

## A MIND OF ITS OWN

To what extent is our mind and our perception of the world around us actually under our control? We have seen that we can't tell our mind to take in all available information because that is impossible so we are really requiring it to notice what is most relevant for our present situation hoping that it knows what that is! We are seeking the kind of connectedness across the two worlds that will be best for our meaning and our feelings.

We have this comfortable idea that we are seeing everything quite effortlessly and accurately, but there is an enormous amount of the information out there that we miss because we see the world firstly in the way that was useful to us in the past. The painter, David Hockney, said we see with our memory and Henri Bergson, a major French philosopher and Nobel prize winner, wrote: 'the eye sees only what the mind is prepared to comprehend.'

Consequently what we sense about the world is always relative, historical and personal. Perception is not passive; it is highly proactive in that the brain directs our attention, particularly with regard to seeing and hearing. Envisioning is a good word for seeing. There are many more nerve fibres from the visual cortex in the brain telling the eye what to do than there are coming in from the eye (via the thalamus) with new information. This is equally true of our hearing and our other senses to a lesser extent.

Our moment-to-moment experience of what we think is happening in the outside world is mostly the result of an internal simulation using a model of the world we have constructed from previous experience, but there is also a cross-checking process. When our mind is alert it checks for perceptions that don't fit the existing model because these will affect the accuracy of its predictions. We will see later that this is more active when we experience the emotion of fear.

The way we pay attention is an important subject we will be exploring further. The point here is that what we attend to is always a consequence of the present state of our mind. Mind can't stand still and its next step will always be heavily influenced by its last one, which sometimes makes it feel like it does its own thing; has a mind of its own. So if we have missed something that was important we might continue to go astray for some time. Fortunately much of what we miss is not crucial for our wellbeing.

Here is an example of something that is quite hard to see, but not likely to make a big difference to your life if you missed it:

This paragraph is most unusual. How quickly can you find out what is so unusual about it? It looks so ordinary, you'd think nothing was wrong with it and, in fact, nothing is wrong with it. It looks normal. It IS unusual mind you. Study it. What is most obvious? If you work at it for a bit it will probably dawn on you. Good luck!

If you haven't worked it out you could try holding that paragraph up against any other paragraph in this book and you will see that the letter which is by far the most common in the English language, the letter 'e', is missing from that entire paragraph. We are much more likely to miss something that is absent as well as being outside our sphere of attention.

There are some dramatic examples of 'inattention blindness,' the most famous being the 'invisible gorilla' experiment described by Christopher Chabris and Daniel Simons in their book, *The Invisible Gorilla - How Our Intuitions Deceive Us*. In one version of the experiment, participants watched a 30-second videotape of a basketball game having been asked to count,

very carefully, the number of passes made by the players in the white shirts. Only about half of them noticed, until it was pointed out afterwards, that a woman in a gorilla suit walked across the court for 10 seconds towards the end of the tape. Their attention was elsewhere.

Something similar called 'change blindness' has been demonstrated by having one person substitute for another after a physical obstruction (such as a car going by) has briefly obscured the first person from view. Most people believed it was still the same person even though his appearance was very different. Their mind's eye simply felt no need to attend to those particular details at that time. You cannot stop that from happening unless you have some cause to focus your attention differently.

The fact is we don't know at the time what it is we missed. We are quite unaware of the boundaries of our visual field or that we have a blind spot. The reason we miss a lot is not because we have blind spot in each eye, but knowing about the blind spot tells us something else about perception.

If you focus on the letter 'A' below with your left eye closed and gradually vary the distance between your eye and this page, back and forth, you will find a point where the letter 'B' has disappeared from view. That is your blind spot for that eye; it doesn't really affect you because you have two eyes and a deep visual field.

**A**

**B**

Next close your right eye and focus on the dot below and do the same procedure. The thing to notice here is that the black line becomes a continuous line because your mind fills in the gap with a line when the gap falls in your blind spot.



In fact your mind is filling in gaps all the time so that your story can remain coherent. Your brain takes a few things that it notices and makes up whatever else it needs to create a meaningful picture that fits with your story. This applies to the other senses as well.

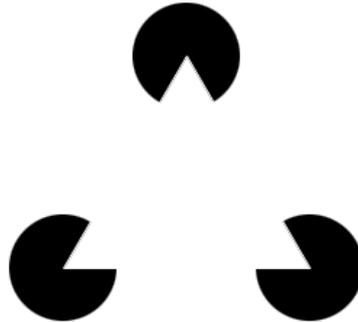
This imaginative ability is often very useful. For example the fact that you can read the paragraph below is because your mind can override a lot of muddle by drawing on its previous experience.

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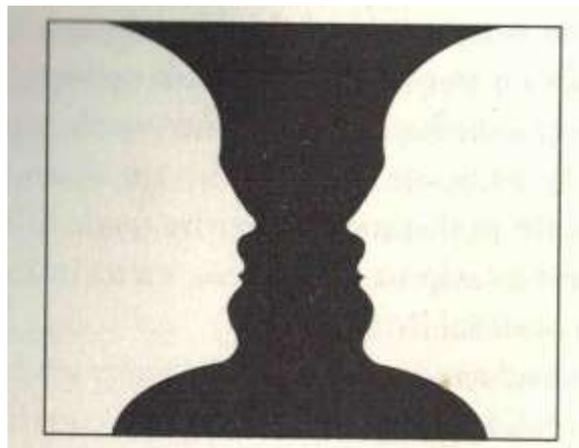
Letters in a word are, the only important thing is that the first and last letter be at the right place. The rest can be a total mess and you can still read it without problem. This is because the human mind does not read every letter by itself, but the word as a whole.

According to the Internet there never was such research at Cambridge University and this idea probably came from a thesis submitted by a man called Graham Rawlinson at Nottingham University in 1976.

Everyone will see immediately another shape as well as the three Pac-men in the figure below even though its boundary lines are only suggested.



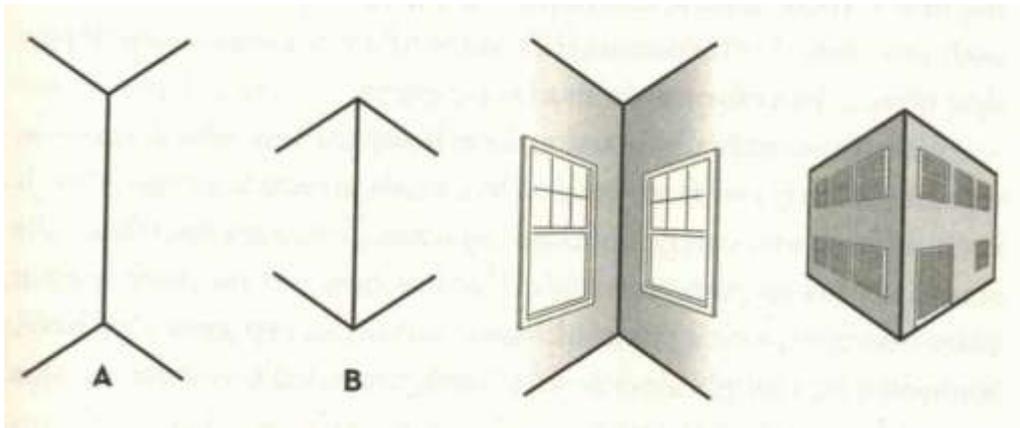
Sometimes (as in the Rubin's illusion shown below) there are two figures discerned in the same drawing (vase and faces), but then our mind must shift itself from one to the other to give either of them meaning. We know intuitively that they coexist, but our perception can only grasp one or the other. This helps us to understand that what we are connecting with is more important than what is actually there. We often think of our mind as multi-tasking, but in fact it is very singular in its meaningful attention.



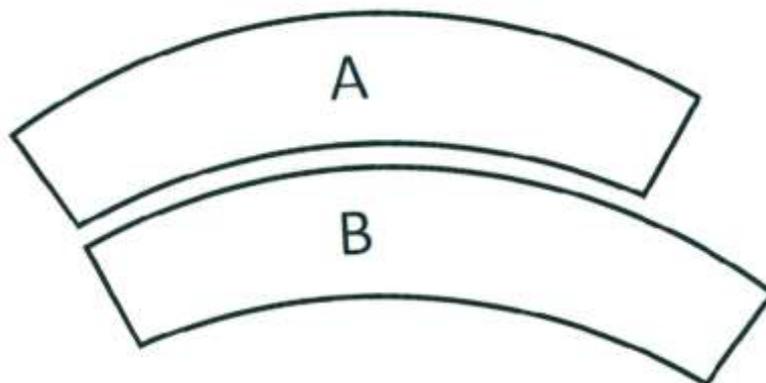
When we sense something we also 'make sense' of it, that is we give it meaning. Because this is generated subconsciously in the first instance we are usually not aware of how the perspectives and shapes of the hidden parts of our mind influence the judgments that our senses make.

In the Müller-Lyer illusion shown below we judge the line in 'B' to be shorter than the line in 'A' because of the difference between looking into a corner (such as in a room) or standing

outside it (such on the street outside a building).



Another illusion that shows this effect is given below. We judge the lower crescent to be longer than the upper one because of the subconscious image of a circle that is suggested by the slope of its ends. Our minds are very susceptible to circle shapes. If you doubt these two are the same size, try cutting out a cardboard crescent in that shape and fitting it in.



Continuing this idea, here is an example (drawn by Jackie Bortoft) showing that we need an 'organising idea' in our mind to see a meaningful pattern and that organising idea comes from our previous experience. This is explained beautifully by Henri Bortoft in several of his books, especially *The Wholeness of Nature*. It may take you a few moments to discern the head of a wild animal in this picture because your mind has to impose its organising pattern on what is otherwise a jumble of black blobs.



So our mind imposes the order onto the ragbag of information that it is able to grasp hold of; this is the connecting process that makes the music across our two worlds. When it comes to interpersonal relationships the tuning action of our feelings becomes crucial. In this case it's not just the organising idea, but the state of our feelings, that will make all the difference to what we notice and what we don't.

So the two ways in which our mind does its own thing are that it will miss a lot without us realising and it will make up lots of things without bothering to tell us it has done so. In the next section we will see how these interesting attributes of human perception can lead us in one direction or another.