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TEACHING, THEOLOGY, AND ACCOUNTING IN LUCA PACIOLI'S PORTRAIT

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ABSTRACT

This article explores the symbolism, educational significance, and theological elements present in the portrait of Luca Pacioli, attributed to Jacopo de' Barbari (1495). Through an iconographic analysis, it highlights how this portrait reflects the close relationship between accounting, mathematics, theology, and education in the Renaissance. Panofsky's three-level method of analysis (pre-iconographic, iconographic and iconological) was applied, which allowed for a deep interpretation of the visual elements. Luca Pacioli, pioneer of the double-entry system, is depicted as a teacher and transmitter of knowledge, surrounded by elements that symbolize his legacy in accounting, mathematics, and his deep connection to the Christian philosophy of his time. The compass, the blackboard with geometric figures, and the suspended polyhedron evoke the precision and order inherent in the mathematical sciences, but also suggest the theological idea of the universe as an ordered creation based on a divine principle, a reflection of God's design in the material world. The figure of the disciple not only symbolizes the transmission of knowledge but also the spiritual and moral heritage that the teacher shares with future generations, aligning with the Christian ideals of the time. The work not only represents Pacioli as a mathematician but also as an educator who perpetuated knowledge through teaching, consolidating the foundations of modern accounting and demonstrating the balance between earthly knowledge and divine principles. The analysis led to the conclusion that the portrait is not a mere biographical representation, but a visual manifesto of Christian humanism and the pedagogical role of accounting in the Renaissance. The analysis highlights how the portrait reflects Renaissance ideals of proportion, rationality, and the interconnectedness of art, science, pedagogy, and theology, showing how mathematics and accounting

could be seen as reflections of divine perfection in creation and the pursuit of truth.

KEYWORDS: Luca Pacioli, Accounting, Education, Theology, Renaissance, Teaching, Double Entry.

1. INTRODUCTION

The Renaissance was a period of great intellectual, artistic, and scientific advances in Europe, with notable figures contributing significantly to the consolidation of mathematics and accounting as key disciplines for the economic structure and social development of the time (Ulivi, 1994). One of the most representative figures in this field was Friar Luca Pacioli, a mathematician, Franciscan friar, and pioneer of modern accounting, primarily known for having formalized the double-entry system in his work Summa de Arithmetica, Geometria, Proportioni et Proportionalità (1494) (Jayawardene, 1974). The portrait of Luca Pacioli, attributed to Jacopo de' Barbari and dated 1495, is a work that encapsulates the relevance of mathematics and education in the Renaissance context.

Of humble origins, Luca Pacioli left for Venice as a young man to work as a teacher. He later joined the Franciscan Order and, after completing his training in theology and philosophy, dedicated himself to teaching mathematics in various Italian cities, including Perugia, Venice, Zara, Florence, Rome, Milan, Pisa, and Bologna. Close to Leonardo da Vinci, Pacioli was one of the most representative figures of his time. Unlike other mathematicians before him, he chose not to write in Latin, but in the vernacular, although his style was quite rudimentary, replete with Latin, Greek, and local dialect terms. Although he did not use algebraic symbolism as we know it today, Pacioli introduced interesting linguistic abbreviations that broke new ground. His writings laid the foundations for future algebraic research in the 16th century. Although he cannot be considered a creator, his use of Leonardo Fibonacci's unpublished texts was undoubtedly a true revolution.

He published several books, including: Summa de Arithmetica, Geometria, Proportioni et Proportionalita (1494): This is his most famous work, which addresses topics of arithmetic, geometry, and proportions. It includes a section dedicated to accounting, where he introduces the double-entry system. Tractatus Statii de Numeris et Mensuris: A treatise on measurements and numbers, including mathematical principles applied to accounting. De divina provisione (1509): This book focuses on divine proportions and geometry, exploring the relationships between mathematics and art. Summa de Arithmetica: A compendium of mathematical knowledge, including principles of calculation and accounting. Practica Arithmetice: A treatise on the practical application of arithmetic in everyday life and business.

The most important work in the context of accounting is the "Summa de Arithmetica," which not only lays the foundations of the modern accounting system but also presents the importance of keeping accurate records and the logic behind business transactions.

Luca Pacioli, mathematician and humanist, displayed a profound philosophical and religious interest, evident from the title of his work. In his geometric investigations of regular bodies, he exalts them from a Platonic perspective, highlighting their ideal purity as archetypal models for the bodies derived from them. In the literature of the visual arts, On the Divine Proportion has particular relevance due to Pacioli's connections with the cultural environment of Ludovico il Moro's court in Milan, and in particular, with Leonardo da Vinci, with whom he maintained a close relationship. In some respects, the book reflects Leonardo's thinking, especially in its praise of painting, and also includes valuable information about the master's work. According to Pacioli himself, the perspective polyhedron figures and the letters of the alphabet included at the end of the volume were created by Leonardo.

This article analyzes the symbolism of the elements present in the portrait and its relationship to accounting and education. In the Renaissance, mathematics and proportion were considered the foundations of cosmic order and human rationality, and this portrait reflects these concepts through Pacioli's representation of objects such as the compass and the open book. These elements not only reinforce the importance of technical knowledge but also Pacioli's didactic function, as he played an essential role in transmitting mathematical and accounting knowledge to new generations (Ghyka, 1977).

The portrait of Luca Pacioli, attributed to Jacopo de' Barbari (1495), has been the subject of multiple interpretations in art history, but it has been rarely analyzed from a perspective that articulates iconography, accounting, mathematics, theology, and pedagogy in the context of the Renaissance. Although Pacioli is recognized as a central figure in the consolidation of the double-entry method, his visual representation contains a symbolic complexity that transcends the biographical and raises questions about the role of scientific and religious knowledge in humanist culture. This study begins with the following research question: how does Pacioli's portrait represent the interrelationship between accounting, mathematics, theology, and pedagogy in the Renaissance imagination? By situating the image

as a cultural artifact, iconographic analysis allows us to explore the underlying meanings of its visual elements, such as the polyhedron, the compass, or the figure of the disciple, and their function in the construction of a Christian pedagogical ideal based on order, proportion, and the transmission of knowledge. This approach allows us not only to reinterpret the portrait from an interdisciplinary perspective, but also to broaden our understanding of the symbolic role of accounting in the visual representations of knowledge in 15th-century Europe. Furthermore, we will address Pacioli's relevance as a teacher and his contribution to the development of modern accounting, as well as the mathematical symbolism present in the work. The interpretation of these aspects offers a comprehensive view of how Renaissance art not only served as a means of representation but also as a tool for conveying scientific and philosophical concepts (Garrard, 2009).

2. THEORETICAL FRAMEWORK

The theoretical framework of this study is structured around three main themes: accounting in the Renaissance, the role of education in the transmission of mathematical knowledge, and the relationship between art and theology. Through these themes, the study explores how Luca Pacioli's portrait reflects and symbolizes Renaissance ideals, not only in terms of teaching and mathematics, but also in terms of the role of accounting as an applied science.

2.1. Accounting In the Renaissance

The double-entry system, formalized by Luca Pacioli in his work Summa de Arithmetica, Geometria, Proportioni et Proportionalità (1494), is considered a fundamental milestone in the evolution of modern accounting (Jayawardene, 1974). This method, which organizes financial transactions according to the principle of balance between debits and credits, transformed accounting practice, allowing for more accurate and systematic recording of economic operations. Pacioli did not invent this system, but he was the first to describe it in a formal and accessible way, making him the "father of modern accounting" (Ulivi, 1994).

During the Renaissance, accounting was not considered merely a technical tool for merchants, but a mathematical discipline that offered a deeper understanding of the economic and social order. Indeed, applied mathematics and accounting became essential tools for the economic success of Italian city-states such as Venice and Florence, where international trade and finance flourished (Garrard, 2009). Pacioli's work was therefore key to consolidating the use of this system on a large scale, and his influence was felt not only in the commercial sphere but also in the academic sphere, as reflected in his depiction in the portrait.

2.2. The Role of Education and The Transmission of Knowledge

During the Renaissance, education was fundamental to the consolidation of scientific and humanistic knowledge. The Renaissance educational system, inspired by humanistic ideals, valued the transmission of knowledge from master to disciple as essential for the advancement of disciplines (Ulivi, 1994). Pacioli was both a mathematician and a teacher, and his portrait symbolizes this duality: a man who not only creates knowledge but also imparts it, training a new generation of accountants and mathematicians.

Pacioli's portrait, featuring a disciple, reinforces this ideal. The teacher-disciple relationship was a pillar of the Renaissance educational system and was often represented as a way of perpetuating the wisdom of great intellectuals (Ghyka, 1977). In this sense, Pacioli not only embodies the figure of the erudite mathematician, but also that of the educator who, through his teaching, guarantees the continuity of knowledge.

2.3. The Intersection Between Art and Mathematics in The Renaissance

The Renaissance was a time when mathematics and the arts were closely intertwined. Artists such as Leonardo da Vinci and Albrecht Dürer considered mathematics, particularly geometry, the key to achieving greater precision and beauty in their works (Panofsky, 1982). Geometry was not only considered an exact science but also a philosophical discipline that allowed artists to capture divine order and proportion in nature. In this context, Pacioli and his treatise De Divina Proportione (1497) were instrumental in introducing the Platonic solids into Renaissance art, which would become symbols of geometric perfection and ideal proportion (Ghyka, 1977).

The transparent polyhedron featured in Pacioli's portrait is a clear example of the influence of mathematics on Renaissance art. A rhombicuboctahedron symbolizes mathematical precision and the connection between geometric forms and universal order (Jayawardene, 1974). Thus, the portrait presents Pacioli not only as a mathematician but also as an intellectual who

understood and promoted the application of mathematics in different fields of knowledge, including art and architecture.

2.4. Theology And Religious Symbolism in Pacioli's Work

Renaissance thought united scientific knowledge with philosophy and religion, and Pacioli's work is no exception. In his research on proportion and geometry, Pacioli displays a strong theological influence. For him, mathematics was not just a practical science, but a means of understanding the divine order that governs the universe (Ulivi, 1994). The regular geometric solids, platonically exalted in his work, were considered ideal archetypes that reflected the purity and perfection of divine creation.

The title of his most famous work, De Divina Proportione, explicitly underlines the theological dimension of his thought, connecting mathematical proportions with the idea that the world was created according to a rational and divine design. Geometry was therefore seen as a reflection of the order established by God, and mathematics as a way of discovering and replicating that design in the material world (Ghyka, 1977). The mathematical elements present in the portrait, such as the compass and the polyhedron, are associated with the human capacity to discover and reproduce the divine order through mathematics (Panofsky, 1982).

Pacioli's portrait reflects this theological vision through mathematical symbols and the presence of geometric elements that allude to divine perfection. The compass that Pacioli holds, traditionally a symbol of mathematical precision, is also a reference to God as the architect of the universe, a common concept in Christian iconography of the period (Panofsky, 1982). In this way, Pacioli is not only represented as a mathematician, but as a thinker who conceives of mathematics as a divine language for describing creation.

Unlike previous studies that focused exclusively on the mathematical or artistic dimensions of Pacioli's portrait (Ghyka, 1977; Jayawardene, 1974), this article proposes an interdisciplinary reading that articulates accounting, pedagogy, theology, and Renaissance art. By applying Panofsky's iconographic framework, a deeper interpretation of the symbolic elements is achieved, positioning Pacioli as a point of convergence between scientific reason and Christian morality. This synthesis reveals how these domains did not operate in isolation but were intertwined in a comprehensive formative project, characteristic of Renaissance humanism.

3. METHODOLOGY

This article follows a qualitative approach based on an iconographic and historical analysis of the "Portrait of Luca Pacioli," attributed to Jacopo de' Barbari, with the aim of understanding the symbolism of the elements present in the work and its relationship with accounting, education, and mathematics in the context of the Renaissance. The research was carried out in three stages, supported by the visual analysis of the work and the review of secondary sources specialized in art history, accounting, and Renaissance mathematics. The three-level method proposed by Erwin Panofsky (1982) was used as a formal framework for analysis. This method distinguishes between pre-iconographic analysis (formal description of the visual elements), iconographic analysis (identification of conventional motifs and symbols), and iconological analysis (interpretation of the deeper meaning in its historical and cultural context).

The first phase consisted of a comprehensive review of the academic literature to establish a theoretical framework for the symbolism and interpretation of Renaissance art. Key sources related to the life and work of Luca Pacioli were consulted, as well as studies on the role of mathematics and accounting in their historical context. Among the reviewed works, the studies by Ghyka (1977), Jayawardene (1974), and Ulivi (1994) stand out, providing a solid foundation for understanding mathematical symbolism and the relevance of education to Pacioli. Academic databases such as Google Scholar, JSTOR, and specialized books on Renaissance art, accounting history, and science education of the period were used. This phase also included a review of recent studies analyzing the relationship between art and science during the Renaissance, such as the works by Garrard (2009).

The iconographic analysis of the portrait constituted the second phase of the research. This technique was applied according to Panofskian methodology, beginning with a pre-iconographic description of the visible elements—the compass, the suspended polyhedron, the open book, and the presence of the disciple—followed by an iconographic level in which the symbolic motifs associated with mathematics, proportion, and teaching were identified. At the iconological level, the deeper meanings these objects acquired within the context of Renaissance culture were explored, emphasizing their connection to the humanist ideal of transmitting scientific knowledge.

In the third phase, the iconographic findings were historically contextualized through a comparative

analysis with other works of the period that include scientific and mathematical elements, such as the illustrations for Leonardo da Vinci's De Divina Proportione and other contemporary depictions of academic figures. This approach allowed Pacioli's portrait to be situated within a broader current of Renaissance art, characterized by the intersection of art, science, and pedagogy.

To validate the iconographic and historical interpretation, a methodological triangulation was applied based on the comparison of visual, documentary, and specialized bibliographic sources. This strategy allowed us to compare the findings obtained from the analysis of the work with previous academic studies and contemporary artistic representations, thus strengthening the validity of the conclusions.

The collected data were subjected to a critical analysis that sought to interpret not only the visible content of the portrait, but also its philosophical, theological, and epistemic implications. This interpretation advanced the understanding of the portrait as a symbol of the convergence of accounting, art, and humanistic knowledge, highlighting its function as a cultural artifact that transcends individual representation to articulate a broader message about the role of scientific education in Renaissance society.

4. RESULTS

An analysis of the portrait of Luca Pacioli, a key figure in the history of accounting and mathematics, requires an understanding of the work's iconography, its historical context, and Pacioli's impact.

Friar Luca Bartolomeo de Pacioli (c. 1445–1517) was an Italian mathematician, accountant, economist, and Franciscan friar. Credited with laying the foundations of modern accounting through the double-entry system, he also made important contributions to mathematics and the theory of the golden ratio, which closely links him to the ideals of the Italian Renaissance. He worked alongside Leonardo da Vinci, who illustrated his work De Divina Proportione.

The Portrait of Luca Pacioli contains profound theological elements that reflect the intersection of science and spirituality in the Renaissance. The figure of Pacioli, dressed in the Franciscan habit, highlights his connection to the values of humility, poverty, and service characteristic of the order of Saint Francis of Assisi. Franciscan spirituality is centered on Christ, emphasizing a vision of the incarnation and God's closeness to creation, as opposed to the idea of a distant God. As Saint Bonaventure affirmed, God bends down to uplift us, and the Eucharist is the manifestation of this divine humility. Faithful to the Gospel and the Church, this spirituality advocates obedience and fidelity to the Magisterium, fostering a critical and prophetic engagement with modern secular culture. It is nourished by a synthesis between prayer, contemplation, and service, where each aspect nourishes the other, promoting an authority based on mutual service. Furthermore, Franciscan spirituality upholds the dignity of all creation, recognizing each person as the image of God and valuing creation as a reflection of his goodness. This approach entails a profound respect for human labor and a commitment to social justice, seeking solidarity with the poorest and most marginalized. Thus, Franciscan spirituality strives to bear witness to fraternity, peace, and reconciliation in a world that yearns for justice and dignity for all. Franciscans (2024).

This symbolism suggests that Pacioli's teachings, especially in accounting and mathematics, were not limited to the technical realm but were also imbued with ethical and spiritual values, linking the material with the divine. The compass and the geometric figures it hold represent the precision and order of the cosmos, reflecting the belief that mathematics is a manifestation of God's divine plan, who designed the universe with perfect proportions. This idea is reinforced by the presence of the suspended polyhedron, a symbol of mathematical perfection that evokes the immutable order of divine creation. The relationship between mathematics and theology is made even more evident in Pacioli's work, who believed that mathematics revealed the universal laws established by God. Furthermore, the inclusion of the disciple alongside Pacioli symbolizes the transmission of knowledge, not only technical but also spiritual, showing Pacioli as an educator who integrated the rational with the moral. Finally, the light in the portrait, illuminating Pacioli and his instruments, acts as a metaphor for divine wisdom, suggesting that human knowledge is illuminated by God's grace, allowing humanity to approach the mysteries of the universe through science and mathematics.

Formation in Franciscan life is a continuous process that develops through various stages and extends throughout life, strengthening the friars' Christian and religious identity. It begins with the postulancy, a nine-month discernment phase in which the aspirant reflects on his vocation through

intensive orientation toward Franciscan life, community prayer, and ministry. Later, in the novitiate, the candidate deepens his relationship with God and his Franciscan identity through the study of the Rule, the General Constitutions, and the vows of poverty, chastity, and obedience. At this stage, he receives the Franciscan habit, but without the knots representing the vows. Later, in the post-novitiate, the friars profess their vows for the first time, committing themselves for one year and renewing them for a period of three to nine years, during which they continue their theological or professional formation according to their vocation. Upon completion of this phase, with the approval of their superiors and community, they may request admission to solemn profession, through which they commit themselves to the Franciscan Order for life, an indispensable requirement for those aspiring to the ordained ministry. Finally, ongoing formation accompanies the friar throughout his life, providing opportunities for growth through retreats, fraternal gatherings, advanced studies, and community experiences, consolidating his commitment to Eternal Life.

Figure no 1: Portrait of Luca Pacioli.
Fountain: Capodimonte Museumnaples.

Characteristics of the work:

Author	Attributed toJacopo de' Barbari
Creation	c. 1495-1500
Location	Capodimonte MuseumNaples
Style	Renaissance
Material	Temperaon the panel
Dimensions	98 centimeters × 108 centimeters

Figure no: 2: Working Data.
Fountain: Capodimonte MuseumNaples.

Figure no 2: Coin by Luca Pacioli.
Source: kleinanzeigen (2025).

The Portrait of Luca Pacioli, attributed to Jacopo de' Barbari and painted in 1495, is a Renaissance painting notable not only for its artistic quality but also for its profound symbolic meaning related to Renaissance scientific and mathematical thought. In this portrait, each element has been carefully selected to represent the mathematical knowledge, the philosophy of balance, and rationality fundamental to the era. The central figure is Luca Pacioli, a Franciscan friar, mathematician, and pioneer of modern accounting, who uses a compass over a blackboard containing a geometric figure. A traditional symbol of precision and measurement, the compass evokes the human capacity to decipher the laws of the universe through mathematics. Its use denotes a sense of rational control over space and form, reflecting the Renaissance belief that mathematics was the key to understanding the cosmos.

4.1. Tools Of Knowledge

In front of him is an open book, likely a reference to his famous work, "Summa de arithmetica, geometria, percentagei et percentageita," published in 1494. This detail reinforces Pacioli's image not only as a scholar and creator, but also as a teacher committed to the dissemination of knowledge. The open book represents knowledge available to be shared, underscoring the didactic function of the subject.

One of the most striking elements of the work is the transparent polyhedron suspended above the table. It is a rhombicuboctahedron, an Archimedean solid that reflects the interest in geometry and proportion that Pacioli shared with his friend and collaborator Leonardo da Vinci. This solid appears almost to float, suggesting an idea of geometric perfection and lightness that could be interpreted as a visual representation of the transparency and clarity of mathematical knowledge. Its inclusion is not accidental, as it refers to Platonic ideas about form and order, and to the belief that geometric shapes were the basis for the creation of the universe.

Next to Pacioli is a young disciple, whose identity is still a matter of debate among historians, although some believe it could be Guidobaldo da Montefeltro, the mathematician's protector and patron. The disciple represents the transmission of knowledge, suggesting that wisdom should not only be treasured but also taught to new generations. His posture of attentive observation reinforces the teacher-student relationship, so fundamental in the academic world of the Renaissance.

The board with geometric figures, drawn with mathematical precision, and the various objects on the table, such as an inkwell and a ruler, underscore the practical nature of Pacioli's knowledge. These objects are a direct reference to his work in formalizing the double-entry accounting system, which laid the foundations of modern accounting, and in turn to his interest in applied geometry in various fields of knowledge.

This combination of elements seems to point to a deeper interpretation: Pacioli's portrait is not simply a representation of a scientist, but a visual meditation on the power of mathematics and geometry as tools for understanding the natural world. The balance and proportion present in the work reflect the Renaissance mentality, which considered mathematics the universal language of creation and knowledge.

The Portrait of Luca Pacioli not only captures the image of an intellectual but also symbolizes the interconnection between the disciplines of mathematics and art, the transmission of knowledge, and the pursuit of truth through logical reasoning and the systematic study of the world. Each element of the work suggests a meaning beyond its immediate function, reinforcing the idea that mathematics was not only considered a practical science but a discipline with profound philosophical and spiritual significance during the Renaissance.

Luca Pacioli, recognized as the father of modern accounting, not only left his mark on economics but also integrated theology into his thinking and work. As a Franciscan friar, his accounting approach was not limited to a financial record-keeping system but was deeply rooted in biblical and theological principles. His work Summa de Arithmetica, Geometria, Proportioni et Proportionalità (1494) showcases a conception of mathematical and financial order as a reflection of divine harmony.

In the Bible, order and justice in economic matters are recurring themes. Passages such as Proverbs 11:1, which says, "The Lord hates dishonest scales, but he approves of accurate weights," reflect the importance of honesty and fairness in business transactions, principles that Pacioli promoted in his teachings on double-entry bookkeeping. For him, the proper management of resources had not only a technical purpose, but also a moral and spiritual one, as it reflected God's order in creation.

4.2. Key Aspects of Theology

Another key aspect of Pacioli's theology is his emphasis on proportion and balance, concepts he associated with divine perfection. Inspired by texts such as Ecclesiastes 3:1 ("To everything there is a season, and a time for every purpose under heaven"), Pacioli saw accounting as a reflection of the universal harmony established by God. Orderly and accurate accounting, in his view, was an act of obedience to divine creation and a way to justly administer humanity's goods.

Likewise, in the parable of the talents (Matthew 25:14-30), Jesus emphasizes the importance of good stewardship of the resources given by God. Pacioli, from his Franciscan perspective, understood that accounting not only served merchants and rulers, but was a tool for the responsible management of assets, in line with the principles of Christian stewardship. Transparency and accountability were, for him, essential values that every merchant should embrace, reflecting the biblical teaching of acting with integrity and responsibility before God and man.

The doctrine of the Catholic Church has influenced various disciplines throughout history, including economics and accounting. Luca Pacioli, a Franciscan friar and mathematician, integrated Catholic principles into his thought and work. His contribution to modern accounting was based not only on the development of an efficient system but also on an ethical vision aligned with the Church's teaching on justice, honesty, and the responsible stewardship of assets.

One of the fundamental principles of the Church's social doctrine is the universal destiny of goods, which maintains that the earth's resources should benefit all humanity. Pacioli, in his work on accounting, promoted transparency and balance in economic transactions, ensuring the fair management of wealth. This principle is found in Leo XIII's encyclical Rerum Novarum, which emphasizes the importance of an economic order based on equity and Christian morality.

Likewise, the Catholic Church has insisted on the need for justice in business and economics. The Catechism of the Catholic Church affirms that business relations must be based on truth and equity (CCC, 2401-2419). Pacioli promoted these values through double-entry bookkeeping, a system that enables accountability and prevents fraud by ensuring that each transaction has verifiable support.

Another key aspect of Catholic doctrine is the preferential option for the poor. Saint Francis of Assisi, founder of the order to which Pacioli belonged, preached a life of simplicity and solidarity with the needy. While Pacioli worked with merchants and bankers, his accounting system also served to ensure that resources were managed fairly and responsibly, avoiding exploitation and promoting the common good.

Catholic doctrine also emphasizes the dignity of work and the importance of responsibility in the management of assets. In the encyclical Laborem Exercens, Pope John Paul II emphasized that work should not be considered merely a means of subsistence, but rather a form of collaboration with God's work. Pacioli, by documenting and teaching accounting, contributed to dignifying the accounting

profession, providing it with a framework of ethics and responsibility that remains relevant today.

5. DISCUSSION

The portrait of Luca Pacioli includes elements that represent him not only as a mathematician, but also as a pioneer in the field of accounting, specifically with the formalization of the double-entry system (Ghyka, 1977). The inclusion of tools such as the compass and geometric diagrams suggests a close relationship between mathematics, accounting, and art. However, debate also arises regarding the theological dimension of the work. The question is whether these elements are present solely as a representation of applied science, or whether they also function as a tribute to both divine mathematics and accounting's ability to structure not only economic reality but also the cosmic and spiritual order in the Renaissance (Jayawardene, 1974).

Some authors argue that accounting, seen as a practical technique, is elevated in this portrait to a philosophical and theological level. The order and mathematical precision represented in the compass and diagrams were not only essential in business but also reflected divine order, as mathematics was considered a language for understanding divine creation (Ulivi, 1994). In this sense, the portrait seems to revalue the role of accounting in shaping not only Renaissance society but also in understanding the world from a theological perspective. Mathematics applied to accounting is seen as a reflection of divine balance and justice, suggesting a profound interconnection between the spiritual and the material.

A central aspect of the analysis of the portrait is the representation of Pacioli as an educator. The inclusion of the disciple behind Pacioli can be interpreted as a symbol of the process of transmitting knowledge. According to Ulivi (1994), the Renaissance highlighted the importance of teaching as a tool for social and intellectual progress, and this portrait underscores that role. However, from a theological perspective, the disciple can also symbolize the transmission of spiritual knowledge, in the sense that knowledge was not only to be shared but also entailed a moral and spiritual duty. Education was not limited to the exact sciences but also included an ethical and theological dimension, transmitting the principles of balance and divine justice that underpinned the accounting and religious thought of the time (Garrard, 2009).

The debate extends to the role of education in the consolidation of accounting as a discipline. Is the figure of the disciple a representation of Pacioli's direct influence on his contemporaries or a broader symbol of the moral responsibility of intellectuals to educate future generations in both a scientific and spiritual context? In this sense, the work could be interpreted as a statement on the importance of teaching and the dissemination of scientific and theological knowledge in Renaissance culture.

One of the most notable elements of the portrait is the polyhedron suspended above Pacioli's table, which represents an Archimedean geometric solid, the rhombicuboctahedron (Ghyka, 1977). This object has been the subject of numerous debates among art historians and mathematicians due to its symbolism in the context of the Renaissance. While some interpret it as a simple mathematical object, others suggest that its presence alludes to geometric perfection and divine proportion, elements that Pacioli explored in his treatise De Divina Proportione (Ulivi, 1994).

In this context, it can be seen as a representation of the Renaissance ideal that mathematics was not only a science but also a gateway to profound knowledge of the cosmos and divine design. This connects the work to a philosophical and theological tradition that considered geometric forms a manifestation of universal laws and the cosmic order ordained by God. This aspect of the portrait underscores the belief that mathematics was not only fundamental to science and art but also key to understanding the divine order underlying the world (Jayawardene, 1974). Pacioli seems to suggest that sacred geometry not only governs creation but also illuminates how human beings can approach an understanding of the divine.

Another point of debate surrounding Luca Pacioli's portrait is the relationship between art, science, and theology, represented through the integration of mathematical tools and artistic elements in the work. During the Renaissance, mathematics and geometry were essential not only to science but also to artistic development, with techniques such as perspective allowing painters to create more realistic and proportional representations of the world. From a theological perspective, this pursuit of mathematical balance and perfection in art and science also reflected an aspiration to understand divine design in creation (Garrard, 2009).

In this sense, the portrait can be interpreted as an affirmation of the interrelationship between science, art, and theology in artistic creation, showing how mathematical knowledge was not only a scientific tool but also a means of understanding the world as a reflection of divine design. This theological vision,

present in Pacioli's work and in his relationship with figures such as Leonardo da Vinci, reinforces the idea that mathematics was not considered in isolation, but as a discipline that connected human reason with divine wisdom.

The portrait not only projects the Renaissance ideals of integrating science, faith, and education, but also offers ethical lessons relevant to the 21st century. In a contemporary context marked by the technological advancement and fragmentation of knowledge, his figure invites us to recover a holistic view of accounting knowledge, where technical precision is balanced with moral responsibility and comprehensive training. Thus, the humanistic and pedagogical values that emanate from his visual representation continue to serve as a benchmark for professional ethics that are not limited to regulatory compliance but also promote integrity, justice, and the critical transmission of knowledge.

6. CONCLUSIONS

An analysis of the Portrait of Luca Pacioli reveals a rich interconnection between accounting, education, mathematics, and theology, fundamental to Renaissance thought. Through the iconography of the portrait, Pacioli is shown not only as a mathematician and pioneer of modern accounting, but also as a teacher who promoted the transmission of scientific and technical knowledge to new generations, integrating philosophical and theological principles into his approach.

The portrait highlights Pacioli's educational work, which played a key role in the dissemination of applied mathematics, particularly double-entry bookkeeping, the basis of modern accounting. The figure of the disciple reinforces this dimension of Pacioli as a teacher and mentor, symbolizing the importance of the transmission of knowledge in the Renaissance. From a theological perspective, the disciple represents not only the teaching of technical knowledge but also the transmission of ethical and spiritual principles, essential for a comprehensive understanding of knowledge.

Mathematical symbolism, such as the compass and the blackboard with geometric figures, highlights the intrinsic relationship between mathematics and the natural order. These symbols also evoke the precision and balance that characterize both mathematics and Renaissance accounting techniques. From a theological perspective, these elements reflect not only the natural order but also the divine order, presenting mathematics as a manifestation of the perfection and harmony with which God created the universe. The geometry and mathematical proportions in Pacioli's work align with the idea of divine design, where science and faith intersect.

Pacioli's portrait reflects the humanist ideals of the Renaissance, where science and art intertwined to achieve a deeper understanding of the universe. Mathematics was presented not only as a technical tool but also as a universal language that connected the physical with the intellectual and spiritual worlds. Pacioli exemplifies this union, where mathematics is not merely a system of rules but a way of approaching divine knowledge, aligning his work with the prevailing Platonic theology of the time.

It symbolizes the transformative power of education and knowledge, while highlighting the importance of accounting and mathematics as pillars of the rational, economic, and spiritual order of the Renaissance. Luca Pacioli's portrait can be a symbol of the fundamental values and principles of accounting that remain relevant in the 21st century, inspiring accountants to be ethical, innovative, and committed to ongoing training. It also invites reflection on the theological component of accounting practice, where the pursuit of precision and balance also reflects the search for divine order in the economic and social world.

This study has revealed how Luca Pacioli's portrait embodies a symbolic synthesis of scientific, ethical, and theological knowledge characteristic of the Renaissance, reaffirming the formative and moral role of accounting. Future research could expand this approach through comparative analysis with other Renaissance portraits that integrate educational or scientific symbols, allowing for the tracing of a visual genealogy of knowledge and its representation in different historical and cultural contexts.

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