

Editorial Article



The Missing Pages: The Origin of Alice Wonderland Syndrome

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Editorial

The Alice in Wonderland syndrome is a syndrome in which people perceive themselves or their surroundings as changing in a hallucinatory way [1]. The phenomenon is not considered a separate disease, but usually occurs as a symptom accompanying a migraine attack or as a precursor to an epileptic seizure in the form of an aura with pronounced visual perceptual disturbances. An Alice in Wonderland syndrome can also be caused by the Epstein-Barr virus or drugs [2-4]. The term "Alice in Wonderland syndrome" was named after the children's book Alice in Wonderland by Lewis Carroll and coined by John Todd as a possible, but not essential, accompanying symptom of migraine and epilepsy. Carroll himself suffered from migraines, and it is believed that his experiences with the condition served as inspiration for the hallucination-like effects described in his work [5]. In addition, Carroll's story has been discussed as a description of a trip after consuming consciousnessaltering drugs. In one of the most famous sequences of the book, Alice changes her size by taking bites from different sides of a mushroom. The Alice in Wonderland syndrome leads to changes in the perception of one's own environment [6]. These changes include both micropsia and macropsia, as well as altered auditory perception, altered tactile sensations, and altered perception of time [7,8]. There is only speculation about the causes, as the corresponding diaries of Charles Dodgson from that time are missing, and Carroll's letters to Alice were destroyed by her mother. Speculations range from his alleged infatuation with Alice and the desire to marry her to assumptions that a romantic relationship with Alice or Alice eldest sister Ina was developing. The syndrome is particularly common in children. The attacks are often shorter and can also be completely painless, although accompanying symptoms such as nausea, vomiting, light and noise sensitivity are more pronounced. This can lead to neurological deficits, causing the affected child to start hallucinating. They may perceive their body as larger or smaller and/ or start to see "fantastic images." The changes in perception can greatly impair those affected, causing them to lose their orientation and "not be able to find their way." In extreme cases, falls and other accidents can occur. The perceptual disturbances can lead to the Alice in Wonderland syndrome being mistaken for other mental disorders or misinterpreted as "madness".

Charles Dodgson alias Lewis Carroll

Lewis Carroll (born January 27, 1832 in Daresbury, Cheshire, England; died January 14, 1898 in Guildford, Surrey, England; real name Charles Lutwidge Dodgson) was a British writer of the Victorian era, photographer, mathematician, and deacon. He is the author of the famous children's books Alice's Adventures in Wonderland, Through the Looking-Glass, and The Hunting of the Snark. With his talent for wordplay, logic, and imagination, he captivated a wide audience. His works, known as nonsense literature, have remained popular to this day and have influenced not only children's literature but also writers like James Joyce, the Surrealists like André Breton, the painter and sculptor Max Ernst, the cognitive scientist Douglas R. Hofstadter, and

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the musician and composer John Lennon. Carroll also gained recognition as a photographer: Like Julia Margaret Cameron and Oscar Gustave Rejlander, he practiced photography as an art form from the mid-19th century.

Biography of Charles Dodgson

Dodgson, also known as Carroll, came from a Northern English family with Irish connections – conservative, Anglican, upper middle class – whose members chose the typical professions of their class in the army and the church. His great-grandfather, grandfather, and father, all named Charles, had risen to the rank of bishop in the Anglican community. His grandfather died in December 1803 as a captain in the British Army (4th Dragoon Guards) on duty when his two sons were still young children. He was stationed in Ireland and was shot from ambush when he tried to meet an Irish rebel at night who claimed to want to surrender. His older son, Charles Dodgson, Lewis Carroll's father, turned to the other family tradition and pursued a clerical career. He went to Westminster School, then to the University of Oxford. He excelled in mathematics and classical languages; he graduated summa cum laude, became a lecturer in mathematics at the University of Oxford, a fellow of his college, and was ordained a deacon. This could have been the start of an outstanding career; for a higher office, he would have had to live a celibate life. However, in 1827, he married his cousin Frances Jane Lutwidge (1803-1851), after which he retired to the obscurity of a rural parish position. Charles Lutwidge Dodgson was born in 1832 in the small rectory of Daresbury in Cheshire. He was the eldest son and the third child. Eight more children followed, and all (seven girls and four boys) survived to adulthood, which was unusual for the time. When Charles was eleven, his father received the parish of Croft-on-Tees in North Yorkshire, and the whole family moved into the spacious rectory, which remained their home for the next 25 years. Meanwhile, Dodgson senior made a certain career within the church: he published some sermons, translated Tertullian, became archdeacon of Ripon Cathedral, and got involved, sometimes influentially, in the intense religious disputes that divided the Anglican community. He belonged to the High Church of England, admired John Henry Newman and the Oxford Movement, and tried to instill these views in his children. Charles junior did not attend school in the early years but was homeschooled until he was eleven. His reading list was passed down in the family and is evidence of his outstanding intellect: at the age of seven, for example, he read The Pilgrim's Progress by John Bunyan. As an eleven-year-old, Charles invented a "railway game," inspired by the new, revolutionary technical invention of the railway, which he experienced in his neighborhood in Darlington. The game with his siblings followed precisely defined rules, which he wrote down with sarcastic humor, already revealing the later Lewis Carroll. He also wrote

plays for a puppet theater like the tragedy of King John or the opera La Guida di Bragia, bringing the wide world into the walls of the rectory for himself and his siblings. Here, the double world that would determine his life is already visible: the staging, subject to precise rules, and the uncontrollable world outside. At the age of twelve, he was sent to a small private school in nearby Richmond in 1844, where he already stood out for his mathematical talent. During this time, he wrote poems in Latin, followed by English narratives. The headmaster, James Tate, attested to him an extraordinary degree of genius, but advised his father not to let his son know about this superiority; he should gradually discover it himself. Carroll suffered from this lack of affirmation throughout his life, and it could be a cause of his stuttering, lack of selfconfidence, and identity crisis. A year later, however, Charles transferred to Rugby School in Rugby, one of England's most famous private schools, where he was apparently less happy. Ten years later, after leaving school, he wrote in his diary about his time there: "I made some friends there, but I cannot say that I look back on my life at the Public School with good feelings or that anything could make me go through those three years again." During his time at the disliked school, known for its discipline-oriented system. The young adult Charles Dodgson was about 1.80 meters tall, slim, with curly brown hair and blue eyes. At the age of 17, he suffered from a severe infection with whooping cough, resulting in deafness in his right ear. However, the only serious disability was what he called his "uncertainty," a stutter that had plagued him since early childhood and continued to bother him throughout his life. The stutter was always a significant part of the myths that formed around Lewis Carroll. In this context, it was claimed, for example, that he only stuttered in the company of adults, but spoke freely and fluently in the presence of children. There is no evidence for this claim; many children from his circle of acquaintances remembered his stuttering, and many adults did not notice it. Although the stutter bothered him, it was never so severe that it would have impaired his ability to interact with others. Dodgson attended his father's college, Christ Church, from May 1850, where he studied mathematics, theology, and classical literature. He had only been in Oxford for two days when he was called back home. His mother died at the age of 47 from "brain fever" (presumably meningitis or a stroke). When he returned to Oxford, learning was easy for him; the following year, he completed his undergraduate studies with top marks, and an old friend of his father, Canon Edward Pusey, recommended him for a scholarship that enabled him to pursue his graduate studies. Dodgson's early academic career fluctuated between high ambitions and lack of concentration. In 1854, he also prepared for ordination. A regional newspaper, the Whitby Gazette in Yorkshire, published some of his poems around this time. Due to laziness, he missed an important scholarship,



but due to his brilliance as a mathematician, he was hired as a mathematics tutor at Christ Church after completing his studies in 1854; he held this position for the next 26 years. As a tutor, he earned a good income, but the work bored him. Many of his students were dull, older than him, richer than him, and above all, completely disinterested. They did not want to learn from him, and he did not want to teach them; mutual apathy characterized their daily interactions.

Charles Dodgson and the New Medium of Photography

His pen name Lewis Carroll, which would make him famous, first appeared in 1856 in connection with a romantic poem, solitude, in the newspaper The Train, where some of his parodies, including Upon the Lonely Moor, were published [5]. Edmund Yates, the publisher of The Train, came up with the idea. This pseudonym is derived from his real name: Lewis is the anglicized form of Ludovicus, the Latinized form for Lutwidge, and Carroll is the anglicized form of Carolus, the Latin name for Charles. Photography was invented in the 1830s, but it was not available to amateur photographers until the 1850s; at that time, the development of the collodion wet plate process facilitated the photographic process. In March 1856, Carroll purchased a new camera in London with the accompanying chemical materials for £15, a high sum at the time. He was influenced by his uncle Skeffington Lutwidge, whom he had visited in his childhood, and his friend from Oxford, Reginald Southey, with whom he made his first photographic attempts. Despite the noxious chemical solvents, Carroll developed the photos in a corner of his room. In 1868, he acquired a larger studio at Christ Church and built his own studio above it, which was not completed until 1871. From that point on, he had a photographic equipment that was professional for the time.

Charles Dodgson and Alice Liddell

Carroll's most famous subject was Alice Liddell, the daughter of the Dean of Christ Church, Henry George Liddell. He had seen her in 1856 through the window of his workplace while she was playing in the deanery garden with her sisters. In April of that year, he attempted to photograph the church from that garden, which failed due to unfavorable lighting conditions. Carroll met the siblings and befriended them.

Alice's Adventures in Wonderland

On July 4, 1862, Carroll took a boat trip on the Thames with his friend Robinson Duckworth and the three Liddell sisters, Lorina Charlotte, Alice, and Edith, and told a story. When Alice Liddell expressed the wish for him to write down the story, the inspiration for his world-famous children's book Alice's Adventures in Wonderland was born. In February 1863, Carroll completed the manuscript of

Alice's Adventures in Wonderland. It had become 90 pages in his meticulous small handwriting, with numerous blank spaces into which Carroll wanted to insert personally made illustrations. It took almost two more years until he completed the handwritten original version titled Alice's Adventures Under Ground and presented it to Alice Pleasance Liddell in November 1864 with the dedication "A Christmas gift for a dear child in memory of a summer day." While his own drawings had their charm, the amateurish execution was not suitable for a printed edition, which Carroll did not rule out as a possibility by then. The friendship between the Liddell family and Carroll broke down in June 1863. There is only speculation about the causes, as the corresponding diaries from that time are missing, and Carroll's letters to Alice were destroyed by her mother. Speculations range from his alleged infatuation with Alice and the desire to marry her to assumptions that a romantic relationship with Alice's eldest sister Ina was developing. Further explanations can be found in the reception section on the history of the diaries. While on holiday in Hastings, he met the Scottish writer George MacDonald - it was the enthusiastic reception of his Alice by the young MacDonald children that finally convinced him to publish the work.

In 1886, after many years, Carroll reconnected with Alice Liddell, now married as Hargreaves, and asked her for permission to produce a facsimile edition of his original manuscript. This edition was published at the end of the year in an edition of 5,000 copies; there was a reprint in the 1980s. Thirty years after Carroll's death, Alice Hargreaves released the original manuscript with the handwritten drawings for sale in 1928. It fetched high prices and only returned to England in 1946 through an initiative of the American Library of Congress and bibliophile supporters. The Americans saw the handover "as a small token of recognition that the English kept Hitler in check while we were still preparing for war." It is on display in the Manuscript Room of the British Museum in London.

The Diaries and the "Missing Pages"

In addition to the four lost volumes, there are ten individual pages missing from the surviving journals. Evidence suggests Dodgson removed at least one page, possibly due to a mistake or inappropriate tone. One page removed from volume 12 is between June 16 and 18, 1885. Page 116 is missing from the right-hand leaves but follows consecutively when the volume is reversed. Dodgson marked the top of page 117 with an insert-mark and "June 18" to indicate the date. A page missing from journal 4 may also have been removed by Dodgson. Two missing pages may be due to pagination errors by Dodgson, who was not always careful with numbering (Table 1).



Table 1: Missing Pages of Charles Dodgson's diaries (Journal 2-12, 1855, 1857,1862, 1863, 1882, 1884 and 1885).

Journal:	2
Pages:	64, 65, 66
Missing:	1855: 15 to 19 August
Journal:	4
Page:	108
Missing:	1855: 15 to 19 August
Journal:	5
Page:	46
Missing:	1857: 30 May to 31 May
Journal:	8
Page:	2
Missing:	1862: 18 to 23 May
Journal:	8
Page:	91
Missing:	1863: 27 to 29 June
Journal:	11
Page:	110
Missing:	1879: 24 May to 5 June And Verso: 265
Missing:	1882: 14 to 24 January
Journal:	12
Page:	85
Missing:	1884: 23 to 26 November
Journal:	12
Pages:	116
Missing:	1885: 16 to 18 June

Dodgson occasionally mis-paginates his journal, recording two separate pages with the same number in the same volume. This indicates that he inserted the page numbers as he worked through the notebooks. Examples include volume 4 with two pages numbered 31, volume 5 with two at 17, volume 9 with two at 14, volume 11 with two at 242, volume 12 with two at 35, two at 51, two at 195, and two at 326, and volume 13 with two at 26. When working back from later volumes, Dodgson skips a page number if the page is already filled with a subsequent note. There is no page 206 in volume 10, as the entry for 9 January continues from page 205 to 207 without a break. The page numbering on opposite pages is consecutive in this volume.

Lewis Carroll alias Charles Dodgson was an enthusiast making nude photographs of small children. The friendship between the Liddell family and Carroll broke down in June 1863. There is only speculation about the causes, as the corresponding diaries from that time are missing, and Carroll's letters to Alice were destroyed by her mother. Speculations range from his alleged infatuation with Alice and the desire to marry her to assumptions that a romantic

relationship with Alice or Alice's eldest sister Ina was developing. Recent publications describe the curious aspect of AIWS seizures chronically correlating with physical abuse. In this publications, two elder woman aged 57 and 61 years describing their horrific experience with sexual abuse and chronically relating AIWS seizures after many years. These case studies shed light on aspects on physical abuse by describing the entity many years after this curious experience by two elder women analyzing their experience as a child. This sensible and curious descriptions and just descriptions of two elder women from the US and the UK should be underpinned by further cases and research. The topic is very sensible, very curious and should be analyzed with more cases. A recent published book in 2025, 7 curious personal experiences of adults with retrospective descriptions of Alice in Wonderland syndrome similar perceptions as a child shed light on any physical abuse as underlying origin of Alice in Wonderland syndrome in childhood [9-13]. Due to this sensitive aspect of origin, further cases need to be critically evaluated and analyzed to confirm this serious suspicion [9,12,13].

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References

- 1. Weissenstein A, Luchter E, Bittmann MA. Alice in Wonderland syndrome: A rare neurological manifestation with microscopy in a 6-year-old child. J Pediatr Neurosci 9 (2014): 303-4.
- 2. Lanska DJ, Lanska JR. The Alice-in-Wonderland Syndrome. Front Neurol Neurosci 42 (2018): 142-150.
- 3. Hossain MM. Alice in Wonderland syndrome (AIWS): a research overview. AIMS Neurosci 7 (2020): 389-400.
- 4. Blom JD. Alice in Wonderland syndrome: A systematic review. Neurol Clin Pract 6 (2016): 259-270.
- 5. O'Toole P, Modestino EJ. Alice in Wonderland Syndrome: A real life version of Lewis Carroll's novel. Brain Dev 39 (2017): 470-474.



- 6. Mastria G, Mancini V, Viganò A, et al. Alice in Wonderland Syndrome: A Clinical and Pathophysiological Review. Biomed Res Int 2016 (2016): 8243145.
- 7. Piervincenzi C, Petsas N, Giannì C, et al. Alice in Wonderland syndrome: a lesion mapping study. Neurol Sci 43 (2022): 3321-3332.
- 8. Piervincenzi C, Petsas N, Viganò A, et al. Functional connectivity alterations in migraineurs with Alice in Wonderland syndrome. Neurol Sci 44 (2023): 305-317.
- 9. Blom JD. Charles Dodgson and Alice in Wonderland syndrome. Lancet Neurol 20 (2021): 890-891.

- 10. Lanska DJ, Lanska JR. The Alice-in-Wonderland Syndrome. Front Neurol Neurosci 42 (2018): 142-150.
- 11. Fine EJ. The Alice in Wonderland syndrome. Prog Brain Res 206 (2013): 143-56.
- 12. Bittmann S. The origin of Alice in wonderland syndrome: Charles Dodgson and his attraction to small children. Adv Pediatr Res 5 (2019): 24.
- 13. Bittmann S. Alice in Wonderland Syndrome in Childhood: Abuse is the Root? Generis Publishing (2025).