

Beliefs and Behaviour

Nailing up 7 theses, Alan Allport argued that the functional beliefs which implicitly guide our knowing are more powerful than our explicitly stated beliefs.

I'm going to focus on some of the interrelations between belief and behaviour. I'll try to illustrate some examples of how beliefs, in a sense which I shall define shortly, play out on our behaviour. Most of the examples I'll give you are relatively low level examples of cognitive processing; but one of the theses I'll try to develop is that the same basic functional principles operate at low levels of the cognitive processes as operate in much higher levels.

Imagine that you have a very large piece of paper and you fold it in half so that it is now double the thickness; then you fold it in half again, and you keep doing that; you do it fifty times (you need a very large piece of paper). How thick would you suppose the resulting folded paper would be? It would be 2^{50} – it would reach the sun. Suppose you fold it once more. How thick will that be? Yes, the answer is to the sun and back.

Now here's a little story. Just listen carefully and see how it goes:

In the courtroom it was hot and stuffy. It had been a long day and at times the judge had struggled to stay awake. But now the last case was finished. Time to pack up, hang up the wig and gown and get home. By this time the lobby was empty. The judge looked around anxiously, then nipped into the ladies toilet, re-emerging some time later. There was the judge's son waiting in the lobby. 'Hello Mum!' he said.

Did some of you do a little double take? Are there some beliefs operating there? You probably don't claim explicitly to believe that all judges are male. But there is somebody in there listening to the story who is interpreting it that way. There is some functional belief system that is operating to that effect. So that in practice these functional

belief processes operate as though you believed such and such, which may be substantially different from your explicit beliefs. I'm going to put up a number of theses – here is thesis number 1:

1. Our functional beliefs – that is the beliefs that directly but implicitly guide our cognition, our understanding of things, our perception and our actions – often differ from the explicitly stated beliefs that we have.

I suggest to you that our functional beliefs are normally implicit, that is to say, they operate without awareness. A while ago (in the days when there were clock or watch repair shops and you didn't have to just chuck your broken one away and get a new one), I took my watch into the watch shop, gave it to the assistant and pocketed the little docket, to collect it again when it had been repaired. And then I thought: 'Is there just time for me to nip across the road to the co-op?' What did I do? Of course, I looked at my wrist to check the time! There was a functional belief operating: my watch is on my wrist. At the same time at another level I knew I had just handed it over to the assistant.

These things operate at many different levels, so let me offer a demonstration at quite a simple low level. I'm going to put a written question on the screen. Please answer the question. (It's a question about what you plan to do at lunch time.) Here's the question (see fig. 1). Did you

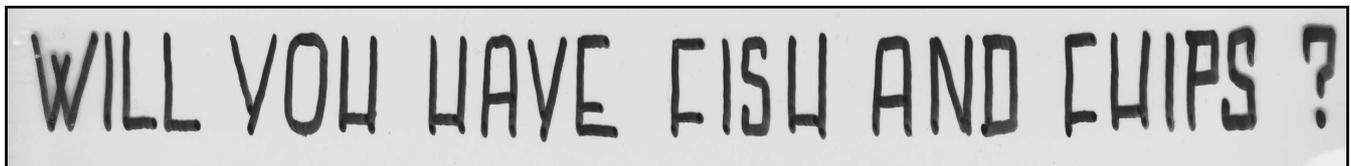


Fig. 1 notice anything funny about the lettering? Generally not! Look at the U of 'you' and the H of 'have': they are identical; look at the Y of 'you' and the the V of 'have' (again identical); that's the F of 'fish' and the C of 'chips'.

It's really hard to see because the context guides your beliefs, mapping into one particular

set of belief structures. These are belief structures at the level of English spelling that you have probably never formulated as an explicit belief: there are no words in English like ‘cish’ or ‘fhips’. Indeed you have an even lower level functional belief structure that there are no words in English that begin FH. It couldn’t map into any belief structure that you have and therefore you don’t see it, you simply do not see what doesn’t fit. So that’s my next thesis to be nailed to the door:

2. We tend not to notice – not to see – the things that don’t fit into our functional belief structures.

What do I really mean by functional belief structures? To a first approximation, a functional belief structure is a framework of ideas into which – in terms of which – experiences are encoded and hence that’s how they are interpreted, understood and consequently acted on. To a second approximation, a functional belief system of that kind is embodied in, realised in, a neural network, which operates as a constraint satisfaction system. Everything has to agree together, everything has to fit with all of the encoded relationships within that belief structure. Where there are things missing, it will fill them in for you.

I think it’s impossible to overstate how important to our mental lives, to our mental processes, these cognitive structures are. They are not something you have or might not have as an optional extra; you live inside them, they are fundamental to how you cognise everything. Rather than something you have, they are what you are. For the philosophers amongst you they are a little bit analogous to the Kantian categories, of time, space and causation. We finite humans cannot cognise things except through the metaphorical spectacles of time and space and causation. We can’t see things in themselves, we can’t experience reality except through those lenses. And similarly, but much more comprehensively, we can’t cognise things except through the spectacles, the transformative processes, of our functional belief systems.

Perhaps a helpful metaphor here would be a language. Supposing someone is attempting to speak to you in Turkish and you don’t have Turkish. All you hear is a set of honking sounds. It has no possible meaning to you. But if it’s a language that you *do* know, it’s impossible *not* to hear the meaning of those words.

It’s also the case even when you have multiple

languages, you are going to hear or read them in one language but that will depend on the language context that you’re in. Consider the words ‘**chat**’ and ‘**coin**’. If you are in an English language context, you ‘have a chat’ or ‘toss a coin’, but if you are in a French language context you think ‘un petit chat’ or ‘dans un coin’. You encode those same letter strings in a totally different way. The context can be very minimal; ‘*un chat*’, ‘*le coin*’ is quite enough to compel how you interpret it. The current context has to match the belief structures and, vice versa, the belief structures have to mesh with the context. If there is something that doesn’t properly mesh then the whole system skitters or even collapses.

Here’s another little demonstration. When you look through this small peephole, all you see is a variety of circles, squares and stripey bits (fig 2) :

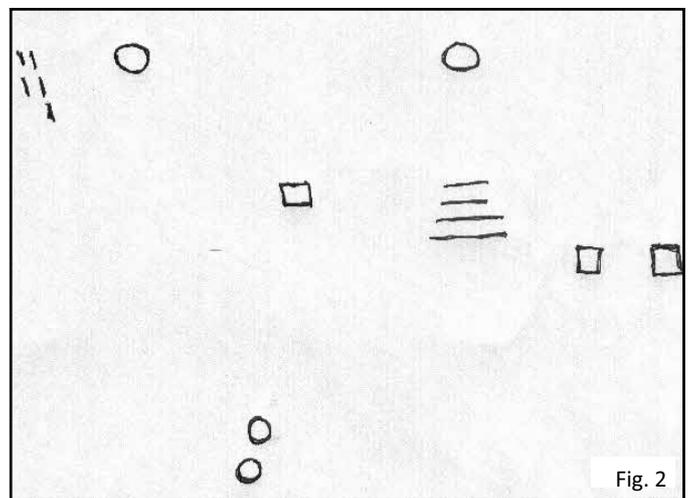


Fig. 2

Individually, they don’t make a whole lot of sense. But when you can see the whole picture, the elements provide a context for each other. Then you can’t help but map it into all those belief structures that you have about boys and scarves and paths and suns and balls, hats and ships (see fig. 3 overleaf). It depends on the context how you read all of it. So here is another of my theses:

3. The structure in the input and the structure in the belief systems have to match, have to resonate together, and when they do, then they lock together and that’s your interpretation.

And another: .

4. In the absence of an appropriate belief structure, things fail to make sense.

And I'd like to reiterate something I said near the beginning with two more of my theses:

5. Our functional beliefs are normally implicit. They function without the necessity of awareness.

6. The same fundamental cognitive mechanisms operate at many – I'm inclined to say all – cognitive levels.

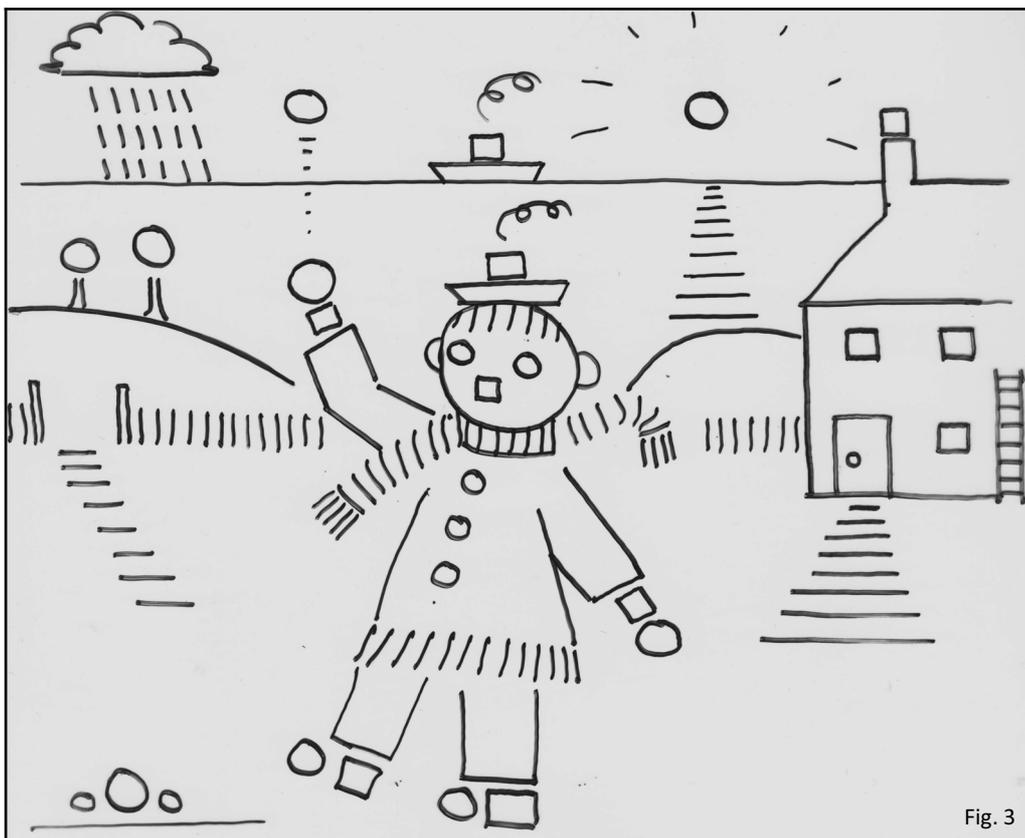


Fig. 3

functional belief systems are operating at much lower levels. But my proposition is that broadly the *same* mechanisms operate at all levels.

Returning to my earlier proposition that functional beliefs are normally implicit, it is not at all easy to contrive demonstrations of unconscious beliefs. You can see why this is a very difficult thing to demonstrate! But I can illustrate, at least indirectly, unconscious perceptions. I'm going to give you a task.

[Here the task was to read only the red letters in lists of superimposed pairs of red and green letters. One of the things the speaker demonstrated was how it was typically quicker to read a list when the ignored green letter was always the *same* letter, even though members of the audience were unaware that the green letters were repeated, than a list in which the ignored green letter was the same as the red letter in the next pair.]

The illustrations I'm giving you are mostly rather low-level or intermediate-level cognitive processes. It's extremely difficult, if not impossible in a talk like this to illustrate the high level ones. But let me just gesture to the kind of thing I'm talking about. In a Quaker meeting for worship – doubtless, in many other similar situations – people frequently have experiences which they might characterise as inner serenity or joy, sometimes of intense emotion or of oneness with everything, or occasionally a compelling impulse towards some course of action. Theistic Quakers interpret these kind of experiences that you all know about very differently from non-theists. They tend to interpret them as the presence of God or as divine forgiveness or a call from God. I think characteristically there the source or origin of the experience is felt as, or interpreted as, coming

from outside, from beyond the individual. On the other hand, I suspect that most non-theistic people in the same context interpret what I suppose are essentially the same experiences as coming from within their own nature. That seems to me to be an important difference.

That's the sort of level of things I'd like to be able to talk about but I don't have the skill and I certainly don't have any professional knowledge in that area. So I am going to tell you about how

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My first thesis was: Our functional beliefs often differ quite radically from our explicitly stated beliefs. There are very often differences, discrepancies between the two and perhaps most strikingly in our beliefs about ourselves and our own capabilities.

[Here the speaker referred to the famous social psychology experiments on obedience to authority, conducted by Stanley Milgram in Yale University several decades ago, in which well over half the subjects proved

willing to inflict high levels of what they thought were electric shocks on a 'learner'. However, when other people were shown a video of the experiment and asked whether they themselves would be willing to inflict such shocks they *all* said no. This is a systematic shared delusion. He then gave another example of a 'guards and prisoners scenario', in which within 24 hours the subjects had slipped into their roles and showed either brutal aggression as 'guards' or signs of depersonalisation as 'prisoners.']

Finally, let me mention an experiment on students at Princeton Theological Seminary, conducted by John Darley and Daniel Batson. The theological students who volunteered to take part were asked to prepare a 3-5 minute talk. Half were given the topic 'the role of professional ministry' and the other half's topic was the parable of the Good Samaritan. When their talks were prepared, each subject was told to go to another building to record his talk. They were given a map and half were told: 'You're late, you must hurry,' and the other half: 'You have plenty of time to get over there.' On the way each subject encountered a figure slumped on the ground, groaning and coughing and in a bad way. The main dependent variable – of course – was what did each subject do about this?

Some of them merely stepped over the body. Some of them had a swift look and carried on. Some asked, 'Are you OK?' Some genuinely stopped to help. What determined what the response was? Was it the topic of the talk they had prepared? No. The *only* significant factor was whether you were in a hurry. Of those in a hurry only 10% stopped and attended, while of those not in a hurry 63% did. This illustrates my 7th thesis:

7. Our explicitly held beliefs are often less important in shaping our behaviour than our philosophical traditions have tended to suppose.

Conclusion

I need to end up. For me the big question is not 'What do I believe?' but 'How to live?' In looking for practical answers to that big question how to live, two things seems to be of fundamental importance. To me at least, what is much more important than 'What do I believe?' is: 'How do I understand myself?' How do I understand my own nature? What kind of a being am I? If I recognise myself as a spiritual

being then I immediately see deceit or theft or murder or all the rest as simply unworthy of me. They are unworthy of what I am and what I seek to be. There's a lovely French philosopher Alain, *aka* Emile Auguste Chartier, who wrote: 'Ethics is neither more nor less than a sense of dignity.'

The second thing, closely linked to that first one, is what I'll call Perspective. How far do I see the world through or from my own point of view and in terms of my own interests? Or how far do I see it from the viewpoint of any other particular individual, or perhaps even from the perspective of my participation in the communion of all conscious beings, through my being and knowing myself to be a part of that communion? I think that *Perspective*, in this sense, rather than beliefs, is what is fundamental to the key question of how to live.

Alan Allport is a former Professor of Experimental Psychology at the University of Oxford, currently reinventing himself as a field naturalist. He is passionately concerned about the future of humanity in a warmer world.

This is a shortened, edited version of the talk he gave to the 2011 SOF Annual Conference in Leicester. A recording of the whole talk will be available on SOF website:

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Prayer

Prayer the Church's banquet, Angels' age,
God's breath in man returning to his birth,
The soul in paraphrase, heart in pilgrimage,
The Christian plummet sounding heaven and earth;
Engine against the Almighty, sinner's tower,
Reversed thunder, Christ-side-piercing spear,
The six-days world transposing in an hour,
A kind of tune, which all things hear and fear ;
Softness, and peace, and joy, and love, and bliss,
Exalted Manna, gladness of the best,
Heaven in ordinary, man well dressed,
The milky way, the bird of Paradise,
Church-bells beyond the stars heard, the soul's
blood, The land of spices, something understood.

George Herbert