

Upstairs Downstairs and Your Brain

I am fascinated by a metaphor used by Antonio Damasio in his book *Descartes's Error*. It is the idea that the brain is often thought of as having **higher** and **lower** parts, an upstairs and a downstairs, like a grand family's house with its posh rooms and hidden kitchens and sculleries. In the biological model, the higher parts are those that occurred later in evolution and feature the **neo-cortex**, the bubble-wrap like covering of the organ. You can see it clearly in the image above.

The lower or more basic parts include the **limbic** system, the **amygdala** and the **brain stem** and are often thought of as attending to biological regulatory mechanisms and the workings of organs, including the blood and muscles.

So, as in the TV series, *Downton Abbey*, Upstairs takes all the big important decisions while Downstairs maintains the body of the home, cleaning, cooking, clearing up and setting the scene.



Damasio's fundamental contribution to our understanding of how humans' work dispels this simplistic split and points out how the brain's Upstairs and Downstairs are interlinked in the generation of behaviour, and perhaps most surprisingly of all, that **emotion is a fundamental part**

of rationality. On pp135 – 138 of Descartes's Error, Damasio describes the neurological process of experiencing an emotion in response to a situation. We learn that our initial responses to any event are based on learned rather than innate representations and that unconsciously and automatically these responses are signalled to the amygdala and thus to the body, initiating a massive series of bodily changes. In part these changes include a link between the event that stimulated the emotion and the bodily reactions. However, it is quite possible to have an emotional reaction without ever pinpointing the actual feeling or linking it to the causes. In these circumstances we have an emotional reaction but do not know what caused it.

Continuing with the Downton Abbey analogy, can you recall how the Upstairs sector of the family resisted the blurring of the split between upstairs and downstairs in its horrified response to Lady Sybil falling in love with and marrying the chauffeur, Tom Branson? Perhaps we resist the idea of blurring the split between the top and bottom brains as well?



Leading up to this, Damasio makes the distinction between Primary & Secondary emotions.

Primary emotions are wired in and present right from birth, things like fear in response to a growl or pleasure in response to a mother's voice. We generally call these 'instincts'. These are automatic, but knowing that you feel them is not: that has to be learned. Evolutionally, it was probably better to start running from a suspicion of danger, before you notice that you are afraid!

Secondary Emotions are linked to your own experience of life, to your personal autobiography. They are triggered by events that have significance for you. Thus this part of your emotional palette is entirely your own.

But there is a lot of difference between the automatic neurological responses and the cognitive sense of knowing what you feel. Why is it important to know what you feel – whether for Primary or Secondary emotions? Because **being conscious of your emotions offers you flexibility of response** based on your intentions and your particular history of interactions with the environment. Thus the hunter chooses a different response on hearing a bear growl to that of the camper. Who has not responded automatically to a feeling and regretted that response later?

One of the great advantages of emotional responses is that they condition & prepare the body for appropriate action. Quite often these preparations and the ensuing actions are made without any thought. I mention this because I believe this to be the case **when a heuristic is activated by circumstances that seem similar to former experiences**, and things like familiarity and availability prepare us to act. What is important to remember is that a heuristic is triggered by a

feeling, an emotion, arising from the presence of a stimulus that can be classified as belonging to the appropriate class. So while the stimulus may set off the heuristic, it is driven by feelings. It has become common in the explanations favoured by Behavioural Economics to leave out the 'feelings' part of heuristics and just to describe the process - almost as if it were inevitable. Considering the above, we can see that it is always possible to ignore or reframe a heuristic, no matter how many times we have used it in the past. It is also possible for those of us interested in behavioural science, to become more adept at spotting the subtle triggers of heuristics and then to more fully consider how to respond.

The key fact for qualitative researchers is that heuristics tend to be considered as part of our rational machinery, simply as short-cuts that save time and effort. It is vital to remember that ***the feeling arising from what stimulated the heuristic*** and the ***feeling of our expectations in employing it*** are crucial components. We cannot hope to understand heuristics without engaging with emotions. As we might suspect from the above description, ***asking questions about what we did and why is suspiciously tangential to actually invoking and working with the feelings.***