

## **Think Straight 1 & 2**

**Reader's question:** "I think in English, but my Swedish friend thinks in Swedish. How do deaf people, who have never heard words in any language, think?"

When I think, I think using words and sentences. Although I can't remember for certain, I don't think I knew any form of language as a baby, so how do babies think?"

**Reply from Joe Wolfe, School of Physics, University of New South Wales, Sydney:**

The physicist Richard Feynman demolished the argument that thought necessarily involves language simply by asking how a crankshaft works. Certainly one can explain in words, but my guess is that a reader will only understand those words if s/he already knows how a crankshaft works.

A subset of thinking (a small one for me) closely involves language, such as rehearsing what one is going to say or write. Other thinking, such as developing a logical argument that will later be put in words, is readily described in language. Some people conclude from these observations that they think in their native language, or another.

To some extent, one might try to limit the definition of thought to exclude a lot of what I call thinking. You cannot easily put into words the processing that you used to work out how to jump over a puddle onto a slippery, non-horizontal tile without spilling your coffee or falling over. But perhaps you call this a higher motor skill.

However, surely you would admit that jazz musicians improvising a solo are thinking, but we are not thinking in words, and it moderately difficult to describe in words what we do.

I think in thoughts. When I want to talk or write, I use a spoken or written language. When I play, I use music. And when I jump over puddles, I've been known to fall over.

Joe Wolfe, Sydney.