



A Discourse on Hypergraphia and Other Writing Pathologies, Not Omitting Left-Handedness and Mirror Writing

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Writing, a highly specialised motor activity integrally linked to language, is an intrinsic activity of our species and has played a huge part in the progression of civilisation. Being unable to read and write in today's world is a huge liability. In this review, we look at issues related to writing including handedness, agraphia, hypergraphia, mirror writing, the role of pathology, psychiatric illness and artistic talent. Case studies include the prophet Ezekiel, Arthur Inman, Leonardo da Vinci and Vincent van Gogh. The study of writing is important and deserves further attention.

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A Discourse on Hypergraphia and Other Writing Pathologies, Not Omitting Left-handedness and Mirror Writing

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Abstract

Writing, a highly specialised motor activity integrally linked to language, is an intrinsic activity of our species and has played a huge part in the progression of civilisation. Being unable to read and write in today's world is a huge liability. In this review, we look at issues related to writing including handedness, agraphia, hypergraphia, mirror writing, the role of pathology, psychiatric illness and artistic talent. Case studies include the prophet Ezekiel, Arthur Inman, Leonardo da Vinci and Vincent van Gogh. The study of writing is important and deserves further attention.

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'Another d-mn'd thick, square book! Always, scribble, scribble, scribble! Eh! Mr. Gibbon?'

King George 111 on receiving a copy of the first volume of Edward Gibbon's great work.

'If the skin were parchment and the blows you gave were ink, Your own handwriting would tell you what I think'

William Shakespeare

'Writing in English is the most ingenious torture ever devised for sins committed in previous lives'

James Joyce

Writing, a highly specialised motor activity integrally linked to language, is an intrinsic activity of our species and has played a huge part in the progression of civilisation. Being unable to read and write in today's world is a huge liability for any individual. For those of us with the ability to write changes can occur of reduced or absent writing and the opposite state, hypergraphia.

Before looking at those issues we must consider the issue of handedness – nothing in the study of writing leads to as much mythology, confusion and dispute. Handedness is an individual's preferential use of one hand, known as the dominant hand, due to and causing it to be stronger, faster or more dextrous. The other hand, representing the inherent bias, is often called the non-dominant hand.

Handedness arises from the laterality of the brain and involves other issues besides writing. Contradicting the theory that left handers have their speech centres in the right brain, this only occurs in 30% of cases. The book of Judges tells us that the first left-hander known in history is the biblical character Ehud, son of Gera (circa 1200 BC) who assassinated Eglon, the king of Moab, by a sword held in his left hand. Many examples follow after that. Christopher McManus, the great authority on laterality, describes the cultural war to list great artists like Picasso and van Gogh as left-handed despite overwhelming evidence that they were dextral. To compensate the sinistral groupies there can be no better example of the talent derived from being a leftie than the ultimate Beatle, Sir Paul McCartney.



There are also many examples of left-handedness in art. An especially intriguing example is the first masterpiece by van Gogh, *The Potato Eaters* where the five peasants sitting around the table are all left-handed, possibly unique in great painting.

However, this was not intentional, but due to inadvertent reversal printing of the lithograph. Schizophrenia, bipolar disorder, anxiety disorders, dyslexia, alcoholism and autism have been associated with left- and mixed-handedness. The basis for this is the lack of full lateralisation of the brain to varying degrees. Again, the statistics and methodology should be questioned and it is risky to accept this as an established fact.

Left-handedness, historically, has had a bad press and many were those forced at school to change to dextrality, even accused of witchcraft in the past. The countermythology is that the sinistral folk are more talented, viz Leonardo, and better at some physical activities, such as tennis. There is also the claim that paraphiliacs and homosexuals are more likely to be left-handed but, again, this is highly disputed, the statistics are difficult to confirm and is best left as an open issue.

The agreed facts are that true left-handedness is found in 8-12% of the population, there is a strong family link but the genetics do not always run true. Add to that women, as a group, are more strongly right-handed meaning that they are more strongly lateralised and explains why they have better verbal skills.

References

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About the Authors



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