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**Psychiatry in history**

# Reflections on Franz Gall and phrenology

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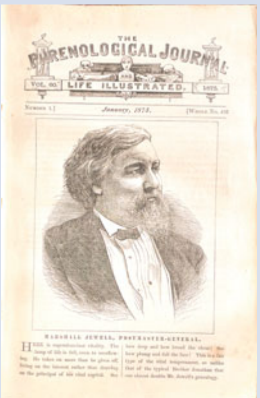


An intrigued schoolboy, Franz Gall, comparing his own disposition and cognitive prowess with that of his peers, would eventually go on to study the seemingly inherent talents of man. He would formulate the 'phrenological system' in the late 1790s, a time when homeopathy and bloodletting as a cure-all were prevalent. He and his colleague Spurzheim were well-versed in philosophy, metaphysics, neuroanatomy and physiology when they hypothesised that discrete brain areas, or 'organs', had localised functional specificity. They postulated that such 'organs' might be revealed externally through examination of the skull's palpable bumps, contours and shape – a technique referred to as cranioscopy. Phrenology utilised cranioscopy to study variations in skull morphology to predict personal traits and mental faculties.

They considered the cerebral hemisphere's capacity for intellect and the corpus callosum's connectivity for the brain and theorised the brainstem as a locale for life's vital forces. Notably, Gall did not initially attempt, as some postulate, to dissect a brain and then proceed to map out its 'organs' based on his own speculative imagination. He faithfully relied on keen observation, studying large numbers of people's heads and skull morphology at every opportunity. Through observation of their actions as related to head morphology, Gall would formulate his nomenclature for the various 'organs'. The findings would then be extrapolated such that the named 'organs' might be broadly predictive for personal traits. Gall's theories extended to considerably subtle aspects of character, including the inclination to laugh and the propensity to steal. The field surged, despite its heavy reliance on correlation without established causation.

He did not limit his study to the living, observing heads after death, ensuring the deceased's character in life corresponded to their brain anatomy as revealed on autopsy. He elaborated on his discoveries with the support of his observations, models of heads and collections of skulls, which he reports difficulty in obtaining. With these elaborations, he urges his readers to examine his words carefully but understands that, even as he dives into a substantial explanation of his theories, 'he who is so blind as not to see by the light of the sun, will not do better by the additional light of a candle'. One speculates whether such explanation was in response to growing criticisms of phrenology.

Gall claimed that throughout life, as personalities evolve, so too do the faculties and 'organs', with some diminishing and others increasing in density. Spurzheim would later criticise Gall's established nomenclature as being flawed, stating Gall erred by 'observing man only in action', even stating 'our larger work must assume a more scientific arrangement than Gall was accustomed to'. Spurzheim argued that the actions of man seldom result from one single faculty and that Gall 'failed to determine the organ's special faculties'. Nevertheless, Spurzheim continued to support phrenology's validity given their copious observations. Despite their efforts to illuminate the field, phrenology would fade away in the mid-1800s, around the time of the rise of psychosurgery and scientific method.



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