



## Traumatic Memories

Firstly, I want to point out that there are many, many theories as to how we store memory, apparent 'false memories' and in particular how we store 'traumatic' memories, where they are stored and if and how we retrieve them. This is not a piece of academic research, this is me 'thinking out loud' almost. It will hopefully give you a sense of my thoughts and opinions on the issue of traumatic memories and certain 'flavours' of how I've been influenced by my training, theoretical background, subsequent experience and reading.

It also must be pointed out that this is not intended to be an 'elixir for all', as I do not believe there is one, and *only* one approach to this phenomenon. It is not intended as any 'self-help' type manual and anything taken from this article should be information that is pointedly, one person's (who happens to be a therapist) opinion and certainly not an attempt to claim that this is an original or pure way of working. I of course have certain biases and although I attempt a balanced perspective on this, I make no claim that this is an academic paper attempting to prove a hypothesis. This is therefore, based in my own thoughts and opinions subsequent to my own (admittedly subjective) experience.

What a memory is, what it consists of, and how we 'lay down' these memories, as previously mentioned is highly debatable. It is generally thought that memories are a result of our brain synapses 'firing' together (synapses), at a given time, which creates an impression or 'neural pathway' that is then stored. Brain scans demonstrate that there are certain sites within the brain that show more activity when we think about a certain event or experience. It is thought however that some aspects of our memories are stored in different areas of the brain than others. This essentially means that a 'whole memory' (if this is indeed possible) is not necessarily stored in one place, like a piece of music is stored on a cd for instance. Brain scans show activity in different areas when a subject is in the process of retrieving certain memories. This is a bit like having to put several different cd's in a player at once to play one song; the digital information from one cd being necessary for another piece of digital information from the other to function correctly and play the correct song. If one cd is missing or not 'in sync' then the song is 'jumbled up' somehow. This is not unlike a memory can feel sometimes, with pieces of information seemingly missing or irretrievable.

Now, trying not to complicate things even further, we are unsure just how much of an event is or can be 'saved'. We know that we certainly perceive a lot more and in different ways, than we are consciously aware of as sometimes memories of the same event can be very different to different people. They may perceive things very differently in nature and/or amount. From a gestalt perspective what we perceive most strongly is what becomes 'figure' to us. Essentially this means what 'stands out' about the experience; whilst the rest becomes 'ground', meaning less important or 'background'. For example if anyone is old



enough to remember standing outside Athena gazing at Magic Eye pictures? The (usually present) dolphin is 'figure' and the rest of the dots are 'ground'. We may not remember the seemingly insignificant dots in the background but that does not mean that they are not perceived, they are just not important and simply serve to make the dolphin more visible. However for some people, no matter how hard they looked, they could just not see that darn dolphin! And so it is with our perception and memory sometimes for some people.

Now if I haven't complicated things too much, if our perception is so subjective and prone to saving only what is important to us at that given moment, what when something that *was* important at the time may be less important at another time? Can we then access the parts that at the time weren't important but are now? This can certainly not be answered in a paper like this, if at all, but it serves in a sense to illustrate the vague, almost 'ghostliness' of some of our memories and how difficult it can be to 'get hold of' them.

Some of our memories seem surprisingly deeply emblazoned in such a way as to remember them very vividly even many years after the actual event. This can be the memory of a pleasant event as it can also be of a traumatic event. I think we have all probably encountered the 'smell memory'? For me it is experiencing a smell that takes me right back to a place in time: the smell of wet autumn leaves on earthy ground, which then takes me back to being a young boy in an area that I used to play in. This results in me, just momentarily seeing the gold and brown colours of autumn in particularly vivid form, feeling the warm moist air on my skin and a slight feeling of melancholy (although my memory either isn't fully available about this or won't let me retrieve why). So in a sense it is a fragmented memory that is only partially retrievable at this moment of my life at least.

It is certain that during traumatic events, or events that are unusual or out of the ordinary to us in some way, we are affected physiologically as well as emotionally. For instance, adrenaline is produced at these times and this will serve to heighten our senses, sometimes making us hyper-vigilant. This is a survival mechanism which helps us react to the 'danger' or 'difference' in a way that will help us 'survive' the event. It is safe to assume then, that in a state of hyper-alert like this, our brain chemistry will be affected quite radically and this can then influence the way the event is perceived and from that, the way the memory of that event is saved. For instance, it has long been accepted that some people completely unconsciously 'block out' traumatic events. This doesn't necessarily mean that the memory isn't there somewhere stored, just that for some reason (perhaps a protective response?) that we are unable to retrieve them. Some people also only remember fragmented versions of a traumatic event, for instance what 'stood out' most for them, or what was the 'most traumatic'. There are also some people that leave the most traumatic impression behind and store only the background and as such, less traumatic information. From an evolutionary psychology perspective this will obviously have some 'survival benefit' however it can be frustrating when trying to deal with and resolve these issues, for instance



(although not exclusively) in therapy as we can sometimes wonder where these memories are and why we can't access them. So it may be the case that the memories simply may not *be* there, or that we are unable to retrieve them due to the way they were 'saved', or that our brain is 'protecting' us and is 'blocking out' certain memories that are just too difficult to engage with. Unfortunately there are times when we have to accept for whatever reason, at that certain time, our memories do not or perhaps will never feel 'fully formed' enough for us to be completely certain of an event. It is common however for us to simply *know* that an event of a certain kind occurred but we can not build a complete enough picture to be able to say exactly what happened.

It is important to remember that because we are unable to remember something at one stage in our lives that this doesn't necessarily mean that this will always be the case. Our memory sometimes has a habit of reminding us of things when we least expect them and this can often be the case in therapy or even from something unexpected like my earlier example of the smell of autumn leaves. When we experience an unpleasant memory this can initially feel quite vague, yet can then become clearer as you build on the last memory, not unlike the pages of a story gradually unfolding and building on the last page. This isn't always the case and sometimes a memory can remain vague for long periods or even for the duration of your life. And for some, a memory is not vague at all and comes back to us quite vividly in its full form and when this is a pleasant memory this will be welcomed, but when this is a traumatic memory we may find this particularly distressing.

It is by and large accepted that our brain goes through different stages of development and as such, processes experiences, perceptions and memories in different ways according to those different stages. Often we experience memories in symbols, smells, pictures and sounds, but we also perceive, process and remember information by use of language. It would follow then that memories from our earlier childhood where our use and understanding of language was not as developed or even not developed at all, that our memories will be experienced, processed and saved in 'different formats'. (Some would argue that without the use of language we do not form memories at all, although this is arguable.) It is not uncommon for us to have traumatic memories yet be unable to 'process' or explain them very well. This could be due to the fact that at the time of the memory being formed, that language was not adequate enough to 'file' it correctly therefore rendering it difficult to find using conventional spoken language. In instances like this, therapies such as 'Art Therapy' and 'Music Therapy' can be more useful than (or used alongside) traditional 'talking therapies'. Where words are inadequate, expression through other perhaps more abstract mediums can be highly beneficial.

*Intrusive traumatic memories can sometimes result in what is called a 'flashback'. This can take many forms, both emotionally, mentally and physically. This will be discussed in a separate paper.*