

## **Anosognosia and "Plausibility" Assessment**

Even more problematic, they often seem to be unaware of their disabilities, a syndrome called anosognosia. Patients with anosognosia don't realize that they aren't thinking clearly, or that they can't do all the things they used to do. For example, an airplane pilot with a right hemisphere stroke and a left hemiparesis talked about going back to work the very next day, ignoring the fact that he was even in the hospital.

This problem may be related to another important specialization of the right hemisphere. The difficulty that right brain damaged patients have in understanding social situations seems to extend to a difficulty in contextualizing all sorts of information. In an interesting study, Howard Gardner and his colleagues had right and left brain damaged patients listen to a series of narratives. The narratives were designed so that each one included something that didn't make sense in the context of the story. When asked to recall the story, the left brain damaged patients and the non brain damaged control subjects either changed the nonsensical detail to fit the story or simply left it out. In contrast, the right brain damaged patients not only remembered the detail but tried to make the rest of the story fit. This process caused them to sacrifice the essence of the narrative and end up with a highly implausible construction. On the basis of these results, Gardner and his colleagues suggested that the right hemisphere houses a

system that assesses the 'plausibility' of events. This system, they suggest, is important to the ability to judge the likelihood or probability that an event could actually take place. This notion fits well with some other data showing that right brain damaged patients violate the contextual reality of objects (drawing things like a 'potato bush', for example). These results might be related to the anecdotes about right brain damaged people who seem to be unaware of the magnitude of their deficits--here, they seem "out of touch with reality" in another way.

The fact that the right hemisphere would be in a special position to judge the 'reality' of something seems to be compatible with its other specializations, such as the ability to judge spatial relationships and the ability to distribute attention across both sides of space. The fact that right brain damaged patients have difficulty getting the gist of a narrative suggests that the right hemisphere is also good at judging relationships between other kinds of concepts as well, a skill that would be needed to put things in an appropriate context i.e. to assess how realistic they might be.