

Atmospheric Disturbances: On Michael Gazzaniga

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The Nation:

We live in the age of the fMRI machine, dazzled and bamboozled by pictures of brains “lighting up” in living Technicolor. Before these neuroscientific glory days, the mysteries of the mind had to be approached by rather less alluring methods: postmortem examination of the brains of psychiatric patients, animal experiments of legendary cruelty and intelligence testing after pioneering brain surgeries, to name but a few. During the knife-happy decades of the mid-twentieth century, surgical treatments for seizure disorders generated especially startling insights into human brain function.

In Montreal, the neurosurgeon Wilder Penfield developed an exquisitely sensitive procedure for protecting the neurological integrity of his epileptic patients, keeping them conscious on the operating table and asking them to describe their sensations as he gently stimulated their exposed brains with electrodes while a stenographer in a little glass booth transcribed every word. A byproduct of this work was “Penfield’s Homunculus,” a cartoon character whose proportions corresponded to the area of cortex devoted to each body part: huge thumbs and outsize lips (parts under voluntary control) and a titchy little penis (not so voluntary).

Read the whole story: [The Nation](#)