

An Unfortunate Boon of Genius

John Baxter

Yale University

Abstract

In this article, possible origins for extreme creativity are explored. Among these are the capacities for concentration, curiosity, and access to resources. In addition to these stable, highly-researched topics, a lesser-researched idea of parental issues or early parental death is discussed. Several exceptionally gifted individuals have come from families rife with tragedy and strife such as Isaac Newton, Ludwig van Beethoven, and Steve Jobs. This tendency is, of course, merely correlation; direct effects of parental bereavement on children cannot be assessed with confidence. Instead, theories taken from psychological and creativity studies are used as possible explanations for this correlation. For instance, individuals who go through traumatic early parental loss may have developed cognitive defenses against adversity. When these individuals meet obstacles later in life, they are perhaps better able to solve them through their inner fortitude (Ritter et al. 2012). Genius is not guaranteed for those with rough childhoods; in fact, much research supports quite the opposite direction. Young individuals with early parental death have often been associated with delinquency (Brennan et al., 1998; Murray & Farrington, 2005). Other mechanisms of genius and contradictions to the early parental death theory are discussed.

Perhaps the genius will forever be somewhat misunderstood. For years scholars and scientists have attempted to explain how such greatness can occur in the men and women who have changed our worlds, but there seem to be no definitive answers. There are instead traits that seem to be consistently present in those whom we identify as geniuses. Among these traits are the capacities for concentration and memory, extreme inquisitiveness, and access to the resources necessary to accomplish their goals. It is important to note that the tendencies shown in this discussion are vulnerable to biases in firstly who we define as genius and secondly what we define as genius behavior. These traits are summarized below.

One aspect of these geniuses' lives often goes unstudied: the relationship between the genius and his or her parents. Often, the biological parents of these geniuses have passed away, been absent during childhood, or been abusive to their children. The remainder of this article explores the possibility that the strife within geniuses concerning their parents manifests itself in their works.

Concentration, Curiosity, & Resources

The first major enabler of genius is the genius's capacity for intense concentration. Many of the great geniuses have been able to focus their efforts and attention on one task for hours. For instance, Leonardo Da Vinci is said to have worked from dawn till dusk on a painting without pause for food or drink (Capra, 2006). Isaac Newton was also very capable of focusing on his work as evidenced by his many skipped meals. Additionally, an account describes Newton journeying all the way home without realizing he had left his horse behind; he was engrossed in a book the entire way back (Westward, 2015). Beethoven was also known to lose himself within his work, often composing through meals without realizing he had not actually eaten anything (Breuning, 1992).

Geniuses, most likely due to their strong powers of concentration, often show remarkable facility in memory as well (Alloway et al. 2010, Rapport et al. 1997). For instance, Mozart was known to transcribe and perform pieces just from hearing them once, as he famously did with Allegri's *Miserere Mei Deus* (Bone, 2011). Beethoven displayed a keen memory as well, being able to compose without a piano, or keep a composition in his head until he could reach quill and ink (Breuning, 1992). In order for geniuses to be the amazingly productive and successful beings that they are, they need to be able to focus their minds on their efforts, keeping their great ideas from being forgotten. They will persist in their efforts without fail, as exemplified by Newton when he said, "I keep the subject of my inquiry constantly before me, and wait till the first dawning opens gradually, by little and little, into a full and clear light."

Geniuses often tend to be extremely curious as well and, thus, are frequently autodidactic. Accounts of Newton as a teenager present us with the image of someone who would rather stay nose deep in his books than spend time with his friends (Westfall, 1992). Da Vinci is another genius described as having an unquenchable curiosity. Not even the manifold unpleasantness of spending nights with rotting cadavers would keep him from learning about the human body (Capra, 2006). Da Vinci proclaimed, "Learning never exhausts the mind."

Similar to Newton and Da Vinci, Albert Einstein had a fervent curiosity at a young age, perhaps kindled when his father gave young Einstein a compass. It is even said that Einstein was chastised frequently by his teachers for asking so many questions (Berne, 2013). It was his curiosity that kept him delving into the mysteries of science despite the many rejections he received. While working as a patent clerk in 1905, without resources of universities or laboratories, Einstein carried out research and published major works (Robinson, 2010). We see here that curiosity is what motivates genius; for if geniuses had concentration skills with

no motivation to seek out the mysteries of the world, they would not create as they did.

However, even if a young genius is both curious and intensely focused, they might not be able to achieve their great works due to a lack of resources. In other words, they may just be unlucky. Mozart and Beethoven, two of the most prolific and creative geniuses of music, both had parents who were, so to speak, “in the business.” Their fathers pushed them very hard in the direction of music and practice and were financially stable enough to support their children’s endeavors (Morris, 1994). Exceptional young individuals may be unable to develop their natural gifts if they are burdened with working extra jobs for financial stability; family members who are not capable of (or actively against) supporting their children’s activities may lead to innate potential remaining untapped.

Of course, the story of Da Vinci somewhat disputes this narrative. Da Vinci’s mother and father held unartistic or scientific jobs, yet through his own curiosity and motivation, he taught and funded himself in his scientific ventures (Capra, 2006). Similarly, it is unlikely that Shakespeare’s parents were literate, yet Shakespeare became famous as a playwright (Potter, 2012). The parents of the great composer, conductor, and orchestrator Hector Berlioz were very much against his pursuit of music, pushing him instead towards a career in law (Cairns, 2000). Alfred Nobel achieved prominence and invented several new technologies despite being born into an impoverished family (Jorpes, 1959). George Washington Carver was able to revolutionize agricultural science despite being born into slavery (McMurry, 1982). A lack of easily obtainable resources can make the journey to eminence difficult, but not impossible.

Parental Loss

Concentration, curiosity, and access to resources are three very typical aspects to examine when researching

genius. However, the relationship with parents is one of the most important factors in human development¹ and sometimes goes ignored in eminence research. Frequently evident in geniuses is a problematic or nonexistent relationship with parents. Indeed, one study of 699 eminent individuals found that 45% had lost a parent before age 21 (Eisenstadt, 1978). A quick look into Nobel Prize history shows that three of the four double-winners of the Nobel prize (Marie Curie, John Bardeen, Linus Pauling) had early parental deaths. Perhaps a closer examination of the genius’s relationship with parents is needed in our eminence research.

How many prototypical geniuses had problems with their parents? Da Vinci was born illegitimately, lived briefly with his mother, but then had to leave, moving in with his father (Capra, 2006). Newton’s father died before his birth; Newton held some enmity towards his mother for remarrying (Westfall, 1994). Beethoven’s father often beat young Ludwig for making mistakes in his playing (Kagan, 2015). Van Gogh had a very tense relationship with his father growing up (Klein, 2010). Virginia Woolf’s mother died when Woolf was 13, leading to a nervous breakdown (McMan, 2001). Steve Jobs was adopted and held coldness in his heart for his biological parents (Isaacson, 2011). Bach, Copernicus, Darwin, and Camus all had a mother and/or father who passed away during their childhoods (Carnot, 2012). The list continues. What might be causing this trend in eminence as a function of early familial trauma?

One theory is that adversity (parental loss/problems) creates cognitive flexibility and therefore creativity. Evidence in support of this hypothesis can be found in an experiment performed by Ritter et al. (2012). In this experiment, participants were either exposed to strange, abnormal situations or common, everyday experiences. Afterward, all participants were given

¹ See Gillath et al. (2006), Bowlby (1979), and Steven-son-hinde (2007) for reviews.

a test of creativity called the Unusual Uses task. Results revealed that participants who had gone through the stressful, unusual situation were better at the creativity task than control participants. By this theory, when young men and women are faced with adversity and strife, they build defenses and become cognitively creative as a form of protection. However, this theory could apply to any adversity experienced in childhood, not just parental problems (see also Forgeard, (2013)).

Another theory is one of emotional bereavement leading to compensatory behavior (Simonton, 1999). According to this idea, the genius can work to achieve greatness as a way of subconsciously filling the hole left by the lack of a meaningful parental relationship. This paradigm can perhaps shed light on the abilities and motivations of figures such as Vincent Van Gogh. Van Gogh's relationship with his father, Pastor Theodorus, was always a rather tumultuous one. Being the eldest son, Van Gogh felt pressure to live up to his father's expectations in terms of career. However, this was simply not to be as Van Gogh was not a very good priest. He failed in the ministry and, in his mind, perhaps felt that his father never really accepted him. Around the year 1885, Van Gogh's father died and his lover attempted to commit suicide. These events occurred around the same time that Van Gogh began to produce his immense number of incredible paintings. Perhaps Van Gogh began producing so many paintings as a way to try to somehow please his father in the afterlife.

Yet another possible theory to explain the higher than average percentage of geniuses with problematic childhoods involves the influence of nature (as opposed to nurture). Intelligent adults tend to wait longer to have children than unintelligent adults (Cf. Kanazawa, 2014), causing the parents of geniuses to be older and therefore more likely to die while their offspring are young. Genius is, therefore, an immanent quality given to children by parental genes. In this theory, early parental death does not

cause genius, but is merely an outcome of later pregnancy.

However, this hypothesis needs to be viewed in line with the fact that parents tended to die at earlier ages in the previous centuries due to the privations of contemporaneous medical approaches (Woodward, 1974). Perhaps the two ideas (intelligent older parents/shorter life expectancy) interact together to strengthen the effect. These combined factors might even be why we see so many brilliant geniuses of old, but not as many in present times.²

Some researchers have postulated that there is a difference between a mother's absence and a father's absence. The data from Walberg et al.'s 1981 study reveal that more authors and poets came from homes without a father, whereas more scientists came from homes without a mother. These data might seem natural as writers and poets tend to be more interpersonal and emotionally conscious; they may have acquired these traits from their mothers. Children with only a father, on the other hand, might grow up in a colder, more technical household and thus feel more drawn to the physical sciences. Of course, mothers can be just as cold as fathers and vice versa, but this theory proposes an interesting line of research (see also Martindale (1972) and Silverman (1974)).

I am certainly not the first to place a focus on the parental relationships of geniuses and eminent individuals. Albert and Runco's 1989 study examined the disproportionate number of gifted individuals with parental tension. From this study, they raise the idea that early autonomy being thrust upon these individuals allowed them to be able to achieve their great works. Certainly, there is a great deal of independence and curiosity in the individuals we have studied. Early independence can perhaps

² Of course, many present geniuses have not been discovered yet. Also, there may simply exist fewer ideas and formulas to discover/write.

wire young, mutable brains to expect no help in solving their problems; these subjects are then more cognitively able to handle the problems thrown their way.

Albert's 1971 study analyzes children with exceedingly high recorded IQs and similarly high rate of early parental loss. He raises the question of extra-parental influencers such as uncles, mentors, and friends. Indeed, perhaps the access to a diverse set of teachers and experiences can allow for individuals to relate to and understand several types of problems. However, individuals do not necessarily need a parent to pass away in order to access outside mentors.³

While many geniuses tend to have problematic relationships with their parents, there are numerous other eminent titans who grew up in perfectly healthy, happy households. Some of these geniuses include Albert Einstein⁴, Mozart⁵, Picasso⁶, Chopin, Tesla, and Bill Gates. The list of geniuses with healthy parents is extensive; our theory concerning early parental loss and its effects on eminence is certainly not a law. Moreover, there are equally as young individuals who have lost their parents and gone on to lead lives of obscurity or worse, depravity. Studies show that many individuals who have unhealthy childhoods show a tendency toward delinquency and issues of mental health (Brennan et al., 1998; Murray & Farrington, 2005).

³ Children with an early parental death may be forced to spend more time with various caretakers. Individuals can also, however, choose to spend more time with extra-parental figures.

⁴ Albert Einstein grew up with both parents present. However, some researchers have postulated that economic stress (such as that experienced by the Einstein family (see Calaprice & Lipscombe, 2005)) can lead to eminence.

⁵ Mozart was composing great works well before his parents passed away.

⁶ Picasso's sister did die when he was seven years old, however, he had shown artistic prowess before this event.

What decides the fate of the orphan? Not much research has been dedicated to this subject. I believe that there is an interaction with genetic components involved. Some children who face adversity might have a genetic resistance or shield that protects them against the deleterious effects of adversity. These remarkable children are perhaps able to take the problems they face and solve them through their creative endeavors.

Conclusion

Geniuses tend to be immensely focused on their work, extremely inquisitive, passionate, and lucky. Many geniuses have also faced adversity and stress in their childhoods. While the concept of early parental death tends to have support in the history of geniuses, there arise many more questions than answers. For instance, how do other relatives/siblings factor into the equation? Why is it that a genius's siblings are often unable to achieve eminence despite being raised in the same household? Can an aunt or uncle substitute for a biological parent? There are many approaches to examining eminence; perhaps a closer look into the parental relationships of geniuses will yield answers to our questions.

References

- Albert, R. S. (1971). Cognitive development and parental loss among the gifted, the exceptionally gifted and the creative. *Psychological Reports*, 29(1), 19-26.
- Albert, R.S., & Runco, M.A. (1989). Independence and the creative potential of gifted and exceptional gifted boys. *Journal of Youth and Adolescence*, 18, 221-230.
- Alloway, T. P., & Alloway, R. G. (2010). Investigating the predictive roles of working memory and IQ in academic attainment. *Journal of experimental child psychology*, 106(1), 20-29.

- Berne, J., & Radunsky, V. (2013). *On a beam of light: A story of Albert Einstein*.
- Bone, J. (2011). Vatican reveals Wolfgang Mozart's papal honour. Retrieved July 16, 2016.
- Bowlby, J. (1979). The Bowlby-Ainsworth attachment theory. *Behavioral and Brain Sciences*, 2(4), 637-638.
- Brennan, K. A., & Shaver, P. R. (1998). Attachment styles and personality disorders: Their connections to each other and to parental divorce, parental death, and perceptions of parental caregiving. *Journal of personality*, 66(5), 835-878.
- Calaprice, A., & Lipscombe, T. (2005). *Albert Einstein: a biography*. Greenwood Publishing Group.
- Cairns, D. (2000). *Berlioz: Volume Two Servitude and Greatness*. University of California Press. 119.
- Carnot, S. (2012). Early parental death and genius. Retrieved March 26, 2016, from [http://www.eoht.info/page/Early parental death and genius](http://www.eoht.info/page/Early%20parental%20death%20and%20genius)
- Dutton, D. (2001). Denis Dutton on genius. Retrieved March 26, 2016, from http://denisdutton.com/what_is_genius.htm
- Eisenstadt, J. M. (1978). Parental loss and genius. *American Psychologist*, 33(3), 211-223.
- Forgeard, M.J. (2013). Perceiving benefits after adversity: The relationship between self-reported posttraumatic growth and creativity. *Psychology of Aesthetics, Creativity, and the Arts*, 7(3), 245-264.
- Fölsing, A., & Stachel, J. (1998). *Albert Einstein: a biography*. *Physics Today*, 51, 55.
- Gillath, O., Mikulincer, M., Fitzsimons, G. M., Shaver, P. R., Schachner, D. A., & Bargh, J. A. (2006). Automatic activation of attachment-related goals. *Personality and Social Psychology Bulletin*, 32(10), 1375-1388.
- Isaacson, W. (2011). *Steve Jobs*. JC Lattès.
- Jorpes, J. E. (1959). Alfred Nobel. *British medical journal*, 1(5113), 1.
- Kagan, S. (2015). Beethoven: Anguish and Triumph. *The Beethoven Journal*, 30(1)
- Kanazawa, S. (2014). Intelligence and childlessness. *Social science research*, 48, 157-170.
- Klein, A. G. (2010). *Vincent van Gogh*. ABDO Publishing Company.
- Martindale, C. (1972). Father's absence, psychopathology, and poetic eminence. *Psychological Reports*, 31(3), 843-847.
- McMan's Depression and Bipolar Web. (2001). Retrieved April 23, 2016, from <http://www.mcmanweb.com/woolf.html>
- McMurry, L. O., & Edwards, L. M. (1982). *George Washington Carver: scientist and symbol*. Oxford University Press. 9-10.
- Morris, J. M. (1994). *On Mozart*. Cambridge University Press.
- Murray, J., & Farrington, D. P. (2005). Parental imprisonment: effects on boys' antisocial behaviour and delinquency through the life-course. *Journal of Child Psychology and psychiatry*, 46(12), 1269-1278.
- Potter, L. (2012). *The life of William Shakespeare: A critical biography*. John Wiley & Sons. 9.
- Rappaport, L. J., Axelrod, B. N., Theisen, M. E., Brines, D. B., Kalechstein, A. D., & Ricker, J. H. (1997). Relationship of IQ to verbal learning and memory: Test and retest. *Journal of clinical and experimental neuropsychology*, 19(5), 655-666.
- Ritter, S. M., Damian, R. I., Simonton, D. K., van Baaren, R. B., Strick, M., Derks, J., & Dijksterhuis, A. (2012). Diversifying experiences enhance cognitive flexibility. *Journal of Experimental Social Psychology*, 48(4), 961-964.
- Robinson, A. (2010). *Sudden genius?: The gradual path to creative breakthroughs*. OUP Oxford.
- Silverman, S. M. (1974). Parental loss and scientists. *Science Studies*, 4(3), 259-264.
- Simonton, D. K. (1999). *Origins of genius: Darwinian perspectives on creativity*. Oxford University Press.
- Stevenson-Hinde, J. (2007). Attachment theory and John Bowlby: some reflections. *Attachment & Human Development*, 9(4), 337-342.
- Walberg, H. J., Tsai, S. L., Weinstein, T., Gabriel, C. L., Rasher, S. P., Rosecrans, T., ... & Vukosavich,

P. (1981). Childhood traits and environmental conditions of highly eminent adults. *Gifted Child Quarterly*, 25(3), 103-107.

Westfall, R. S. (1994). *The Life of Isaac Newton*. Cambridge University Press.

Woodward, W. R. (1974). Scientific genius and loss of a parent. *Science Studies*, 4(3), 265-277.