

COGNITIVE AND LINGUISTIC MANIFESTATIONS OF A BLIND CHILD IN ANTHONY DOERR'S *ALL THE LIGHT WE CANNOT SEE*

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Received: 27th October 2022/Revised: 16th February 2023/Accepted: 16th February 2023

How to Cite: Hossain, M. M. (2023). Cognitive and linguistic manifestations of a blind child in Anthony Doerr's *All the Light We Cannot See*. *Lingua Cultura*, 17(1), 93-100. <https://doi.org/10.21512/lc.v17i1.9068>

ABSTRACT

The research intended to construe the interconnection among Marie-Laure's blindness, thinking, and language and, thereby, explore if the language choice or spontaneous language of a blind person could be interpreted psycholinguistically in Anthony Doerr's All the Lights We Cannot See. This novel presented the life-long stories of a girl and a boy whose paths merged eventually despite remaining unaffiliated throughout the first part of their life. Named Marie-Laure, the girl was blind and had her passage in her world through both sweet childhood experiences and chronologically upsetting predicaments. In the whole narrative of the novel, the novelist presented a reciprocal affiliation between Marie-Laure's cognitive processing resulting from her physical condition, blindness, and language. Through portraying the predicaments of Marie-Laure, one of the two protagonists of All the Light We Cannot See, demonstrated vivid instances of the physical as well as mental trauma a blind child usually goes through. Concurrently, the novel also depicted conspicuously what improvisations a blind child had to devise to face reality, discern prevalent meanings of phenomena, construct her thoughts, and produce language. The research applied a qualitative method consisting of in-depth content analyses based on the selected text and secondary sources, namely published books, journals, and research articles. It analyzed the existing literature on the cognitive, psychological, and linguistic considerations of blind children and linked the discernment with the related portrayal in the narrative. The findings reveal substantial reciprocal dependence between a child's physical authenticity and cognitive making, i.e., a child's blindness influences his/her language, thoughts, and circadian psycholinguistic behavior.

Keywords: cognitive manifestation, language manifestation, blind child, *All the Light We Cannot See*, psycholinguistics

INTRODUCTION

A six-year-old girl, Marie-Laure LeBlanc, who has lost her mother already and is with her father, is, due to congenital cataracts, losing her eyesight quite rapidly. Within another month, she becomes completely blind, her world goes shapeless, and everything becomes confusing or indecisive. Her father, Monsieur LeBlanc, is extremely determined to help his daughter be self-reliant, and he understands better what he should do for the purpose, so he does everything possible to add to Marie-Laure's life the things that are imperative to assist in her day-to-day life. Similarly goes the girl's psychology as she gets habituated to going on with her life without eyesight

and starts seeing her universe in a new way (Pandit, 2019). In addition to her sightless life, she begins her war, which shakes her psyche frequently with fear and hesitation (Pandit, 2019). During her whole childhood and adolescence, she continues her life blind and in the apprehension of household confinement, the rampant sound of bombing, and the everlasting atmosphere of war. These crucial issues have substantially influenced her thought processes, which the novelist Anthony Doerr has amply and eruditely presented in the novel's narrative (Anghel, 2020).

Healthy eyesight and hearing power are two of the most irreparable human senses without which everyday life, continuous learning, and psychological development are significantly hampered (Dehghan

et al., 2020; Ankeeta et al., 2021). The cognitive as well as educational attainment and development of children with a visual disability require unique approaches and methods (Tobin et al., 1997; Vervloed, van den Broek, & van Eijden, 2020). If a blind child is nurtured and instructed in an inclusive educational setting, the learning level of the child gets accelerated to a significant extent in concurrence with his/her normal peers (Morrison et al., 2021; Chen et al., 2021). Children with visual impairments go through multifaceted troubles and hindrances in the development of adaptive functioning. They need to learn how to comprehend the physical world with a view to acquiring cognitive skills and realizing and discerning social relationships (van den Broek et al., 2017; Larsen & Dammeyer, 2021); although some researchers suggest that pedagogical approaches if familiar and available, work better and even almost equally for both normal and blind children (Carpio, Amérgo, & Durán, 2017). Marie-Laure comprehends the world with touches and mild marching of her fingers on the models of her neighborhood made by her father. She thinks the older's thoughts, sees the apprehending realities, performs the role of a caring daughter, and prays that everything is all right, all through her blindness. Anthony Doerr, in *All the Light We Cannot See*, has depicted how a blind child sees the world, understands things of the world, demonstrates her mental workings through her thoughts and reactions, and, most importantly, what linguistic features she produces. As such, this research aims to present the cognitive as well as language manifestations of Marie-Laure, the blind protagonist of the novel.

There have been many scholastic pursuits in terms of how a blind child (both the born-blind and the post-birth-blind) acquires language (Wills, 1979; Erin, 1990; Andersen, Dunlea, & Kekelis, 1993). Although the language of a child with healthy eyesight relates to the vivid experience of the world that is basically organized in terms of visual aspects, a blind child's language of the world may not come in a manner as organized and familiar as sighted people have it (Wills, 1979). In the case of a blind child, learning things and acquiring cerebral development take place in phases slower than those with normal visual ability (Wills, 1979). As vision plays the most crucial role in inputting senses into a person on numerous things from the real world, a child without the power of vision undergoes severe constraints to comprehend and describe physical as well as discernible phenomena (Gyawali & Moodley, 2018; Sonksen, 1993; Gupta et al., 2022). The mental and intellectual progress along with language skills of a blind child has been a researchable issue (Tobin, 1992; Cassar et al., 2022). Some argue that blindness may later have a stimulating effect on speech and cerebral development, for which Tobin (1992) thinks that a blind child may end up being a good orator. Teaching a language or any knowledge to a blind child involves fundamentally different pedagogical approaches and remarkably dissimilar learning methods (Lister, Leach, & Simpson, 1994;

Dillmann et al., 2021). However, if a blind child does not have any other handicap other than blindness, he/she may acquire linguistic competence in an unidentical route, which, if known to the academicians or simply grown-ups, may be of substantial significance in terms of helping the blind children to achieve language skills (Kitzinger, 1984).

Anthony Doerr, on a grand novelistic scale, does more than touch a central and sustained theme in his novel *All the Lights We Cannot See* (Goh, 2019). Doerr's novel, through Marie-Laure, one of the principal protagonists, who is blind, inscribes touch in sensory, factual, and vibratory ways, and it hones the sensitivity to touch (Goh, 2019). Reading *All the Light We Cannot See* demands an eye-and-mind operation, i.e., it requires one to activate the sense of touch, an urgency of receiving the feeling of each and every single touch one performs (Goh, 2019). The novelist goes back to introducing Marie-Laure as a child and is gradually losing her eyesight due to congenital cataracts. Doerr narrates, "Marie-Laure LeBlanc is a tall and freckled six-year-old in Paris with rapidly deteriorating eyesight when her father sends her on a children's tour of the museum where he works." (Doerr, 2015, pp. 19).

A blind child gradually attains cognitive development and slowly and, by default, possesses resourceful adaptability (Wilson, 2000). More importantly, when blind children learn independently without interruption from sighted people, they are found to obtain skills better (Laatar et al., 2022). Nevertheless, how a blind child develops an understanding of the atmosphere and cognitive health depends on many factors like the cause of blindness, age of onset, amount and use of remaining vision, intellectual capital, presence or absence of other infirmities, and forms of parenting and chances for wider social and environmental interactions, which altogether make for individual differences as wide within this low incidence population group as within the population as a whole (Wilson, 2000). The available supportive approaches to blind children for their mental as well as physical well-being are always scarce in comparison with the magnitude of the case and the necessity of affirmative interventions (de Verdier, 2018). Blind children's cognitive as well as psychological development proceeds without the support of vision; their absence of vision influences the roles of the other senses, and they build an image of the world that deviates from that of seeing people (Caroli, 2019). Slowly but surely, they manage to adapt to their unsighted atmosphere (Burlingham, 1979). The image of the world the blind children create in their minds and brains is unique (Burlingham, 1979). Children gradually know about the innumerable matters of the world through senses like touch, smell, vision, and audition, while they understand the world in terms of objects, events, agents, and their mental states (Bedny & Saxe, 2012). In spite of having radically unlike sensory experiences, behavioral and neuroscientific works manifest that blind children gain normal notions

about regular objects and their color, actions, and psychological status (Kim et al., 2021; Bedny & Saxe, 2012).

The available literature on children's blindness and its required instructional treatments suggest a myriad of facts and responses. However, blind children's cognition and language logically demand that there should be some affinities between them. The research delineates the psychological, as well as the linguistic demonstration of a blind child, which has been convincingly depicted by Anthony Doerr in his debut novel, *All the Light We Cannot See*.

METHODS

The research applies a qualitative method consisting of in-depth content analyses based on the selected text and secondary sources, namely published books, journals, and research articles, as to the genre of the key terms of the current research. The researcher outlines the theoretical framework through which the selected text is to be anatomized in relation to the research problem. Accordingly, the text is scrutinized, related contents are consulted substantially, and finally, comprehensible findings are reached.

RESULTS AND DISCUSSIONS

Doerr (2015) describes the girl in her youth, *In a corner of the city, inside a tall, narrow house at Number 4 rue Vauborel, on the sixth and highest floor, a sightless sixteen-year-old named Marie-Laure LeBlanc kneels over a low table covered entirely with a model. This model is a miniature of the city she kneels within and contains scale replicas of the hundreds of houses and shops and hotels within its walls.* (Doerr, 2015: 5)

She wants to visualize the neighborhood with her inner eyes, for which she moves her hand all through the model. The novelist describes, *"Her fingers travel back to the cathedral spire. South to the Gate of Dinan. All evening she has been marching her fingers around the model"* (Doerr, 2015, pp. 5). Marie-Laure possesses a strong psychological sense which helps her hear and understand many remote happenings, which Doerr illustrates, *"She can hear the bombers when they are miles away. A mounting static. The hum inside a seashell"* (Doerr, 2015: 6). Frequently, she runs her fingers on the neighborhood model made by her father because she has a strong will to be self-reliant in case there remains no one to aid her, which is also the wish of her father. Even in the intense moments when the bombers are so close that the floor starts to throb under her knees, she does not forget the model; rather, she grasps it tightly. The writer narrates, *"Marie-Laure clutches the tiny house in one hand and the stone in the other. The room feels*

flimsy, tenuous. Giant finger-tips seem about to punch through its walls. 'Papa?' she whispers" (Doerr, 2015:13).

"Poor child", Marie-Laure is the only child of "Poor Monsieur LeBlanc" (Doerr, 2015, pp. 27), the principal locksmith for the National Museum of Natural History. They live in Paris. Mr. LeBlanc has lost his father in the war and his wife in childbirth, while the little six-year-old daughter has lost her eyesight completely due to irreparable congenital cataracts. He smokes cigarettes while making tiny models for his daughter, Marie-Laure, who finds her sanctuary nowhere but in her bed. Mr. LeBlanc takes her with him to the museum and keeps her near him; alongside, he helps her improve her knowledge and intelligence by asking her quizzes and all. He asks her, *"Vault key or padlock key" or "Cupboard key or deadbolt key"* (Doerr, 2015: 29). He frequently tests her on the locations of displays and the contents of cabinets, continually places some unexpected things into her hands, and inquires her whether they are a light bulb, a fossilized fish, or a flamingo feather. For an hour each morning, even on Sundays, he teaches her Braille, and in the afternoons, he takes her on his rounds. On Tuesdays, when the museum is closed, the father and daughter sleep much, drink sugared coffee, walk to different places, visit bookshops; when Mr. LeBlanc gifts her with a dictionary, a journal, or a magazine full of photographs, and promises to her that he will never leave her, not in a million years (Doerr, 2015: 31)

Parents' dedication to remaining focused on the development of the child, either abled or disabled, has been seen as having a promoting influence on cognitive enrichment (Gomez et al., 2018; Platje et al., 2018; Straughan & Xu, 2022). Mr. LeBlanc's incessant contributions to help broaden Marie-Laure's inner sight as he makes her go through multiple riddles, puzzles, and surprises lead to noticeable outcomes in terms of enabling the blind child to face her life. On her birthdays, he gives her wooden puzzle boxes with myriad levels of difficulties to solve and overcome to reach a certain destination where there lies some sort of wonder, which she really becomes happy to win. Doerr (2015) narrates,

Usually Marie-Laure can solve the wooden puzzle boxes her father creates for her birthday. Often, they are shaped like houses and contain some hidden trinket. Opening them involves a cunning series of steps: find a seam with your fingernails, slide the bottom to the right, detach a side rail, remove a hidden key from inside the rail, unlock the top, and discover a bracelet inside (Doerr, 2015: 35).

Since supporting parent-child affiliation helps children overcome the difficulties of growing up with visual or visual and intellectual obstacles (van den Broek et al., 2017; Hao & Yu, 2017; Leung et al., 2019), Marie-Laure's father puts her into challenges

to lead the way home, which reveals much of the confusion and apprehension a blind child goes through. He takes her to the path, picks her up, and spins her around three times to test if she can make it home. She feels an unsolvable riddle and cannot even say if the gardens are ahead or behind. Mr. LeBlanc inspires her and assures her that he is one step behind and will not let anything happen to her. But to her,

The world pivots and rumbles. Crows shout, brakes hiss, someone to her left bangs something metal with what might be a hammer. She shuffles forward until the tip of her cane floats in space. The Edge of a curb? A pond, a staircase, a cliff? (Doerr, 2015: 36)

She tries and moves ahead one pace, two paces, till twelve paces very nervously when two women jostle her while passing. She drops her cane, begins to cry, and feels the world to be “so big” (Doerr, 2015: 37). Nevertheless, Marie-Laure does not give up and continues failing Tuesdays after Tuesdays. At long last, in the winter of her eighth year, to her utter wonder, she starts doing it right.

She runs her fingers over the model in their kitchen, counting miniature benches, trees, lampposts, doorways. Everyday some new details emerges – each storm drain, park bench, and hydrant in the model has its counterpart in the real world. (Doerr, 2015: 40)

Now, she leads the way, though she worries about if the road is safe to cross. She asks her father, “Safe to cross, Papa?” Although she cannot see, she can read the happiness and celestial gratitude on her father’s face. The narrator describes,

Right. Then straight. They walk up their street now, she is sure of it. One step behind her, her father tilts his head up and gives the sky a huge smile. Marie-Laure knows this even though her back is to him, even though he says nothing, even though she is blind. (Doerr, 2015: 41)

She can imagine now and creates her own world where things are given color, smell, shape, and meaning by herself. The narrator goes on,

Marie-Laure draws maps in her head, unreels a hundred yards of imaginary twine, and then turns and reels it back in. Botany smells like glue and blotter paper and pressed flowers. Paleontology smells like rock dust, bone dust. Biology smells like formalin and old fruit. (Doerr, 2015: 44)

While walking and exploring, she takes aids off and follows cables and pipes, railings and ropes, hedges, and sidewalks. When Marie-Laure’s father lets her know that the German occupying forces are

going to make them change their everyday timetable, she logically questions, “How can one country make another change its clocks? What if everybody refuses?” (Doerr, 2015, p. 130). Despite being blind and bereft of the dystopian workings of the world around her, Marie-Laure nurtures the fundamental human logicity in her depth, so she cannot accept one forcing others to do things the latter do not want to do. She relates her life to a book. Doerr writes,

*One week in Saint-Malo becomes two. Marie begins to feel that her life, like *Twenty Thousand Leagues Under the Sea*, has been interrupted halfway through. There was volume 1, when Marie-Laure and her father lived in Paris and went to work, and now there is volume 2, when Germans ride motorcycles through these strange, narrow streets and her uncle vanishes inside his own house.* (Doerr, 2015: 145)

The children she meets boil her with many questions about whether being blind hurts, if she shuts her eyes while sleeping, and how she knows the time. To them, she answers, “It doesn’t hurt. And there is no darkness, not the kind they imagine. Everything is composed of webs and lattices and upheaval of sound and texture” (Doerr, 2015: 44). Everything is colorful in her imagination and dreams, which is why, to her, the museum buildings are beige, chestnut, and hazel. Its scientists are lilac, lemon yellow, and fox brown. Piano chords loll in the speaker of the wireless in the guard station, projecting rich blacks and complicated blues down the hall toward the key pound; bees are silver; pigeons are ginger and auburn and occasionally golden.

Marie-Laure does not have any memory of her mother; she “imagines her as white, a soundless brilliance” (Doerr, 2015: 45). In her father, she finds a millennium of colors and many more fancy things. Doerr illustrates,

Her father radiates a thousand colors, opal, strawberry red, deep russet, wild green; a smell like oil and metal, the feel of a lock tumbler sliding home, the sound of his key rings chiming as he walks. He is an olive green when he talks to a department head, an escalating series of oranges when he speaks to Mademoiselle Fleury from the green houses, a bright red when he tries to cook. (Doerr, 2015: 45)

When Marie-Laure reaches ten, she can project anything onto the black screen of her imagination: a sailing yacht, a sword battle, a Coliseum seething with color. As she comes to hear about the gemstone called “Shepherd’s Stone” in the Paris Museum where her father works, and that the diamond possesses some ominous power, “She envisions an angry goddess stalking the halls, sending curses through the galleries like poison clouds” (Doerr, 2015: 51).

Marie-Laure’s auditory prowess is intense,

and she hears the things happening around her. The narrator says, “*She walks a circle around the Grand Gallery, navigating between squeaking floorboards; she hears feet tramp up and down the museum staircases, a toddler squeal, the groan of a weary grandmother lowering herself onto a bench*” (p. 44). Waddell (2019) describes the “light” in Doerr’s *All the Light We Cannot See* as one of the various degrees of senses and truths. While to Marie-Laure, literal light is inaccessible; she can reach and utilize deeper metaphorical light in her intuition and see-through life better than people with actual seeing ability.

Her father is the only person in the universe she thinks she truly belongs to, for which she loves him and cares for him seemingly more than her life. When she hears the rumor that the diamond in the Paris Museum has a curse on it to kill anyone who holds it or comes near it, she does in no way want her father to be around it. She says, “*I want to believe that Papa hasn’t been anywhere near it*” (Doerr, 2015: 52).

Marie-Laure is fond of reading, which is why her father gifts her with at least a braille book on each of her birthdays.

Marie-Laure reads Jules Verne in the key pound, on the toilet, in the corridors; she reads on the benches of the Grand Gallery and out along the hundred gravel paths of the gardens. She reads the first half of Twenty Thousand Leagues Under the Sea so many times, she practically memorizes it. (Doerr, 2015: 60)

On a certain day in November 1939, Marie-Laure was reading *Twenty Thousand Leagues Under the Sea* when some boys talked about the ensuing war, only to rejoice at the expense of her psychic normality and what could happen to a blind girl. They say, “*They’re mad for blind girls*”, and they “*Make them do things*”, “*Nasty things*” (Doerr, 2015: 65). This panics the girl to chilling blood, and she “*listens to the trees rustle, her blood swarms. For a long and panicked minute, she crawls among the leaves at the foot of the bench until her fingers find her cane*” (Doerr, 2015: 65). Late, she asks her father, “*Papa, if there is a war, what will happen to us*” (Doerr, 2015: 66)? Though her father assures her that there will not be any war, she finds restlessness in him. “*But she hears the way he turns newspaper pages, snapping them with urgency. He lights cigarette after cigarette; he hardly stops working. Weeks pass, and the trees go bare, and her father doesn’t ask her to walk in the garden once*” (Doerr, 2015: 66). As the straining situation approaches, when everything, everybody is silent, she finds her father nowhere, “*Nothing. No wardens, no janitors, no carpenters, no clop-clop-clop of a secretary’s heels crossing the hall*” (Doerr, 2015: 76). The rumor about the attacking soldiers resonates in her ears, “*They can march for days without eating. They impregnate every school-girl they meet*” (Doerr, 2015: 76). When they are in the multitude, leaving Paris for the fear of the Germans, She asks her father,

“*Are there Germans, Papa?*”
 “*No Ma Cherie*”
 “*But soon*”
 “*So they say.*”
 “*What will we do when they get here?*”
 “*We will be on a train by then*” (Doerr, 2015: 78)
 “*While waiting at the station, Marie-Laure apprehends, “Is something on fire, Papa?”*”
 “*Nothing is on fire*”
 “*I smell smoke.*”
 “*Again, she worries, “What is that noise?”*”
 “*Grasshoppers*”
 “*Is it dark?*”
 “*Getting there now.*”
 “*Where will we sleep?*”
 “*Here.*”
 “*Are there beds?*”
 “*No ma Cherie*” (Doerr, 2015: 88).
 But she sounds farsighted when she enquires,
 “*How much food do we have, Papa?*”
 “*Some. Are you still hungry?*”
 “*I’m not hungry. I want to save the food*”
 (Doerr, 2015: 89)

For a child whose world is dark, things in a straining period are more imaginary and scary. According to Al-Zboon (2017), blind children are afraid of the unknown in relation to the atmosphere, vehicles, humans, and animals. Their absence of sight leads to the creation as well as the persistence of both external and internal constraints (Al-Zboon, 2017; Veldhorst et al., 2022). Doerr narrates,

“*It feels to Marie-Laure as if they have wound these past four days towards the center of a bewildering maze, and now they are tiptoeing past the pickets of some final interior cell. Inside which a terrible beast might slumber*” (Doerr, 2015: 118).

In the critical time of war, while fleeing Paris, when there are machine guns blazing here and there, her father and she get into a lorry; she consoles herself that this whole saga is nothing but something like a test designed and set by her father, which will very soon be over in a pleasing tone. Doerr describes, “*For half the morning, Marie-Laure tries to convince herself that the previous days have been some elaborate test concocted by her father, that the truck is moving not away from Paris but toward it, that tonight they’ll return home*” (Doerr, 2015: 117). At the horrible prospect of the Nazi forces occupying the area where Marie-Laure and her father live, Marie-Laure can sense her father’s thoughts fluttering like trapped birds.

She asks, “*What does it mean, Papa, they’ll occupy us?*”
 “*It means they’ll park their trucks in the squares.*”
 “*Will they make us speak their language?*”

(Doerr, 2015: 129). *Her escalating fear makes her ask again, "Are German soldiers climbing into our beds right now, Papa?"* (Doerr, 2015: 130).

When arrives the moment of departure, when all across Paris, people pack their belongings to leave for uncertainty, Marie-Laure, out of sheer apprehension, prays, *"Please let this be a puzzle, an elaborate game Papa has constructed, a riddle she must solve"* (p. 75). Nevertheless, in the choking tension of fleeing for life and fearing death, she has her curiosity intact. She enquires her father about the station they wait at,

"What does it look like, Papa?"
"What, Marie?"
"The station, the night" (Doerr, 2015: 78).
After some moments, she asks again,
"What are we doing now, Papa?"
"Hoping for a train."
"What is everybody else doing?"
"There are hoping too" (Doerr, 2015: 79)

When things are breathtaking when the German soldiers have already occupied the town when, Marie-Laure senses eerie trouble in her father's voice. She wears a soothing shape, and she whispers to her father,

"It will be okay. We will stay here awhile then we will go back to our apartment and the pinecones will be right where we left them and Twenty Thousand Leagues under the Sea will be on the floor of the key pound where we left it and no one will be on our beds." (Doerr, 2015: 130)

In all her absence of light, being deprived of her father's presence and fatherly care, she takes courage and says to Etienne, *"I may be a girl of twelve, but I am a brave French explorer who has come to help you with your adventures."* (Doer, 2015: 151)

Although Marie-Laure is completely blind, she has her longing alive to see nature as it is. On the sixth floor of her uncle's home, she stands atop the bed, runs her palms along the wall, wants Madame Manec, the elderly caregiver, to open the window, and asks, *"Can one see the sea from it"* (Doer, 2015: 128)? She longs to find snails there because she has found tree snails and garden snails, but she has never found marine snails (Doer, 2015: 128). Despite being physically blind, Marie is portrayed as a girl child who is commendably intelligent, brave, and inquisitive, all of which demand her to continue her struggle to stay safe and alive (Herdianti, 2020). Marie's inner virtues and qualities play a significant role in establishing her fight to fulfill her needs, needs of vision, external support, motivation, sense of safety, cooperation, and compassion (Herdianti, 2020). When her father is arrested by the German forces, she needs the most support and inner courage, much of which the people surrounding her, like her great uncle, Etienne, and Madam Manec (Etienne's housekeeper) provide her

amply, and the more significant rest part she improvises from her blindness and the books she read (Herdianti, 2020).

CONCLUSIONS

A motherless blind girl child in a war-occupied country is to learn the world she lives in on her own, although her father can manage to be with her and provide her with didactic support until he leaves for his life. In the absence of her father, she is in a new place, her great uncle Etienne's house, where Madame Manec, the elderly housekeeper, provides her with all sorts of support. Nevertheless, Marie-Laure's world is pitch dark, and her mind resides in an absolutely uncommon stature. Through her words, the real world comes to know her kind of world, which her blindness creates and lingers only for her. Each of her syntactic expressions reveals her cerebral working, psychological whereabouts, and her comprehension of the real world. Her sanity and courage can be felt when she desires to explore the world. All her thoughts, musings, questions, and surmised notions of the world give indications to the cognitive development process of any blind child without any other handicap. These patterns of understanding in relation to a blind child are essential for an academician or scholar who might be working on child language acquisition and intellectual development. Anthony Doerr, in his novel *All the Light We Cannot See*, illustrates such a mechanism of a blind child aesthetically and convincingly.

The research, through anatomizing a work of fiction, implies demarcating the psychological whereabouts and functions of a blind child and her cognitive buildings and expressions. It is brave and frank to admit that the research does not follow the existing scientific formulae or is not conducted in a scientific laboratory. Nevertheless, it boldly attempts to content-analyze the chosen text and related research works to reach an understandable as well as acceptable thematic decision, which is sure to help scholars and knowledge-seekers in such fictional and real-world issues. Any positive approach to the research will inspire further studies to come up with additional and novel findings as to visually impaired children and their psychic functions, including language.

REFERENCES

- Al-Zboon, E. (2017). Childhood fears among children who are blind: The perspective of teachers who are blind. *Early Years, 37*(2), 158-172. <https://doi.org/10.1080/09575146.2016.1168789>.
- Andersen, E. S., Dunlea, A., & Kekelis, L. (1993). The impact of input: Language acquisition in the visually impaired. *First Language, 13*(37), 23-49. <https://doi.org/10.1177/014272379301303703>.
- Anghel, F. (2020). Art puzzling war in Anthony Doerr's "All the Light We Cannot See". *Belgrade English*

- Language and Literature Studies: BELLS90 Proceedings*, 2(2), 289-297. <https://doi.org/10.18485/bells90.2020.2.ch21>.
- Ankeeta, A., Kumaran, S. S., Saxena, R., Dwivedi, S. N., & Jagannathan, N. R. (2021). Visual cortex alterations in early and late blind subjects during tactile perception. *Perception*, 50(3), 249-265. <https://doi.org/10.1177/0301006621991953>.
- Bedny, M., & Saxe, R. (2012). Insights into the origins of knowledge from the cognitive neuroscience of blindness. *Cognitive Neuropsychology*, 29(1-2), 56-84. <https://doi.org/10.1080/02643294.2012.713342>.
- Burlingham, D. (1979). To be blind in a sighted world. *The Psychoanalytic Study of the Child*, 34, 5-30. <https://doi.org/10.1080/00797308.1979.11822998>.
- Caroli, D., Sagone, M. E., Falanga, E., & Licciardello, R. (2019). Analysis of creative and logical-spatial skills in blind children and adolescents. *International Journal of Developmental and Educational Psychology*, 1(1), 241-250. <https://doi.org/10.17060/ijdaep.2019.n1.v1.1416>.
- Carpio, C., Amérigo, M., & Durán, M. (2017). Study of an inclusive intervention programme in pictorial perception with blind and sighted students. *European Journal of Special Needs Education*, 32(4), 525-542. <https://doi.org/10.1080/08856257.2017.1297567>.
- Cassar, C., Tambelli, R., Pezzuti, L., Lecis, D., Castorina, S., Ricci, D., Fortini, S., Amore, F. M., De Crescenzo, F., & Lucchese, F. (2022). A haptic nonverbal cognitive test for children and adolescents with visual impairment. *Journal of Visual Impairment & Blindness*, 116(4), 485-495. <https://doi.org/10.1177/0145482X221117172>.
- Chen, X., Lu, M., Bu, W., Wang, L., Wang, Y., Xu, Y., & Zhong, M. (2021). Psychometric properties of WISC-IV verbal scales: A study of students in China who are blind. *Journal of Visual Impairment and Blindness*, 115(3), 228-241. <https://doi.org/10.1177/0145482X211018520>.
- de Verdier, K. (2018). *Children with blindness: Developmental aspects, comorbidity and implications for education and support*. Stockholm: Stockholm University.
- Dehghan, F., Kaboudi, M., Alizadeh, Z., & Heidarisharaf, P. (2020). The relationship between emotional intelligence and mental health with social anxiety in blind and deaf children. *Cogent Psychology*, 7(1), 1716465. <https://doi.org/10.1080/23311908.2020.1716465>.
- Dillmann, J., Freitag, C., Lorenz, B., Holve, K., Schweinfurth, S., & Schwarzer, G. (2021). Motor and visual-spatial cognitive abilities in children treated for infantile esotropia. *Perceptual and Motor Skills*, 128(4), 1443-1463. <https://doi.org/10.1177/00315125211011726>.
- Doerr, A. (2015). *All the lights we cannot see*. Britain: Clays Ltd. Great.
- Erin, J. N. (1990). Language samples from visually impaired four and five-year olds. *Journal of Childhood Communication Disorders*, 13(2), 181-191. <https://doi.org/10.1177/152574019001300205>.
- Goh, I. (2019). Introducing touching literature: Anthony Doerr's All the Light We Cannot See. *CR: The New Centennial Review* 19(3), 241-264.
- Gomez, J. A., Carter, A. S., Forbes, D., & Gray, S. A. O. (2018). Parental insightfulness and parenting behavior: a two-dimensional analysis of parent contributions to child cognitive outcomes. *Attachment and Human Development*, 20(3), 255-271. <https://doi.org/10.1080/014616734.2018.1446734>.
- Gupta, P., Shah, P., Gutnick, S. G., Vogelsang, M., Vogelsang, L., Tiwari, K., Gandhi, T., Ganesh, S., & Sinha, P. (2022). Development of visual memory capacity following early-onset and extended blindness. *Psychological Science*, 33(6), 847-858. <https://doi.org/10.1177/09567976211056664>.
- Gyawali, R., & Moodley, V. R. (2018). Need for optical intervention in children attending a school for the blind in Eritrea. *Clinical and Experimental Optometry*, 101(4), 565-570. <https://doi.org/10.1111/cxo.12601>.
- Hao, L., & Yu, X. (2017). Sources of unequal cognitive development of middle-school students in China's rural-urban migration era. *Chinese Journal of Sociology*, 3(1), 32-55. <https://doi.org/10.1177/2057150X16684115>.
- Herdianti, M. (2020). Marie-Laure's struggle as blind teenager in Anthony Doerr's "All the Light We Cannot See". *Dinamika: Jurnal Sastra dan Budaya*, 8(1), 805-820. <https://doi.org/10.25139/dinamika.v8i1.4027>.
- Kim, J. S., Aheimer, B., Manrara, V. M., & Bedny, M. (2021). Shared understanding of color among sighted and blind adults. *Proceedings of the National Academy of Sciences of United States of America*, 118(33), e2020192118. <https://doi.org/10.1073/pnas.2020192118>.
- Kitzinger, M. (1984). The role of repeated and echoed utterances in communication with a blind child. *International Journal of Language & Communication Disorders*, 19(2), 135-146. <https://doi.org/10.3109/13682828409007184>.
- Laatar, R., Waer, F. B., Borji, R., Rebai, H., Sahli, S. (2022). Cognitive-motor interference during dual tasks in blind children. *Journal of Motor Behavior*, 54(6), 736-743. <https://doi.org/10.1080/00222895.2022.2074956>.
- Larsen, F., & Dammeyer, J. (2021). The relation between sensory loss and communicative and cognitive development in children with congenital deaf blindness. *British Journal of Visual Impairment*, 39(2), 104-116. <https://doi.org/10.1177/0264619620913901>.
- Leung, C., Lai, C., Lau, D., Leung, S., & Pin, T. W. (2020). Effectiveness of a multidisciplinary parent training program for children with developmental disabilities: A single-blind randomized waitlist-controlled trial. *Journal of Child Health Care*, 24(4), 560-576. <https://doi.org/10.1177/1367493519880447>.
- Lister, C., Leach, C., & Simpson, L. (1994). An exploration of understanding of quantity in children who are blind. *Early Child Development and Care*, 103(1), 43-63. <https://doi.org/10.1080/0300443941030104>.

- Morrison, C., Villar, N., Hadwen-Bennett, A., Regan, T., Cletheroe, D., Thieme, A., & Sentance, S. (2021). Physical programming for blind and low vision children at scale. *Human-Computer Interaction*, 36(5-6), 535-569. <https://doi.org/10.1080/07370024.2019.1621175>.
- Pandit, P. (2019). A study of trauma and transformation in Anthony Doerr's "All the Light We Cannot See". *Journal of Emerging Technologies and Innovative Research*, 10(9), 494-499.
- Platje, E., Sterkenburg, P., Overbeek, M., Kef, S., & Schuengel, C. (2018). The efficacy of VIPP-V parenting training for parents of young children with a visual or visual-and-intellectual disability: A randomized controlled trial. *Attachment and Human Development*, 20(5), 455-472. <https://doi.org/10.1080/014616734.2018.1428997>.
- Sonksen, P. M. (1993). Effect of severe visual impairment on development. In A. R. Fielder, A. B. Best, & M. C. O. Bax (eds), *The Management of Visual Impairment in Childhood*. London: Mac Keith Press.
- Straughan, P. T., & Xu, C. (2022). Parents' knowledge, attitudes, and practices of childhood obesity in Singapore. *SAGE Open*, 12(4), 1-14. <https://doi.org/10.1177/21582440221144436>.
- Tobin, M. J. (1992). The language of blind children: Communication, words, and meanings. *Language and Education*, 6(2-4), 177-182. <https://doi.org/10.1080/09500789209541336>.
- Tobin, M. J., Bozic, N., Douglas, G., Greaney, J., & Ross, S. (1997). Visually impaired children: Development and implications for education. *European Journal of Psychology of Education*, 12(4), 431-447.
- van den Broek, E. G. C., van Eijden, A. J. P. M., Overbeek, M. M., Kef, S., Sterkenburg, P. S., & Schuengel, C. (2017). A systematic review of the literature on parenting of young children with visual impairments and the adaptations for video-feedback intervention to promote positive parenting (VIPP). *Journal of Developmental and Physical Disabilities*, 29(3), 503-545. <https://doi.org/10.1007/s10882-016-9529-6>.
- Veldhorst, C., Vervloed, M., Kef, S., & Steenbergen, B. (2022). A scoping review of longitudinal studies of children with vision impairment. *British Journal of Visual Impairment*, 41(3), 587-609. <https://doi.org/10.1177/02646196211072432>.
- Vervloed, M. P. J., van den Broek, E. G. C., & van Eijden, A. J. P. M. (2020). Critical review of setback in development in young children with congenital blindness or visual impairment. *International Journal of Disability, Development, and Education*, 67(3), 336-355. <https://doi.org/10.1080/1034912X.2019.1588231>.
- Waddell, M. (2019). "All the light we cannot see": Psychoanalytic and poetic reflections on the nature of hope. *International Journal of Psychoanalysis*, 100(6), 1405-1421. <https://doi.org/10.1080/00207578.2019.1642761>.
- Wills, D. M. (1979). Early speech development in blind children. *The Psychoanalytic Study of the Child*, 34, 85-117. <https://doi.org/10.1080/00797308.1979.11823001>.
- Wilson, S. (2000). A review of language development and social interaction in blind children. *Infant Observation*, 3(2), 103-105. <https://doi.org/10.1080/13698030008406152>.