying, and bearing children, they make you possible, that they are you. When a police-cell, creeping through your flesh, arrests and devours a trespasser, he is not interested in you or your health; he is interested in getting his food. All the same, his unawareness, and the unawareness of his fellow-citizens, does not affect their efficiency.

Picture to yourself what happens when you stretch out your hand to open a page of this book. There is great municipal activity, and it is beautifully organised. Millions of citizens get busy: overseers give instructions, telephone operators put through trunk-calls, information bureaux get out reports, brawny workmen push and pull. Result: your arm moves.





What you do, your cells do. Your life is built out of their life. If a pair of them were clever enough to think and talk, this is what they might say:

1st Cell (A genius amongst cells) Why do we work so hard scavenging, operating telephones, having families, building this and that, or whatever it is we so earnestly do?

2nd Cell To earn our livings, of course. A cell must work for his dinner.

1st Cell Yes I know that. But I was wondering.....Don't you think it is possible that there is something else in the world, a sort of god-cell -- call him Jack Robinson -- who is somehow responsible for all this feverish activity?

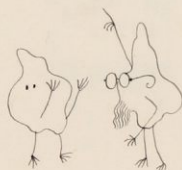
2nd Cell Where is this Jack Robinson? I'll believe in him when I see him.

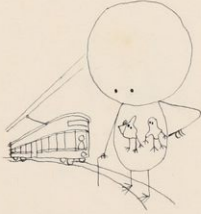
1st Cell I haven't seen him either, yet I have a feeling..... Perhaps he isn't out there, but here. I mean, in you and me. It's contrary to common-sense I know. All the same --

2nd Cell That sounds dangerously like mysticism.

1st Cell I have it! We -- you and I and our fellow-cells -- are this Jack Robinson. When we do our little job of work we do his big job of work. Our little bodies are his big body. Our little lives are his big life. I admit that only in moments of insight does the idea really mean something to me. Nevertheless it is true.

Just as your supernaturally intelligent cell finds it difficult to grasp the idea that his life is a bit of your life, so, perhaps, do you find it difficult to grasp the idea that you are a walking metropolis, of which he is a citizen. When a





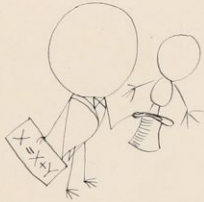
police-cell in your blood is about to devour a criminal he does not preface his meal with any pious remarks about your welfare. And in much the same way you, when faced with the on-coming tramcar, do not say to yourself: "We -- all the millions of us -- must co-operate and do something about this. Get busy, cells!" You and your cells are sublimely indifferent to one another. Unaware, you just carry on in your different spheres.



The question now arises: how do you, one and indivisible, intelligent, self-conscious, arise from these multitudes of amazingly efficient, yet minute, stupid, un-self-conscious animals? If a million human idiots cannot between them muster a single intelligent thought, how is it that you, who are a walking asylum of brainless and blind deaf-mutes, are also a creature whose field of thought is the universe?

Nobody knows how it happens. We can and we do give high-sounding names to the mystery, and multiply instances of it, and probe its surface a little, only to find more and more mystery underneath.

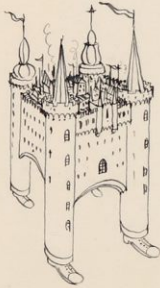
One view is that the qualities which make you a human being are hidden all the time in the animals of which you are composed. Another is that God did a sort of sleight-of-hand trick and slipped these qualities in while creation was looking in the other direction. A third opinion is that your human life and self-consciousness arise from the extremely complicated personal relationships (as it were) of your animal population. Possibly there is something in all three 'explanations'. Possibly; but in reality they no more explain the situation than arrows in a diagram explain light.



You are like a sum that is always coming out wrong. A conjurer-mathematician takes the inhabitants of the walking city one by one, reckons them up, and gets X for an answer. Then he shuffles them, and having, after endless experiments, arranged them in extremely intricate patterns, he counts them again. This time they come to $X + Y$. No amount of checking and counter-checking can isolate or explain the intruder, and neither common-sense nor science can say exactly what it is or how it got there.

CHAPTER - III

THE ART OF AMPUTATION



"All right," common-sense replies, "I know nothing about my body's interior, but this I do know: whatever may or may not go on within this hundred and fifty pounds of flesh and bone, however extraordinary this walking city may be, at least the city has walls. I know where I stop. My skin contains my body. The world is divided into two distinct parts -- my body, and everything outside my body. Perhaps that fact is not very profound, but at least there is something definite about it.

"It is of no use," common-sense goes on, "pointing out that the distinction between me and the outside world is blurred because my mind is full of stars, tramcars, and all that I see. I am referring to myself as a body, which no tramcar or star has ever got mixed up with. I may be a skinful of mystery and the world may be an extraordinary place as well, but I do know where the one ends and the other begins. Only a sophist could argue otherwise."



Let us take up common-sense's challenge, and put a few questions.

- Q. I see you have a set of false teeth. Are they a part of your body?
- A. Of course not.
- Q. Why not?
- A. Because they are dead.



Q. But your bones are largely made of dead material deposited by living cells. Does it follow that your bones are not part of your body?

A. No. My bones are part of me because they are not loose and removable like my false teeth.

Q. Then a dead thing can be part of your body but a loose thing cannot be?

A. Correct.

Q. What about your gastric juice and your saliva? They are loose as well as dead. Are they part of your body?

A. I suppose they are.

Q. Then the looseness of your false teeth does not disqualify them for membership any more than their deadness disqualifies them. You will have to find another reason for excluding your dentures.

A. My false teeth are not part of my body, because they did not grow along with the rest of me.

Q. Please drink this glass of water. Now in a little while some of the water will be flowing in your arteries, and some of it will be inside certain of your cells. Will it then be part of you?

A. Yes.

Q. But the water did not grow up along with the rest of you. How, then, can it be part of you?

A. It does a useful job of work in connection with my body.

Q. That is the real reason why it is part of you?

A. Yes.

Q. And anything which does a useful job in connection with your body is part of it?

A. I suppose so.

Q. Then your false teeth are part of you!



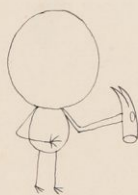
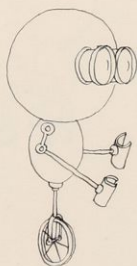
Common-sense, however, feels it has been tricked. It is not satisfied, and demands further explanation.

Your body is a collection of tools and instruments. Your hand, for instance, is a tool for grasping things; your eyes are seeing-instruments; your legs are propellers. You, as a body, know how to grow these devices, which enable you to get to grips with the world.

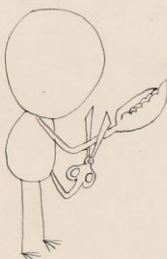
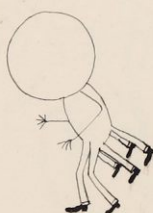
But the natural tools you grow are hopelessly inadequate for the sort of life you lead. Your bare hand cannot write a letter, or cut up a piece of paper neatly, or bore a hole in a piece of wood. Your eye is a marvellous optical instrument, but it cannot register animals much smaller than a cheese-mite, or the details of the moon's surface. Your legs, however muscular, are inadequate when it comes to really fast travelling. Before you can do these things you have to grow. And this is precisely what you do -- artificially.

You extend your body. To write a letter you grip a pen, and add that pen to your body. Temporarily, you have grown a nib at the end of your right arm. When you want to look at the details of a fly's leg, you grow, for the time being, a new front to your eyeball, in the form of a microscope. If you want to get somewhere quickly you grow wheels. When you want to break things you grow a hard fist, known as a hammer, for that purpose. If you feel cold you grow a thick skin by putting on an overcoat, and as soon as you feel hot you slough it. When your natural teeth get beyond repair you grow an artificial set.

In fact, your body has two parts -- the fleshy part that you are committed to for life, and the acquired part which you grow and un-grow as you please. The organs of the



first body you take around with you always; the organs of the second you leave lying about, ready to be attached when you need them. Let us glance at some of this artificial anatomy of yours...



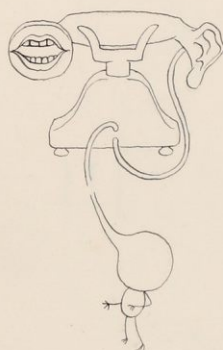
Take as an example a chair. When you sit on it you grow four more legs, making six in all, which is as many as a fly has. It is obviously convenient to have these four extra legs, yet be able to amputate them at will. You can get up and leave four legs behind; a fly, on the other hand, has to take all its six legs round all the time, though they are as useless when the fly is on the wing as chair-legs are to you when you are walking.

Or take a pair of pincers. When you want to nip something, you pick up the pincers and grow a claw at the end of your arm. A lobster has done the same thing, but its claw, being natural, is a fixture. The lobster having rashly committed itself for life to nipping, has become incapable of boring, cutting, or scraping, whereas you are sensible enough to grow an artificial claw that you can amputate at a moment's notice and grow again as gimlet, or a knife, or a razor, or a hundred other limb-endings.

At meal-times it would be useful if one of the finger-nails on your right hand were big enough and strong enough to function as a spoon, and one on the left hand could do service as a fork. But such protuberances would be in the way between meals. You find it much more convenient to have a set of metal finger-nails (so to speak) beside your plate, enabling you to grow a suitable pair of hands for dealing with each course.

Modern sanitary practice demands that you shall eliminate your waste matter at the town's sewage farm, or in the sea. There are three conceivable ways of doing this.

You might travel there daily. You (or nature for you) might grow a natural bowel between your house and the sewage works, presumably burying most of it beneath the pavements. Or you might grow an artificial bowel (known as a drain) of the same length, which you can amputate and re-grow as often as you wish. The superior efficiency of the third method is obvious.

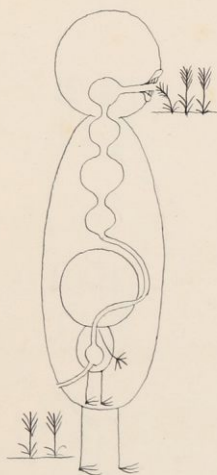


If you want to hear your friend talking at the other end of the town, you may visit him; you may sit at home and grow a face so lopsided that your ear is up against his window (nature has done more extraordinary things than this before now); or you may grow an outer ear made of steel and bakelite and copper, and hang one end of it permanently in his flat and the other end in yours, with the middle part propped up on telegraph poles. Sensibly, you adopt the third method, and use an artificial ear that you can grow and un-grow many times an hour.



There are hardly any limits to this kind of growth. You are a monster that can develop, at a moment's notice, and in all directions, a body suitable for any occasion. When you want to broadcast your ideas you can grow a million mouths to shout with. When walking does not serve your purpose you can grow wings to fly with. When necessity arises, you can make yourself into a passable imitation of a fish, by growing an elaborate submarine body.

Suppose you are now eating a piece of toast. Actually, you started eating it weeks or months ago, when the wheat of which the bread was made was still standing in the field. Like any other herbivorous animal you grazed in that field, when your mechanical jaws (they are called harvesting-machines) bit off the corn stalks. Having eaten, you started digesting your food -- the useless stalks and husks were removed in your first stomach, which is known as a threshing-machine. Your second



stomach was the mill where the grain was ground into flour; the third, the bakery where the flour was made into bread; the fourth, the kitchen where the bread was toasted. By the time the toast arrives on your table it has already passed through four of your artificial stomachs, each of which has brought the raw material one stage nearer to its semi-final form, which is masticated toast lying inside your fifth stomach. Lastly, your personal digestive organs extract what is useful, while the rest is passed into your artificial bowel and returned to the land. Like a cow, you graze on the land and excrete on the land. The difference is that your body is several million times bigger than a cow's and capable of grazing in many fields at the same time, while excreting miles away.

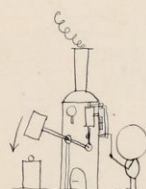
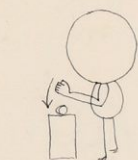


But even a cow is part of you. Her mouth as she grazes is your mouth; her teeth as she chews the cud are your teeth; her organs as she makes milk of the grass are your organs. You and I and all who drink milk are grass-eaters who have grown preliminary stomachs that are capable of dealing with such food.

Everywhere you have mouths. When a fishing-net is dragged along the sea-bed it is your mouth feeding. When the sole that is about to be caught in the net has a meal, you have a meal. When the turkey you plan to kill for your Christmas dinner pecks corn in the farmyard, it is you who peck corn.



Everywhere you have eyes. When events in China or Peru are filmed and you see them on the cinema screen, the movie-cameras that shot the film are your eyes. A newspaper photographer is a man who walks around with another of your eyes in a leather case slung over his shoulder, and if he comes across something he thinks you would like to see, out comes your eye and up goes your eyelid.



Everywhere you have hands, from the tiniest tool to an industrial plant covering several square miles. A steam-hammer weighing a ton is just as truly an extension of your hand as the hammer in your home-carpentry set is, the only important distinction being that the steam-hammer is an energetic fist, so to speak, whereas the carpenter's hammer is not. A mechanical excavator scooping out the side of a mountain is a sort of energised spade, and a spade is not a mere spade, but a flat-shaped growth on the human arm, capable of easy amputation.

By far the greater part of your external eyes, and mouths, and stomachs, and hands, need men to work them. The men who operate steam-shovels, drive harvesters, bake bread, shoot films, milk cows, stoke locomotives, build houses, administer laws, clean drains -- in fact, all men who do socially useful work -- are as much your organs as are the devices they operate.

Tools, machines, animals, men -- all things that help to make your life what it is -- are extensions of your body. They are your means of life, in the same way that your hands and feet and liver are your means of life. In fact, many of your external or artificial organs are more important to you than a good deal of your body of flesh and blood. If you were deprived of your appendix and your fingernails and your eyebrows and even a part of your stomach, you would still be able to live the sort of life you do now, but the permanent amputation of a few of your preliminary stomachs, or your bowel extensions, or your shell, would leave you ill-equipped for life. It is quite possible you would not survive the operation. Whatever common-sense may say to the contrary,



the jacket you are now wearing is, in a very real sense, at least as much a part of you as are your eyebrows.

But where do you end?

If telephones are extensions of your ears and vocal chords, and food-factories and cattle are your stomachs, and trains, cars, aeroplanes and ships are your artificial legs and wings and fins, and libraries are your organs of memory, -- if all these and much more are part of your greater body, where does this body stop and the outside world start?



If the cow that extracts nutriment from grass on your behalf is part of you, is not the grass that extracts nutriment from earth and air just as much part of you? The grass is as essential an item in the process of buttering your toast as the cow is and the milkmaid is. Grass, like the false teeth at the beginning of this chapter, does a useful job in connection with your body. It is part of you. And if it is part of you, are not the earth and the air, from which your nutriment ultimately comes, also part of you?



Similarly, if your house is your shell -- a sort of hard loose skin from which your various artificial organs protrude -- and this shell has to have a base which is the earth, is not the earth a necessary part of your shell and therefore part of you?

And so on. Your fleshly body shades off into your extended body, and both your fleshly and your extended body shade off into earth and air.

One way of summing up the situation is to say that the things which only you are dependent upon belong to your body in a special way, and the things which you and other

people are dependent upon belong to your body in a remoter sense. The world is not divided into two parts -- the part that is inside you, and the part that is outside you. All of it belongs to you, but in a greater or lesser degree.

You are like a sort of onion consisting of a core enveloped in five skins or layers, which, though distinguishable, are not sharply divided from one another. The core is your flesh -- the mysterious walking city of the previous chapter. It is you in a special sense; you cannot change it for another one, nor can you share it with other people.

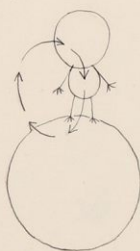


1. The first layer is the personal section of your artificial body -- your clothes, spectacles, false teeth, fountain-pen, tooth-brush, and other articles which are for your use alone. This part of your body can undergo piecemeal amputation and replacement, and most of it could be grafted on to somebody else quite easily. All the same, you do not normally share this set of organs with other people; of all the vast anatomy of your artificial body it is the part which is most intimately your own.

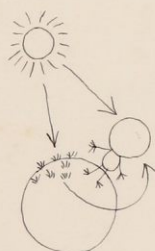


2. The second layer is a world-wide organisation of domestic animals and plants, machines, books, roads, railways, ships, aeroplanes, buildings, and the men and women who make and work them. These are your body; you are dependent on them; they make your life human. But you share them with many other men, and in that sense they are less yours than your toothbrush and your kidneys are.

3. The third layer -- the planet itself -- is vaster still, and everybody's property. You are as dependent on this outer husk of yourself as you are on the flesh and blood



at the centre, and it is only because you share the Earth with all other men, animals and plants, that we must describe it as an outlying portion of your anatomy. In a sense, of course, this third skin penetrates right to the core -- your flesh is made up of earth and air; earth and air in various forms flow through your fleshy body in a constant stream, gradually replacing it and enabling it to live. Nobody can say where the earth and air of your fleshy body stop, and the earth and air of your food and drink and breath begin. And for a good reason: your greater body is the Earth.



4. Why not the Sun also? In the Sun you have an organ yielding light, warmth, seasons, and the rhythm of day and night. The Sun, like the Earth and trancars and your waistcoat and your heart, belongs to your body, and you would stand as much chance of survival if it were amputated as if a surgeon cut your brain out. The Sun, and its planet the Earth, are the material basis of your life. It takes them to keep you going.



5. And finally there is the Universe itself, of which our Solar System is a mere particle. The Sun needs the Universe as its home; the Earth needs the Sun to light and warm it; the grass needs the Earth to grow on; the cow needs the grass to eat; your stomach needs the cow to keep it supplied with milk; the rest of your natural organs need your stomach to feed them. All are organs of your life, from the Universe to the least of your cell-citizens. In the last resort your body is the whole of things.

"This," says common-sense, "is the height of absurdity. I can follow you when you say that every time I use a pair of nut-crackers I grow a lobster-claw. You ask much when you tell me to look upon a herd of cows as so many detached stomachs of mine strolling in a meadow. You ask more when you tell me to look on this planet as my body. But when you tell me that I am the Universe you go too far. I am not specially humble, and I might be persuaded to regard myself as Creation's masterpiece, but I do draw the line at regarding myself as Creation."

Common-sense said that you are your body. We did not attempt to criticise this statement, so much as to see where it led us. It has led us to a view of yourself as spreading out till you embrace the Universe.

Whatever common-sense may say to the contrary, your body does not stop at your skin; you are not merely a hundred and fifty pounds of flesh hanging by the soles of your feet from a ball that is tearing through Space; the world is not something alien, apart from yourself. Your life is not here only, in your fleshly body, but in your greater body also -- in tramcars and fields and cattle and houses and earth and air and sun. When you look at these you are looking at yourself.

At your centre lie the cells, with their huge question marks about matter, and life, and consciousness. At your extremities there lies the Universe with its even huger question-marks, and it is only a tiny fraction of what lies in between that common-sense can even start to understand.

