PARALLELS 15 AND 20

CONTEMPORARY RESEARCH IN DIALOGUE WITH DON BOSCO

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In 1883, Saint John Bosco had a dream in which he saw a new city being built in the Central Region of Brazil. Significantly, the saint declared that this city would be built between **Parallels 15 and 20**.

Don Bosco's vision was a major inspiration for the foundation of Brasilia, Brazil's modern capital city. In honour of the saint and his aspirational dream, the Shrine of Don Bosco was built right on the 15th parallel in Brasilia.

See Eugenio Ceria, Biographical Memoirs of St. John Bosco, Vol. 16 (New Rochelle: Salesiana Publishers, 1995), 303-312.

PREFACE

Many books have been written about Don Bosco: his pedagogy, spirituality, personality, holiness, writings, and his educational psychology. So why yet another? And why this intriguing title: **Parallels 15 and 20**? Clearly it suggests a new and original approach. I would like to introduce the reader to this approach by briefly explaining the choice of title, cover and the guiding themes of this book.

There was one quite simple and very clear reason for writing this book: the need to dialogue with educators, teachers and researchers about John Bosco the man, the saint and the particular relevance of his educational practice today.

During my travels around the world, I have met people with academic training, experience in the field of research, commitment to the great issues of contemporary times such as human rights, citizenship, cultural diversity, caring for others, ecology, promoting justice and peace, interest in digital culture, biotechnology and quantum physics, generative artificial intelligence, migrants, indigenous people and the poor, and surely the list does not end there.

When we meet these people and present the figure of Don Bosco, it is understandable that our first perspective on this saint might be one of religion and theology. Yet, people whose main pursuits are in fields such as engineering, chemistry, physics, nutrition, economics, medicine, psychology, artificial intelligence and politics might also be looking for a way to open the dialogue about a particular saint. And naturally, given their scientific background, the first question we must face is precisely this: what is there, in the figure of the saint, that offers a point for scientific dialogue with the engineer, the architect, or any other individual coming from a technical or scientific perspective?

Parallels 15 and 20 is my attempt to open one or more doors for dialogue with these people, through a more technical perspective on Don Bosco's way of educating, as he designed his educational pedagogy.

So one thing is clear: this book does not offer a theological or religious interpretation! It is a text that seeks to define some variables based on Don Bosco's phenomenological experience. We look for these variables by examining some assumptions that arise from his experience as a human being, an artist, a builder, an organiser, a leader and an entrepreneur. Of course, the question of his faith in God underlies everything he is; it is latent in everything he does, yet we shall see that the book's starting point is not theological but pragmatic and technical.

In order to discover some of Don Bosco's technical elements, i.e. aspects of the genesis of his educational model, I had to engage in my own dialogue with some studies of a technical nature. For example, more recent studies on geographical imagination, neuroscience, and the spatial relationship of geographical imagination with the way people organise their lives, carry out projects and interpret reality from the logic of geography.

In my studies of Don Bosco, I discovered that he had a great interest in maps, studied geography intently, and designed his educational system and the expansion of the Salesian Congregation from his geographical view of the world.

Don Bosco was a dreamer! His countless dreams, with different interpretations, are full of images, designs, geographical elements (spaces, dimensions, relationships, distances, correlations), visual elements, sounds: all forming a veritable kaleidoscope. It is not my interest in this book to discuss the veracity or otherwise of Don Bosco's dreams, nor to make a spiritual, supernatural or symbolic analysis of them. My interest is technical! Spatial! Phenomenological!

Parallels 15 and 20 expresses this spatial vision of Don Bosco in one of his dreams about Brasilia, the capital of Brazil. He dreams of a city that would be built between parallels 15 and 20.

This is an important starting point for this study. Don Bosco studied geography. Don Bosco mapped out the places where he planned to send his Salesians to open new works; he had a globe, a map of the world in his office, which he observed, studied and made notes on. Mentally, he created images and symbols, drew up real layouts for churches and schools. He planned his educational environments, including the courtyard or playground. He engaged in real engineering of places, spaces, and the architectural relationships between spaces and people.

The book's cover was designed with this perspective of spatial imagination in mind: Don Bosco had a real mental map of things, a geometry of things, a mathematics of space, real spatial engineering.

Don Bosco, as we look at him today, is an architect of the human and the material. He is an artist who creates and shapes the things around him. Everything is seen in terms of relationship, space, movement, human, technical and organisational dynamism.

In all of this we discover a human being with great inner capacity and energy, of immense affective and relational expressiveness, of tenacious determination to get things done. Don Bosco is an educator with multiple intelligences, with gifts, skills and innovative actions and a great capacity for leadership. He had an incredible ability to win people over to do good, to establish work teams. He gave rise to a movement of people, near and far, who would dedicate themselves to a cause at the service of others. The Don Bosco that emerges from our study is an emotionally and spiritually rich individual whose skills and practical knowledge allow him to be innovative, operative and a leader.

Starting from some assumptions about multiple intelligence, neuroscience, spatial geography, virtual reality, cognitive and affective psychology, this study proposes to find the epistemological elements in Don Bosco the man and the saint, and in his educational work, that can open a dialogue with people today in a world that is dominated by science and technology.

In the final part of the book, I propose a dialogue between Don Bosco's educational vision and some contemporary sciences such as artificial intelligence, biotechnology, biology and ecology, and education.

My earnest and committed intention in developing this new perspective is to encourage more people to get to know the rich, polyhedral figure of Don Bosco, who was profoundly human and profoundly holy, and to open up dialogue with people today with regard to his educational system and contemporary approaches.

The technical preparation and publication of this book would not have been possible without the great collaboration and expertise of a marvellous and creative team.

I am indebted to Fr Robert Falzon, who generously, and with philosophical and hermeneutical competence, did several readings and revisions of the text, with very clear and practical suggestions.

Many thanks to Margaret Buhagiar for encouraging me to publish this book, providing ideas, insights and masterfully coordinating the Pubblikazzjoni Salesjana team.

My deep gratitude to Trisa Camilleri, who, with great artistic sensitivity and technical competence, organised this text in detail, always paying attention to corrections and the layout of the text.

Finally, I would like to thank Fabrizio Emigli for his original ideas and artistic intuition in designing the cover of this book.

Gildásio Mendes dos Santos, Ph.D

Rome, August 2024

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Note About the Translation

This book is a translation into English from the original text in Portuguese. All quotes from other sources, including those which had been translated for the original text, are also translated from Portuguese. As such, page numbers refer to the version used by the author for the original text, even if, for the reader's information, the English version (whenever this exists) is referred to in the footnotes. The two exceptions are the quotes from the *Memoirs of the Oratory* (MO) and the *Biographical Memoirs* (BM). Quotes from these two sources have been accessed from official English translations, and page numbers refer to these publications.

1. Why we need to find a Dialogue Between Don Bosco's System and Contemporary Issues

Today, there is a great need to study the figure of Don Bosco from some contemporary scientific approaches. At the same time, this offers a considerable challenge.

Why the great need? For three fundamental reasons: first, Don Bosco is like a great mosaic – he has various nuances at a spiritual, psychological, pedagogical, artistic, and cultural level that are very rich, profound, and topical. We have not yet realised the greatness of his human and spiritual genius.

Second, we need to explore the figure of this saint further in a dialogue with the new sciences and interdisciplinary studies. Third, the figure of Don Bosco, with all its human and spiritual richness, offers a scientific basis for studying themes in psychology and education: motivation, leadership, attitude, and innovative and enterprising spirit.

Don Bosco is an object of study of immense vastness and possibilities! We are still at the beginning of the discoveries about this great personality. Beyond what has been said and written about Don Bosco, a new look, beginning with new approaches, is fundamental to understanding his life and history.

Continuing the studies on Don Bosco and his Educational System[1] and following new hermeneutics, I present in this study the presupposition that Don Bosco developed a creative and innovative spatial imagination inherent to his personality, spirituality, and entrepreneurial spirit.

The central premise of this interdisciplinary study is that Don Bosco's educational and spatial perspective expresses great inner vitality and a great capacity to educate and communicate.

Rooted in a profound faith in God and deep love for the youth, his inner and integral strength is the source and reason for all his capacity to educate, love, work, and found the Salesian Congregation.

It is essential to highlight and draw attention to three critical aspects of this study.

First, it is crucial to establish a coherent and consistent basis for using interdisciplinary concepts to address the proposed theme. This means choosing approaches that complement each other, even if some interpretations do not yet reach agreement and conclusions from a scientific point of view.

While discussions between the physical and psychological world of the human person continue in the scientific field, the hermeneutical position of this study (because it is from this stance that I see an opening for dialogue with the contemporary approaches) is that of being open to new discoveries brought about through the use of new studies involving psychology and neuroscience. Such new studies illuminate our understanding of the human person with new horizons and depths.[2] In this respect, scholars in these two

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[1] Cf. Pietro Braido, *Don Bosco: Prete dei Giovani Nel Secolo della Libertà, Vols. 1, 5.2 (Rome: LAS, 2009*); Pietro Braido, "Prospettive di Ricerca su Don Bosco," *Ricerche Storiche Salesiane*, no. 16 (Rome: LAS, 1992) and Arthur Lenti, *Don Bosco: History and Spirit*, Vols. 1-3 (Rome: LAS, 2007).

[2] There has been a debate between philosophy, psychology (affective/cognitive), and neuroscience on this issue for many years.

areas are developing what they call cognitive neuroscience. The approach this study adopts follows this stance.[3]

The second aspect. This study is aligned with and consistent with studies on Don Bosco by various authors, especially more recent studies. I quote here:

- *Atti: Convegno Internazionale di Pedagogia Salesiana* with its theme "Don Bosco educatore dei giovani del nostro tempo";
- the study edited by Andrea Bozzolo (*I sogni di Don Bosco*);
- "Carisma para educar e conquistar" by Fr Afonso de Castro;
- "10 Critérios de Dom Bosco para desenvolver a inteligência emocional" by José Antonio San Martín;

and other studies developed in the field of psychology and anthropology.

The third aspect refers to this study's intended purpose: I try to open potential new topics for research into Don Bosco's life and pedagogy from new approaches. The desire is that scholars and researchers, religious or lay, in our Higher Education Institutions and Study Centres develop themes on Don Bosco and his Educational System congruent with new methodologies and approaches.

2. Don Bosco's Educative System in Dialogue with the Times

It is a considerable challenge, and yet, at the same time, there is a great need to keep studying Don Bosco and open a dialogue between the Preventive System and the present times. Such dialogue would consider new research methodologies.

For this, we have to take an attitude of methodological innovation, maintaining scientific coherence between the given historical objective and the new interpretative outlook of the researcher.

The primary objective of this study is to awaken educators and scholars to give continuity to studies on Don Bosco. These scholars need to dialogue with the times and current issues and encourage a more excellent methodological and interpretative approach by researchers, educators, parents, and young people. In this way, the figure of this great educator can continue to be explored and discovered from the perspective of these new approaches.

In the final part of this study, I present approaches to dialogue between Don Bosco's Educational System and issues and tendencies of current approaches in education, aesthetics, communication, biotechnology, integral ecology, new languages, and spirituality. It is fundamental to find new approaches that encourage, for example, the search for a metaphysics of the virtual universe.[4]

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[3] It is fundamental to highlight here that this study does not intend to discuss philosophical issues on topics studied over the years on the nature and characteristics of the physical and psychological universe or the implications of themes resulting from this analysis, such as free will. Moreover, for methodological reasons, I will not approach Don Bosco and his educational system directly from a theological perspective.

[4] Michael Heim (1994) proposes a metaphysics of virtuality.

3. The Contribution of New Hermeneutics to the Study of Don Bosco

Since Don Bosco died in 1888, many studies have contributed to our knowledge of his life, spirituality, and work.

Various studies on Don Bosco are historical and hagiographic and focus on this great educator's sources, the Preventive System, spirituality, and pedagogy.[5]

These studies have demonstrated essential facets of Don Bosco's life and work and contributed significantly to a greater understanding of nature and the various manifestations of his life, pedagogy, and spirituality. They answer new questions and open new cases for scientific investigation.

We have vast historical and bibliographical material on Don Bosco. The *Biographical Memoirs*, the *Memoirs of the Oratory*, his letters and his writings, for example, are a true encyclopaedia of information on Don Bosco, his writings, his dreams, his way of educating, his relationships with Salesians, civil and ecclesiastical authorities, his pastoral work, his priesthood, the foundation of the Congregation, and his educational method.

Presently, we have groups of scholars, Salesians, and laypeople seeking new ways of interpreting the figure of Don Bosco and his Educational System.

In March 2015, at the Salesian University in Rome (UPS), a Congress was held at which several authors presented new approaches to the Preventive System in dialogue with the new sciences.[6]

Several new study areas were presented to dialogue and update themes regarding the Preventive System. A few examples:

- "Don Bosco's Preventive System as Lived Spirituality" by Franc Marsic;
- "Literature and Formation: a Variant of the Preventive System" by Roberto Albarea;
- "The Preventive System and Restorative Justice" by Luz Angela H. Castrillon;
- "Aesthetic Education. Recent Developments in Comparison with the Salesian Educative Tradition and Contemporary Praxis" by Tadek Lewicki;

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[5] Cf. Cosimo Semeraro, "I sogni di Don Bosco – Saggio di Storiografia," in *Don Bosco e Brasilia, Profezia, Realtá Sociale e Diritto,* ed. Cosimo Semeraro (Padova: Cedam, 1990): 21-58; Pietro Brocardo, *Don Bosco: Profondamente Uomo, Profondamente Santo* (Rome: LAS, 2001); Michal Vojtáš, *Progettare e Discernere*, (Rome, LAS, 2015); Aldo Giraudo ed., *Insegnamenti di Vita Spirituale* (Rome: LAS 2013). Afonso de Castro, *Alegria na Espirtitualidade de São João Bosco* (Campinas: Arte Brasil Publicidade, 2015); Katia Papic, Juan Pablo Conejeros *El Sistema Preventivo de Don Bosco: Algunas perspectivas para la educación escolar y universitária del siglo XXI, 2nd ed.* (Santiago de Chile: Universidad Catolica Silva Henriquez, 2019).

[6] *Con Don Bosco educatori dei giovani del nostro tempo*, Acts of the Convegno Internazionale di Pedagogia Salesiana, 19-21 March 2015, Rome: Salesianum/UPS.

- "Educating at the Salesian University for a Responsible Citizenship in a Fluid Society" by Roberto Damas.

These studies seek, above all, to update Don Bosco's pedagogy in the context of the tremendous economic, political, cultural, and religious challenges of Europe, Africa, the Americas, and Asia. The articles converge in analysing the needs of young people in a world in continual change and how to respond through Salesian education to the challenges of new technologies, the phenomenon of migrants, poverty, and violence.

4. The Interior and Spiritual Dynamism of Don Bosco's Dreams

New studies of Don Bosco's dreams[7] have opened doors to understanding some aspects of his spirituality and pedagogy. His dreams have become the research subjects of various authors from different perspectives.[8]

Although various analyses exist on the nature and legitimacy of some of Don Bosco's dreams and some questions about the consistency of historical information, dreams have been an essential and promising subject of study for a greater and better understanding of Don Bosco's psychological and spiritual interiority.

Andrea Bozzolo and a group of researchers have prepared a wide-ranging study of Don Bosco's dreams[9] entitled *I sogni di Don Bosco, Esperienza spirituale e sapienza educativa*.[10] The authors seek new approaches to demonstrate that dreams must be studied from a broader perspective, applying an approach to dreams beginning from phenomenology.

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7 Pietro Stella, a great scholar of Don Bosco, says that we can distinguish distinct groups among Don Bosco's dreams. For example, dreams connected to his person, questions of individual and collective morality, his mission, educational messages to young people, the development of the Salesian Congregation in civil society and the missions. He says that there is another group of dreams that refer to politico-religious questions, local and universal. He has another cycle of dreams that refers to the rural universe, to domestic and urban life. These dreams often refer to hills, meadows, pastures, animals, flowers, gardens, and water. Finally, there is a group of dreams that refer to the oratory and its environment.

8 See the analysis of Don Bosco's dreams: Antonio da Silva Ferreira, *Acima e Além: Os sonhos de Dom Bosco* (São Paulo: Editora Salesiana, 2011); Fausto Jimenez, *Los Suenos de Don Bosco*, (Madrid: Editorial CCS, 1995); Semeraro, *Don Bosco e Brasilia;* Afonso de Castro, *Pedagogia e Espiritualdiade em Cinco Sonhos de Dom Bosco* (Campo Grande: UCDB, 2008).

9 A series of studies coordinated by Andrea Bozzolo, were published in November 2017 with topics developed by various authors: "Il sogno oltre l'inconscio. Quell'inquieta certezza che vien dal sonno" (L. De Paula); "I sogni nella storia di Giuseppe (Gen 37:40-41)" (M. Priotto); "Sogno e segno. Il rapporto fra sogno e testo nella Scrittura a partire da Gdc 7:9-15" (M. Pavan); "La speciale dignità e missione conferita da Dio a Giuseppe di Nazaret nella narrativa dei sogni di Mt 1-2" (M. Rossetti); "Il sogno come elemento letterario e spazio teologico nei Padri della Chiesa" (C. Besso); "Lo stato degli studi sui 'sogni' di don Bosco e prospettive di ricerca" (A. Giraudo); "Echi di un mondo. Note sul contesto storico-spirituale riflessione nei sogni di don Bosco" (E. Bolis); "L'immaginario dei sogni di don Bosco. Ipotesi per una poetica onirica" (M. Bergamaschi); "Il sogno dei nove anni. Questioni ermeneutiche e lettura teologica" (A. Bozzolo); "Una casa, una chiesa, un pergolato di rose. Le cinque visite come rivelazione della forma comunitaria del carisma salesiano" (S. Mazzer); "Il sacramento della confessione nei sogni di don Bosco" (R. Carelli); "'Io ti darò la Maestra.' La presenza di Maria nei sogni di don Bosco" (L. Pocher); "La morte e l'aldilà nei sogni di don Bosco. Tra spiritualità e pedagogia" (M. Wirth); "Le citazioni bibliche nel sogno dei 'dieci diamanti'" (F. Mosetto); "L'uso educativo dei sogni da parte di don Bosco: contesti, processi, intenzioni" (M. Vojtáš); "Recezione e trasmissione dei sogni di don Bosco da parte di don Giulio Barberis: due episodi singolari" (M. Fissore); "I sogni di don Bosco nel contesto della oralità negro-africana" (F. Gatterre); "La forza ispiratrice dei sogni missionari di don Bosco. Riflessioni ed esperienze di un salesiano in Cina" (M. Ferrero); "Iconografia dei sogni di don Bosco" (N. Maffioli).

10 Published in Italian by the Centro Studi Don Bosco, *Studi Storici* Vol. 20 (Rome: LAS, 2017).

A philosopher, De Paula Luisa, of Urbanianum, Italy, introduced the basis for this new study.[11]

The author analyses how dreams are treated across the centuries, from Aristotle to Descartes, from Freud to current authors,[12] and opens up a new perspective on oneiric (dream-like) phenomena. Using a phenomenological approach, she maintains that dreams express the whole person rather than the expression of the unconscious only, as some authors like Freud proposed. The author points out the limits of a reductionist vision of dreams and proposes a phenomenological and existentialist view of the person's reality that is also manifested in dreams. Her approach maintains that the person thinks, feels, projects, and dreams during the night. The conscious and the unconscious have a logic that is not chronological but systemic and complementary, which acts dynamically beyond what is thought and verbalised. For her, the dream inhabits the total region of being and the phenomenological vision of existence. Integrating with the postulates of neuroscience puts dreams on a new level in scientific studies.

After analysing Descartes's dreams and proposing that the dream is beyond chronological time, she says,

The dream inhabits impenetrable depths in the diaphanous clarity of total reason. From the abysses of the night, it soars toward the heavens of the future, ignoring the logical steps of sleepless reason. Wakefulness comes to truly possessing the dreamlike process only in the *chiaroscuro* of consciousness, living it to the fullest and awakening it as a call of one's world (*Eigenwelt*), an irresistible call to the fullness of existence. The phenomenological and existential approach offers an understanding of dream processes that are radically alternative to the *cursus honorum* of Western thought and are easily integrated with neuroscience studies. (15)

For the researcher, the dream not only happens in the conscious but also "is capable of giving meaning to the conscious." Analysing the view of modern psychology about dreams, she says, "For the dream to make sense again for the conscious, modern psychology has postulated the unconscious, a non-place in which the irrepressible creations of the night find refuge next to frustrated desires and remorseful fantasies." (16)

Refuting the principle that the dream is not part of the conscious dimensions and that consciousness acts only by day, De Paola says,

Consciousness lives the adventures of the night with the same intensity of the day; the images of dreams present themselves to us with evidence in no way inferior to waking images, evidence that enabled Descartes to declare the fallibility of the senses and the primacy of ideas of reason, but that from a phenomenological and existential perspective instead reveals the solid nature of intentional foundation in the continuity of the experience. (16)

The author seeks to analyse the dream outside instrumental rationality, placing the dream in a broad dimension in what she calls "multiple states of consciousness."

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[11] Luisa de Paula, "*Il sogno tra radicalismo scettico e realism onirico," Isonomia* (Urbino: Università di Urbino, 2008).

[12] In the article, the author engages in a dialogue between dream and reality, presenting the hypothesis of a double line of continuity between modern philosophy and Freudian psychology, between Aristotle and an integrated vision between the current perspective on dreams. The author seeks to develop an epistemological paradigm to integrate neuroscience, existentialism, and phenomenology.

From the point of view of *Erlebnis*, experience and the real world, sleep, and wakefulness are not simple states of consciousness but broad theoretical classifications that include within themselves multiple types of states of consciousness. Many states of consciousness are not attributable either to sleep or being awake. (17)

In brief, for the author, the common and general notion that night dreams are expressions of the unconscious is rationalistic and limited. The night is also the place of the conscious; therefore, the dream is a language of the conscious, the unconscious, and the person in his or her totality. Dreams are profound expressions of interiority, with their energy and vitality. Dreams are affective, cognitive, and neurological expressions. Dreams are expressions of inner strength that inspire, awaken, and energise human and spiritual activities.

Considering this new study, and from a more psychology focused perspective, Bozzolo proposes a new interpretation, seeking to demonstrate that Don Bosco's dreams open the way to a more complete and profound understanding of his interiority, motivations, desires, and affectivity.

In his dreams, Don Bosco expresses the world of his emotions: his fears, his anguish, his instinct for defense, his way of loving, his immense joy and sense of fulfilment in seeing, through his dreams, the presence of God and Our Lady. (6)

In one of the recent studies on Don Bosco and emotional intelligence,[13] the author, San Martín, analyses the "Letter from Rome" from an emotional intelligence perspective. Although it is a simple application of Don Bosco's criteria for developing emotional intelligence, the author starts from the principle that Don Bosco was a person of great emotional wealth who knew how to live his emotional life in a free and profound way and to develop his educational system from his emotional intelligence. He cites the studies of Antonio Damásio, a neurologist who maintains that emotions are innate; we are born with them, but that during life, we learn to "connect emotions through the system of facts, with an emotion that is already there." (19)

The merit of this study lies in its approach to neuroscience. It seeks to demonstrate that emotions are related to our intelligence and that to better understand Don Bosco, we must look more deeply at the role that our cerebellum, limbic system, and thalamus play in our emotional intelligence.

Developing a broad panorama of studies on Don Bosco's spirituality and pedagogy, Fr Afonso de Castro seeks to establish the dialogue of the Preventive System and Salesian spirituality "correlated with the cultural characteristics of today." (11) His book *Carisma para educar e conquistar* (2002), describes what spirituality and Salesian spirituality are today.

De Castro rightly attempts to describe the tremendous epochal changes we have experienced through globalisation, simultaneity in communication, the sense of ecology, the extraordinary ecosystem of the planet, the important discoveries of medicine, artificial intelligence, and the discoveries of neuroscience. From this analysis, he proposes a deeper and more current interpretation of spirituality, considering the

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[13] Cf. José Antonio San Martín, *10 Critérios de Dom Bosco para desenvolver a inteligencia emocional* (Brasilia: Edebê, 2017).

question of subjectivity, desire, the psyche, aesthetics, pleasure, planning ability, and the inner dynamics of joy. (15-26)

The great endeavour and originality of Fr Afonso are to establish a re-reading of Salesian spirituality and pedagogy, beginning from anthropology, psychology, and aesthetics, seeking to demonstrate its vigour and originality in the "attempt to present it in a broader language, to express current tendencies about education and efforts to cultivate a striking spirituality." (11)

5. Dreams Reveal an Inner Life

The studies on Don Bosco's dreams, edited by Bozzolo, analyse several aspects, for example, the psychological depth revealed in them: the world of emotions, fears, insecurities, self-defence, and the joy of perceiving that something divine is being realised in what he does. In this sense, dreams become a faithful narrative of an inner portrait, his way of speaking about himself, of translating his deepest feelings and desires.

Analysing his dreams, Don Bosco described them as true narratives with strong sensory and symbolic appeals, using images and environments where animals, nature, geographical spaces, angels, demons, Our Lady, and other characters are described. He always charted his dreams in a well-scripted way where each has a beginning, a middle, and an end, with powerful expressions of tragic and epic sentiments carrying a Christian message. From the point of view of virtual reality, creating interactive environments, or the sense of telepresence, how might we associate the ambience of his dreams with such environments?

From the point of view of the psychology of attitudes and motivations that demonstrate the creative vitality of the person and their entrepreneurial capacity, how can we better understand the inspiring power of love in Don Bosco? How can we know the power of his desire, psychic strength, and human subjectivity from studies of the unconscious?

From his childhood, the figure of Don Bosco offers us a great field of study and a wealth of information. This allows us to carry out an interdisciplinary study encompassing various human realities (research topics) and, therefore, a panorama for scientific investigations.

The rich and vast material of his childhood, adolescence, youth, priesthood at the age of 30, 40, 50, and his final stage of life is like a thread where it is possible to establish a particular sequence coherent with his inner life, his intentions, his personality and decisions. The loss of his father in his infancy and the educational presence of his mother are aspects that would influence, for example, John Bosco's values and behaviour. How would this loss and the educational presence of his mother influence John Bosco in the decisions he made in life, and, above all, how would he develop his communication skills?[14]

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[14] One area of study in neuroscience that analyses communication skills and the power to make decisions in a person is Neurolinguistic Programming (NLP). "The name Neurolinguistic Programming summarises its three pillars of support. The 'neuro' refers to the mind, where we process our experiences through the five senses. 'Linguistic' refers to language or other forms of non-verbal communication. The term 'programming' can be understood as a comparison between the human mind and a computer: the brain is the 'hardware,' while the mind, thoughts and behaviours make up the 'software,' that is, the program that defines how the computer interprets the data received." See: http://www.pnl.com.br/admin/assets/uploads/anexos/a-pnl-e-sua-vida-pessoal1.pdfhttp://www.pnl.com.br/admin/assets/uploads/anexos/a-pnl-e-sua-vida-pessoal1.pdf

6. Defining Spatial Imagination

A central premise of this study is that spatial imagination[15] is a fundamental aspect of Don Bosco's affective cognition. Why choose spatial imagination as the starting point for this study?

First, spatial imagination, whether from the point of view of affective and cognitive psychology or the point of view of neuroscience, offers an opening for an interpretation with new complementary epistemological possibilities. Second, spatial imagination allows a phenomenological reading, offering data and information open to a better dialogue with today's anthropological and psychological postulates. Third, Don Bosco's writings provide a vast and profound encyclopedia of elements that his spatial imagination had discovered.

In recent decades, the development of the concept of spatial imagination has expanded and gained scientific consistency within the broad scenario of the study of the human mind. Researchers have recently been very interested in and attentive to studying the human mind. Researchers consider the human mind the most complex object in the universe, with its immense network of molecules, cells, circuits, and systems connected to our perceptions, cognition, emotions, memory, psyche, thought, language, and types of intelligence.

Spatial imagination is a new area of science. Studies by Gregory and Colman (1995) suggest that we develop spatial imagination in childhood. Spatial imagination identifies itself with relationships between the development of the structures of the mind and the connections that help people to do things.

Two authors who have extensively developed the study of spatial imagination are Sambrook and Zurick (2010). The two authors maintain that the genesis of spatial imagination is our values, beliefs, convictions, culture, and interests. "Spatial imagination is connected not only by seeing different places and situations but by seeing places and situations differently. This way of seeing is deeply connected with our cognition and behaviour. We learn spatial information through our individual experiences." (20)

Practically, our brains are the organisers of these things. The brain is like a vast, complex file where information is stored in memory files. Therefore, our brain is formed in interaction with the reality of things. To better visualise these concepts, let us imagine the world of architecture, art, painting, and religion. To create symbols, we resort to the square, the circle, and the geometric and mathematical elements that favour the order and aesthetics of how we organise them.

Fundamentally, we learn what we visualise. The learning process is based on spatial imagination. Psychology and the most recent neuroscientific studies show that the spatial dimension of the human mind reveals how we learn to deal with reality from childhood and how we establish relationships with people and natural objects.

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[15] In this study, we will refer to the terms "spatial imagination" and "geographical intelligence." These two terms are related and have the same meaning. Spatial imagination is human intelligence in its totality (cognitive and neurological affective).

According to neuroscience, the various areas of the human brain interact to construct our geometry of thoughts and feelings. For a study of human language, how people make decisions, and how someone interprets reality, it is necessary to see their development process in the various areas of the human brain.

6.1. Spatial Imagination and Neuroscience

When discussing spatial imagination, we must define the terms well and map out the great complex of psychology and neuroscience that constitutes it and its relationship with the human brain, the nervous system, memory, and intelligence.

Understanding our spatial imagination requires prerequisites concerning psychology and neuroscience. Definitions of the human brain and neuroscience[16] are necessary.

Let us look at the basic idea of neuroscience. In practical terms, neurons are the basis for processing information we receive in the brain. We have about 100 billion neurons—human gateways—that form the complex and powerful communication system that connects us to the outside world. Our perceptions of the outside world depend on these neurons' chemical and electrical connections, defining how we learn, relate, love, and interact with reality around us.[17]

The neuron is like a wire that passes information to another neuron by an electrochemical process, so these electrical signals propagate as waves through the axons. These impulses are transformed into chemical signals in the synapses, reaching the brain, which, like an immense server, responds to the signals sent by the neurons.

Neuroscience studies the nervous system's complex relationship with the brain and other human organs. Other areas of neuroscience branch out and seek to understand, for example, how our intelligence is formed, the relationship between emotions and intelligence, and the relationship between language and the ability to make decisions. In the area of science called artificial intelligence, neuroscience has been a reference for understanding the relationship between human beings, computers, and virtual reality.

Several specialists from different areas usually study neuroscience. Due to its complex ramifications, there are several neurosciences. Each one seeks to investigate the various connections of the human mind with the complexity of the person's thinking, feeling, and acting.[18]

Currently, the Society for Neuroscience[19] seeks to study how the essential principles and fundamental concepts of neuroscience refer to the human mind as the most complex organ. For example, how neurons

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[16] One of the foci of neuroscience is to understand the functions of all layers of the nervous system. This complex branch of nerves and cells transmits information back and forth between the mind, the spinal cord, organs, and limbs. The brain and spinal cord are considered the central part of the nervous system. The peripheral nervous system includes the somatic system and the autonomic system. It is responsible for the voluntary control of the muscles and also the involuntary regulation of bodily functions such as heartbeats, digestion, breathing, eye movement, urination, and sexual desires.

[17] See further definitions in Gildásio Mendes Dos Santos, *A Arte de Comunicar*, (UCDB, 2002) and in Sidarta Ribeiro, "Tempo de cérebro" *Estudos Avançados* 27 (77), 2013: http://www.scielo.br/pdf/ea/v27n77/v27n77a02.pdf

[18] See Sidarta Ribeiro, "Tempo de cérebro."

[19] See https://www.sfn.org/

communicate by using both electrical and chemical signals, how genetically determined circuits are the basis for the formation of the nervous system, how life experience can change the nervous system, and how intelligence manifests itself when the mind reasons, plans and solves problems, to the human curiosity to understand and interpret the world around it.

Neuroscience is a science of the present and the future. It uses modern technology and biomedicine to conduct its experiments and analyses. It offers us parameters for analysis from references directly related to how the human mind works. For example, from Leonardo da Vinci's drawings, it is possible to analyse various aspects of his personality, feelings, artistic intuitions, and intelligence. An analysis of Shakespeare's literary texts allows us to analyse his way of creating characters, establish the emotional impact of his characters' language, or outline the psychological space of his characters.

Let us see how spatial imagination studies contribute to a more precise knowledge of how we create the notion of time, space, relationships between one place and another, colour differences, and how we establish and differentiate the most complex relationships in our daily lives.

6.2. The Human Mind Through Studies of Spatial Imagination

For scholars of spatial imagination, the human mind is a map that develops and orientates us before reality through cognitive-affective and neuroscientific processes. What we imagine and how we deal with reality, how we understand our place in the world, our beliefs, perceptions, attitudes, behaviours, and choices are expressions of our way of mapping the world, says Gregory (1994): "We carry with us mental images of the world, the country where we live (north, south) and the street our home is in."

Imagine you are in your office or your living room at home. You organise these environments by creating a "geography of space," where a table is located in a practical place for you to work at. Perhaps there is a vase of flowers on the table or a picture on the wall. In other areas, there is a telephone, stereo, books, magazines, CDs, etc. We organise our "archives" and put things in order so that our objects are organised to create meaning.

It is like this in the kitchen, living room, office, church, football stadium, and garden at home. We are beings who organise the world around us. The question of why this organisation exists is very simple: our brain is the organiser of these things. The brain is like a vast, complex file that stores, processes, generates, and dynamically organises information.

What exists around us, designed, organised, and built, is the result of processing information in interaction with the reality of things.

Spatial imagination is developed with our geographical imagination. For Gersmehl and Gersmehl (2008), geographical/spatial imagination is a way of thinking about the world and considering the importance of places and the relationship between "our places" and "the places of others." The term covers a variety of meanings, including mental images of people, languages, and cultural expressions of their different environments.

In the relationship between spatial imagination and anthropology (Barkow & Cosmides, 1992), spatial imagination is studied in terms of its relationship with culture, religion, and beliefs. From the point of view of anthropology, spatial imagination is how we interpret or see the world from our perspective. Therefore, our way of interpreting is based on language, culture, environment, ethnic groups, religion, and many other factors.

Therefore, how we see the world around us is influenced by many factors, including social class, education, and personal and collective beliefs. Geographical imagination – spatial – plays a significant role in shaping our thinking about the social world and our way of thinking.

Interestingly, regardless of the degree of studies and knowledge, human beings are intrinsically the organisers of their social, cultural, and religious reality. Let us take as an example an architect from a European country, a musician from Asia, and a leader of the indigenous rituals of the Yanomami peoples of the Amazon. The basis of knowledge regarding space, time, and coordination of geographical spaces between mind and reality has common foundations.

When we try to analyse the affective/cognitive effects of the images and sounds of music, films, and advertisements, we notice that we respond psychologically to symbols, words, and images that impact the human person.

Take, for example, studies carried out by Advertising and Virtual Reality.[20] Several of these studies have found that the psychological effects of graphs, drawings, and images on communication occur on three levels: low, medium, and high.

Other studies in Advertising (Leslie, 1956; Stone, 1995) have been done to test product effects on consumers. These studies seek to test the impact of products based on how they are presented to the public and how they are technically elaborated. For advertising, image is one of the main elements of communication. Several questions are asked before preparing an advertising campaign for a particular product. What physical and psychological effects can be caused, for example, by a vertical or horizontal line, the type of colour, the point relationship, the combination of lines, symmetries, asymmetries, etc?

Looking at things from a historical level helps us better understand how, many years ago, artists, architects, and religious people knew the impact and interaction between the human person and the reality of symbols and sounds.

6.3. An Interdisciplinary Perspective on Spatial Imagination

Leonardo da Vinci,[21] the great Italian Renaissance artist, brilliantly combined the laws of mathematics with principles of medicine related to the rules of art. Leonardo's drawings express the numerical and

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[20] Studies in Virtual Reality demonstrate the relationship of the mind to objects and the mathematical relationship between them. Polygons are used in virtual reality as numerical representations. "Objects (triangles or other geometric shapes) are drawn in real-time as solid objects on the screen" (Biocca and Levy 1995, 180).

[21] For Leonardo da Vinci, art and science are directly linked. Leonardo, as an artist, develops the capacity for observation, paying special attention to the details of the human body. He studies the details of human nature, of the human body, from his knowledge of geometry, engineering, mathematics, medicine, and the art of painting. Therefore, with the eyes of a scientist and researcher, he begins to paint and draw with an incredible ability to put together the technical, aesthetic, and psychological aspects. In particular, the nature scenes found in the background of his paintings express the scientific themes related to water, air, and earth.

mathematical relationship associated with the human body, and the design is expressed through paintings and pictures. The human body is seen as the place of the synthesis of the earth (square) and the sky (circle).

Studies carried out by Clark and Baron (1996) based on Leonardo da Vinci tried to demonstrate that the human mind naturally tries to connect the dots, like in a puzzle, putting the data together to form the whole.

For Leonardo, a painting is like the human person. It is drawn part by part, like a great machine that must be understood as part by part and, if possible, in its whole. The stones are not simple decorations or silhouettes of the drawing. They were part of the 'bones of the earth,' with an anatomy of their own. The clouds were not simply drawings that were the result of an artist's imagination, but a union of tiny drops formed from the evaporation of the sea, and by a process of evaporation, becomes rain and rivers. (20)

This natural inclination of the person to connect the parts to form the whole is related, for example, to the geometry of things. The genesis of spatial imagination can also be explained by some studies by Taylor (1964) and Gimple (1984). They have demonstrated how mathematical and geometric law expresses how the human mind works, organises, and relates to the objects and colours in the outside world. This relationship between the mind and objects in the outer world (e.g. images, colours, music) creates a psychological state in the communicative act.

For some authors, the human person is a kind of mind map in the process of learning external reality (Down, 1977). This mental process is formed from the person's interaction with their environment, culture, and social system (Sack, 2003; Tuan, 1977).

In the interaction between a person's internal learning processes and reality, we develop through language, the representation of things, meaning, and interpretations. This process of spatial creation has psychological effects.

Taylor (1964) describes how technical elements in a painting influence the result of the person who sees it. For example, he talks about visual balance. To create a visual balance, several elements are considered by the artist, such as the proportion of the image, the symmetry, the axis, the movement, the relationships, the rhythm, the positive and negative areas, and the use of colours so that they can create a positive or negative effect. The artist, according to Taylor, knew how to deal with these elements when he (or she) painted a picture, sculpted an image, or built a church.

The human being builds up spatial imagination in the contact of the human mind with reality. Some studies seek to relate, for example, architecture with spatial imagination.[22]

Taylor (1964), an architect and graphic engineer, conducted exciting studies in this area. In his book *Design and Expression in the Visual Arts*, he studies how humans used geometric elements to represent the sacred when they started to create religious symbols. Why the square? He says that "the square does not

[22] Jean Gimpel (1984), in *The Cathedral Builders*, describes the development of technology used in the Medieval Age for church building. According to him, the engineers of that period used iron, bronze, and spatial structures according to engineering techniques developed in that period to build houses, walls, towers, churches, and roads.

exist in nature; it was created by the human mind: dreamed and built by the human being." What does the circle mean? The author defines the "circle as indicative of the totality of the human person." (34)

According to Taylor (1964), the symbolic relationship between the square and the circle represents the relationship between the person and the divine, the physical and the spiritual world, the perfect and the imperfect. Furthermore, the integration between the square and the circle is a metaphor for the balance between earth and heaven. In the past, religions used two geometric forms that prevailed in the universal structure of sacred buildings: the circle and the square. It is through the junction of these two primary symbols that sacred architecture is essentially formed.

Whether in ancient architecture and arts or religion and the various scientific discoveries in human history, the dimension of spatial imagination has a fundamental function in the way information is processed in the interaction between the person and reality.

Our spatial imagination is formed from this geometric grammar that we build to interact, interpret, and situate ourselves within our world. The whole cognitive/affective process elaborates the meanings of visual reality through language, codes, and symbols, allowing knowledge to be elaborated in the individual's interaction with reality.

If, on the one hand, geometric grammar allows us to interact with the reality of the world (which has a similar format to the human mind), as we have seen with the circle and square symbols, we need to explain better how our way of making choices, expressing our freedom and making decisions are related to spatial imagination (Baker, 1961).

According to Zambrook and Zurick (2010), "Our spatial decisions are born from our beliefs, values, and assets that we acquire within our cultural environment. In this sense, multiple perspectives of spaces are influenced by factors such as idiosyncrasy, culture, representations, and technology."

The existence of various spatial perspectives has led scholars of geography to affirm that in human beings, we have a 'geographical imagination' that is dependent not only on the nature of places but also on how we think and interpret these places. (Gregory, 1994)

Scholars of spatial imagination believe that through the cognitive-affective process of each individual, it is possible to build and develop their knowledge and behaviour, both on a personal level and in their social and cultural environment (Blaut, 1991; Hanson, 1999).

With our development and knowledge of the world around us, whether as children, adolescents, or adults, we develop social and cultural relationships that give us the skills to interact and expand our perceptions and spatial systems. This perception and attitude towards reality guides our behaviours.

Spatial imagination is the starting point of the universe of new technologies and the virtual world.[23] Computers and cell phones are designed from the perspective of a geometric configuration similar to the

[23] The journal *Scientific American* (April 2001, 66-75) presents a very well-organised review on the studies and perspectives of the use of tele-immersion in the information age. Written by Jaron Lanier, considered the father of virtual reality, the article gives a perspective of how virtual environments – virtual rooms, whether for business relations, education, or business – will soon be part of our style of communication. Lanier gives an insight into the technology used for videoconferencing and the use of video over the internet with 3-D images. Lanier, a computer scientist, and a group of researchers from the University of North Carolina, Chapel Hill, University of Pennsylvania, and Brown University work together to develop virtual relationship

human body. For example, the evolution of technology in how new computers are designed responds to our geographical imagination. We organise data, relate images with information, and establish maps in the real world or the virtual to communicate, produce, and distribute knowledge.[24]

Therefore, we have seen that the human mind's relationship to things constructed and designed in society and cultures is an archetype. The mind projects its format/shape and dynamics; in interaction with reality, it projects its format. Thus, they form a whole. In this regard, we can affirm that the way people think and feel is expressed in the projection of religious symbols. Computers, iPhones, and applications are designed according to the format of the human mind. When I draw a map of a place, I express an intention. When I put the GPS into action and define a direction, I am exteriorising a desire, a goal. The geography of reality is the expression of the inner geography of the human mind.

By analysing maps in relation to human knowledge and behaviour, Sambrook and Zurick (2010) show us, for example, how the individual expresses spatial knowledge through the traditional maps used for hundreds of years by scholars, politicians, organisations, and individuals in all cultures.

From these definitions of spatial imagination, the next step is to establish a possible genesis for Don Bosco's geographical/spatial vision.

7. Don Bosco's Geographical Insight

To apply the concepts of spatial imagination to Don Bosco's educational system, the first questions we must ask are: Was Don Bosco interested in geography? What shows this interest, and how does this interest relate to his affective/cognitive intelligence?

From these initial questions, the second question is: how did his spatial imagination work in relation to his inner dynamics and immensely creative, working, and entrepreneurial capacity?

In one of the passages of Don Bosco's *Biographical Memoirs*, his biographer[25] tells us that,

Don Bosco's competence in geography helped secure a splendid position for an Oratory boy named Marchisio. In July 1863, the Department of Communications published a new postal map of Italy, eight maps of Italian provinces, and a timetable of mail pickups and deliveries patiently drawn up by Marchisio

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meetings in which a person present in another state or country can attend a meeting in North Carolina as if the person were physically present there. Image, sound, and feedback have technical qualities comparable to a normal conversation between two people.

[24] About ten years ago, the computer was seen as a machine, a piece of hardware, as if it were a new typing machine, augmented, fast, capable of storing more information inside it and with floppy disks, offering graphic possibilities and certain designs. More recently we have moved from the computer seen as a piece of software to the operating system. The computer is now seen as a system capable of organising information, but above all as a machine capable of working with systems and software, being coupled with other media such as television, film, video, research tools, and finally, a machine that not only creates and stores information, but that can also be used as an integrating system with other media.

Recently, the computer has moved into a new phase: virtualisation and human mediation. Computers are seen as a medium that responds more appropriately to the way the human body works and resembles the way a person responds physically, psychologically, and socially. Computers respond to how the human mind works, how the person behaves, and lives. This is one of the sectors of communication that has made a great contribution to the human being's relationship with computers, the Internet, media in general, and virtual reality.

[25] Don Bosco's memoirs known as *Le Memorie Biografiche* were recorded by Giovanni Battista Lemoyne, Angelo Amadei, and Eugenio Ceria. All citations signalled "BM" refer to the English translation: G.B. Lemoyne, Angelo Amadei, Eugenio Ceria, *Biographical Memoirs of St. John Bosco*, 19 Vol. (New Rochelle: Salesiana Publishers, 1965-2003).

in the course of several years. Don Bosco had advised him to undertake this project and had encouraged him to bring it to completion. Marchisio often came to the Oratory to work under Don Bosco's guidance. Later on he was appointed postmaster in Rome itself. (BM VII, 274)

According to the *Biographical Memoirs*, one afternoon in 1883, Fr Philip Rinaldi entered Don Bosco's office in Turin for an informal conversation and was surprised to see Don Bosco with a globe on his desk and his eyes lost far away in the immensity of the places on it, and with one hand he was caressing Brazil. According to Lemoyne, one day before this meeting between Fr Rinaldi and Don Bosco, Don Bosco had dreamt that he had travelled all of South America from end to end.

D'Acquino (1988) speaks of Don Bosco's great interest in studying geography: "Since 1860 Don Bosco had been studying history books and geographical maps of distant lands (America, Africa, and Asia)." (265)

Reading the *Biographical Memoirs*, the Letters to Missionaries, and the *Memoirs of the Oratory* offers us a true encyclopaedia of spatial, geographic, and geometric drawings of the realities that Don Bosco studied, planned, and executed. An analysis of dreams from this perspective demonstrates that Don Bosco always offers a spatial outlook on what he dreams. Space and time interact continuously and sequentially in his dreams.

Don Bosco's interest in geography is not only from the perspective that he was interested in expanding his Congregation. Geography is not simply a science of mapping, information, directions, and descriptions of nature, which is also of interest to Don Bosco. However, the fundamental point for understanding Don Bosco's geographical imagination is that it was inherent to his cognitive/affective intelligence and the expression of his creative and imaginative interiority.

Don Bosco's interest in geography is not just when he begins to dream of and plan for mission lands. He attempts to dedicate himself more intensely and organise himself in the study of geography. Fr Barberis says,

I took two maps, one of Patagonia and the other of South America. Don Bosco and I began to study the geography of Patagonia in detail. We spent much time exploring its characteristics, such as the gulfs, the Straits of Magellan, and the outline of the islands.[26]

Don Bosco's spatial imagination is rooted in his creative imagination, the expressiveness of his desire, his psyche, his interiority, and his complete way of acting.

Don Bosco's spatial imagination develops as he grows up in the cradle of his family, through his studies, his outlook as a new priest, as an educator, in his way of designing his educational system, his way of dreaming, in his writings, and in his capacity to plan and implement the foundation of the Salesian Congregation and to project it on a worldwide level. Don Bosco dreams, draws, projects, and executes things within a symmetry expressed in his affective, cognitive, and complete imagination.

This study assumes that Don Bosco's spatial imagination developed from childhood. How can we make some statements and inferences about the development of the spatial imagination of John Bosco, the boy?

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[26] ASC A001 – *Cronichette* – Barberis. Cited by Lenti, Vol. 3, 226.

In the narrative of his life in the *Memoirs of the Oratory*, he writes straightforwardly and transparently about what he liked to do and how he was developing his skills in music, games, theatre, and tailoring, as well as his capacity for social relationships and leadership among his friends.

This convergence of Bosco's skills as a boy shows that he had multiple and practical intelligences, which always saw him as the leader in his activities. A glance at Don Bosco's abilities gives us information on his intelligence.

Lenti (2012), writing about Don Bosco's abilities (101), says he possessed musical gifts. "He played and composed music." He says that "in 1845, Don Bosco himself began to teach music to young people to the admiration of musicians and educationalists."

Don Bosco himself says: "Since I had a good voice, I took up music wholeheartedly. In a few months, I could take the stage to accompany him [John Roberto] with fair success." (MO 49)[27]

Apart from music, he speaks of his skill with games:

In the midst of my studies and other interests, such as singing, music, speech training, and dramatics, which I undertook wholeheartedly, I also learned a variety of new games: card tricks, marbles, quoits, walking on stilts, running and jumping, all of which I enjoyed and in which I was by no means mediocre, even if I was no champion. (MO 98)

His agility in working with clothes, fabric, and sewing demonstrates a simple but expressive kind of "engineering" the way John Bosco could apply his multiple intelligences within areas related to measurements, sizes, and spaces. In the *Memoirs of the Oratory*, he writes: "Before long, I was able to make buttonholes and hems and sew simple and double seams. Later, I learned to cut out underwear, waistcoats, trousers, and coats. I like to think I became a master tailor." (MO 49)

Don Bosco also had an excellent ability for games. We know from Don Bosco himself that he developed these skills very well.

He writes in the *Memoirs of the Oratory*: "By the time I was eleven, I could juggle, do midair somersaults and the swallow trick, and walk on my hands. I could walk, jump, and even dance on the tightrope like a professional acrobat.*"* (MO 28) He then goes on to say:

At Becchi, there was a field in which grew several trees. One of them, a pear tree that is still there, was very helpful to me then. I used to sling a rope to it from another tree some distance away. I had a table with a haversack on it and on the ground a mat for the jumps. When I had everything set up, and everyone was eager to marvel at my latest feats, I would invite them to recite the rosary and sing a hymn. (MO 28)

These artistic skills reveal much of Don Bosco's intelligence. It is, therefore, part of his creative imagination, inner strength, and ability in various areas of knowledge. Broccardo (2005) says, "Don Bosco's daring, courage, and creative imagination can be highlighted." (7)

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[27] All citations signalled "MO" refer to John Bosco, *Memoirs of the Oratory*, trans. Daniel Lyons (New Rochelle: Don Bosco Publications, 1989).

7.1. Don Bosco's Multiple Intelligences

According to Gardner (1993), from a systemic view of human intelligence, we have linguistic intelligence (related to written and gesture skills); logical-mathematical intelligence (numerical, logical skills); spatial intelligence (skills with geometry, mental images, and symbols, colours, drawings); musical intelligence (skills with sounds, rhythms, musicality); body and synesthetic intelligence (motor skills, dance, gymnastics); intrapersonal intelligence (ability to deal with feelings, empathy); interpersonal intelligence (ability to interpret words, gestures, and latent intentions); naturalist intelligence (taste for nature, animals, vegetables, climates, human survival, planetary sense).

Gardner (1993) has contributed his notion of multiple intelligences to a broader vision of human intelligence that is not simply reduced to a dual vision between what we traditionally call the rational (cortex) and affective (limbic) zones. Gardner's discoveries align with what neuroscience has discovered: that human intelligence is more complex and vaster.

When we sought to apply this notion of multiple intelligences in harmony with Don Bosco's abilities, we perceived that he had practically all the intelligences described by Gardner. More importantly, studying Don Bosco's intelligences could open us up to possibilities for a better understanding of his psychological and spiritual dynamics.

The expressiveness of the young Bosco's systemic intelligence, we could say, calls our attention to how, as someone educated in a traditional, linear (in pedagogical terms) culture, he was capable of developing his multiple intelligences.

Educated in the traditional religious context of the time, Don Bosco developed his affective and cognitive dimensions wholly and extraordinarily. As we will try to demonstrate in this study, it is surprising how Don Bosco designed and practiced his Preventive System from a systematic perspective of the human being.

John Bosco lived in a traditional Church culture where Thomist theology was in vogue. Philosophy had its Aristotelian-Thomist, rationalist bias based on logic and metaphysics. In this universe, knowledge is fundamentally analytical, discursive, and linear. All of the Church's theology and education was based on these concepts. From catechism to liturgy, from the classroom to social environments, an education focused on linear concepts dominated. John Bosco grew up in this environment, but at the same time, he knew how to individualise his potential and, in a free and creative way, committed himself to developing his abilities.

Reading the *Memoirs of the Oratory* reveals fascinating data on Don Bosco's intelligence. Ever since he was a teenager, he stood out for his ability to relate, for example, create friendships, get to know his colleagues, and interact with them.

In the same way, music, theatre, games that he mastered very well, and his magician skills, demonstrate how he developed a proper geometry of human relationships with his family and friends.

One of the areas of research that is of continual interest and growth is learning through games that multiply through the internet, smartphones, and other devices. Children and adults have both aroused great interest in digital games.

Qualitative and quantitative studies on games have sought to raise questions to verify the benefits of games in learning.[28]

These studies have shown, for example, how the format of a game can encourage learning at school to a greater or lesser extent. From cognitive/affective psychology and neuroscience concepts, researchers try to identify which games can be included in the subject curriculum.

Other studies have investigated the correlation between games and the sense of cooperation between students in a given classroom. They have shown, for example, that games motivate students to create and expand their knowledge and encourage them to create a network of learning and collaborative knowledge.

Don Bosco's great interest in and dedication to games demonstrates something greater about his abilities and his method of education.

Lenti (2014) says,

"Don Bosco recognised the usefulness of the game not only for leisure but also for the integral development of the young person. For him, educating meant helping the young person to mature. The game is a necessary activity for the young person to reach maturity. To help them to sublimate particular inclinations, to get to know each other through competition with the other, and to recognise and control their own impulses". (99)

Don Bosco's interest in and practice of involving young people also helps us understand his emotional intelligence.

7.2. Don Bosco's Emotional Intelligence

Don Bosco's life offers us many moments in which he expresses his affectivity, openness to human relationships, and captivating way of communicating with people. His educational practice was founded on and experienced in the practice of love. Don Bosco captivates young people and marks the Salesians with his way of loving and expressing love: "Love and make yourself loved" was one of his mottos.

Considering the culture and mentality of the time, we need to see more deeply what makes Don Bosco a person who develops and expresses excellent emotional intelligence.

The study of human intelligence has significantly developed in recent decades. In Don Bosco's time, intelligence was little studied, and the fundamental concept was what we had until a few years ago. Studies on intelligence focused too much on the cognitive aspect, strengthening the notion that the IQ (Intelligence Quotient)[29] is the privileged and primary factor of a person's intelligence. The traditional dualism between emotion and reason has entered the culture and mentality of people and religion itself.

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[28] For a review of various studies on games and pedagogy see: https://msu.edu/~milczyn1/artifacts/literaturereview_karen_milczynski.pdf

[29] For many years, studies on human intelligence have been carried out on the mathematical equation (IQ - Intelligence Quotient). Several sectors in the field of psychology, education, and neurology have used methods of intelligence verification based on the principle that the area of the cortex is solely responsible for the cognitive part of the human being. The tests that define intelligence based on formal and mathematical formulae are still found today in schools and institutions.

Picard (1997) points out that this way of seeing the emotional dimension, in contradiction to the rational one, has created suspicion, neglect, and prejudice toward the emotional part of intelligence. This author criticises, for example, the patterns of tests and experiences that consider the intelligent person to have a high IQ. Let us consider the old concept that men tend to be more 'intelligent' or 'rational' than women, and this mechanistic view's ethical, social, and educational consequences.

One of the most outstanding neuroscientific scholars, Cytowic (1996), has developed many studies to demonstrate that the limbic system is the basis of emotions, memory, and attention.

The limbic system contains various connections to the neocortex, so the human brain's function is not purely limbic or cortical but a mixture of both. Cytowic's studies propose a complete change in how the cognitive (rational) and affective (emotional) dimensions are related to each other.

This way of conceiving the human neurological system redefines the concept of perception. Therefore, perception should be seen as occurring not only in the cortex area but also below in the limbic cortex, which is primarily the place of emotions. In summary, perceptions carry emotional and cognitive elements within themselves.

Goleman started from the same principle as Gardner, emphasising that emotional intelligence is more important than traditional rational intelligence. For Goleman, emotional intelligence involves self-motivation, empathy, personal awareness, persistence, social skills, communication, and creativity.

Taking up Don Bosco's various skills and analysing them from the perspective of these new studies on intelligence, we can see that Don Bosco developed his intelligence in multiple ways, applying it in a practical way in life, in his relationships and undertakings.

Don Bosco's affective expressiveness demonstrates that despite his reserved Piedmontese style and the conservative religious culture of the time, he was a complete person in his inner dynamic of freely developing all his gifts and putting them into practice in his daily life, be it in his creative power, in his way of relating, in his inner vitality to love and work, and in his capacity for enterprise.

Socially, Don Bosco had a great capacity to relate to a poor boy, a prince, or the Pope. His encounters are always striking, expressive, and captivating.

Today, some studies propose that people have what is called social intelligence.[30] Hence the ability to relate with a poor boy, a prince, or the Pope. Social intelligence is an area of study that has been developed more recently and seeks to understand better how people develop their ability to react appropriately to their social environment and develop healthy and productive relationships. According to neuroscience, social intelligence consists of social perception (including empathy, compatibility, emotional intelligence, and social cognition) and social faculties (including synchronicity, self-presentation, influence, and attention to others).

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[30] A study developed by Reeves and Nass (1996) in the area of computing, *The Media Equation*, assumes that the relationship between a person and a television or a computer is a social relationship. The central notion of *The Media Equation* is that "Affection is a natural and social aspect of human communication. Therefore, people naturally express affection, even when they interact with computers or watch television" (Picard 1997, 14). Reeves and Nass (1996), after hundreds of tests analysing how people communicate socially with the media, noted that even when we are not rationally aware of our relationship with people, computers or television, there is emotional communication.

Don Bosco's psychology reveals essential aspects that help us better understand who he was and how he was educated. According to Giacomo D'Acquino (1988), Don Bosco's psychological profile could be described as strong, dynamic, active, open, cordial, kind, and courageous, with a deep sense of duty and a clear awareness of his responsibilities. (50)

This information forms a kaleidoscope of Don Bosco's personality, abilities and aptitudes, capacity for relationships, and excellent memory.

An essential aspect of intelligence is memory. We have some data offering us information from his brilliant memory.

7.3. Don Bosco's Spatial Memory

Neuroscience has developed many studies on memory.[31] The central idea is that memory has multiple systems; that is, it can be understood through the mediations of different structures and systems of the human brain. The fundamental issue studied by cognitive neuroscience is that the human brain and the human mind process information in a more complex and total way, including not only the areas defined by psychology as places and parts where memory is produced.

Studies in this area have focused on multiple memory systems, checking the relationships between the processes of the mind and cognitive theories, with the aim of better understanding memory. For example, does memory work when we remember things? It certainly does. But what about the realities that are not remembered? One of the assumptions of this view is that memory is not only what is remembered, but latently, memory works in a more complex and whole way.

These discoveries about memory are in some way aligned with dream studies. The philosopher Luisa De Paula's (2017) new study showed that dreams have more complex dimensions and expressions than those measured between the conscious and the unconscious.

We do not have specific studies that explore the relationship of Don Bosco's memory with his abilities or the correlation between his memory, his abilities, and his educational attitudes (presence, affection, and care for young people).

From the *Memoirs of the Oratory*, we know that Don Bosco had a prodigious memory. He read a lot, especially the Classics. He spoke of his great motivation for reading and his pleasure in these readings.

He says, "Since I had an exceptional memory, I knew by heart long passages from the classics, the poets particularly. I could quote at will from Dante, Petrarch, Tasso, Parini, Monti, and others as if they were my own." (MO 98)

In revealing his tastes in reading, games, and arts, Don Bosco has offered us some elements for entering into his spatial imagination. The design of his educational model can offer us more elements for this understanding.

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[31] See the article in the following link on the neuroscientific perspective of memory: http://www.inference.org.uk/jmb86/memory.pdf

7.4. Don Bosco's Psycho-spatial Dimension

From his dreams at nine years of age until his last undertakings, Don Bosco lived a life of intense expressiveness of his interiority. His heart and mind were always in a movement of high creative and enterprising capacity.

Little by little, he developed an educational system and a religious organisation of immense size and proportions. Like in a kaleidoscope, he imagined his projects, mapped them, elaborated them with his Salesians, and impressively implemented them.

His educational method places the young person before human reality, with the potential open to freedom, creativity, art, pleasure, and beauty.[32]

According to D'Acquino (1988), "Don Bosco committed himself to developing in his young people the feeling of beauty, of the natural, of the aesthetic, and he did all this with the use of analogy, metaphors of nature, and poetic portraits of nature." (153)

We note a clear and explicit educational symmetry in the design of Don Bosco's pedagogical system. It is interesting to observe in his writings on the Preventive System how he draws a symmetry of well-delineated geographic spaces for his Salesians.

The courtyard, for example, is a geographical, educational place where the educational environment is built within a spatial outlook. The courtyard space was a special place for Don Bosco, whether in childhood, youth, or as an educator. "The courtyard, as it functioned in the oratory, was one of Don Bosco's original creations." (Lenti, 99)

The architecture of the educational place, including the courtyard, the church, the porticos, and the classrooms, expresses an educational spatial vision.

From the perspective of Spatial Intelligence,[33] space in a phenomenological view of things is formed by squares, circles, vegetation, rivers, gardens, rooms, avenues, fields, forests, houses, and buildings. Space is not an abstract concept. As children, we learn to navigate in spaces, giving meaning to them, finding directions, and moving within spatial realities.

According to Sambrook and Zurick (2010), sources of spatial information from the outside world are assimilated and harmonised from our innate inner knowledge of orientation and places based on our personal experiences. "Our sense of places involves our sense of self, emotional and intellectual connections, and our cognitive-affective processes motivated by our spatial imagination and decisions connected to them." They state "that our spatial behaviour depends on how we perceive ourselves and conceive places and their geographic relationships." (477)

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[32] Afonso de Castro develops these themes in his book: *Carisma par a educar e conquistar: Espiritualidade, alegria e prazer na educacao salesiana* (São Paulo: Editoria Salesiana, 2002), 71-101.

[33] Spatial intelligence is related to the concept of spatial imagination in this study.

In anthropology, many studies have been developed to demonstrate that people have an affective relationship with their homeland, culture, language, values, cuisine, and religion.[34] Many of these studies have focused on anthropological and cultural issues. These studies are essential and complementary to the view we are proposing in this work.[35]

New studies are being done to understand better the affective relationship with spatial projection, the planning to build and live, the affective aspects involved in the projection of great works, and the desire to expand a project and develop what is imagined.[36]

Don Bosco's emotional intensity can be analysed in his dreams. The studies conducted by Bozzolo (2017) show that he lived an inner emotional tension between what he dreamed, what he interpreted, and what he did to see his dream come true. An analysis of the dream at nine years of age from an emotional spatial perspective offers us a horizon of discoveries of Don Bosco's interiority. How did he develop and mature within himself the dream, the promise, and the steps to realise what was asked of him in the dream?

Immediately after his priestly mission at Valdocco with poor young people, Don Bosco experienced immense psychological tension while looking for a place to begin his work. He had the spatial imagination to find a place to house his young people. There was tension in finding a way to give them food, hospitality, and education. Space defines and expresses Don Bosco's intention of realising what he imagines. We also note Don Bosco's emotional intensity in analysing Italy and Europe's social, political, and ecclesial context.

Lenti (2014) states that Don Bosco was deeply involved in the politics of the Church, especially in his missionary calling and the expansion of his work. The dream he shares with Pope Pius IX is in the context of this missionary perspective of the Church. Lenti states:

Don Bosco's dreams, with the needs, desires, and possibilities they express, also occur in a context determined by the situation of society and the Church. Though Don Bosco's missionary awareness had a long prehistory, it reached its climax when the changes in the Church and in society made the participation of the Salesian Congregation in missionary activity become a vocation. (137)

For Don Bosco, geographical imagination is associated with love, the tireless seeking to realise the dream related to his mission. Running against time and without resources, Don Bosco managed things that required courage, determination, discipline, and workforce. His inner vitality is expressed in a nourishing and operative love. It is an immense and intense imagination that needs to be materialised in the name of a mission that he has introjected into the depths of his being.

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[34] Digital Anthropology. https://www.nelfuturo.com/home-antropologia-digitale

[35] There is an immense variety of studies in these areas. It is not the purpose of this study to mention these aspects systematically. For an in-depth look at these topics, see, for example, Stuart Hall et al. (eds.) *Culture, Media, Language* (London: Routledge,1980); Stuart Hall, *Critical Dialogues in Cultural Studies* (London: Routledge, 1996); Graeme Turner, *British Cultural Studies: An Introduction* (London: Routledge, 1990).

[36] Architecture, for example, is currently designed to the taste and desire of the people who will live in the houses to be built. In the digital universe, each person can decorate their iPhone with photos, colours, and sounds that they like. The world of fashion seeks to present clothes according to the taste of the client. Cuisine seeks to customise to attract its customers.

Don Bosco's spatial imagination, expressed through searching for places and implementing the Congregation, expresses a profound spatial psychology. It reveals the design of his educational system as a home that welcomes a safe environment, the presence of educators, etc.

Don Bosco's spatial imagination expresses a fruitful and creative spirituality, open to the new and the uncertain, courageous and with foresight. Only with this inner tension between dream-desire, desire-project, and project-realisation did Don Bosco successfully express, focus, and administer such a mission that he could successfully undertake.

However, to better understand the nature of Don Bosco's affective and cognitive expressions, we need to seek information that will help us form the basis of the psychodynamics of his spatial imagination.

8. The Psychodynamics of Spatial Imagination

To understand Don Bosco's educational perspective from the point of view of his spatial imagination and his geographical intelligence, it is necessary to look at the development of the imagination of the person in the phase of childhood from the perspectives of psychology and neuroscience.[37]

Research by psychologists and specialised educators tends to support a fundamental assumption of neuroscience that the areas of the human mind are destined for different types of spatial thinking, which are developed in childhood.

Considering the possibility of identifying the nature of the aspects that form the psychodynamics of Don Bosco's affective/cognitive/neurological development, we can make a possible projection of how his mind elaborated and processed images and then transformed them into messages through his dreams, writings, and way of communicating.

To do so, let us resort to studies that can help us.

One of the most consistent scientific studies on spatial intelligence and neuroscience has been carried out by Philip J. Gersmehl and Carol A. Gersmehl. The article they published entitled "Spatial Thinking by Young Children: Neurologic Evidence for Early Development and 'Educability'" (2008) describes the eight distinct modes of spatial thinking. Based on cognitive neuroscience, they explain how children develop spatial thinking and its process.

Citing studies made by geographers, the authors present the distinction researchers make between places (city A and city B) and within places (the relationship between vegetation, streets, spaces, and buildings). The human mind distinguishes between conditions (information about places) and connections (movements). The authors say that these differences and associations between these two conditions of the human mind are associated with how the cortical area of human intelligence works. Although researchers have already discovered these two areas, the two authors warn that the process of connecting

[37] In recent decades, we have seen the great development of psychology in its various branches, as well as neuroscience. It is also worth mentioning that many psychologists prefer to establish a line of separation between their approaches and neuroscience. For example, psychoanalysis and analytic psychology.

these two modes – the place, and the facts and conditions of connections – is much more complex than initially imagined by researchers.

For example, memorising the complexity of data and information in our reality is very difficult for people. When we go from our home to the University, for example, we go through streets, houses, and shops, and we come across different people and different types of cars, but we do not have all this information organised and focused. Some authors think there are ways of previous spatial thinking that help us remember facts and situations we experience (Held).

When adding other variables within this analysis, the two authors say:

This picture gets more complicated when variables like gender, language, mobility, classes, and economic differences are placed within this equation. For example, females deal better with conditions, while males deal better with connections, although, it is not yet scientifically known why these differences occur and what to do about them. (183)

The authors specify and describe in an organic way the eight neurological models regarding spatial imagination. These models can be applied to the psychodynamics of human development.

8.1. Eight Neurological Models Regarding Spatial Imagination

The authors propose eight distinct neurological models to understand how spatial imagination works.[38]

The first is called **Comparison**. It is characterised as thinking about conditions and connections in 'new' places and comparing them with better-known places. In all languages, we can verify structures and grammatical categories where the words inherently form comparisons of places. For example, graphics, games, and toys children use are based on comparison. The very intensity of the language, with its adjectives and adverbs, influences the way we think about reality: when we say, for example, that a house is small, medium, or large. In learning, given children's spatial intelligence, it is important and necessary to use photos, stories, and images that contribute to the development of spatial imagination from the story's intensity, the characters' characteristics, and the place where an action takes place.

The second aspect described by Gersmehl and Gersmehl is what they call **Aura**. It is defined as the zone of influence around a specific object. The Aura is the affective, cognitive space that helps us unconsciously recognise objects that we project and have a value that we give them. When we look at a Christmas tree, we see it as a symbol of peace and joy. A green light at the traffic light calls us to go through, a red one to stop. There is an aura around people. A good person, an artist, a saint, a religious image (angel), and an evil person (demon).

Region is the third element we use in our spatial imagination to deal with reality. A group of adjacent locations with similar conditions or connections forms the Region. This happens when, for example, that the Amazon is a place of lots of green and lots of water, that in the north-east there are many dry areas, and that Disneyland is a place that offers an environment for children and parents to play and have fun.

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[38] Further studies on this topic can be found in William Bechtel, "A Bridge Between Cognitive Science and Neuroscience: The Functional Architecture of Mind," in David J. Cole et al. (eds) *Philosophy, Mind, and Cognitive Inquiry*, Studies in Cognitive Systems Vol 3 (Dordrecht: Springer, 1990), https://doi.org/10.1007/978-94-009-1882-5_14

Studies by Sambrook and Zurick (2010) are aligned with the notion that our sense of location and the meaning of the places we see, usually rely on geographical comparisons we make to situate ourselves.

The fourth element is **Hierarchy**. It is the way we organise information by degrees. Gersmehl and Gersmehl describe this stage as starting early in a child's life. The child tends to receive much information in a disorganised way. The concept of direction, for example, is developed by describing places, authorities, the relationship of the forces of nature, and the relationship of the characters in a story. It is easier for the child in this process of learning spatial geography to understand better the hierarchical relationships of their place, city, and state. At this stage, the child still has difficulty understanding the globe, the world, and the various regions and continents. The sense of authority in the family and at school: the teacher, mother, and father are the highest authorities within the child's universe.

The fifth aspect of spatial intelligence, **transition**, is the change from one place to another, considering the modulation of places: high, low, flat, straight, curved, etc. Neuroscientific studies have tested the theory that the human mind stores information about the gradients of the environment in a parallel and independent way from the process of spatial data. One way to learn spatial transition is to analyse what a child perceives in the relationships of things on the way home from school. The adolescent can already establish relationships of size, width, distance, weight, and data such as the size of a city, its population, age of people, and main professions. This transition phase allows the adolescent to compare and understand the degrees involved in both nature and human relations and the organisation of society.

The sixth way neuroscience explains our spatial imagination is by **Analogy**. It refers to our ability to identify places that may be too far away but have something similar. For example, the relationship between the beaches in California and Rio de Janeiro. Between the environments of the Patagonian and Amazonian Indians. This ability to form an analogy begins very early in a child's life. Studies show that three-year-old children can make inferences through analogies (Brown 1977). For example, what are the kinds of things that go on in the kitchen, the bedroom, and the living room?

For neuroscience, **standardisation** is how we organise things that do not follow an order but are disorganised, misaligned, and seen and described within an order. This ability begins in childhood and develops into adult life. According to this factor, 5-year-olds can go after hidden objects and put them in the right place. Standardisation offers us information to compare realities and understand the differences between them. For example, how is a street in a prosperous city or a favela organised? Compare a boat trip on the Amazon River with a train trip in the centre of Paris; a ride in the shopping centre with a ride on a farm.

Neuroscience describes the **association** process as a pair of resources occurring together in the same locality. It is a way to associate objects and link them to the environment. Children know, for example, how to associate marine objects at the beachside or link insects with diseases, the power of the good character who fights to overcome the bad.

Neuroscience has contributed significantly to our understanding of some aspects of the complexity of how we think and organise information to coordinate our lives in reality. The human mind has an extraordinary and complex structure for retaining, elaborating, and analysing information, objects, places, and times. In

recent years, neuroscience has studied how small areas of the human mind function to understand what types of 'thought elaboration' are performed in these areas.

Currently, researchers have used scanners to photograph the human brain. Results suggest that the human brain has some particular regions structured to perform specific types of thinking. Several specialised areas of the human brain demonstrate different types of thinking about places and spatial relationships, such as associations made with places and looking for analogous geographical situations.

According to Gersmehl and Gersmehl,

parallel research by psychologists and specialised educators tends to endorse a fundamental conclusion of neuroscience: that areas of the human brain are destined for different types of spatial thinking and are developed in childhood. This is a different view from traditional thinking of the development of the memory of the human person. (188)

Gershmehl and Gershmehl (2007) have contributed significantly to the understanding that the human brain has some particular regions structured to realise specific types of thinking. Various specialised areas of the human mind demonstrate different types of thinking about places and spatial relationships, that is, associations made with places, seeking analogous geographical situations.

In recent years, interdisciplinary studies have been carried out on the human mind. Although differences in approach between affective cognitive psychology and neuroscience have emerged among researchers, studies in neuroscience have opened up a broad panorama of research fields and dialogue between the various sciences.

This view of the development of the spatial imagination elaborated by Gersmehl and Gersmehl could contribute to an analysis of Don Bosco's spatial imagination, even if the description of his memories does not follow a regularity and proportionality in time.[39]

9. Spatial Imagination and the Dream at 9 Years of Age

Spatial imagination in Don Bosco is extraordinary. He developed it within a family environment, in contact with the reality of nature, people, art, liturgy, studies,[40] and games.

Considering the eight models of Gershmehl and Gershmehl (2007) for the analysis of the dream at nine years of age,[41] for example, we can identify some interesting aspects from the point of view of neuroscience.

Briefly, we can categorise Don Bosco's dream into various models proposed by the two authors.

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[39] For example, Don Bosco wrote the *Memoirs of the Oratory* as an adult. His dreams take place in different phases of his life.

[40] It is important to emphasise that in Don Bosco's time, education had a strong classical bias, influenced by the metaphysics of St. Thomas Aquinas, and had a Jansenistic character. Studies were carried out based on tracts. They were functional studies and, although strongly linear, helped to develop artistic skills and games. Multiple Intelligence and Emotional Intelligence define these skills.

[41] It is not our aim in this study to analyse some of Don Bosco's dreams from the perspective of neuroscience concepts. This study can be done separately.

a. "*In this dream, I was in a huge yard near my home. A crowd of children were playing there.*" Don Bosco's statement identifies what Gersmehl and Gersmehl describe in developing the spatial imagination as a **Region**. The third element we use in our spatial imagination is to deal with a group of adjacent locations with similar conditions or connections: "*in a huge yard near my home.*"

b. "*Some were laughing, some were playing games, and not a few were swearing. When I heard these evil words, I jumped immediately amongst them and tried to stop them by using my words and fists*." **Aura** is the affective, cognitive space that helps us unconsciously recognise objects that we project and gives them value. Young Bosco recognises, "*Some were laughing … not a few were swearing.*" He recognises the different emotional states of the characters.

c. "*At that moment, a dignified man appeared, a nobly dressed adult.*" **Analogy**. Here, we identify John Bosco's ability to identify the nobly dressed man. Jesus is a new person on the scene. Even as a new and distant image, he is referred to other (religious) images.

d. "*He called me by name, told me to take charge of these children, and added these words: 'You will have to win these friends of yours not by blows but with gentleness and kindness. Start right away to teach them the ugliness of sin and the value of virtue.*" **Hierarchy**. At this moment, John Bosco expresses a sense of gradualness, of degree. "*He told me to take charge of these children … to teach them.*" *Teaching* in psychological terms means a position above those being taught.

e. "*Confused and frightened, I replied that I was a poor, ignorant child. I was unable to talk to those youngsters about religion. At that moment, the kids stopped fighting, shouting, and swearing; they gathered around the man who was speaking.*" **Standardisation**. It is John Bosco's way of organising things that do not follow an order, are disorganised, and are misaligned. After the boys' confusion in a melee, they are organised around the main character.

f. "*But who are you that speak so?" "I am the son of the one your mother has taught you to greet three times daily.*" **Association**. John Bosco's way of associating the main character with his mother and Our Lady linking these three people in an atmosphere of trust.

g. "*My mother tells me not to mix with people I don't know unless I have her permission. So, tell me your name.*" **Comparison**. John Bosco connects the categories of people he can speak to (known, in contrast to strangers). We also see the hierarchy here ("my mother" is the authority).

Beyond dreams, John Bosco's childhood and youth are a true "laboratory of educational spatial experience." Various elements constitute the environment where he immerses himself in learning and developing his spatial vision. Let me list some of them: catechism classes, the basic prayers that he said with his mother's help, going to Mass in the churches near his home, the stories of the saints that his mother surely told him, the great curiosity John had in observing nature, animals, the rhythm of life at home. The games, the races, and the manual work were very educational experiences for John Bosco.

In developing his multiple intelligences, we saw how John Bosco's childhood and youth were intense with artistic, playful, social, and religious activities. Later, in the design of his preventive system, we see a Don

Bosco who traces out the lines of his educational system geometrically with much precision and practicality. He applied the geometry of his spatial imagination in his writings.[42]

His observant spirit and geometric outlook on reality make Don Bosco a competent educator who deals with reality and gives it a communicative and educational sense.

He is a true scientist of education, someone who observes the movements of people, measures the psychological time required for the growth of young people, gives a compass to educational time, draws up new spaces, measures his projects, outlines his work, geometrising the opportunities, "photographing" the facts and creating the educational script for his young people.

Observing Don Bosco's interest in and exposure to photographs of him and with the Salesians and his young people, we can continue to identify how the wealth of his emotional/spiritual intensity emerged.

9.1. Don Bosco's Spatial Imagination as Seen Through Photographs

Photography is a communicative feature of Don Bosco. He was one of the first saints to enjoy being photographed. The motifs and scenarios of Don Bosco's photographs are well-studied and strategically done with communicative objectives of profound impact and great persuasive power. Don Bosco understood the images' strength and the recorded moment's affective power.

Perhaps, among all the saints of his time, Don Bosco is the most photographed saint of the Church. A complete collection of photos (paintings) of Don Bosco was taken by Giuseppe Soldá (1987). In this work of accurate methodological rigour, he presents Don Bosco's photos alone, photos connected to places that Don Bosco had been, Don Bosco's encounters with individuals and groups of Salesians, and photos organised by the chronological stages of his life.[43]

Observing the variety and uniqueness of Don Bosco's photos in different situations and with people of various ages, we note some aspects of his psychology through these photos.[44]

Considering the dimension of spatial imagination, we note in Don Bosco an intention to organise and record individuals, situations, and times that could be future references for the Salesians. Each photo is a geometrical drawing of life experiences and lessons that must become a living book of memories for future generations.

The photograph expresses the intention and motives of the person of Don Bosco or of the Salesians, who saw a language and a message in the pictures since they were close to them.

The dimension that Don Bosco gives to the photos demonstrates the Salesians' sense of belonging, some of the activities that were organised (The Band), the feeling of recording the Salesians' fidelity to the

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[42] We know that Don Bosco had a classical, philosophical, and metaphysical formation and that he mastered oracy and writing very well. We have proposed in this study that together with the development of oracy and writing and his logical capacity, he had, as a basis, a strong and special imagination.

[43] *Don Bosco nella Fotografia dell'800 (1861-1888)* (Turin: Societá Editrice Internazionale, 1987).

[44] This is, however, a difficult interpretation to make because we have no description of what the photos represent or what the intention of photographing such people and such moments was.

Constitutions (Handing over the Constitutions), and the photos of Don Bosco hearing confessions and praying before a statue of Our Lady. The images reveal Don Bosco, his self, and his plans.

Eftaiha (2012), when developing the psychology of framing a photo, says that "photography is always created through the spatial dimensions that are delimited by the framing of the image. Above all, the dimension we want to give to photography influences the composition of the scenes."

Photographing and being photographed, therefore, involves a psychological attitude (Hagen, 1080). Photography expresses feelings of friendship, deep emotional ties, a sense of future and belonging. Photographing a graduation party represents a crowning moment of a phase of study, the affective bond built between colleagues and teachers. The sense of starting a new career, an opportunity to construct. Photography is related to our self, sense of belonging to a group, promoted values, and important people and representatives in life (parents, teachers, priests, friends, doctors, artists, etc.).

In his studies on the psychology of photography, Kestenhoiz (2012) states that "the experience of photography, being a photographer, photographing can be seen as an opening of eyes to the reality we live in, because photography helps us to focus better on what is happening around us and helps us to see things more attentively around us."

Within this psychological dimension of the photo as a revelation of sentiments, Don Bosco's photo with the first missionaries can demonstrate the conviction and commitment of the first Salesians to missionary work. It has the communicative impact of showing that their dreams come true, that God's plan for them is being realised, that the vocation of every Salesian is a blessing from God, and that the Congregation is growing.

9.2. Communication and Don Bosco's Spatial Imagination

Communication is another key to reading Don Bosco's inner world and spatial imagination. Because of his Piedmontese character and upbringing, we know he did not speak or write much about himself. He was a reserved priest in his personal life of prayer and his way of living and loving.

Interestingly, he only decided to go to Pope Pius IX to talk about it 40 years after he had had the dream at nine years of age. He held on to this dream. It has been a compass for interpreting his life and work, his photographs, the construction of the Basilica of Our Lady Help, and his writings.

To understand a small amount of the greatness of Don Bosco's communication, we need an interpretative reading of what we have called spatial imagination.

Don Bosco became involved in communication, including writing (books, bulletins, letters), publishing, printed communication, and photography. He knew how to promote visual art, music, theatre, and the liturgy as a communication system.

For example, Don Bosco developed a real cinematographic outlook when he wrote the script of the lives of a few of his young people. The lives of Dominic Savio and Besucco are true film scripts for young people. Narrating the life of young people was an expression of Don Bosco's educational spatial vision. For him, education is a process of gradualness where everything becomes a script, a visual narrative that involves people effectively and spiritually in history.

Don Bosco was intensely immersed in what he thought and realised. When he went out with his band for walks in the mountains, he immersed his young people in the scenery, forming them through the environment, the music, and the interaction among them—an educational ecosystem.

When Don Bosco decided to ask T. Lorenzone to paint the picture of Our Lady Help of Christians for the Basilica, Broccardo (2005) said that "in Don Bosco's mind the saint longed for something even more splendid and great. When the painter heard him speak of the picture as something he had already contemplated for a long time, he was amazed at the boldness of the project." (170) The description of the project demonstrates Don Bosco's creative, affective, and photographic imagination.

Above, Mary Most Holy among the choirs of the angels; around her, the apostles; then the choirs of the prophets, virgins, and confessors. On earth, there are emblems of the great victories of Mary and the people of different parts of the world with their hands raised, asking her for help. (171)

Don Bosco's way of communicating expresses the richness and variety of his multiple intelligences. What he learns and develops in childhood and youth, which we have portrayed previously, is applied to what he writes, projects, builds, and realises. His geographical/artistic mind allows him to project and take care of every detail in, for example, the Basilica of Our Lady Help of Christians. From the first stone to the details of the Basilica's central painting, he expresses and projects the heart and mind of a complete architect, inspired and guided by his great spatial imagination.

His dreams are deep and meaningful expressions of his human and spiritual interiority.

9.3. Don Bosco's Spatial Imagination Through His Dreams

Dreams are an open book of Don Bosco's personal life. They have the tremendous communicative force of his personality, talent, spiritual strength, and educational, spiritual, and enterprising vision. Don Bosco communicates the treasure of his spirituality and educational system through the communication of his dreams.

In general, his dreams have the design of a profound expression of spatial imagination. Don Bosco describes in detail the places, the physical spaces, rivers, mountains, animals, people, the presence of the devil, Our Lady, and young people. These elements are placed within an environment and described in detail.

The titles of Don Bosco's dreams suggest these spatial aspects: the dream of the raft, the dream of the rose pergola, the missionary dream (with its geographical definition of parallels), and the dream of the ten diamonds. Let us note the spatial dimension of these dreams as indicated by the titles (raft, garden with roses and thorns, parallels and geography, the diamonds).

To understand the relationship of these symbols with the psychological dimension, it is important to remember the basic concepts of spatial imagination (described above) that have their genesis in the creation of the circle and the square, and how the geometry of things is projected and elaborated in the relationship of the mind with reality.

Spatial imagination is an expression of the person's cognition and affectivity. The psychodynamics of the expression of spatial imagination is rich and complex because it makes the person converge on the totality

of his or her being. In this regard, we can say that the power of the person's interiority makes him or her motivated and energised to seek ways and means to express this inner power. The dream, for example, expresses subjectivity, spiritual interiority, loving vitality, and intensity of life, projecting deep desires to accomplish something. It is the expressiveness of feelings and inventiveness.

Bozzolo (2017) points out that in his dream at nine years of age, Don Bosco met Jesus not in a traditional church but in the courtyard or open area. Our Lady in his dreams appears in the most domestic and natural environments. This movement from educational places to open spaces, courtyards, porticos, walks in the hills and mountains, his vision of the places in his missionary dreams, expresses the breadth of his spatial vision. This reflects his immense capacity to find spaces in these new circumstances for his young people as well as his works to expand, grow, and develop.

Don Bosco used dreams as a kind of encyclopaedia of communication. Each dream has an actual script, colours, movements, rhythms, contrasts, motion, and message.

Dreams are an explicit grammar of Don Bosco's spatial imagination.[45] He communicates through dreams, images, metaphors, and dream symbolism.

Each narrative of his dreams expresses an educational geometry, symmetry of educational spaces, geopolitics of expansion of the Salesian Congregation, and spatial viewpoint on educational relationships. Don Bosco's educational architecture reveals his imagination as an educator and founder.

In his missionary dream, when he describes a Salesian Centre in Patagonia at 47 degrees south latitude, he makes the allegory of the rope (1883 dream).

This allegory presents the numbers 47-, 50-, and 55 degrees south latitude that have become the reference for Salesian foundations in these places. At point 47, the rope is divided into many lines that join the places. No city is mentioned, but a marginal note in Lemoyne's hand expressly interprets number 47 as representing "the Salesian centre from which one could reach the Malvinas Islands, Tierra del Fuego and other islands, the most desired in South America. (Lenti 2014, Vol. 3, 230)

For example, we look at a few of Don Bosco's dreams from this perspective.[46]

In one of his dreams, Don Bosco gave a geometric description with a strong visual, emotional, and immersive appeal:

The Queen of Heaven appeared to me. She led me into a beautiful garden. There stood a rustic but *wide and charming portico* built as a vestibule. Its *pillars* were dressed with climbing vines whose tendrils, thick with leaves and flowers, *stretched upward* together and *knitted a graceful awning*. *The portico opened on a lovely walk that soon became, as far as the eye could see,* a breathtakingly beautiful pergola whose sides were lined with enchanting roses in full bloom. (BM III, 26).

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[45] Don Bosco's dream of Brasilia expresses his spatial imagination very well. José de Vasconcellos, a former Director of the Salesian Centre for Documentation and Research at Barbacena made a good analysis of the psychological aspects of dreams in the article for the *Boletim Salesiano* (Salesian Bulletin) no. 33, July-August 1983, no. 04.

[46] Afonso de Castro, scholar and researcher on Don Bosco's spirituality, analyses these five dreams of Don Bosco in his book *Pedagogia e Espiritualidade dos Sonhos de Dom Bosco.*

We note how he depicts the dream within symmetrical spaces with geometric and spatial figures. The dream's message is found inside this well-elaborated depiction, which includes shapes, dimensions, thicknesses, widths, and lengths.

In the dream of the *fourteen tables* (BM VI, 410-411), Don Bosco said: "I saw my boys in a most gorgeous garden, seated at fourteen long tables *arranged amphitheatre-wise* at three different *terrace-like levels*. The topmost tables were *so lofty that they could hardly be seen*."

In this dream of geometric proportions, Don Bosco defined the scenario in metric and symmetrical terms. He used mathematics and geometry to give dimensionality to what he would narrate.

As if drawing up an engineering blueprint for the dream, he describes the spaces in measured terms: semicircles, the placing of the tables, divided into three terraced levels, in such a way that the scenario – drawn in geometric shapes – is logical and coherent. From this logical geometric environment, the educational message is born. Often, the geometric design that the theme inspires becomes the message. It does not need words because the geometry of the dream speaks for its structural consistency, and the aesthetics of the whole of this geometry is the educational message.

In the description of the 1883 dream, at a certain point, Don Bosco reveals:

As I was *studying the map*, the engine blew its whistle and the train began to move. [...] I was looking out the carriage window, and I saw whiz before me various astonishing regions: forests, mountains, plains, very long majestic rivers which I could not believe to be so wide at points so far from their mouths. For more than a thousand miles we skirted the edge of a virgin forest which has not been explored even today. (BM XVI, 308)

Don Bosco's geographical vision in his dreams always reveals large, expansive, spacious environments of deep and vast dimensions. He says here that he "studied the map." It is a statement that is related to the basis of this study. Don Bosco reads reality through maps. He maps reality, places, people, nature, and culture. "For more than a thousand miles" expressed his geographical sense of working at a distance: metres, kilometres, and miles. His geographical perspective applied to a microscopic reality (the details of a table) and then to the macroscopic perspective, (analysis of a region) demonstrates his remarkable ability to read reality and seek to control it by a strategic geometry.

In the dream about Brasilia, Don Bosco says that "*Between 15 and 20 degrees latitude* lay a very broad and very lengthy body of water that *had its origin from the end of a lake*." (BM XVI, 309) The journey continues *along the Cordillera, toward the south,* as does the description of the *regions of the Prato, the Pampas and Patagonia, to Punta Arenas and the Straits of Magellan*.

This dream, which is very well known and discussed in Don Bosco's dream studies, offers clear and robust evidence of his spatial intelligence. The dream is explicitly a spatial geographical representation. Don Bosco established the 15th and 20th degrees latitude as the place where a great city would be built.

Applying the basic foundations outlined in this study is fundamental to analysing these dreams from the perspective of spatial imagination. This perspective is also used to analyse Don Bosco's other dreams.

9.4. Don Bosco's Spatial Imagination and the Expansion of the Salesian Congregation

Don Bosco knew how to look deeply into the present and the distant future with foresight. If the dreams reveal his spirituality and pastoral vision, some also reveal his inner vision as a founder who dreams of expanding his Congregation throughout Europe and the world.

Where does this entrepreneurial intelligence come from? Where does the strategic inner urge to accomplish such a mission come from? Why do maps attract him so much? Can this attitude reveal Don Bosco's psychodynamics as founder? We can verify Don Bosco's creative energy from his spatial intelligence.

Sambrook and Zurick (2010) say that "Maps have a fundamental technological role in our organisations and navigation in space." (4)

The authors suggest that we are inwardly motivated through spatial intelligence to expand our vision of growth, world knowledge, sense of achievement, and political, economic, or religious expansion.

This means that through our geographical imagination, we analyse the spaces of relationships in the family, the neighbourhood, the school, the district, the community, and society in general. Unlike the abstract concept of ideas, spatial imagination is something real, a practical imagination that takes its notion of human and social relations and politics from geography.

The map is a technical representation of something deeper: the internal motivations of human interests and desires. Commercial, political, or religious interests also manipulate spatial behaviour and the perception of places and environments. "The tourist industry is explicitly engaged in these objectives with the clear intention of influencing the behaviour of travellers and tourists." (5)

Therefore, if spatial imagination is motivated by our personal and community interests and desires, our spatial imagination constructs and manages the organisations and structures of society. Within these systems, our lives and our decisions are all linked to the way that society as a whole is geographically organised.

Our decisions to live in a particular city or neighbourhood, our motivations for belonging to community A or B, our trips, the way we organise our house, our rooms, and even our personal habits all take place according to this compass called spatial imagination.

Theorists of spatial imagination hold that, what we imagine of the world forms the special cognition that plays a fundamental role in our behaviour on a large scale. This allows us to understand the world around us and other distant realities and also enables us to make spatial decisions that have an impact far beyond our lives. It also allows for the person's engagement at a public level, locally and globally, and contributes to constructing spatial structures. (Gregory & Colman, 1995)

This means that through imagination, the individual's behaviour extends and has a ripple effect: from the person to society and from local to global interests. This impact of special cognition also affects global interests in material matters and symbolic and representative expressions.

One example is how the construction of maps impacts social mobility, the cartography industry, and other technologies. An individual can express his worldview and develop his interests and business through maps and cartography.

Citing cartography, the authors suggest that maps have become an expression of particular human behaviour. This also applies to collective imagination in general. As an example, one can consider the voyages of navigators and explorers who, through maps, established a policy of expansion across several continents (Mackay, 1985; Said, 1985).

Don Bosco's creative geographical imagination was part of his spirituality and system of educating and expanding the Salesian Congregation. This imaginative, creative force was being passed on to his Salesians. They were formed to look at the world, evangelisation, and the growth of the Congregation from this great organisational strategy focused on emotional intelligence.

A letter from Cagliero, one of his closest Salesians, expresses this vision:

"This exploration has now covered the whole of the Rio Negro valley as far as the Limay and Neuquen rivers, the whole of the right bank and left bank valleys of the Neuquen, with its ten or twelve tributaries, pushing as far as the Chilean border and the province of Mendoza. We know by now the whole of the most important and more densely populated sector of northern Patagonia which has been initially catechized, save for four or five tribes whose cachiques have already declared that they are favorable to their conversion.

We are working on an ethnographic map of the entire area lying between the Rio Negro and Rio Colorado, marking the missionary stations and inhabited areas, the settlements and tribes, and specifying the distance lying between one station and another, as well as the principal rivers and the fords where horses can ford them, making reference to the most important valleys and mountains".(BM Vol XVIII, 197)

From the point of view of the expansion of the Congregation and the geopolitics that Don Bosco had to establish to open new houses and missions in the Americas, he developed an ability to map out the places where he wanted the Salesians to begin new works.

Don Bosco was never in the Americas, but he recalled the geographic mapping of Patagonia. He read, studied, drew and dreamed of the places where he wanted to send missionary expeditions.

"*To the west* I see very lofty mountains, and *to the east there is the sea*!" [Please note that I was then seeing a summary, *in miniature as it were, of what I later saw in its real grandeur and extent, as I shall narrate. The marks numbered on the rope, each corresponding precisely to the degrees of latitude, were those which allowed me to keep in memory for several years the successive localities I visited as I traveled in the second part of this same dream*.] My young friend continued: "Very well. These mountains form a ridge or boundary. From here to there is the harvest assigned to the Salesians. *Thousands and millions of people are awaiting your help, waiting for the faith*." (BM XVI, 307)

Travelling and exploring other places is also a result of psychological needs. Sometimes, it tells us what others pass on to us, what we learn, read, or dream about other places. According to Gould and White (1974), with education, one's age and spatial experience, our geographical intelligence changes.

“After traveling a very long distance, the train stopped before a town of considerable size. [Possibly *on the 47th parallel*, where at the very beginning of the dream I had seen the big knot in the rope.] There was no one at the station to meet me. I got off the train and immediately found the Salesians. I saw many houses with many people in them; more churches, schools, various hospices for children and youths, artisans and fanners, and a school for girls which taught a variety of domestic arts. Our missionaries were caring for both the young and the adults”. (BM XVI, 310)

This foresight, the fruit of his spatial imagination, is passed on and becomes a value, conviction, and means of evangelisation and projection of the Congregation for his Salesians.

When the Salesians arrive in South America, we see the spirit of observation, spatial imagination, and concern for building up the means to manage the situation, be it to build new colleges and parishes, determine places to open up oratories and missions, or invest in education in dialogue with the sciences.

Bishop Luigi Lasagna, writing in America, says,

“The meteorological observatory at Vila Colon has rendered invaluable service to navigation. It has become the first link in a long chain that numbers dozens of observatories in Uruguay, Mato Grosso, in the Amazon to Pari-Cachoeira and Jauaraté, on the border with Colombia.” (25)[47]

The vision of the future expansion of the Congregation is visual, geographical, and imaginative. Geometry is a language and a method of thinking, organising, and projecting what he sees and dreams of achieving. The way he draws up and organises his educational system is an expression of his spatial imagination.

10.The Dynamics of Spatial Geometry in Don Bosco’s Educational System

For Don Bosco, the vitality and mobility of the young person in the environment are essential for the educational experience. It is fundamental to keep in mind the concepts of immersion in the five senses that were previously explained. We immerse ourselves in the realities around us through the senses, with all its ramifications for affective, cognitive, and neurological aspects. By immersing ourselves in reality through sight, smell, or hearing, we become aware of colours, people, spaces, and sound.

Don Bosco’s educational environment seems simple. Nevertheless, it is very well designed from an educational spatial perspective. Furthermore, he is original and innovative in this new environment he designs for his young people. Don Bosco, for example, uses the religious rituals of the time, such as Mass, prayers, and devotions, according to the religious tradition of the time. Still, he renews and amplifies the ritual within his innovative education vision.

Music, in its simple format, the use of drums, songs sung on footpaths, the movement of games, and movement in the courtyard, all done with simplicity but within an educational symmetry thought out and organised by Don Bosco.

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[47] Salesianos Defuntos da Inspetoria de Mato Grosso (Deceased Salesians of the Province of Mato Grosso in the Bodas de Diamante) (1894-1954).

His rich and creative spatial imagination allowed him to involve young people within a proper educational system, where play, drama, music, prayer, learning a trade, and relationships in the courtyard would become what we today call an educational ecosystem.

Creating this educational ecosystem is not only a matter of placing educational activities within a technical and organisational context. Indeed, other institutions at that time and today use various methods of integrating educational activities. However, something in Don Bosco allows for a more profound and involving approach. To create this ecosystem, he created a language that allowed him to give meaning and energy to the educational process.

Don Bosco's language with his young people is profoundly innovative. He uses both the arts and the language of dreams. He creates a true kaleidoscope that involves spatial imagination, feelings, relationships, values, a sense of the supernatural, visual appeal, and the commitment of his young people to the educational proposal. Don Bosco created an educational ritual.

A study on the relationship between religious rituals and the spatial dimension (Klapp, 1956) presents[48] five characteristics of activity that make it a ritual: affectivity, regularity, repetition, symbolism, and drama.

Don Bosco's Preventive System strongly develops a sense of ritual. For him, the educational ritual must involve what young people like. By using rituals and placing the young person within an environment of affective relationships, Don Bosco innovates a sense of belonging and freedom to express oneself through games, music, theatre, play, prayer, and study.

Don Bosco knew how to creatively and attractively apply all the symbolism of the angels and saints, the different features of Our Lady, the Way of the Cross, the Rosary, and other symbolic expressions of faith to educate his young people.

Young people's involvement in this ritual is related to Don Bosco's vision of the educational environment. The young person is naturally inclined to enter into the educational environment holistically with mind, heart, and body. This immersion is a fundamental aspect of Don Bosco's way of educating.

With a broad spatial vision and an extraordinary geographical imagination, Don Bosco created a new experience of what we call an environment, an educational environment. For him, the *cortile*, the courtyard or playground, the outings, the artistic activities and the liturgy happened in an immersive way. Unlike the Christian tradition and the education of the time, Don Bosco viewed his whole educational system as an immersion of the young person in the environment.

Don Bosco knew from his childhood experience that immersion in the environment of the hills, in the middle of the fields, and the meadows encouraged a natural contact with the geographical space of nature. This is the first school of development in his emotional intelligence.

I recall here some aspects already presented about how we organise spaces at a psychological level, how they speak of and reveal us.

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[48] Orrin E. Klapp, *Ritual and Cult: A Sociological Interpretation* in *The Annals of American Sociology* (Washington D.C.: Affairs Press, 1956).

Let us take your house, the kitchen spaces, the bedroom, the winery—everything that allows you to establish relationships that we can call the geographical spaces of relationships—as an example.

Practically everything we access is connected to an organised geographical design. If we take the GPS as an example, when we go out by car, the signs that we pass in the streets are visual maps that guide us.

We all organise our lives around our spatial imagination. We have a natural GPS that allows us to locate ourselves at home, follow the address of a street, stop at the traffic lights, recognise the signs of the environment and trade, tune a radio, surf a website, and make an online purchase.

Don Bosco's educational psychology permits us to mention the educational environment connected to the five senses. It is through them that the young person, even though he does not know how to read or write well (like Garelli!), can have an immersive and educational experience.

Apart from the intellect, through spatial intelligence, we can have access to the reality of things, including their material, human, affective, and spiritual aspects. As we have seen, human beings access reality through their immense cognitive-affective networks.

Don Bosco knew how to integrate religious, ritualistic, and artistic elements into the education of his young people. He uses his extraordinary capacity for emotional intelligence to create by using everything that was part of the educational symmetry of his system. Religion, with all its symbolism and prayer rituals, is the means he used to educate.

Don Bosco intensely and appropriately developed his spatial intelligence to serve his educational method, communication, and capacity to project and expand his Congregation. Extraordinarily and profoundly, he knew how to practise love and the capacity for relationships with young people, his Salesians, from the simplest to the noblest. His educational system comes from a heart that loves in a simple, profound, and true way. Hence, he created an immense network of relationships with a spiritual and educational aim.

11. Don Bosco's immense and varied network of relationships

A complete re-reading of Don Bosco's life reveals that from childhood, he was a person who had tremendous and profound experiences in human and spiritual relationships. From the moment of the very early loss of his father, he describes times of deep anguish, the profound friendship that he established with Fr Calosso, the unbreakable friendship with Jonah, the human sensation of establishing rapport with friends, priests, young people, Salesians – these are all moments of considerable magnitude. Don Bosco loves and is loved. He makes his mother, Fr Calosso and Fr Cafasso points of affective reference. Moreover, his greatness of heart and soul makes him an affective reference for hundreds of people. Don Bosco is a man of affective richness, immense quality, and depth.[49]

Some studies on Don Bosco offer us some particularities of his person.

[49] Cf. Broccardo, *Don Bosco profondamente uomo, profondamente santo*.

After all, how did Don Bosco express himself emotionally? How did he relate to people affectively? How did he live his emotional intelligence with young people?

Stella (1969) expresses clearly how Don Bosco loved:

"Don Bosco's heart never stopped loving until the end. Don Bosco's pedagogy is identified with all his action and all his action with his personality; Don Bosco's inner being is ultimately focused on his heart. It is the heart as he understands it, "not only as an organ of love but as a central part of our being," on the level of nature and grace: the heart wants, the heart desires, understands, and unites; it listens to what is said to it, it is inflamed with love, it reflects, moves".

The majority of studies on Don Bosco's spirituality and educational system show that he had an enormous capacity to establish human relationships (Stella, 1969; Braido, 2004; De Castro, 2002), captivate people, have an educational influence on young people, promote motivations, form leaders, encourage people, discover great personalities, and establish a fascination for them, from the simplest to the authorities of the time, from the poorest to the richest.

The most recent studies on Don Bosco have used new approaches, especially from perspectives of psychology and anthropology, to analyse his psychological and spiritual depth.[50]

In recent decades, many interdisciplinary studies have been conducted to analyse the human personality, attitudes, motivations, and capacity to lead and innovate.

To understand some aspects of Don Bosco's relational dimension, I would like to refer to some studies that integrate an affective/cognitive/neurological vision of the human person, focusing, for example, on specific dimensions: leadership, motivation, and attitude.[51]

Currently, one of the areas of significant focus of studies is about presence and leadership: Who is a leader? How is presence correlated with leadership? Another highly developed area of study is the motivational one. How are people motivated to make choices? What motivates someone to be a good student, a good professional, or a good entrepreneur? Several studies and tests have been developed on emotional intelligence and entrepreneurship and the relationship of attitude with aspects of cognitive psychology.

Harvard Business School, one of the leading world authorities in these subjects, has conducted hundreds of science-based and practical studies.[52] The theme of presence has been one of the themes studied related to leadership, motivation, and attitude.

One of the fundamental pillars of Don Bosco's educational system is presence. In his dreams, writings, exhortations to the Salesians, and letters, presence is an accurate compass of his system. The affective and effective presence of the educator among young people is one of the fundamental pillars of Salesian

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[50] Many studies have used the affective and cognitive approaches of psychology. Some studies have analysed Don Bosco more specifically using the presuppositions of psychology.

[51] Currently, several lines of study on these themes are applied to psychology, clinics, companies, and the training of people in different professional areas.

[52] Check out the Business Harvard University scientific papers at https://cb.hbsp.harvard.edu/cbmp/pages/content/articles

pedagogy and spirituality. Through the psychodynamics of presence, we enter more into the educational realm of Don Bosco and his system.

11.1. The Psychodynamics of Affective Spatial Presence in Don Bosco

As we have seen before, presence involves several spiritual human aspects of the educator. Interestingly, affective presence is intense, complete, and whole, even in dreams.

What does it mean to be present in the family, at school, at work, in the yard, in the environment where people are? Furthermore, what defines an educational presence?

More recently, researchers have studied presence, starting from social psychology, associated with themes such as presence, attitude, persuasion, motivation, and leadership.[53]

One of the most outstanding researchers on this topic today is Business Harvard University professor Amy Cuddy (2015). Analysing from the perspective of social psychology, she presents a consistent and practical vision of what presence is and how it is deeply related to aspects of human behaviour in social, political, economic, and religious relations.

Cuddy (2015) defines presence as,

"the psychological state of the person being deeply connected with him or herself and able to express their thoughts, feelings, values and potential authentically and naturally. Presence manifests itself when the person feels proactive so that this positive and authentic attitude allows him/her to be truly and coherently connected with his/her deepest and truest self.

For Cuddy, in this psychological state, we can maintain "presence even in difficult and adverse situations which, in general, make us fragile and detached from ourselves." (24)

According to the author, presence means being whole and true in relationships with people, whether at an individual level or with a group. When we are present, "there must be a coherence between what we speak, feel, our facial expression, our language, postures and movements, in such a way that we become whole in communicating. These expressions synchronise us and focus us." (25)

According to her, presence then involves this "internal convergence, a palpable and resonant harmonisation" of what we express – because it is real. This attitude makes us attractive and generates appeal and credibility for our presence. Our presence does not become fragmented or incoherent between speaking, expressing, and acting. Therefore, presence is not exteriority, extroversion, or being socially charismatic. "Our expression of presence means to be honest, to be truly and authentically connected internally with ourselves." (25)

In this sense, presence allows us to focus on the moment, situations, and dialogue with the people, feeling them authentically and honestly. To be present is to be whole in the ordinary relationships of life. It is an attitude of knowing how to be with oneself and experiencing one's own presence from one's own feelings,

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[53] Amy Cuddy is a social psychologist and best-selling author, specialising in human behaviour sciences of power, presence, and prejudice. With a Ph.D. from Princeton University, she is currently a professor at Harvard Business School. One of her best-known books is *Presence: Bringing Your Boldest Self to Your Biggest Challenges* (Little, Brown Spark, 2015).

values, and attitudes so that, in this way, in the encounter with others, we can naturally establish a presence. Unlike performance, presence is revealing of the person in his/her true personality. Presence allows the partner in dialogue to trust and open themselves to the presence of the other, thus becoming dialogue, encounter, and true communion.

In her studies on presence, Cuddy says presence has a natural coherence. You do not force yourself to get it.

“Presence allows us to face difficult situations without anxiety, fear and frustration. On the contrary, the person becomes serene and secure because they have done their best to resolve a critical situation. In the face of problems, the person faithfully and completely lives and expresses who they are and what their skills and abilities are. Finally, who they truly are”. (28)

For the author, presence manifests itself in two ways: first, when we are present, we can communicate passion, confidence and spontaneous enthusiasm. Second, presence comes through what the author calls synchronism (27). That is, presence means believing and trusting our own story – our feelings, beliefs, values, and abilities. Being present means trusting and expressing my genuine personality. This makes us convincing.

Don Bosco’s Preventive System is fundamentally focused on presence. The educator’s presence is perhaps the most crucial aspect of his educational system.

If we look at the Letter from Rome,[54] the central theme is the importance of the Salesians being together and close to young people. The presence of Salesians among young people generates trust, family spirit, commitment, and joy. Distance and absence, on the contrary, generate mistrust, coldness, discouragement, and sadness.

Various aspects characterise presence for Don Bosco: being among young people, getting to know them, captivating them, loving them, demanding the best of them, creating affective bonds, placing challenges before them, working together, getting involved in religious and artistic activities, etc. It is a loving, dynamic, constructive presence. Presence is an attitude of the person’s interior life. It is the expression of an entire, genuine, and authentic educator.

The fruit of Don Bosco’s preventive system results from an educational presence in all dimensions: relationships, teaching, work, spiritual guidance, play, prayer, and life. Presence is a way of being and living.

The result of this educational presence can be seen in its completeness in the historical narratives of the three biographies and stories of Comollo (1844), Magone (1861), and Besucco (1864). In these writings, Don Bosco used the stories of his young people intelligently and creatively, showing how educational presence with the young produces good results.

However, to produce these fruits, presence must necessarily pass through the journey of a love that trusts, generates a family atmosphere, and gives of itself for the good of the other.

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[54] See the analysis of Don Bosco’s educational aspects in Castro, *A Alegria na Espiritualidade de São João Bosco,* 219-236.

Don Bosco's spatial imagination was inspired, nourished, and projected, and he lived in a way that had the vitality and expressiveness of his love as its source.

11.2. The Expressiveness of Love as an Educational Presence and Reference

Many studies have been conducted on human emotions. Izard (1977) developed several studies on emotions broadly and systematically. These studies are aligned with the assumptions of D. Gooleman's emotional intelligence and Gardner's multiple intelligences.

Fundamentally, these authors have demonstrated through their studies that emotions are intelligent and, therefore, capable of expressing our deepest feelings and desires authentically and truly.

Other studies, along the lines of emotions, have sought to deepen the correlation between emotion and love and the correlation between emotion, love, and spirituality.

We have already mentioned that the affective/cognitive/neurological dimensions are being increasingly studied to understand better the sense of presence in human relationships, education, and work.

Looking back on Don Bosco's life, we know he learned to love at home, in the maternal womb. Indeed, he received much affection when with his mother. In the *Memoirs of the Oratory*, he recounts how deeply his friendships with Fr Calosso, his friend Jonah, and Fr Cafasso affected him.

Don Bosco was a man whose expression of love knew no bounds. For Don Bosco, to love was to breathe, live, educate, dream, and work. Love was always at the heart of his spirituality and pedagogy in his letters, writings, and recommendations to the Salesians and many other religious, priests, and laypersons.

As we read his letters and observe photos of Don Bosco, many of them among the young people or Salesians, we note the presence of a loving, close person who became an affective reference point for all.

One of the most vivid and forceful testimonies on how Don Bosco loved was given by Father Paul Albera, his second successor. In one of his circular letters to the Salesians (Turin 1922), he describes how he felt Don Bosco's love: "Don Bosco loved us in a unique way, one that was typically his: one felt an irresistible fascination in his regard that words cannot express or make understood for those who did not have the opportunity to experience it."

Fr Albera goes on to say,

"His love attracted, conquered and transformed our hearts. He drew us to himself by the fullness of supernatural love which burned in his heart and which, with its flames, absorbed and unified the little sparks of the same love aroused in our hearts by the hand of God".

The *Letter from Rome*, his personal letters to the Salesians, and his recommendations to them reveal a very human, affective, close, and captivating Don Bosco. However, he was not outgoing.

Don Bosco's biographers say that he was not an outgoing person. Therefore, the expression of love does not necessarily need to be correlated with extroversion.

Don Bosco's presence, through which he loved in a profound and real way, gave him immense credibility for what he believed, dreamt, and wanted to achieve. His affective and operative love gave him tremendous credibility and authority.

Through his effective and affective presence, Don Bosco drew people along with him and his vision. Every dream Don Bosco told us came true, became real and credible, and could strengthen and give credibility to his project as educator and founder of the Congregation.

In his dreams, it is not the account itself that has weight, but it is the author of the dream, his authentic way of interpreting, generating trust, and making the young people and Salesians co-interpreters with Don Bosco for these dreams. The dream gives integrity to his projects. The dream brings commitment and a horizon of planning. The dream's message confirms the project to which he gives himself completely.

When referring to the correlation between presence, credibility, and commitment, Cuddy (2015) stated in her study that "if people really believe in the value and potential of the project of those who propose it, they commit themselves to realise it and making it even better." (32)

Where does this ability to convince and generate engagement come from? From the person's self-esteem and confidence. The source of self-esteem is internal. "People who have a solid sense of self-confidence always find safe and effective ways to deal with challenges and relationships, becoming more resilient and open." (33)

Don Bosco is a sure affective reference for young people. Francesia illustrates how he felt loved by Don Bosco and how this love transformed and gave meaning to his life, having a reference for love like Don Bosco: "I have seen him, I have known him; he loves me, I love him."

The person who is entirely and truly "present has confidence, manages to be present to others, listens to their profound perspectives and yearnings, and integrates these views of people in such a way as to create values and opportunities for all." (33)

Studies in communication and social psychology confirm that the presence of a person who can influence, inspire, and lead is related to the synchronicity of the self.

To be present with this attitude of inspiring and generating credibility, a person must harmonise emotions, thoughts, facial expressions, attitudes, and behaviours. This harmonisation must be consistent with the values the person believes and experiences. For example, if our emotions are not reflected in our expressions and words, we do not seem natural and convincing. To convince someone of what we believe, integrating affective/cognitive factors is necessary to give unity and convergence to what we think, feel, and want to express.

For example, when we are truly present at a difficult time, our verbal and nonverbal communication processes become quickly apparent. They become visible to others. This implies that the difficult circumstance (pain, loss, accident) demands an entire emotional response from the person.

According to Cuddy (2017),

"we are inspired when we listen to real stories of people facing difficulties (poverty, loss, suffering, abuse) and other problems that make people suffer, but who at the same time find inner strength and have

oriented their lives to overcoming problems and building up their lives. These stories always inspire us". (283)

Cuddy's studies and experiments in communication and non-verbal language confirm that the coherence between the words we speak and the attitude we experience becomes witness to the synchronicity of the self. Therefore, the message given by a communicator is evaluated by his or her corporal expression, the language of the body, gestures, and attitudes. The credibility of the content of the message is evaluated via the genuineness of the communicator.

Presence, therefore, demands an authentic and complete attitude from the person. The opposite is also true: when we are inauthentic, project ambiguous or false emotions, or hide them, our verbal and non-verbal communication creates ambiguity. We lose perspective and purpose. Our presence weakens. The message is lost.

From the cradle of the family, Don Bosco learned a deep sense of authentic presence. His mother, Margaret, was the first to pass on and educate her son about what having an entire and synchronised presence meant. Reading the *Memoirs of the Oratory* from this perspective allows us to identify how Don Bosco truly lived presence in different moments and situations.

A glance at the psychodynamics of the dream at nine years of age reveals a John Bosco very much present, genuine, true to his feelings, fully synchronised in the dialogue with the man of noble appearance. There is consistency and coherence between the spoken word and the images that appear in the dream, the narration's authenticity, and his reactions and attitudes.

When he tells us, for example, of the loss of his father, his friend Comollo, and Fr Calosso, his spiritual guide, the narrative expresses a Don Bosco focused on his inner world, free to express genuine feelings, true emotions, and veritable perceptions of self.

Reading about Don Bosco's affectivity in the *Memoirs of the Oratory* gives us an immense and profound vision of his greatness and emotional richness. He describes with great transparency his pain when he loses his father. When he speaks of the family's poverty, he clearly expresses the family's preoccupations. When he loses his friend Comollo, he describes the anguish of his emotional state in an almost dramatic way.

When describing his joys and conquests, Don Bosco manifests a grateful and open heart. He freely expresses his feelings when he speaks of the pleasures of friendship, games, and music.

His communication would become credible, whole, complete, and accurate. This complete attitude makes the message a natural and true expression of the one who communicates it.

From this presence of love and his capacity to be an affective and effective reference with credibility, he develops the capacity to attract young people to a Christian life project, to be Salesians and work with him. However, presence requires something more: the narration of a life witness based on the story of a life of deep and sacrificial love.

How did Don Bosco succeed in inspiring and attracting many young people?

11.3. The Narrative of Life History as an Educational Strength

In studies of narratives and stories of people, one of the fundamental aspects for those who write and narrate is the proper consistency of the narratives. For researcher Cuddy, believing in our own stories strengthens our sense of presence.

"When we do not believe in what we say and are not consistent with the narrative of our stories, we lose the ability to be present. The confidence that you are present is reflected in the authenticity of your story. (41) .When I believe my own story, my presence speaks for itself. Presence becomes a witness to the person's truth. However, besides believing in my story, something else is necessary for someone else to believe in what we say or how we live. It is necessary to be in contact with the real self. Cuddy says we all have moments when we feel deeply alive, truly coherent with our deep self, and give the best of ourselves. "We collect these experiences and manage to put them within an inner framework of who we are when we are deeply connected to our authentic self." (46)

When we face diverse situations in life that deeply challenge us, like an illness, the loss of a loved one, the loss of a job, a divorce situation, or a great existential crisis, it is our deep self, the instinct to survive, our inner strength, that comes to defend us from threats.

Quoting psychologist Claude Steele, Cuddy says that "we affirm our deepest values and the best part of ourselves before entering a potentially threatening situation." (47)

The losses that Don Bosco experienced in childhood and adolescence profoundly influenced his developing an attitude of genuineness regarding his feelings and the courage to face adversity positively, that is, facing it from his real self.

Throughout his life, Don Bosco lived his joys and sorrows authentically and truly! Because he was genuine with his emotions and wholly present in these circumstances, he knew how to be a human spiritual reference point for many people. From here, we can better understand why his person and message reached beyond the physical space where he lived.

12. Telepresence[55] and Immersion in Don Bosco

The explosion of social networks has placed people in a new dimension of communication that we can call telepresence. We share news and photos instantly. Through social networks, an event in place X becomes an event for a person in place Y. What we photograph and share becomes a mutual experience. We live in the era of telepresence (Sheridan, 1992).

Digital communication and networking in cyberspace are fundamentally a telepresence experience. Telepresence allows us to communicate beyond our geographical location. Communication via radio, television, and the Internet allows us to communicate through telepresence.

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[55] It is important to emphasise that the concept of telepresence that we are applying is communicative. Be it through music, a film, a book, a photograph, or a dream recounted, we naturally project ourselves through our imagination, feelings, and desire into scenarios that are beyond our physical contact in person.

When we watch a film, the images transport us into historical reality, into the context of the film. Why do we get emotional, excited, cry, and even get involved in the plot of a film if what we see in front of us is only images and sounds? What psychological phenomenon happens when images and sounds – from a non-present reality (the film, which practically records images and sound) – involve people profoundly, causing them to relive, recreate, and reinterpret the film's script, becoming an authentic experience for them?

Telepresence can be described as the ability of a person to enter a dimension that goes beyond the physical to another level through the mediation of the environment created for that experience. The 'other level' is the attempt by scholars to find a space beyond the physical temporal space to define virtuality. The concept of virtual reality in Biocca (1995) is defined "as a real or simulated environment in which a person experiences telepresence." (35)

Biocca (1995) says that one of the promises of virtual reality is to lead one to live the adventure of the imaginary world: "Virtual reality promises a kind of transcendence of the physical limits of reality" (36). One of the objectives of virtual reality is to create a sense of presence within the virtual environment.

Presence here means that a person feels present in an environment (virtually created) through computers capable of generating this type of simulation. The person is connected by instruments capable of recreating a climate (simulator) where the user can feel what happens in another environment.

Social networks allow us to recreate presence at a distance. For example, via a video call, we can participate in a lecture, a show, or a party.

Virtual reality aims to create an environment where information goes beyond physical space and gains a virtual dimension that reaches another person. In other words, the communication between a person and a computer is based on the interactivity inside the virtual universe. Let us imagine a mother and her daughter who, through messages, photos, and words, exchange affections and emotions virtually as if they were physically present. Through the computer – or the cell phone, as respective mediums, they interact with real feelings instantly via the network.

Another example is that reading a letter written by a friend can evoke a sense of presence in the place where the person wrote that letter, and, therefore, whoever received the letter can witness that environment, even if it is distant. Listening to a live concert on a CD gives the listener a sense of presence in the place where the music was performed. Video game players describe the experience of "driving a car" on screen as "driving".

According to Biocca (1995), these experiences create a certain sense, a feeling of telepresence. This happens when we watch a film, are in the online world, or see a photograph.

Telepresence is always amplified when we immerse ourselves in scenarios and environments that allow us to amplify—through the five senses—our feeling of experiencing a reality outside and distant from us.

With a large screen in front of the audience, each image is projected sequentially, accompanied by the soundtrack (sound image). This creates an environment where the audience enters the scenario created virtually on screen. The simple use of a screen, where the images are projected, introduces the person into the story of the film, the drama represented there, and the feelings of the actors participating in the film's plot. What is in front of people? A screen and images produced by cameras and reproduced by a machine

inside the cinema that reads the images, either visually or in terms of sound. The images are captured by the camera and eyes, and through vision, the person enters the story of the film, or the film enters the person through the eyes and ears. The music is absorbed by the viewer, triggering hearing. Together with other elements involved in perception, the brain reads, translates, and encodes the film's narrative, incorporating and causing the simple images reproduced on a screen to be amplified and create meaning for the viewer.

The person, therefore, enters the context of the film, participates, moves, cries, and laughs as if the action were present (not feeling time and space). Recreating a virtual scenario offers people the "reality" that projects the body, senses, emotions, and perceptions. Telepresence depends on the intensity of external factors that stimulate the mind, the senses, and the body. In a religious celebration, incense, lights, and sound (in the case of immersive experience in the Church) stimulate the mind, the senses, and the body, leading people to experience telepresence immersion.

Biocca and Delaney (1995) explain that telepresence is possible because the subject of presence, defined as the subjective sense of being somewhere, is not a person's physical body.

Biocca and Delaney seek to define self and presence in these terms:

"The mental model of the user within the virtual world, but specifically differences in self-presence until the moment when there is a short or long effect of the virtual environment on the perceptual part of the user's body (that is, the scheme or image of the body), the psychological, emotional states and identity". (18)

Biocca (1995) calls it "Interaction of the virtual environment with the user's body schema in the immersive virtual environment that offers interesting design aspects of the virtual world." (19)

"With the expansion of virtual reality in our communication universe, the individual experiences an increasing intensity of immersive telepresence. The trends of creating new technologies associated with the vision of virtual reality are increasingly leading us to immerse ourselves in new realities.[56]

These studies seek to demonstrate that communication through a cell phone, a social network, is also emotional, sensory, and physical, even if one person is geographically far from the other.

Through his dreams, Don Bosco had a telepresence experience in the sense of immersing himself in the scenarios of his dreams, narrating them, and involving his young people and Salesians in the narrative of every dream. The dream allowed Don Bosco to travel to other places and situations, immerse them in these scenarios, and lead others to relive their telepresence experience.

Dreams, within a scenario with images, sounds, interactions and actions, involve us as if we were experiencing this moment. An analysis of Don Bosco's dreams from this perspective offers us a variety and intensity of images, sounds, and dialogues of high immersive and telepresence power.

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[56] In "any virtual environment system with a significant level of embodiment, there are three bodies present: the objective body, the virtual body and the body scheme." (Biocca 1995, 19)

From this point of view, Don Bosco uses dreams as an extraordinary and effective means of communication: He dreams, narrates, gives meaning to, and projects his dreams within his educational message and his plan and vision for the expansion of the congregation. Besides the wealth of images and sounds, the dream always has a message of great religious, educational, and moral strength.

John Bosco's dream at nine years of age invites us, in the first line of the narration of the dream, to immerse ourselves in another reality:

I seemed to be near my home in a huge yard. A crowd of children were playing there. Some were laughing, some were playing games, and not a few were swearing. When I heard these evil words, I jumped immediately amongst them and tried to stop them by using my words and fists.

In the dream of the pergola of roses, Don Bosco presented the scenario of a road covered with roses, and later, thorns appeared. The narrative has a great capacity to immerse the audience within the scene. The garden is an immersive environment of great appeal to the senses (sight and smell). Walking on thorns evokes a strong, imaginative sense of pain (thorns that pierce). The pain is directly linked to the nervous system. The thorn in the body is an action that triggers a process in the nervous system that propels the person to react and, therefore, experience immersion in that reality (the thorns are the hard reality of life).

The narrative of the scene immediately invites the reader to an immersion (involving the senses) in the garden narrated by Don Bosco. In this dream, we see a script that expresses the gradual nature of the feelings and actions of the characters.

The Blessed Virgin said to me: "Take off your shoes!" When I had done so, she added: "Walk under that rose pergola, for this is the path you must take." I gladly removed my shoes because stepping on such gorgeous roses would have been a pity. I took but a few steps and immediately felt very sharp thorns piercing my feet and making them bleed. I had to stop and turn back. "I had better wear my shoes," I told my guide. "Yes, indeed," she replied, "sturdy ones." So, I put my shoes on again and returned to the rose pergola, followed by some helpers who had just shown up and asked to go along with me. They followed me under the indescribably beautiful pergola.

Don Bosco continues with his narration of the dream:

"There were roses about me, roses above me, and roses under my feet. As my feet made me wince with pain, I could not help brushing against the roses at my sides, and even sharper thorns pricked me. But I kept walking. My lacerated legs, though, kept getting entangled in the lower branches. Whenever I pushed aside a bough barring my way or skirted the sides of the pergola to avoid it, the thorns dug into me and made me bleed all over. The roses overhead also were thick with thorns, which pricked my head. Notwithstanding, I went forward, encouraged by the Blessed Virgin. Now and then, however, some sharper thorns pierced me more than others and caused greater pain. Meanwhile, those who were watching me walk under that bower — and they were a crowd—passed comments, such as, "How lucky Don Bosco is! His path is forever strewn with roses! He hasn't a worry in the world. No troubles at all!" But they couldn't see the thorns that were piercing my poor legs. I called on many priests, clerics, and laypeople to follow me, and they did so joyfully, enthralled by the beauty of the flowers".

When, however, they discovered that they had to walk over sharp thorns and that there was no way to avoid them, they loudly began complaining, “We have been fooled!” Many turned back. After going on for a while, I turned to look at my followers. You cannot imagine how I felt when I saw that some had disappeared and others had already turned back and were walking away. I went after them and called them back, but it was useless; they would not even listen to me. Then I broke into tears and wept unrestrainedly as I asked myself: “Must I walk this painful path all alone?” But I was soon comforted. I saw a group of priests, clerics and laymen coming toward me. “Here we are,” they said. “We are all yours and ready to follow you.” So, I led them forward. Only a few lost hope and quit; most followed me through.

After walking the whole length of the pergola, I found myself in another enchanting garden, and my few followers gathered around me. They were exhausted, ragged and bleeding, but a cool breeze healed them all. Another gust of wind came, and, like magic, I found myself surrounded by a vast crowd of boys, young clerics, coadjutor brothers, and even priests, who began helping me care for all those boys”.

This dream describes the immersive environment and how people experience it through their senses.

Telepresence and immersion, therefore, can happen anywhere as long as the external factors work, extend, and provoke the senses to lead the person to a high level of immersion and, consequently, experience beyond reality (virtual). Another term used to explain the phenomenon of a high immersion index is “to be transported” to another level (hyper-natural).

Biocca (1995) suggests that the power of this type of communication is directly linked to physical feeling, being able to be transported to a new universe. Biocca’s intuition predicts the person’s relationship through the medium (be it a painting, an icon, an image, or a garden). It has the power to transcend the present, the physical place, and recreate a new universe of broader communication, be it through a dream, a song, a film, or an online broadcast concert.

Human beings have always used communication to transmit a signal, a gesture, a word, a dream, or a message. Historically, humans have always been looking for new ways to express themselves, diminish distances, interact, and leave their place of origin to experience realities beyond their physical space. Immersion and telepresence through music, film, or a dream are realities that people in any culture or society accomplish.

Don Bosco was creative and innovative in his approach to educating and communicating. Through his life, story, spatial imagination, presence, love, and faith, he became one of history’s most outstanding educators and communicators.

Because he is always up-to-date and profound in his way of living and educating, Don Bosco has an educational and spiritual wisdom that offers us a basis for a dialogue with new scientific approaches to modern times.

13. Don Bosco's Educational System, New Scientific Appeals nd contemporary Issues

In this study, I have proposed that Don Bosco's spatial intelligence, seen as a whole, can provide a basis for consistency in dialogue with some current approaches, especially with psychology, education, neuroscience, and new technologies.

Starting from the principle that Don Bosco elaborated his educational system based on creative geometry in his way of thinking about the human person, of organising an educational project and implementing it with much success each time, we can find points of dialogue between Don Bosco's Educational System and the different tendencies and current approaches in the field of scientific query.

We have maintained that Don Bosco's mind is like an immense kaleidoscope, where points converge and complement each other, always leaving room for the unlimited. His geographic perspective gives him a comprehensive view of reality. Concretely, through education and evangelisation, Don Bosco broke through the frontiers of place, establishing a sense of networking.

Many decades have passed since Don Bosco's time (1815-1888). Don Bosco lived in a culture and a world where the various tools and technology we have today were unknown. Examples are the Internet, several communication systems, the laser, and satellites. Even on the theological and pastoral level, Don Bosco lived in a very different and conservative period. However, his intuitions and practices already demonstrated his capacity to educate, beginning from what individuals are best at, their abilities, their intelligence, as well as their ability to integrate knowledge with professional practice, values with life, education with the formation of individuals, evangelisation and the promotion of life, the dignity and competence of individuals. Through his vision and innovative approach, Don Bosco knew how to journey across the times.

From Don Bosco's time to ours, societies have experienced various changes that affect individuals, families, cultures, schools, and churches.

Various things express the significant epochal change that has taken place. Among them, and having a greater impact on people's lives, especially children, adolescents and older youth, are the new technologies and networks of communication. Communication's future is digital and virtual (Cert., 1998).

In his message for the 45th World Communications Day in June 2011, Pope Benedict XVI spoke of "a phenomenon characteristic of our age: the emergence of the internet as a network for communication."[57] He referred to the phenomenon of the Internet as a new revolution. "Just as the Industrial Revolution profoundly transformed society through the modifications it introduced into the cycles of production and the lives of workers, today, the radical changes taking place in communications are guiding significant cultural and social developments."

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[57] Cf. http://www.vatican.va/content/benedict-xvi/en/messages/communications/documents/hf_ben-xvi_mes_20110124_45th-world-communications-day.html

The Pope recognised that these profound transformations in communication and new technologies are neither temporary nor superficial; they affect the fabric of human relationships and the platforms of social and cultural structures.

He went so far as to say,

"The new technologies are not only changing the way we communicate but also communication itself, so much so that it could be said that we are living through a period of vast cultural transformation. This means of spreading information and knowledge is giving birth to a new way of learning and thinking, with unprecedented opportunities for establishing relationships and building fellowship.

We live in a world where daily news is emerging in all sectors of society. With thousands of scholars and researchers working daily in laboratory tests in medicine, psychology, artificial intelligence, biotechnology, and nanotechnology, we see ourselves in a new world where we are constantly challenged to rethink our way of experiencing and seeing the reality around us.

These changes are part of each person's history. We cannot control these changes or the economic, political, social, cultural, and ethical reality. We live with so many changes that we cannot predict what will happen in five or ten years.

If, on the one hand, the sciences have not yet responded satisfactorily to the great human, social, economic and ethical problems, they have allowed us to navigate the universe with a compass that has given us a certain level of security. We will continue to have the great challenge of dialogue between religion and science as a necessary path for the present and future.[58]

In a world of rapid and unpredictable change, how do we situate ourselves as Christians vis-à-vis the values of the Gospel and the Preventive System of Don Bosco? When we speak of Don Bosco, we have the reality of youth before us. Who are these young people? How do they participate in this world of rapid change in society? How do they place themselves before God and religion? Can the values of the Preventive System have meaning for them?

Even though it is not always easy to apply concepts to complex and unique realities, I propose that the new vision that we have given in this study of Don Bosco and his educational system offers a sound basis for an initial response to some problems studied by the sciences.

With the collaboration of secular scholars from various areas of scientific research, we still need to advance in the studies on Don Bosco to understand his interior world, his educational methodology, and his spirituality better.

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[58] For a proposal for dialogue between religion and science, see Brendan Sweetman, *Religion and Science: An Introduction* (London: Bloomsbury Academic, 2009).

13.1. New Approaches to Molecular Biology and Biochemistry

In October 2017, the Pontifical Academy of Sciences, the Vatican Science Academy, met with scientists from Latin America to discuss cell biology and genetics issues. These subjects are at the heart of research by renowned scientific academies.[59]

In the programme for the 2018 International Congress of Cell Biology,[60] topics of great interest and relevance in the world of research were studied: the cell membrane, its organisation and functions, nuclear dynamics, motor molecules and other cell machines, the nuclear matrix, chromatin and the genome, study of cells in 3 and 4 dimensions, intra-cellular transport, modelling human diseases, micro-environment, metabolic control, DNA: how it breaks down and how it fixes itself.

One of the most exciting areas of study in recent years is biochemistry. Based on the multiple studies on chemical combinations, researchers have opened an immense area of research regarding healthy eating, body care, and the use of more ecological and sustainable products, with ethical values incorporated and socially committed to the environment and societies.

In the last two decades, the concept of health has changed radically. People's, governments', companies', and groups' interests have converged in terms of ecological awareness, both locally and globally. Nations and ethnic groups have become more aware of their natural reserves, forests, rivers, animals, soil diversities, and leisure environments.

New technologies have invested in and dedicated themselves to everything from cosmetic production to functional biopolymer technologies, recombinant DNA, and active enzymes. They have invested in new health treatment and food models and creating "green technologies." For this, biology and chemistry integrate research. Biotechnology is one of the fastest-growing sectors of research.

The sciences have always had and will always have a privileged and indispensable place in the history of humanity.

In two thousand years of history, the Catholic Church has been a great promoter of science studies, primarily through its universities.

Through education, Don Bosco always dialogued with the sciences of his time and, through the development of his works, always promoted the sciences and reason as a fundamental element of interpreting the reality of life, society, and cultures.

Dialogue with the sciences in the present and the future is fundamental for any educator and educational institution. Through the values of the Preventive System, study and research, educators, teachers, and researchers who work in Salesian presences, our past pupils, too, can develop a dialogue between science and religion, the Preventive System, and research that will undoubtedly open new horizons for studies.

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[59] See the report online: https://istoe.com.br/quando-ciencia-encontra-Deus/

[60] See ascb.org/ascb-meetings/international-congress-of-cell-biology-2018/

13.2. Language, Perceived Values, and Life Experiences

With cultural change, the new generations seek new languages and attitudes towards reality (postmodern, fluid, and so on). They feel attracted by the search for intangible values (love, happiness, joy, fellowship, sense of belonging, etc.).

Studies in new trends (Morace, 2009) have shown evidence that people seek information that responds to their desires and expectations regarding these intangible values. Suppose we observe the capacity of appeal and attraction of sports, carnivals, the grand celebrations of popular piety, and great musical shows. In that case, we realise that people seek identification with, or the answer in, the media to specific intangible values.

Within the new youth culture, values are experienced and perceived not from logic, categorical imperative, or moral idealism but from the lifestyle and power of perceived values.

According to marketing theory, perceived value is associated with quality, benefits, sacrifice, and satisfaction. The basic idea is that the quality of services provided must meet people's needs and that these services or products are not important in themselves but must foster people's experience and interest.

For Internet natives, values such as respect, justice, solidarity, and love are difficult to understand conceptually. They also have difficulty understanding and accepting representations of life, politics, and institutions. This generation seeks what is tangible, reliable, and responsible, giving security, comfort, and empathy.

The values and horizons of life spring from the vigour of vital experience. Today's adolescents and youth follow the calls for interactivity, engagement, and collaboration. They want to be creative interpreters and like to live relationships with intensity. Similar to the search for perceived values, they want to have a profound experience of life, relationships, and choices. Vital experience is the source of revitalisation and motivation to live and love.

The Internet generation perceives social commitment from a subjective and inventive spirit perspective. For Morace (2009), a scholar of the cultural phenomenon of the new generations, people are learning to fill the space that the Internet offers the user with "biographical" content and with their own talents, which they then transfer to real life, especially in their way of relating to work and being in solidarity.

The members of the Internet generation have not stopped believing. On the contrary, they believe in God. They seek the sacred. They like religious activities that value the affective and the symbolic, which lead to vital experience, being together, a sense of adventure, originality, and experience mystery. This return to the symbolic and affective does not mean, for them, a denial of rationality. Perhaps they seek systemic and complex relationships more clearly. They know how to value spirituality, the sense of mystery, and religious rituals, and engage when motivated to act in solidarity in the name of the sacred and religious.

Intelligently and practically, Don Bosco intuitively grasped the fact that education passes through the vital experience of the individual: the individuals' deepest desires, aligned with their perceived values and

coherently integrated into their experience. Considering his time and culture, Don Bosco developed a new language to educate: profoundly based on the artistic, symbolic, and imaginative.

13.3. Motivational and Innovative Psychodynamics of Education

For Don Bosco, the genesis of Salesian networking could be described as a great imagination that generates an idea, which in turn inspires a dream. This dream produces a scenario, a narrative that becomes a message, a message that becomes a project map, and a project that becomes concrete through an activity that strengthens his educational project and his Congregation.

The dynamics of the creative process involving forward projection and accomplishment are complex and rich in values, attitudes, and behaviours that align with what neuroscience, and social psychology have discovered in current studies regarding creativity, motivation, attitude, leadership, loyalty, networking, and creativity.

From his own experience of life and formation, Don Bosco became a great educator, leader, and founder for his Salesians. Motivation is a fundamental factor in his spirituality. Don Bosco's System is founded on values such as faith, motivation, attitude, leadership, and the capacity for innovation. These values that express themselves in attitudes are, for Don Bosco, fundamental for the complete formation and success in any area of the individual's personal, spiritual, and professional choices.

Right up until his death, Don Bosco had carried out immense work, formed great leaders, extraordinarily motivated them, wrote, published, built churches, established a tremendous relationship of collaborators, and projected the Congregation on a global level.

His educational system, as a whole, opens up room for dialogue with new studies in psychology on examples of motivation, leadership, attitude, innovation, and entrepreneurship.

13.4. Systemic Vision of Education

We have seen that Don Bosco had a broad and comprehensive view of reality. From his experience, he knew how to understand persons and discover each individual's potential. Furthermore, he contributed to discovering, valuing, empowering, giving meaning to his gifts, and finding practical ways to realise them. He considered the person holistically.

As founder of the Salesian Congregation, Don Bosco created a global network to educate and prepare people to implement and expand his educational project in Europe and other continents in an original way. From an oratory in Valdocco, he expanded his Congregation worldwide, reaching from South America to China. His vision of the whole is exceptional. For Don Bosco, the parts unite to form the whole. This is the human reality, and this is the educational reality.

Don Bosco had a vision of the whole in his way of educating and seeing reality. This holistic vision that Don Bosco experienced in his contact with nature, the arts, the image of God, and the interactive educational process offers a fundamental point of dialogue with the systemic vision of reality that is reflected by various approaches, as we have already seen, as well as the vision of Pope Francis, expressed in *Evangelii Gaudium* (nos. 234-237), where he says that the whole is greater than the parts. "The whole is greater than the part, but it is also greater than the sum of its parts." (no. 235)

Starting from an image, Francis speaks of the model of the whole, which is similar to the figure of the polyhedron,

which reflects the convergence of all its parts, each preserving its distinctiveness. Pastoral and political activity seek to gather the best of each in this polyhedron. There is a place for the poor and their culture, aspirations, and potential. Even people who can be considered dubious because of their errors have something to offer that must not be overlooked. It is the convergence of peoples who, within the universal order, maintain their individuality; it is the sum total of persons within a society which pursues the common good, which truly has a place for everyone. To Christians, this principle also evokes the totality or integrity of the Gospel, which the Church passes down to us and sends us forth to proclaim. (EG, nos. 236-7)

The vision of the whole, from an epistemological point of view, has consequences for human and social ethics, for example. Unlike what instrumental rationality proposes, the vision of the whole reintegrates individuals into the environment, their land, their culture, and their relations with nature, seeing this as an extension of the human being and not a fragmented reality.

In his Encyclical *Laudato Si`* , Pope Francis expands on this vision of the whole. He presents to humanity a proposal for the re-education of the person and society in the face of human, social, and ecological values. The Pope says,

Since everything is closely interrelated, and today's problems call for a vision capable of considering every aspect of the global crisis, I suggest we now consider some elements of an integral ecology that clearly respects its human and social dimensions. (LS, no. 137)

13.5. A Humanistic Approach to Communication

In *Laudato Si`* , the Pope says that the fundamental problem we have today is,

"the way that humanity has taken up technology and its development according to an undifferentiated and one-dimensional paradigm. This paradigm exalts the concept of a subject who, using logical and rational procedures, progressively approaches and gains control over an external object. This subject makes every effort to establish the scientific and experimental method, which in itself is already a technique of possession, mastery, and transformation". (LS, no. 106)

A fragmented view of reality can cause serious problems for people, societies, and human progress. Instrumental rationality has caused severe disintegration, problems between people and their cultures, between people and the environment, between economic development and increased pollution, and between economic growth in some regions and extreme poverty, among others.

The world of communication, with the digital revolution and the phenomenon of social networks, has two strong tendencies, according to scholars of virtual communication: the production of information by people who become key players in information, and the communicative and persuasive force of the power of people's own stories.

There is a change in perception of the reality of people, families, politics, religion, and everything aired in the media. Authentic stories are the ones that most attract and generate credibility. Television, radio,

media, and soap operas are seeking more and more real-life scripts, testimonies, and stories that people experience and become messages through experience.

Don Bosco intelligently understood that to tell the stories of the missionaries in the Salesian Bulletin, writing the life stories of a few of his young people would be a way to reach people's hearts originally and authentically. He began to tell stories, to be a storyteller of his young people—stories of achievement, sacrifice, self-giving, and growth.

13.6. Social Development and Cultural Advancement

The 6th World Science Forum was held in November 2016 in Rio de Janeiro. Around 700 researchers, authorities, and entrepreneurs from the five continents reflected on how science can help in global sustainable development. One of the fundamental issues of this forum was the importance of ethics as an element that brings together all sectors of research, political authorities, and entrepreneurs to promote health, education, security, and human rights throughout humanity.

One of the themes of this forum was the difficulty students worldwide have in getting a quality education related to life that advances community, cultures, and people.

The United Nations Organisation has the promotion of global sustainable development as one of its objectives. The vast imbalances caused by economic growth in social, cultural, and ecological life have brought enormous problems for the healthy growth of people and societies.

Starting from another socio-political context, Don Bosco began a project to educate his young people in Turin. Without material conditions, prepared people, or sufficient infrastructure, Don Bosco started a real educational culture, beginning from his integral vision of the human person.

The integral design of Don Bosco's Educational System can inspire and enlighten with its perspective on educational ecosystems. In these ecosystems, the person is educated from a systemic standpoint, integrating education with the arts, spirituality, commitment to others and people in need, and involving self in a more extensive network to promote the values that build growth on an individual and collective level.

Don Bosco knew that knowledge must serve the growth of the person and society. This is done with investment, quality, and commitment.

It is interesting to note that Don Bosco invested in the creation of a quality paper mill, began the magazine known as the Salesian Bulletin, organised the Catholic Readings, supported cartography, began technical vocational schools, promoted the learning of music and theatre, invested in the construction of churches and schools, and supported his Salesians to undertake study and research. When Fr Lasagna, one of his Salesian leaders, arrived in the Americas, he asked for and supported the creation of a meteorological laboratory in Cuiabá. The expansion of the Congregation, with its networks of schools, universities, agricultural schools, museums, publishing houses, record companies, and professional centres, has expanded through an initial vision of Don Bosco, who always promoted integral education.

Don Bosco's incentive for an extraordinary commitment to sending Salesians to work with the indigenous people of Patagonia, Mato Grosso, Amazonia, and other parts of the world were expressions of his

humanistic vision of education that must always be at the service of the growth of individuals, of social and cultural development, both in Europe and on other continents.

Pope Francis's proposal in *Laudato Si`* regarding integral ecology and the ethical commitment of all people to the sustainable development of the planet is in harmony with Don Bosco's aspirations and actions, even though they were modest by comparison with the modern sense of integral development.

Don Bosco dedicated his whole life to the poorest youth who used to come to Turin searching for a job, a house, and food. He deeply comprehended that God is present in the lives of the youth. Therefore, they need love, dignity, and support to grow as human beings and be happy in life.

His option to take care of the young continues to be an appeal to all educators in all societies and cultures.

13.7. Immersion, Instantaneity and Interactions

With the great digital revolution of the Internet and social networks, the new generations—natives of the digital age[61]—live immersed in the virtual universe.

How do we integrate the real world with the virtual? We start from the principle that the real and the virtual do integrate. People's relationships are interconnected between the here and there; their physical and emotional presence expands into a gigantic world of subjective expression. People can be present on several levels; interpersonal relationships happen within a confluence of simultaneous and instantaneous social relationships.

Through his dreams, writings, and the arts, Don Bosco became present in his absence and expanded his communication (images, messages, affections, projects, vision of the future) through what we could call symbolic language. A dream of Don Bosco, in which he tells of a place that he was never present, becomes a reality through the strength of communication and the intensity of sentiments placed within the script of the dream.

Today, we live in a culture of images and their impact on the psychological and social levels. In this culture of images and the power to spread what each person wants to transmit, telepresence is a way of communicating.

The big issue we face in this virtual universe is an ethical one. How can we humanise the Internet? How can we educate people to an ethical stance in the virtual world? How can we live healthily in the virtual world and real-world interaction?

Scholars in the various areas of virtual communication are studying how to define the great question of the individual's freedom and the global universe of Internet networks. The State, for example, can control some aspects of Internet security if the postulates used for ethics in different societies can be applied similarly in the online universe.

Governments, private agencies, and the Church have proposed to humanise the online universe. The UN itself has developed policies of security and protection, for example, against the spread of violence, fake

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[61] For a definition of the new generations at social and psychological levels, Gildásio Mendes dos Santos, *Geração Net: Relacionamento, Espiritualidade, Vida Profissional* (São Paulo: Editora Paulinas, 2009).

news, and racial discrimination, proposing an ethics for the Internet. The Catholic Church, by publishing the document *Ethics in the Internet*, supports the importance of humanism and values that should guide people on the Internet.

Don Bosco's experience, beginning with telepresence, could contribute to the humanistic vision of his communication, placed at the service of human advancement, the human development of people, fostering the active involvement of young people, and the dialogue of sciences (study) with education and culture.

13.8. Humanisation and Artificial Intelligence (AI)

Artificial intelligence (AI) is currently becoming more important. We are facing an epochal change that requires our discernment to educate for its intelligent and conscious use.

In a recent Church pronouncement, Pope Francis stated:

"It is not news that in recent years, Artificial Intelligence (AI) has progressed exponentially, as evidenced by its many applications in various fields of knowledge. Currently, 37% of the world's organisations have implemented AI in some way (a 270% increase in the last four years)".

The Pope recognises its importance and usefulness in different areas of human life and society's development. Still, he clarifies that its progress, like that of robotics, can make a better world possible if it is united to the common good.

Based on Don Bosco's educative system, our approach to AI is to establish an educational dialogue. It is essential to build a humanistic vision of the development of the individual and the community in its use. Likewise, deepening and implementing meetings and seminars in Salesian communities and works is necessary to learn about the different psychological, social, moral and cultural aspects involved in AI.

There is also a need to follow developments in the regulation of AI and its impact on economics, politics, culture, and education, both on a personal and community level, and to make people aware of the binding rules on transparency and security, especially regarding biometric recognition, privacy, and security, ensuring that the use of AI guarantees the protection and security of all citizens.

In the Message for the 57th World Day of Peace in 2024, with the theme "Artificial Intelligence and Peace," Pope Francis clearly warned about the importance of AI and the risks it can pose to humanity:

"On the one hand, exciting opportunities, such as the improvement of work, peoples' living conditions, medical tools and personal interactions; on the other hand, serious risks, such as the unregulated use of so-called smart weapons, the consequent danger of terrorist attacks, thus going on to promote the madness of war or interventions aimed at destabilising legitimate government institutions, going so far as to, for example, condition political elections".

This is why it is essential to know how algorithms work and how they are applied in the different spheres of human and social life (education, health, security, economy, politics). It is good to know how AI is applied in content production, with all the implications for copyright, fake news, information manipulation, state ideologies, and commercial companies.

It will become increasingly necessary to accompany the development and legal provisions with expert teams, with technical information on conscious use in different sectors of society.

Through his vision of the human person, the use of the arts such as music and theatre, and the involvement of young people in games and liturgy, Don Bosco expressed his integral vision of human education.

Already in his time, with a modern vision of communication, he began writing books, had his own printing press to print books and other educational and religious publications, and started a real network of communication and human relations.

Don Bosco's vision of spatial intelligence, which we present in this book, offers a fundamental point of dialogue between some of Don Bosco's aspects of communication, and the digital world and artificial intelligence. Of course, by not considering technological aspects, Don Bosco contributes to a view of human communication in dialogue with artistic aspects, for example, which remains current and necessary for human communication in any technological reality.

13.9. Quality of Life and the Psychodynamics of Joy

Joy is the basic theme of Salesian spirituality and pedagogy. Don Bosco placed joy at the centre of his pedagogy and spirituality.[62] Pope Francis prioritised the theme of joy (*Evangelii Gaudium*) and developed this theme as a proposal of life for the Christians of today.

Joy is the expressiveness and vitality of the interior dynamics of the person who has faith and love. Don Bosco cleverly understood that joy is the expression of human psychodynamics that translates the truth and happiness of the whole person.

Many books have been published, and research has been carried out on joy, contentment, pleasure, and quality of life.

Recently, a group of researchers proposed a more quantitative analysis of quality of life[63] called GNH (Gross Internal Happiness).

Humour is important in the psychodynamics of Don Bosco's spirituality because it reveals aspects of creativity and inner freedom. Humour means an inner capacity for flexibility and intelligence.

Today, scientists analysing the human brain have discovered that moments of creativity happen when the human mind is resting, relaxed, and not working. Brigid Schulte, author of the book *Overwhelmed: Work, Love, and Play When No One Has the Time*, says that "neuroscience is showing that when we are more relaxed mentally, in moments of relaxation, our mind is more active."

Studies conducted by researchers and published at Harvard Business Review maintain that relaxation is fundamental to creating new ideas, inventiveness, and leadership.[64] Conflicts are approached with

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62 This theme is well developed in Afonso de Castro, *A Espiritualidade de São João Bosco* (Campinas: Arte Brasil Publicidade, 2010).

63 See study at https://www.aedb.br/seget/arquivos/artigos08/323_Indice%20de%20Felicidade%20Interna_SEGeT.pdf

64 See David Burkus, "The Creative Benefits of Boredom" *Harvard Business Review*, 2014: https://hbr.org/2014/09/the-creative-benefits-of-boredom and Charalampos Mainemelis, Sarah Harvey, "Ideas Are Born in Fields of Play" *Rotman Management Magazine*, 2010.

flexibility and lightness. Tension is accepted with truth, as an absolute fact, but managed with wisdom and flexibility.

An interdisciplinary approach that studies the human being in its affective-cognitive-neurological dimensions can offer new discoveries on the sources and manifests of human potentialities, especially joy. It is a more significant and total expression of what human beings desire and seek daily, under various names, among them happiness!

14. Journeying with Don Bosco across the Times

Don Bosco's life, formation, educational system, spirituality, and work are monumental. Through some approaches, we have seen that it is possible to establish lines of study with themes related to games, dreams, the conception of space, educational presence, motivation, leadership, attitude, innovation, and entrepreneurship.

A vision of transcendence is fundamental to complement everything he was and accomplished. The vision of the transcendent empowered the human being he was, strengthened the psychodynamics of his person, and gave meaning to his life and work.

Theologically, we can affirm that Don Bosco, in addition to all this, received God's grace, a special call for this noble mission. Here, science and faith meet. Mysteriously, we still have a long way to go to understand some of the mysteries expressed in human nature and action.

His spirituality and his pedagogy are topical today and open to the possibilities of interdisciplinary studies.

Within Don Bosco's spiritual dynamic, the feminine is fundamentally relevant in its psychological and spiritual aspects. Our Lady Help of Christians is the Mother who appeared in the dream at nine years of age, and accompanied and guided Don Bosco.

We do not yet know Don Bosco in terms of his complexity and human spiritual simplicity. All our commitment to getting to know his life, spirituality, and work better will be a way of recognising his greatness and his immense contribution to the Salesian Congregation, the Church, and humanity.

Looking into the future, we journey with Don Bosco across the times.

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