MEDICAL HUMANITIES

The faces hidden in the anatomy of Michelangelo Buonarroti's *Pietà* in the Vatican

Deivis de Campos^{1,2,3}, Luciano Buso⁴

¹Departamento de Ciências Básicas da Saúde, Universidade Federal de Ciências da Saúde de Porto Alegre, Porto Alegre, RS, Brazil; ²Departamento de Ciências da Vida, Universidade de Santa Cruz do Sul, Santa Cruz do Sul, RS, Brazil; ³Programa de Pós-Graduação em Promoção da Saúde, Universidade de Santa Cruz do Sul, Santa Cruz do Sul, RS, Brazil; ⁴San Vito di Altivole, Treviso, Italy

Abstract. The study of human anatomy, besides being fundamental to the practice of medicine, has traditionally always been present in the daily life of many Renaissance artists. In this context, the specialized literature has described the famous Renaissance artist Michelangelo Buonarroti (1475-1564) as being among the greatest artist-anatomists of his time. Thus, many researchers have tried to better understand the inspirations of this famous artist, and even the possible diseases that affected this genius of human anatomy. Therefore, for the first time, this manuscript provides evidence that Michelangelo Buonarroti may have concealed letters, numbers, and faces in the anatomy of the Vatican's Pietà [Virgin Mary/Jesus Christ] in 1498-9. The revelation of these findings, besides testifying to the artist's considerable skill in representing the corporeal forms in his sculptures, will also be provide useful insights into the iconographic understanding of a work of art that is undoubtedly one of the most important of the Renaissance. Moreover, the present study shall be important for professionals in the medico-artistic field and those who keep some interest in the history of human anatomy, which is undoubtedly a fundamental discipline for the practice of medicine.

Keywords: Michelangelo Buonarroti, The Vatican's *Pietà*, Hidden faces, Anatomy.

Introduction

The study of human anatomy, besides being fundamental for the practice of medicine, has also been present in the daily life of great artists since antiquity (1). According to the specialized literature on the Italian Renaissance (2-10), Michelangelo Buonarroti (1475-1564), was one of the greatest artist-anatomists of his time. This is mainly due to the fact that during the Renaissance, knowledge of human anatomy became a necessity among great artists, who used that knowledge to ensure the representations of the human body in their works of art, especially in the sculptures, would be much closer to reality (1,6,9,11). Indeed, at that time, Italian Renaissance artists considered it a necessity to become anatomists, in their attempt to produce a more life-like, sculptural portrayal of the human body, as [...] having

seen human bodies dissected one knows how the bones lie, and the muscles and sinews, and all order of conditions of anatomy [...] (12,13). In this context, many authors have joined efforts to better understand Michelangelo's artistic inspirations, and even the possible diseases that affected this genius of human anatomy (1,14,15). Additionally, several works of art by many Italian Renaissance artists, including those by Michelangelo Buonarroti, are noteworthy not only due to the excellent representation of human physical forms but also because they include secret messages/signatures and half-hidden faces (1). Therefore, for the first time, this manuscript demonstrates that Michelangelo Buonarroti's celebrated Vatican's Pietà from 1498-9, besides being able to present the initial letters of the artist's name, may also contain three faces semi-hidden in the drapery that emphasizes the corporeal forms (anatomy) of the Virgin Mary, and

2 Acta Biomed 2021; Vol. 92, N. 2: e2021044

which, furthermore, are in complete agreement with the iconography of this work. Additionally, in the forearm and hand of Jesus Christ there are still some anatomical details (veins) that may support this hypothesis.

Analysis

The *Pietà* by Michelangelo Buonarroti in the Vatican is undoubtedly one of his most famous marble sculptures. It was commissioned by the French cardinal Jean Bilheres de Lagraulas (c.1430-1499) [cardinal of Saint-Denis] to decorate his tomb in St. Peter's Basilica in Rome/Italy (16). The contract of commission for the *Pietà*, written by Iacopo Gallo, who acted as the intermediary in ordering the work, points out that this would be the most beautiful marble sculpture in the entire city of Rome, a piece no other living artist could create (1,17,18). See below some of the terms in the original contract, from August 1498:

Maestro Michelangelo, statuary of Florence [...] shall at his own proper costs make a Pietà of marble, that is to say a draped figure of the Virgin Mary with the dead Christ in her arms, the figures being life-size, for the sum of four hundred and fifty gold ducats in papal gold, to be finished within the term of one year from the beginning of the work [...]. And I, Iacopo Gallo, do promise the Most Reverend Monsignore [cardinal of Saint-Denis], that the said Michelangelo shall complete said work within one year and that it shall be more beautiful than any work in marble to be seen in Rome today, and such that no master of our own time shall be able to produce a better (17,18).

Currently, the *Pietà* is in the *Cappella della Pietà*, located inside the Basilica of St. Peter in Rome/Italy (Figure 1) (1,18,19). By applying the *Buso method* of delineation (20,21) to the drapery (anatomy) of the Virgin Mary, Michelangelo Buonarroti's initials ['M' and 'B'], as well as two numbers '9' and '5', become apparent (Figure 2). In addition, three faces are also visible on the breast of the Virgin Mary (Figure 3).

Discussion

Renowned authors (1) have pointed out that many of the most famous works of art from the Renaissance are replete with hidden ideas and secret codes. This may be due to the fact that at that time; even the most renowned painters were considered mere employees, and often could not express their real intentions when elaborating their works, especially those commissioned by the Catholic Church. There were many restrictions that hampered and limited the artists of that period. Perhaps the main one being that artists were forbidden to sign their own works, particularly those commissioned by the hierarchy of the Catholic Church. For this reason, many artists inserted images of their own faces, or even letters alluding to their names within their works (1,22). Hence, we can explain the existence of Michelangelo Buonarroti's initials on the Pietà, as this was the only way the artist had to leave his signature, and thus be remembered as the author of the work. However, the sash that crosses the Virgin Mary's chest already bears the signature of the author: MICHAEL ANGELUS BONAROTUS FLORENT FACIEBAT, that is, Michelangelo Buonarroti of Florence, made this work (Figure 1)(1,23). So, what is the explanation for the letters [M] and 'B'] hidden in the Pietà, since Michelangelo had declared his name on the chest of the Virgin Mary? The answer is as follows (1):

According to accounts, the day the statue was unveiled, Michelangelo hid behind a column in St. Peter's Basilica, waiting for the crowd to applaud him and the critics to praise his name. Instead, he heard people

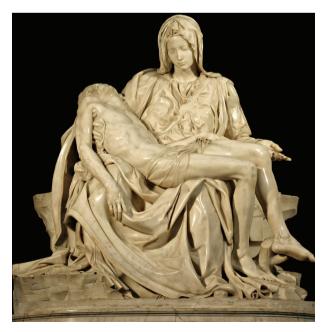
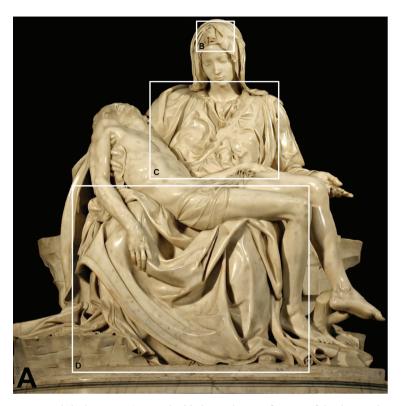


Figure 1. The Vatican's *Pietà*, sculpted by Michelangelo Buonarroti in 1498-9 [*Marble*, 174 x 195 cm, St. Peter's Basilica, Rome/Italy].



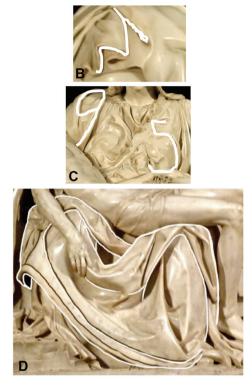


Figure 2. (A) The Vatican's *Pietà*, highlighting the specific areas of the drapery (anatomy) where application of the *Buso method* reveals the letter 'M' (B), the numbers '9' and '5' (C) and the letter 'B' horizontally (D). Michelangelo Buonarroti (1498-9) [Marble, 174 x 195 cm, St. Peter's Basilica, Rome/Italy].

say that the wonderful new statue could only be the work of a great talent from Rome or from Lombardy - from anywhere but Florence. Furious, Michelangelo risked his life that night, entering the cathedral, climbing onto his masterpiece, and quickly inscribing on the sash that crosses Mary's chest: Michelangelo Buonarroti of Florence did this work. He escaped before the Swiss Guards, who most likely would have beheaded any intruder on the spot, could arrest him. Recent examinations using laser light on the surface of the Pietà lend weight to the story. Apparently somebody had polished the whole statue with a constant movement for months, and then the inscription on the strip was made very quickly by someone with a nervous and slightly hesitant hand. The writing also serves as a witness, as it is full of errors, which would be very understandable given the haste and fear of Michelangelo would have felt at the time. When the artist's signature was discovered, Michelangelo had to be pardoned by the Pope, and most likely he had to promise never to sign another work.

These facts demonstrate that the artist's signature declared on the Virgin Mary's sash was only made after the sculpture had been completed. Obviously, this may have been a reflection of the young Michelangelo's [he was 24 years of age] impatience to have his authorship of the work recognised, since with only his half-hidden initials it would undoubtedly have been more difficult for the artist to be widely recognized as the author of this celebrated work.

With regard to the two numbers ['9' and '5'] in the drapery (anatomy) of the Virgin Mary, they may indeed be alluding to the *Gospel of Nicodemus*. There are for two reasons for this: 1- It was Nicodemus who took Jesus Christ down from the Cross (24) and therefore, is a very important character in the crucifixion. 2- It is in *Chapter 9, Verse 5* of the *Gospel of Nicodemus* that the narrative of the crucifixion of Jesus Christ is described, including that Jesus was crucified with two other men (25). Let us see [*Gospel of Nicodemus - Chapter 9, Verse 5*]:

Then Pilate ordered the curtain be drawn before the judgment seat on which he sat, and he said to Jesus: "Your

Acta Biomed 2021: Vol. 92, N. 2: e2021044

nation has convicted you for being a king. For this reason, I pronounce sentence: first you will be flogged according to the decree of the pious kings; and then you will be hanged on the cross in the garden where you were seized. And let the two criminals Dysmas and Gestas be crucified with you" (25).

Hence, we can explain the three half-hidden faces in the drapery (anatomy) of the Virgin Mary as alluding to the face of Jesus Christ and the two criminals who were crucified with him. Detailed analysis reveals the central face has the classic facial features attributed to Jesus Christ, and that in this case would be in the centre of the Pietà's chest as the main character of the crucifixion (Figure 3). The other two faces, to the right and left sides, would be *Dysmas* and *Gestas*, respectively (Figure 3). The very arrangement of the three faces on the breast of the *Pietà* [one on the right side, the other on the left side, and that of Jesus Christ in the centre], can still be explained by reading in Luke 23:32,33. As we can see:

Two other men, both criminals, were also led out with him to be executed. When they came to the place called the Skull, they crucified him there, along with the criminals—one on his right, the other on his left (24).

Another aspect that supports this interpretation is the fact that Michelangelo, being a highly knowledgeable regarding the Hebrew alphabet (1,26), certainly knew that the word Pietà corresponds perfectly to the Hebrew word rachmanut, and which denotes a combination of compassion, love, pity, solace, grief, pain and care (1). Therefore, by placing the faces of the two criminals next to that of Jesus Christ on the Virgin Mary's chest, the artist could be conveying the idea that the sorrow and compassion of Mary would not only be for the dead body of Jesus Christ that was lowered from the cross [by Nicodemus] and placed on her lap, but also for the death of two other men, in this case Dysmas and Gestas. Thus, Michelangelo would in fact be adding, in a unique way, characters that were really part of the whole narrative of the crucifixion and which are also in accord with the iconography of the Pietà (compassion, love, pity, solace, grief, pain and care).

Furthermore, the specialized literature (17) offers evidence that in the sculptures/works of the fifteenth and sixteenth centuries, one can perceive considerable refinement in the representation of the drapery, since it

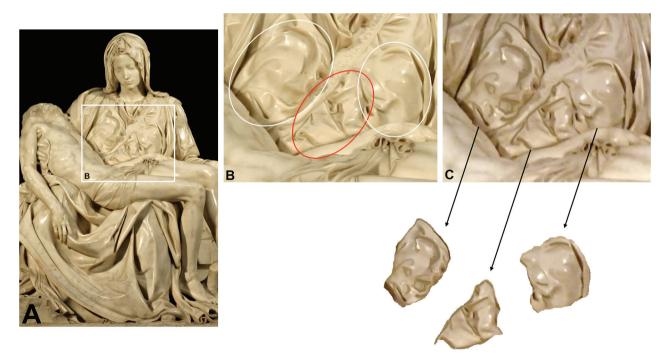


Figure 3. (A) The Vatican's *Pietà*, highlighting the chest of the Virgin Maria where the three faces appear [*inside the circles*] (B). (B) Note that the face in the centre [*red circle*] shows the facial features [*shape of the nose and beard*] traditionally attributed to Jesus Christ. (C) By applying delineation [*Buso method*] to the faces, they become even clearer. Michelangelo Buonarroti (1498-9) [*Marble, 174 x 195 cm, St. Peter's Basilica, Rome/Italy*].

Acta Biomed 2021: Vol. 92, N. 2: e2021044

is to reflect all the movements of the characters, so that no part of the drapery is empty of movement. Hence, in this way, Michelangelo highlights the corporeal forms of his figures through emphasis on the drapery; and thus the artist manages to maintain a complementary relationship, designed to bring out the structure and dynamics of the body (17). Therefore, it is presumed that, given the fact the artist was well aware of the importance of this relation of the corporal forms with the drapery in the representation of his figures; it would be unlikely that all the elements [letters, numbers, and faces] identified in the drapery (anatomy) of the Virgin Mary were carved at random, that is, without the artist really being aware of their existence.

We should also point out that the specialized literature (1) describes that at the time of Michelangelo, ecclesiastical art was supposed to glorify the place of worship, inspire the faithful, and educate the illiterate majority of the population. Hence, attractive illustrations of important stories from the Gospels and the lives of the saints were needed to enlighten the uneducated masses, to instruct the next generation in the ways and in the history of Christianity. This explains why many medieval and Renaissance churches are home to incredibly colourful frescoes, which sometimes narrate an entire book from the Bible. However, pretty pictures that required a quick glance were insufficient. Art had to serve as an eternal source of revelation and fascination with the religious atmosphere. That is one reason why art in Michelangelo's day was so complex: it had to withstand hundreds of hours of prolonged contemplation. The onlookers had to believe new meanings and new ideas could always be found in the images. The artists in Michelangelo's time created amazing works that spoke to all levels of intelligence. The ordinary citizen saw beautiful statues and pictures and heard the cleric narrate their meanings or related stories. However, for those with more learning, there were many other things to discover when exploring each work of art (1,8). In this context, an extremely important anatomical detail emerges in the Vatican's Pietà, and consequently in the narrative of the crucifixion of Jesus Christ. As we can see:

According to what is written in the Bible, Jesus Christ being on the cross was pierced by a spear (*John 19:34*) (24). Therefore, by the time he was taken from

the cross and then placed in the arms of the Virgin Mary, he was already dead; and it was unlikely that there was still blood in her veins. However, Michelangelo represented the forearm and hand of Jesus Christ with prominent veins, typical of one who is alive (Figure 4). Thus, it would be plausible to suppose that Michelangelo's intention was to represent Jesus Christ alive after his death, for after all he would be resurrected (Acts 1:3) (24).

Conclusion

In view of this abundant historical context, and from all the anatomical and iconographic evidence demonstrated in this manuscript, it would be plausible to suppose that the artist actually purposely elaborated all these elements [letters, numbers, faces and veins] in the Vatican's Pietà in reference to his own name and the characters who composed the crucifixion of Jesus Christ.

What is more, even if all the elements identified in this manuscript present a great challenge to any artist, especially to a young man of only 24 years of age; we cannot forget that Michelangelo's entire intellectual training [since the age of 15] had been based on the Neoplatonic teachings of Marsilio Ficino and Pico della Mirandola; who often very clearly argued that



Figure 4. Detail of the distribution of the veins [arrows] on the surface of the forearm and hand of Jesus Christ in the Vatican's *Pietà*. Michelangelo Buonarroti (1498-9) [Marble, 174 x 195 cm, St. Peter's Basilica, Rome/Italy].

6 Acta Biomed 2021; Vol. 92, N. 2: e2021044

artists should combine concepts referring to sculpture/architecture, cosmology/mathematics, anatomy/ medicine, religiosity/spirituality, and symbology (1). Accordingly, each new work by Michelangelo became extremely invigorating and complex, as the artist did not have the consent of his patron [Catholic Church] to use these Neoplatonic ideas, which were considered subversive at the time. Despite which, even though it was forbidden, Michelangelo secretly inserted various Neoplatonic teachings in his works. That is why in most of them, there are innumerable secret symbols and codes that require special attention to be deciphered (1,26). This becomes especially evident when it comes to a work, such as the Vatican's Pietà, which, even after five centuries since its creation, is still extremely invigorating.

One of the criminals who hung there hurled insults at him: "Aren't you the Messiah? Save yourself and us!" But the other criminal rebuked him. "Don't you fear God," he said, "since you are under the same sentence? We are punished justly, for we are getting what our deeds deserve. But this man has done nothing wrong." Then he said, "Jesus, remember me when you come into your kingdom." Jesus answered him, "Truly I tell you, today you will be with me in paradise."

Luke 23:39-43

Conflicts of interest: Each author declares that he or she has no commercial associations (e.g. consultancies, stock ownership, equity interest, patent/licensing arrangement etc.) that might pose a conflict of interest in connection with the submitted article.

References

- 1. Blech B, Doliner R. The Sistine Secrets: Michelangelo`s Forbidden Messages in the Heart of the Vatican. New York: HarperCollins Publishers; 2008.
- 2. Eknoyan G. Michelangelo: art, anatomy, and the kidney. Kidney Int 2000; 57: 1190-1201.
- 3. Ames-Lewis F, Joannides P. Reactions to the Master: Michelangelo's Effect on Art and Artists in the Sixteenth Century. Burlington: Ashgate Publishing; 2003.
- Tranquilli AL, Luccarini A, Emanuelli M. The creation of Adam and God-placenta. J Matern Fetal Neonatal Med 2007; 20: 83-87.
- 5. Suk I, Tamargo RJ. Concealed neuroanatomy in Michel-

- angelo's Separation of Light from Darkness in the Sistine Chapel. Neurosurgery 2010; 66: 851-861.
- Laurenza D. Art and Anatomy in Renaissance Italy: Images from a Scientific Revolution. New York: Metropolitan Museum of Art; 2012.
- Di Bella S, Taglietti F, Iacobuzio A, Johnson E, Baiocchini A, Petrosillo N. The "delivery" of Adam: a medical interpretation of Michelangelo. Mayo Clin Proc 2015; 90: 505-508.
- 8. De Campos D, Malysz T, Bonatto-Costa JA, Jotz GP, de Oliveira Junior LP, Wichmann JF, et al. The hidden symbols of the female anatomy in Michelangelo Buonarroti's ceiling in the Sistine Chapel. Clin Anat 2016; 29: 911-916.
- 9. De Campos D, Oxley Da Rocha A, De Oliveira Lemos R, Malysz T, Antonio Bonatto-Costa J, Pereira Jotz G, et al. Pagan symbols associated with the female anatomy in the Medici Chapel by Michelangelo Buonarroti. Clin Anat 2017; 30: 572-577.
- De Campos D. A hidden rib found in Michelangelo Buonarroti's fresco The Creation of Adam. Clin Anat 2019; 32: 648-653.
- 11. Lydiatt DD, Bucher GS. Historical vignettes of the thyroid gland. Clin Anat 2011; 24: 1-9.
- Lazzeri D. Concealed lung anatomy in Botticelli's masterpieces the primavera and the birth of venus. Acta Biomed 2017; 88: 502-509.
- Lazzeri D, Al-Mousawi A, Nicoli F. Sandro Botticelli's Madonna of the Pomegranate: the hidden cardiac anatomy. Interact Cardiovasc Thorac Surg 2019; 28: 619-621.
- Arshad M, Fitzgerald M. Did Michelangelo (1475–1564) have High-Functioning Autism? J Med Biogr 2004; 12, 115-120.
- Bianucci R, Lippi D, Perciaccante A, Charlier P, Appenzeller O. Michelangelo Buonarroti (1475-1564) had the deconditioning syndrome while painting the Sistine Chapel ceiling. Med Hypotheses 2018; 113: 13-14.
- 16. Wentz MR. Madonna della Pietá by Michelangelo. Mayo Clin Proc 2018; 93: e55.
- 17. Vasari G. Vida de Michelangelo Buonarroti: florentino, pintor, escultor e arquiteto (1568) / Giorgio Vasari; tradução, introdução e comentário: Luiz Marques. Campinas: Editora da Unicamp; 2011.
- Orr TB. Michelangelo: Master of the Renaissance. New York: Lucent Press; 2019.
- 19. Paoletti JT, Radke GM. Art in Renaissance Italy. London: Laurence King Publishing Ltd; 2005.
- 20. Buso L. Firme e date celate nei dipinti da Giotto ai tempi nostri. Castelfranco Veneto: Duck; 2011.
- 21. Buso L. Giotto si Rivela. Crocetta del Montello: Grafiche Antiga SPA; 2019.
- 22. De Campos D. A self-caricature of Michelangelo Buonarroti hidden in the portrait of Vittoria Colonna. Clin Anat 2018; 31: 335-338.
- 23. Deckard MF, Losonczi P. Philosophy Begins in Wonder: An Introduction to Early Modern Philosophy, Theology and Science. Cambridge: James Clarke & Co; 2011.
- 24. Nelson T. The Holy Bible. Nashville: New King James Ver-

sion; 1982.

- 25. Ehrman BD, Plese Z. The Other Gospels: Accounts of Jesus from Outside the New Testament. New York: Oxford University Press; 2014.
- 26. De Campos D, Da Costa Oliveira M. Michelangelo Buonarroti's code in the frescoes of the Sistine Chapel an allusion to Gematria of the Hebrew/Greek alphabet and the Golden Ratio. Clin Anat 2018; 31: 948-955.

Received: 9 January 2020 Accepted: 11 February 2020 Correspondence Deivis de Campos, PhD Departamento de Ciências Básicas da Saúde Laboratório de Anatomia Humana Universidade Federal de Ciências da Saúde de Porto Alegre -UFCSPA

Avenida Sarmento Leite 245, 90050-170, Porto Alegre, RS, Brazil E-mail: dcampos@ufcspa.edu.br