Four Versions of the Christus by the Massys: Deciphering the Meaning of the Letters

Vicente Jara Vera * and Carmen Sánchez Ávila

Department of Applied Mathematics to Information Technology and Communications, Polytechnical University of Madrid, Avenida Complutense no. 30, 28040 Madrid, Spain; carmen.sanchez.avila@upm.es

* Correspondence: vicente.jara@upm.es; Tel.: +34-686-615-535

Abstract: The Flemish painters Quentin Massys and his son Jan Massys appear to be the authors of four works with a very similar motif, the bust of Jesus Christ. These canvasses can be found in different locations today: the Prado Museum in Madrid (Spain), the RKD Netherlands Institute for Art History of The Hague (Netherlands), the Kunstmuseum Winterthur (Switzerland), and another one in a private collection. Written on the edge of the robe around the neck, these canvasses display a series of Hebrew or pseudo-Hebrew letters. We offer the complete solution deciphered, until today incomplete, for three of them, with a very similar letter sequence. Finally, we resolve completely one of the canvasses, which, until today, had no known solution.

Keywords: religious art; Hebrew inscriptions; Renaissance; Quentin Massys; Jan Massys; deciphering; cryptography

1. Introduction

There is a collection of pictorial works attributed to either Quentin Massys (1466–1530) or his son Jan Massys (ca. 1509–1575), whose ascriptions have never been entirely clarified, all of which share a very similar motif, Christ's face, and which will be referred to as *Christus* as a group. These canvasses generally have the same title, with the possibility of finding different name versions, the most frequently used and chosen for our article being: *Christ the Saviour* (for the oil painting exhibited at the Prado Museum in Madrid, Spain), *Christ* (in private collection), *Bust of Christ* (at RKD Netherlands Institute for Art History of The Hague, in Netherlands) and *Christ blessing* (at Kunstmuseum Winterthur in the city of Winterthur, Switzerland).[1]

All these works have both historical and artistic similarities and differences, aspects that will be dealt with in a superficial manner, as they do not fall within our competence. Our interest is focused on the fact that they all display a series of Hebrew or pseudo-Hebrew letters written on the edge of the robe that is around the neck. Their meaning is not fully clear and, as of today, the conclusion for some of the canvasses is that they make no sense at all. Our research, encompassed in the cryptanalysis and linguistic deciphering–decoding field, will focus on the study of these letters, with the aim of ascertaining their possible meaning in each one of the aforementioned canvasses, knowing that the insertion of Hebrew or pseudo-Hebrew letters is not something alien to Medieval, Renaissance and Baroque art, aspects already covered by various researchers ([1], pp. 926–27; [2–6]).

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[1]   We express our gratitude to the Prado Museum, Sotheby's, RKD Netherlands Institute for Art History and Kunstmuseum Winterthur for these digital pictures.

2. The *Christ the Saviour* at the Prado Museum of Madrid, Spain

The Prado Museum of Madrid (Spain) has a diptych (Figure 1) with the bust of Christ as *Christ the Saviour* [7] on display, on which he is staring at his mother, the *Virgin Mary* [8]. The double work has kept the experts' debate about its actual ascription alive for a long time, even when it belongs to a member of the Flemish family of painters known as the Massys ([9], p. 96; [10], pp. 104–9; [11]; [12], pp. 162–64).

Figure 1. Jan Massys. *Virgin Mary*, after 1529. Quentin Massys. *Christ the Saviour*, ca. 1529. Madrid, the Prado Museum. Courtesy of the Prado Museum.

Today, it is clear that Jan Massys is the author of the canvas *Virgin Mary* or *The Virgin in prayer*, painted after 1529, an oil on 44 × 35 cm board ([9], pp. 98–102; [13]).

On the edge of the Marian mantle, there are a series of Hebrew characters, visible on the right of the edging from the neckline down to sternum level, as well as on the right-hand sleeve and a little less on the other sleeve. Such letters reproduce the first lines of the Bible for both Hebrews and Christians, the first verse in the *Book of Genesis* (Figure 2): "In the beginning Elohim created Heaven and Earth." (Gen 1, 1; [14], p. 7; [15], p. 17). This is an aspect which has been clearly solved, so there is no need for further comments ([9], p. 101; [12], pp. 162–64).

GENESIS 1,1

הָאָרֶץ	וְאֵת	הַשָּׁמַיִם	אֵת	אֱלֹהִים	בָּרָא	בְּרֵאשִׁית
earth	and	heaven		Elohim	created	In the beginning

Figure 2. *Book of Genesis*, first verse: "In the beginning Elohim created Heaven and Earth." (Gen 1, 1).

The other canvas, earlier in the production timeline, perhaps dating from around 1529, was painted by Quentin Massys, father of Jan Massys, and is entitled *Christ the Saviour* (Figure 3) [7]. Its size is also 44 × 35 cm ([12], pp. 36–37; [16]). As was the case with the previous one, this canvas

displays Hebrew characters, even though—as we have already said—they are prior to those in *The Virgin in prayer*. It remains unclear whether they have a meaning or not, one possible interpretation being that perhaps they are mere decoration, according to some experts ([11]; [12], pp. 162–64). The letters are displayed on the *Christus* on the edge of the neckline of the robe. We believe that these letters do make sense, and that they have a meaning unmistakably identifying the semantics of the painting and what it symbolises and, dare we say, beyond that. Next, we will elaborate more on it. In this case, the letters are certainly scarce and the meaning is unclear in the first attempt, all the more so when it is genuinely consonantal and the text seems to continue although we do not see it, because the hair covers it and it is likely to be partly hidden under the crease of the central neck area as well.
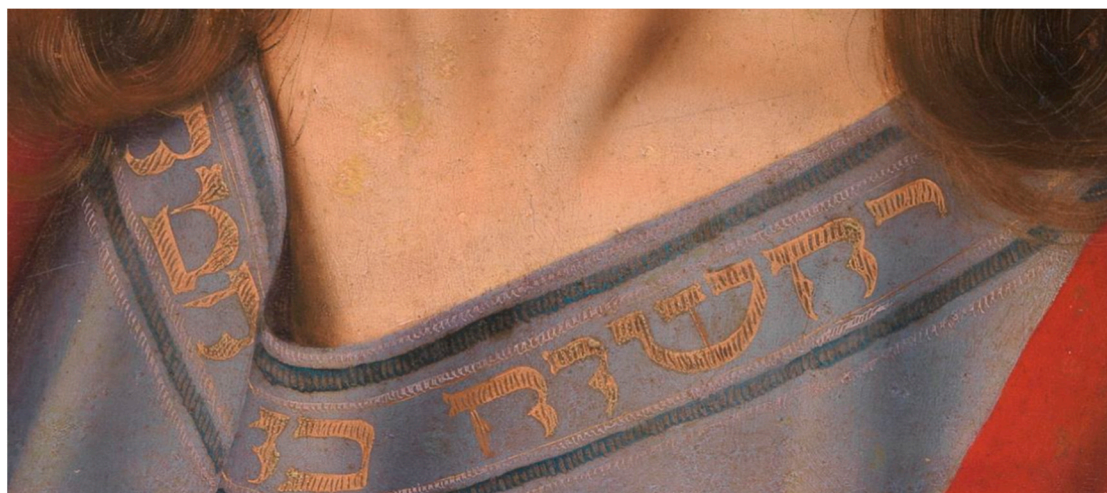

Figure 3. Quentin Massys. *Christ the Saviour* (detail), ca. 1529. Madrid, the Prado Museum. Courtesy of the Prado Museum.

We think that "בן", a Hebrew lexeme standing for *son* ("bn") [17,18], can be read perfectly well, albeit without the vowel notation of adding lines and upper and lower dots to the consonants, as formalised by the Masora [19] in "בֵּן" ("n-eb", or "ben" if read according to Western rules), and which we find in the Bible thousands of times, 4932 to be precise ([20], p. 43).

Carlos Alonso Fontela, Professor of Hebrew and Aramaic Philology, suggests ([9], p. 101) that the text in this canvas has no meaning whatsoever, even though he claims to have copied some characters and made sense out of them, yet leaving the vowels out. Notwithstanding, for these two signs, he notes the possible "בן", ("bn"), that is, *son*, just like we assert. He also suggests the possibility of interpreting it as "בו", ("bv"), meaning *in it*, a suggestion we discard because it does not offer a comprehensive sense, as we will see later. Additionally, we propose another interpretation, which is "בַּז", ("bz"), standing for *haul/looting* ([20], p. 41), but whose semantics are alien to the pictorial work and, for that reason, we dismiss it. In the same line, we consider it inappropriate, in spite of its meaning, to offer "בַּר", ("br"), meaning *clean/pure* ([20], p. 46), due to its upper stroke, which does not seem to match the length of the one we see here, when compared with the other ones in the canvas. In light of all this, we take "בן" ("bn"), *son*.

At the front, "יהשוה" ("YHSWH") can effortlessly be seen. This word is the so-called Pentagrammaton used by the Kabbalah to refer to Jesus Christ, in relation to the Tetragrammaton of the monotheistic God of the Jewish, "YHWH" (*Yahweh*). As we can see, they are quite similar except for the insertion of the character *S* in the middle, allowing for the switching from what sounds like *Yahweh* to the phonetisation *Yehswah* or *Jesus*. This aspect constitutes a relevant piece of information taken into account by Professor José Andrés Sánchez Abarrio from the Eastern Bible Institute of Madrid ([9], p. 101), considering the importance of the introduction of the letter *shin*, "ש", by the Renaissance Kabbalist school into the Hebrew sacred and unutterable name, a semantic detail still questioned by Professor Fontela ([9], p. 101). Nevertheless, we believe we can only confirm how

judicious the consonantal use was without the vowels of this name, so that it would not be uttered as a sign of respect towards the one and only Jewish deity. For that reason, and because it is similar to "יהשוה" ("YHSWH"), it also lacks vowels with dots.

As an argument to support this semantics, we may mention the neatness of the letters, which leaves no room for doubt, aside from the fact that this is rather common in the kabbalist school, specifically in the one developed by the Humanist Philosopher and Catholic Priest, ordained at the end of his life, Johann Reuchlin (1455–1522) ([21], pp. 138–50). He perpetuated the ideas by Giovanni Pico della Mirandola (1463–94) and Marsilio Ficino (1433–99), thus being enabled to identify Jesus of Nazareth the Messiah as the Son of God and God himself ([21], pp. 29–49; [22], pp. 63–64, 84–85), by means of unifying the Tetragrammaton and the Pentagrammaton, as elaborated and explained in his *De Arte Cabalistica* (1517) ([23], pp. 124–34), the central work of his attempt to link Christianity and the Hebrew Kabbalah together. In any case, he had already commented in *De Verbo Mirifico* in 1494, in book 3, page 37: "To the ancient ones in Three Letters (Trigrammaton) [that is to say, YHW], and the Father Tetragrammaton [that is to say, YHWH], and the Son Pentagrammaton [that is to say, YHSWH]; that is, in Nature, SDI [that is to say, Shaddai]; in Law, ADNI [that is to say, Adonai]; in Charity, IHSVH".[2] In 1514, his regular printer, called Thomas Anshelm (ca. 1470–ca. 1524), adorned the last page of his *Epistolae Obscurorum Virorum* ([21], p. XIII) when printing it with the composition of consonants "YHWH" plus the "S" in order to form the Pentagrammaton (Figure 4) ([22], p. 24).

Figure 4. Johann Reuchlin, *Epistolae Obscurorum Virorum*, last folio with the stamp printing of Thomas Anshelm of first edition, Tubingae, 1514.

Furthermore, it must be added that Philosopher and Cardinal Nikolaus von Kues (1401–64) had equally pointed to the Pentagrammaton before that, during one of his sermons (*De Nomine 'Jesus'. Sermo XLVIII*) in 1445 ([25], pp. 49–63; [26]; [27], p. 88). This takes it back even earlier in time, thus making the fact that the Massys were already familiar with its deep sense highly probable. Reuchlin can be placed on the very centre of German Humanism ([23], pp. 18–20, 123–38), a really significant

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[2] "Per nomen auorum Trigrammaton, & patrum Tetragrammaton, et filiorum Pentagrammaton, id est in natura. SDI. In lege. ADNI. In charitate. IHSVH." (Translation of authors) ([24]; [25], pp. 158–81).

figure alongside with Desiderius Erasmus (1466–1536), immortalised by Quentin Massys in 1517 ([10], pp. 116–20), the same year when *De Arte Cabalistica* was published. This constant relationship between European humanists and the painters and portraitists of the time cannot be ignored, as the latter reflect the significance and greatness of the human condition in itself in their portraits [28].

Ultimately, we state with great certainty that the five first Hebrew letters on the left side of the neckline are the pentaconsonantal form of the name of Jesus when identified as God, "YHSWH".

Continuing with the neckline fragments, we will now move on to the right side of the neck, where we can read three letters, "המר" in particular. It is true that the first one, "ה", due to its similarity with the two in the name "יהשוה" ("YHSWH"), becomes related to the letter *he* for us. The letter in the middle is obviously *men* ("מ"), and as for the rest, it might be, perhaps, "ר" (*resh*), or "ד" (*dalet*), "ח" (*het*), "ך" (*kaf*), "ת" (*tav*), or else "ה" (*he*) again.

In Biblical Hebrew, this structure only exists as "המה" in the sense of *to shake/make noise, to touch* ([20], p. 63), or else as the infinitive form of *to change one's mind* or *to weep bitterly* ("הָמֵר") ([29], pp. 305, 354). Also, "המה" may adopt the meaning *they/those* ("הֵמָּה") ([20], p. 63). It does not seem, though, that these options provide the structure of letters on the neckline with a semantic sense. Besides, it must be stated that the possibility of the form "המ" meaning *they/those* does exist like "הֵם" ([20], p. 63), thus leaving the consonant "ה" immediately, which would correspond to the definite article *the* ([20], p. 60). However, it did not help erase our doubts, owing to its inability to offer a better comprehensive answer to the literal set as a whole.

If we consider words incorporating the forms {"המה", "המת", "המך", "המך", "המח", "המד", "המר"} among its letters, we do not observe concordant semantics, some of the options being words such as *roar* ("גְּהָמָה") ([20], p. 145), *cattle* ("בְּהֵמָה") ([20], p. 40), or the perfect tense of the verb *loathe* ("זְהֲמַתּוּ") ([20], p. 66; [29], p. 146), apart from other choices which lack the ability to provide the whole structure with total coherence and are not consistent with the different terms.

Now, we will put the meaning of these last letters aside in order to seek support and help from another one of the canvasses we are studying.

3. The *Christ*, an Acquisition from Sotheby's (New York) by a Private Collector

The analysis of a very similar canvas might help us resolve the work at the Prado Museum. Its title is Christ (Figure 5) and it has been attributed to Quentin Massys as well, its size being 43.2 × 31.2 cm ([12], p. 155; [30]). We are talking about a work that was sold at Sotheby's on 24 January 2008, as lot 6 in its New York headquarters.

Larry Silver, Professor of History of Art, reckons that this canvas was painted before the one at the Prado Museum dating from 1529 [30]. As can be seen, the same letters and a few others are observed (Figure 6), and so the resolution of the literary sense might be achieved.

Figure 5. Quentin Massys. *Christ*, before 1529. Private collection [Sotheby's (New York) 24 January 2008, lot 6]. Courtesy of Sotheby's.
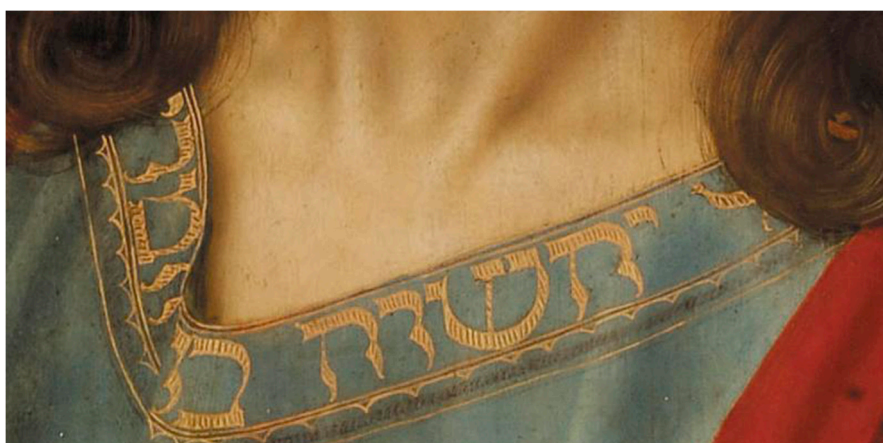

Figure 6. Quentin Massys. *Christ* (detail), before 1529. Private collection [Sotheby's (New York) 24 January 2008, lot 6]. Courtesy of Sotheby's.

It is clear that we can trust the words Yehswah or Jesus, "יהשוה" ("YHSWH") as correct, as well as son, "בן" ("bn"). What is more, we observe that out of every possible option for the last one of the letters on the right-hand side of the Christus at the Prado, "ד" (*dalet*), "ה" (*he*), "ח" (*het*), "ך" (*kaf*), "ר" (*resh*) or "ת" (*tav*), the most suitable one according to the way it is written is "ר" (*resh*). This canvas from the private collection also shows an extra letter after that one, "י" (*yod*) to be precise, and so the

whole set would be "המרי". This structure has no meaning at all for itself or as part of a larger unit. However, "מרי" is clearly part of the expression "מרים", which is nothing but the name of "Mrym", that is, Maryam, Hebrew for Maria, Mary. This is the solution provided nowadays by Larry Silver (since he used to consider that they "seem to be purely decorative," at least when referring to the work at the Prado Museum [11]), and relying on it, it is the same as that provided by Professor José Andrés Sánchez Abarrio. This way, the whole structure would be *Jesus, son of Mary*.

Notwithstanding that, there is still an unresolved letter that appears in the two analysed works, between "מ" and "ן", that is, between *Mary* and *son*. Such letter is "ה" (*he*), which is perfectly distinguishable in the painting at the Prado Museum, even when the canvas being currently studied does not show it in its entirety. A possible interpretation for it would be that it is the definite article ([20], p. 129), although, from a syntactic point of view, it does not contribute the best meaning to the set as a whole. Or does it in fact lack meaning and this letter disrupts our previously guessed semantic construction? That is not the case, because it actually reinforces it, as the letter "ה" has a mystical-kabbalistic sense, the reason why it is inserted into the names of the first patriarch and the first matriarch. Therefore, *Abram* ("אברם") becomes *Abraham* ("אברהם") (Gen 17, 5; [15], p. 69), and *Saray* ("שרי") becomes *Sarah* ("שרה") (Gen 17,15; [15], p. 70) as called by the same God, who also has this letter twice, "יהוה" ("YHWH"), acquiring a theophoric aspect. This letter provides the Semitic Hebrew language with a certain vowel proximity, and consequently with a particularism and, in turn, a sense of belonging [31]. At the same time, because it is an aspirated sound, it offers semantics of divine breath, of breathing, of life ([27], pp. 64–65), which leads to the fact that Abraham and Sarah can be fertile and have offspring through divine intervention, a mystical aspect also present in Reuchlin himself ([32]; [33], p. 114). As a result, letter "ה" provides the sense of offspring, curiously found among the nouns *son* and *Mary*, his mother, and offering full consistency.

Other letter combinations do not give us entirely meaningful results, although structures like "מְרִי" may appear, meaning *rebelliousness* ([29], p. 352), or "מְרֵי" standing for *bitter* ([29], p. 348), or even more distant, "מְרִים", where an extra letter is inserted in order to mean *exalted/elevated*, or *sublime* ([29], p. 571), despite Reuchlin's use of the expression *summum* to mention the Pentagrammaton ([25], p. 160).

There is another possible option we should consider, as it is semantically expectable. It consists in, since we already have something like *Jesus-who-is-God son of Mary*, assuming that the letter "ה" is the end of a word which, somehow, is hidden under the crease and, as we have said, could form *virgin*. This would mean *Jesus-who-is-God son of the Virgin Mary*. Could this word fit in? Surprisingly enough, it could indeed, as *virgin/maid* is written "בתולה" (with vowels "בְּתוּלָה") ([20], p. 48), showing perfect consistence with the final letter. However, we consider that every canvas hereby analysed, and in spite of the turn or crease of the robe at neck level, where some letters could be hidden, could have two hidden letters at the most, because four would truly be too high a number. This is an interesting option and possibility, yet we believe the painter did not realise it.

We will now examine the left end of the neckline under the hair, which can be seen in the canvas on Figure 6. The letters are not clearly differentiated and there is no need for them to have a meaning, but merely to prove the Hebrew graphemic or pseudo-graphemic continuity along the neckline in this section. Which are the possible letters in case they could be? The first and closest one does not have a clear shape and, rather, it does not seem to belong to the Hebrew alephatic set. It could be "ל" (*lamed*), with certain modifications in strokes and inclination and, going further, we might think of "ד" (*dalet*), "ך" (*kaf*) or "ר" (*resh*). Personally, none of them seems to be close enough, since they lead to excessively unnatural strokes. The other letter, which can only be observed rather partially under the hair, looks even more confusing as regards which one it could be, perhaps just the connecting point of two strokes into one letter, or maybe part of the letter "ף" (lower case *pe*) or "פ" (upper case *pe*), or else "מ" (*mem*) or "ט" (*tet*). We also deem it too unsubstantiated and, most unlikely, even when we have not been able to find better similarities. If we were to search for possible Hebrew words now in the biblical lexical context, the most plausible options would be, due to its semantics, either *way*, "מְסִלָּה" ([20], p. 132), or *to govern/to rule*, "מֹשֵׁל" ([20], p. 140), or maybe *praise*, "מַהֲלָל" ([20], p. 122), always assuming, as the painting appears to indicate, that another middle

letter exists between the two that are partially visible. All in all, we do not believe that the solution to this fragment is so complex and hard to get; rather, we think that this section at the end under the hair on the left-hand side of the neckline does not have any letter with a meaning or which makes sense.

4. The *Bust of Christ* at RKD Netherlands Institute for Art History of the Hague, Netherlands

Can we refine the results we have obtained so far? Indeed, we can, as there are two additional oil paintings sharing the same motif and bearing a strong resemblance, both of them containing Hebrew letters on the neckline of the robe, even though, as will be seen, only one of the two will serve as help. We are referring to the one sold at the Christie's auction house in New York on 6 October 1994, as lot 69, currently on display at RKD Netherlands Institute for Art History of The Hague (Netherlands), *Bust of Christ* (Figure 7). We cannot elaborate much on this painting because we have not been able to gather a lot of data as there are not many studies by experts on this subject, but we can also say that it dates back to the first half of the sixteenth century, that its ascription is not clear, whether Quentin or Jan painted it, and that its size is 46.3 × 30.8 cm [34]. Due to the resemblance and the lower quality in comparison with the previous ones, even when evaluating the strokes of the Hebrew letters (Figure 8), we may conclude it is the work of Quentin and prior to 1529, although hardly convinced until a specialised analysis is carried out.
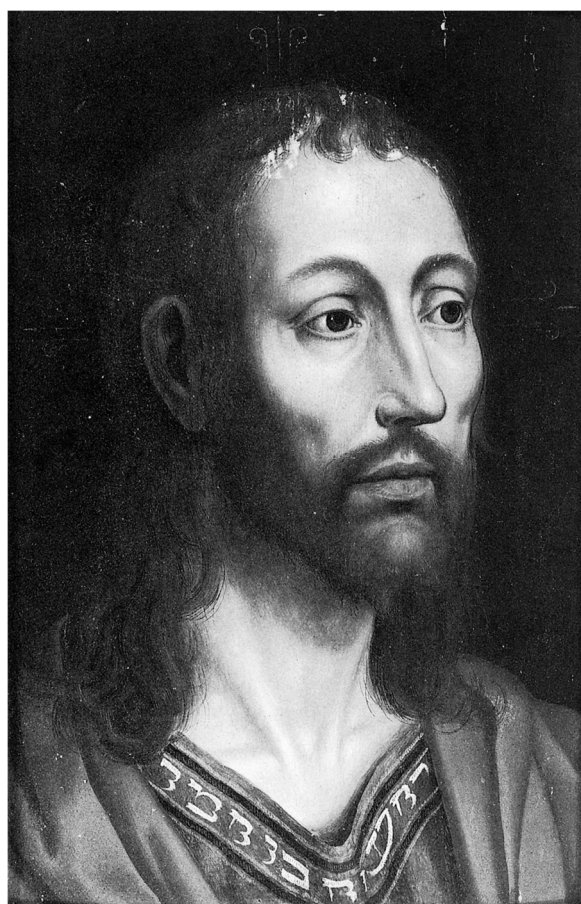

Figure 7. Quentin Massys? *Bust of Christ*, before 1529? The Hague, RKD Netherlands Institute for Art History. Courtesy of the RKD Netherlands Institute for Art History.

Figure 8. Quentin Massys? *Bust of Christ* (detail), before 1529? The Hague, RKD Netherlands Institute for Art History. Courtesy of the RKD Netherlands Institute for Art History.

The letters can do little to help us in this task, aside from reassuring us, as we can find the set "יהשוה", corresponding to "YHSWH", as well as the block "בן" ("bn"), referring to *son*, just like "המר", which are exactly the very same letters we saw in the work at the Prado Museum, no more and no less, hence our position to relate it to the one in Madrid in a closer manner than to the second of the ones hereby analysed. Concerning the meaning we are trying to discern, there is nothing it can contribute to the already considered, but the corroboration of the already expounded.

The only thing left to do is to consider the last of the works, which has a similar motif and bears a great resemblance, *Christ blessing* (Figure 9). His stock number is 63 and is to be found at the Kunstmuseum Winterthur, in the city of Winterthur (Switzerland), with a size of 46 × 36 cm. Some attributed it to Quentin again, others to Jan, yet it is unknown to what extent these were direct or indirect ascriptions, owing to the obvious differences with the model at the Prado Museum, usually believed to date from some point between 1528 and 1538 ([9], p. 101; [12], pp. 154–55).
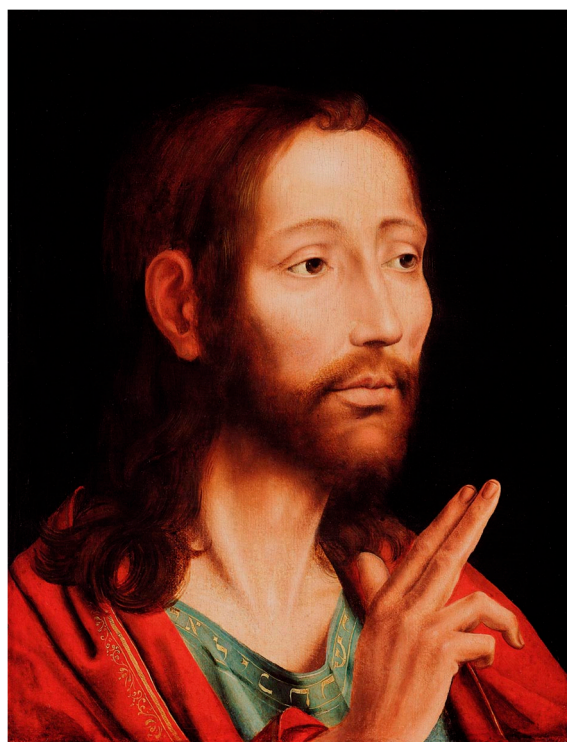

Figure 9. Quentin Massys? Jan Massys? *Christ blessing*, 1528–38. Winterthur, Kunstmuseum Winterthur. Courtesy of the Kunstmuseum Winterthur.

Unfortunately, we find other Hebrew letters in this case (Figure 10), which does not have any similarity to the previous works. Even some Hebrew characters are mistraced, written reverse. This is, then, of no help to the letters found previously at the Prado Museum of Madrid, the private collection one and that at the RKD Netherlands Institute for Art History of The Hague. For all these reasons, these three canvasses will serve as a framework to provide what we consider as the semantic solution to the Hebrew text on the neckline of the robe of the *Christus*, gathered below.

Figure 10. Quentin Massys? Jan Massys? *Christ blessing* (detail), 1528-38. Winterthur, Kunstmuseum Winterthur. Courtesy of the Kunstmuseum Winterthur.

The meaning of these three works is the same, and it happens to be much more profound than that of *Jesus son of Mary*, just like we have concluded. It conveys, on the one hand, that God, the God of the Hebrew monotheism of Judaism, "יהוה" ("YHWH"), is Jesus Christ the Messiah, "יהשוה" ("YHSWH"). On the other hand, his kinship relation with Mary is confirmed, son of Mary, even though thanks to the insertion of the letter "ה" (*he*), "H", the meaning gets theologically more powerful and richer, as we would expect from a humanistic environment where men of letters, painters and Christian rediscoverers of the Greek and Hebrew languages, original Bible sources, who are going back to translating at present, and who live in contact with European Hebrew communities and are acquainted with kabbalistic methods, express their faith in Jesus Christ, since it is stated that Jesus, who is God himself, is the son of Mary through divine intervention. We strongly believe this is the most accurate meaning for the letters in this set of works: *Jesus (the Christ-Messiah) is God himself, son of Mary through divine intervention and work*.

5. The *Christ blessing* at Kunstmuseum in Winterthur, Switzerland

Let's have a look at this canvas again. It is not about clearing up the sense of the previous letters anymore, but about actually focusing our attention on such a varied set of Hebrew graphemes, some of them correct and others mistraced, which have led experts to claim they have no meaning whatsoever ([9], pp. 108–9; [12], pp. 154–55). The mistracing is caused by the fact that some of them were written reverse. The set of letters is as follows, where we include the letters that appear backward between brackets, and offer some possible variations whenever we have doubts about them: "{ר/י}-א-ל-י-[כ]-[ת]-[ר]-[שׁ]-[{ו/ר/י}]".

If we replace the reverse letters with the right letter and try to make sense out of them, we cannot obtain clear semantics. Thus, although we can spot some potential fragmentary meanings, like "ו" as an adversative conjunction, *but/although* ([20], p. 65), "לֹא" as negative particle, *no* ([20], p. 115), "כִּי", semantically *what/because/certainly/when/however much* ([20], p. 109), or even "שַׂר" standing for *chief/royal representative/leader* ([20], p. 218) and "שרת" meaning *service/serve/officiate* ([20], p. 235), we cannot give any fully coherent sense to the letters as a whole once the reverse ones are replaced.

In spite of that, we believe that this nonsense, which has been seen as an exercise of letters randomly positioned without following any semantic rules up to our days has some clear sense, and it only can be resolved by applying the classical cryptographic methods of the Hebrew people, just like we have explained in detail on other occasions ([1], pp. 579–80). Among the most common cipher methods, which are even included in the very *Old Testament* or the Hebrew Bible, we find the Albam (Figure 12), a substitution system for the Hebrew alphabet (Figure 11) that divides it into two groups composed of eleven elements and replaces each letter according to the expression x' = x + 11 mod 22, (with "א" = 0 ,... ,"ת" = 21). The expression "mod 22" refers to modular arithmetic. Put simply, in it any integer is equal to another as long as they are at a distance of 22 units. Thus, {0, 22, 44, ...} are the same number, the lowest value being taken, number 0, as the representative. In the same way, {1, 23, 45, ...} are the same number, being taken as the representative of all of them the minor, the 1. Thus, to the last, the 21, so that {21, 43, 65, ...} are the same number in modular arithmetic, the 21 being taken as the representative. In our expression, x' = x + 11 mod 22, we would have that if x = 0, x' = 11; if x = 1, x' = 12; ...; if x = 20, x' = 9; if x = 21, x' = 10. This way, in the eighth century BCE (before Common Era), in the proto-Isaiah, the first author of the *Book of Isaiah* the prophet ([14], pp. 365–67), we observe an example of Albam replacing, where the expression "טַבְאֵל", *Tabeel*, in chapter 7, verse 6 would hide "רְמַלְיָהוּ", *Remalyahu*, a proper noun previously mentioned in Is 7, 1, Is 7, 4 and Is 7, 5 ([35], pp. 30–31). Even so, this example is not clear concerning the possible Albam coding, as it does not show a perfect fit into the second part of the word as expected with this method ([36], p. 78).

Figure 11. Hebrew alphabet.

Figure 12. Hebrew alphabet showing the cryptographic substitutions of Albam encryption.

Another system is the Atbash cipher, which replaces each letter of the Hebrew alphabet with the corresponding one according to the expression x' = 21 − x (with "א" = 0 ,... , "ת" = 21). It is found, for instance, in the work by the *Old Testament* prophets, in the *Book of Jeremiah* (*Yirmeyahu*) (seventh–sixth centuries BCE), and it can be located within the final text between the seventh and third

centuries BCE ([14], pp. 427–28). To illustrate this, in chapter 25, verse 26 ([35], p. 304); or in chapter 51, verse 41 ([35], p. 420), where instead of "בָּבֶל", *Babel* (*Babylon*), "שֵׁשַׁךְ" *Sheshakh*, appears (an anonymous city whose alleged historical existence has not been proved). Or else in chapter 51, verse 1 by the same prophet, where instead of writing "מַשְׂדִיכ", *Kashedim* (*Chaldeans*), he writes "לֵב קָמַי", *leb kamai* (*heart of my enemy*) ([35], p. 414). A subsequent example is found in *Daniel* the Prophet (*Daniyel*) (seventh–sixth centuries BCE), written around the years 167–164 BCE ([14], pp. 786–87). In his book, chapters 1 to 3 contain the names of three characters: *Shadrach*, *Meshach* and *Abednego* in Chaldean, *Hananiah*, *Mishael* and *Azariah* in Hebrew, "חנניה, מישאל, ועזריה", which could belong to some kings of that time, hidden by modifying the consonants forming their names ([35], p. 650; [36], p. 79).

Along with these we also have the Atbah coding, kabbalistic gematria, a Semitic replacing system which relies on alphabetical–numerical equality with the aim of providing words with numerical values, and once these numbers are assigned, words or groups of letters are searched so that similar additions are produced. Examples of this sort are hard to find in more recent times such as that of the composition of the Hebrew Biblical text, yet it is found indeed in the Babylonian *Talmud* dating from the fifth century CE, even though it is thought that number 318 already appeared in the *Book of Genesis*, chapter 14, verse 14, referring to a particular amount of servants ([15], p. 62). This value coincides with the value of the Hebrew word "אליעזר", *Eliezer*, Abraham's servant, thus identifying both senses in response to the search for solutions to the divine and prophetical questions of the sacred texts by the mystics of Judaism ([36], pp. 79, 91–92; [37,38]). We will now put Hebrew aside and talk about the Greek language, since we will refer at this point to the case of a Christian book written in Greek, the *Book of Revelation*. It is included in the Christian *New Testament*, in which, in chapters and verses 13, 17–18 ([39], p. 1339) and 15, 2 ([39], p. 1345) we observe the value *666* ("χξϛ") (in almost every papyrus and codex) or *616* ("χιϛ") (according to papyrus *P.Oxy. LVI 4499*), making reference to either Emperor Nero (37–68) or Emperor Domitianus (51–96) if we add the numbers [40].

Along with these three systems and encompassed within the Hebrew world, although influenced by the mystical-kabbalistic tradition, the Notarikon must be mentioned. We are talking about an acrostic selection method consisting in taking the first letter of each word of a readable text, or sometimes a meaningless and imprecise one, so as to obtain a new word, which will be key to the meaning of the original text ([36], p. 92; [41], p. 59). Another system is the Temurah, taken from the Kabbalah as well, and it searches for anagramations (cryptographic transpositions) within each word ([36], p. 92; [41], pp. 59–60). It must be noted that all these systems were known before the Medieval Times ([41], pp. 57–60; [42]).

Continuing with our work *Christ blessing*, the key to interpret this oil painting lies in the consideration of the Hebrew methods (Figure 11) of concealment through ciphering, as well as in choosing the system that puts the letters backward, that is, no other than the Atbash one (Figure 13), because that is the one which helps achieve the conversion of the first Hebrew letter into the last one, the second one into the antepenultimate, and so on and so forth and vice versa. This method provides the true meaning of the letters that have been traced reversed and, thanks to it, we obtain the set "{מ/ג/פ}-ב-ג-א-ל-י-ל-א-{ר/י}".

Figure 13. Hebrew alphabet showing the cryptographic substitutions of Atbash encryption.

The painting indicates two clearly distinct segments: the seven first letters corresponding to the right-hand side of the Christ's neckline, and the remaining part, with two letters. After ciphering is

applied, the meaning of the six-letter set "ג-א-ל-י-ל-א" is surprisingly the word *Galilean*, which makes us opt for yod, "י", that is, "Galylay", "גאלילאי" for the seventh letter. This is certainly a peculiar and uncommon way of Atbash coding, because we would normally replace letter x with the one that matches a x' = 21 − x, specularly taking the whole alphabetic set, even when, as we have just seen, such an unexpected unigramic inversion method leads to a surprising result. We believe, though, that this aspect could possibly be detected in the pictorial works of other artists, too.

The other two letters on the left-hand side do not offer any meanings with solid coherence in some of the various assumed options, because, even though we may find "גַּב", standing for *ditch/tank/lobster* ([20], p. 48) and "גַּב" as *back* ([20], p. 48), we cannot find a suitable sense in them in this context, as there is no acceptable semantics for "פב" or "מב" in this case. If we look carefully at both letters, it is evident that they are forming their own set, as previously mentioned, separated by the cut in the middle of the neckline or the crease, and both of them having been written reverse, something that is particularly visible at the very end, although we conclude that the letter "ש" is backward as well by comparing it with the other canvasses.

In our view, a different type of ciphering has been used this time, because this short fragment containing only two letters (both of them written backward) has not undergone the application of the Atbash method, but a specular writing, so that the whole set is not "ב-{פ/ג/מ}", but is "ש-{ו/ר/י}", but read reversely, that is to say, "{ו/ר/י}-ש", a kind of ciphering widely known from the antiquity and used in all eras ([1], pp. 581, 584, 606, 625, 944), as is the case with the *Oxford TII28* manuscript dating from the ninth–tenth centuries, with the expression *altman sanctorum servus factus monachorum* (*Altman, a servant among the servants, became a monk*) [43]. The possible semantic options here are "שר" for *navel/umbilical cord* ([20], p. 235) or "שֵׁי" for *tribute/present/gift* ([20], p. 225; [29], p. 622), which does not help in finding a coherent solution either. For these reasons, we reckon that the most accurate option and the only possible one is to go back to the form "שַׂר", since one of its variations conveys the sense of *boss/leader/royal representative/governor/prince/chief priest* ([20], p. 218; [29], p. 659).

In light of all that, the meaning of the letters in this canvas would be *The Galilean (Jesus) is the Prince and Governor, the Royal Representative and Chief and High Priest*, thus combining the divine authority of being Priest and King, and, just as described by Melquisedec (Gen 14,18; [14], p. 19), who holds both titles in the *Book of Genesis*, it is a prefiguration of Jesus Christ in the Jewish *Torah*, as masterfully and thoroughly explained through the *New Testament Letter* addressed precisely to the Hebrew people [44] (Heb 5, 10; Heb 6, 20; Heb 7, 1–11,15; [39], pp. 1158, 1163–65).

6. Conclusions

Flemish painter Quentin Massys and his son Jan Massys appear to be the authors of four works that are rather similar: the bust of Jesus Christ, canvasses we can find in different locations today and which we have designated as *Christus* altogether.

Focusing on the set of Hebrew letters displayed on the edge of the robe around the neck in these works, we must say that, on the one hand, the canvas at the Prado Museum in Madrid (Spain), *Christ the Saviour*, has exactly the same letters as the oil painting *Bust of Christ*, to be found in the Netherlands nowadays, at the RKD Netherlands Institute for Art History of The Hague. Both works, as far as linguistic texts are concerned, bear a great resemblance to the private collection canvas from the Sotheby's auction (New York) dating from 24 January 2008, *Christ*, with highly similar Hebrew characters, although the latter includes a few more and even some additional fragments, yet without following any semantic rules.

All of these analysed works have allowed us to provide a consistent solution with a clearly Christian semantics, but also with a profound Semitic meaning. Besides, thanks to the contribution coming from the Humanistic environment of artists, writers, philosophers, theologists and philologists, as well as from the kabbalistic schools—Christian ones in these cases—a coherent significance is achieved, which in turn enhances the already known solution previously provided by other experts.

The last work, on display at the Kunstmuseum in the Swiss city of Winterthur, *Christ blessing*, with another series of Hebrew characters and pseudo-characters, has refused to be solved up to this

day, leading all experts to consider it as a meaningless set, devoid of semantics. Analysing the cryptologic methods in the Hebrew world has enabled us to produce an outcome and a meaningful conclusion, which have, in line with the other three works, a profound Christian significance, in order to fulfil the Jewish kingship and priesthood pledges conveyed by the figure of the Galilean, Jesus the Messiah, the Christus.

Approaching Humanistic pictorial works like those by the Massys implies entering a circle of arts and history scholars thanks to them, as well as one of masters and cultured men specialising in philologic, philosophic and theologic sciences or mystical movements such as the Kabbalah and, alongside all that, we are initiated in the same Hebrew-style coded writing, a way of making the theological mystery of God's incarnation in Jesus Christ all the more difficult to solve, and hindering the successful comprehension of writings, which can easily lead us to think that they do not make any sense whatsoever or that they somewhat lack meaning. Such first outburst of thought might lead us to the reconsideration of who we are facing with greater caution and circumspection and, in our days, it is required to rely on the contributions by a wide variety of experts and disciplines so as to verify how masterful that historical period actually was.

Abbreviations

Gen	Book of Genesis
Is	Book of Isaiah
Heb	Epistle to the Hebrews

References

1. Vicente Jara Vera. "Contexto, criptoanálisis y propuesta de solución de la inscripción de la talla (original) de la Virgen de Candelaria de Tenerife (Canarias, España)." Ph.D. Telecommunications Engineering, Universidad Politécnica de Madrid, Departamento de Matemática Aplicada a las Tecnologías de la Información y las Comunicaciones, 28660 Boadilla del Monte, Madrid, España, 27 January 2016.
2. Mirjam Alexander-Knotter. "An Ingenious Device: Rembrandt's Use of Hebrew Inscriptions." *Studia Rosenthaliana* 33 (1999): 131–59.
3. Giancarlo Fiorenza. "Hebrew, Hieroglyphs, and the Secrets of Divine Wisdom in Ludovico Mazzolino's Devotional Paintings." In *Visual Cultures of Secrecy in Early Modern Europe*. Edited by Timothy McCall, Sean Roberts and Giancarlo Fiorenza. Kirksville: Truman State University Press, 2013, pp. 126–48.
4. Ruth Mellinkoff. *Outcasts: Signs of Otherness in Northern European Art of the Late Middle Ages*. Berkeley: University of California Press, 1993, vols. 1–2.
5. Shalom Sabar. "Between calvinists and jews: Hebrew script in Rembrandt's art." In *Beyond the Yellow Badge: Anti-Judaism and Antisemitism in Medieval and Early Modern Visual Culture*. Edited by Mitchell B. Merback. Leiden: Brill, 2007, pp. 371–404.
6. Michael Zell. *Reframing Rembrandt: Jews and the Christian Image in Seventeenth-Century Amsterdam*. Berkeley: University of California Press, 2002.
7. Departamento de Pintura Flamenca y Escuelas del Norte del Museo del Prado. "Cristo Salvador." *Museo del Prado*, 2016. Available online: https://www.museodelprado.es/coleccion/obra-de-arte/cristo-salvador/fb96fb49-7f0d-4a76-9989-e6f4f4a748eb?searchMeta=massys (accessed on 20 July 2016).
8. Departamento de Pintura Flamenca y Escuelas del Norte del Museo del Prado. "La Virgen en oración." *Museo del Prado*, 2016. Available online: https://www.museodelprado.es/coleccion/obra-de-arte/la-virgen-en-oracion/49366885-1460-4713-a008-01cc790ba3e4 (accessed on 20 July 2016).
9. Teresa Posada Kubissa. "Cuadros de Quinten Massys y Jan Massys en el Museo del Prado. Actualización de las atribuciones." *Boletín del Museo del Prado* 32 (2014): 96–109.
10. John Oliver Hand, Catherine A. Metzger, and Ron Spronk. *Prayers and Portraits: Unfolding the Netherlandish Diptych*. New Haven: Yale University Press, 2006.
11. Larry Silver. *The Paintings of Quinten Massys with Catalogue Raisonné*. Oxford: Phaidon, 1984, p. 230.

12. Leontine Buijnsters-Smets. *Jan Massys: een Antwerps Schilder uit de Zestiende Eeuw*. Culemborg: Centraal Boekhuis, 1995.

13. Departamento de Pintura Flamenca y Escuelas del Norte del Museo del Prado. "Massys, Jan." *Museo del Prado*, 2016. Available online: https://www.museodelprado.es/coleccion/artista/massys-jan/db803fe4-82d3-42b6-84d7-5273c9d7d79d?searchMeta=jan%20massys (accessed on 20 July 2016).

14. Francisco Cantera Burgos, and Manuel Iglesias González. *Sagrada Biblia: Versión Crítica Sobre los Textos Hebreo, Arameo y Griego*. Madrid: BAC, 2003.

15. Ricardo Cerni. *Antiguo Testamento Interlineal Hebreo-Español*. Tarrasa: Clie, 2009, vol. I.

16. Fundación de Amigos del Museo del Prado (B.F.). "Massys, Quinten." *Museo del Prado*, 2016. Available online:

    https://www.museodelprado.es/aprende/enciclopedia/voz/massys-quintin/2a304e3a-fc5a-4539-bc93-f7f10ad7c937 (accessed on 20 April 2016).

17. Ernest Klein. *A comprehensive Etymological Dictionary of the Hebrew Language*. Haifa: University of Haifa, 1987, p. 76.

18. Stephen D. Renn. *Expository Dictionary of Bible Words: Word Studies for Key English Bible Words Based on the Hebrew and Greek Texts*. Peabody: Hendrickson Publishers, 2005, p. 1076.

19. Valerio Mannucci. *La Biblia como Palabra de Dios*. Bilbao: Desclée De Brouwer, 1998, p. 99.

20. Jaime Vázquez Allegue. *Diccionario Bíblico Hebreo-Español Español-Hebreo*. Estella: Verbo Divino, 2011.

21. Franz Posset. *Johann Reuchlin (1455–1522): A Theological Biography*. Berlin: Walter de Gruyter, 2015.

22. David Hotchkiss Price. *Johannes Reuchlin and the Campaign to Destroy Jewish Books*. New York: Oxford University Press, 2010.

23. Jonathan Arnold. *The Great Humanists: An Introduction*. London: I.B. Tauris, 2011.

24. Johannes Reuchlin. *De Verbo Mirifico*. Tübingen: Anshelm, 1514, p. 120.

25. Wilhelm Schmidt-Biggemann. *Geschichte der Christlichen Kabbala: 15. und 16. Jahrhundert*. Stuttgart-Bad Cannstatt: Frommann-Holzboog Verlag, 2012.

26. Nikolaus von Kues. "De Nomine 'Jesus'. Sermo XLVIII., Cod. Cus. 220 fol. 140v." *Cusanus Portal*. Available online: http://www.cusanus-portal.de (accessed on 20 April 2016).

27. Allison P. Coudert. *The Impact of the Kabbalah in the Seventeenth Century: The Life and Thought of Francis Mercury Van Helmont (1614–1698)*. Leiden: Brill, 1999.

28. Anthony Levi. *Renaissance and Reformation: The Intellectual Genesis*. New Haven: Yale University Press, 2004, pp. 126, 198.

29. Moisés Chavez. *Diccionario de Hebreo Bíblico*. El Paso: Mundo Hispano, 1991.

30. Sotheby's. "Quinten Massys. Christ, bust length. Important Old Master Paintings including European Works of Art. 24/25-I-2008." *New York: Sotheby's*, 2016. Available online: http://www.sothebys.com/en/auctions/ecatalogue/2008/important-old-master-paintings-including-european-works-of-art-n08404/lot.6.html (accessed on 20 July 2016).

31. Joel Manuel Hoffman. *In the Beginning: A Short History of the Hebrew Language*. New York: New York University Press, 2006, pp. 40–46.

32. Johannes Reuchlin. *On the Art of the Kabbalah (De Arte Cabalistica).* Lincoln: University of Nebraska Press, 1993, p. 315.

33. Wilhelm Schmidt-Biggemann. "Philosophia perennis: Historical Outlines of Western Spirituality in Ancient, Medieval and Early Modern Thought." *Archives Internationales d´Histoire des Idées* 189 (2007): 114.

34. RKD Netherlands Institute for Art History. "Naar Quinten Massijs (I) of naar Jan Massijs. Christus, eerste helft 16de eeuw. Christie's (New York City) 1994-10-06, nr. 69." Den Haag: RKD Netherlands Institute for Art History, 2016. Available online: https://rkd.nl/explore/images/13 (accessed on 20 July 2016).

35. Ricardo Cerni. *Antiguo Testamento Interlineal Hebreo-Español*. Tarrasa: Clie, 2009, vol. IV.

36. David Kahn. *The Code-Breakers: The Comprehensive History of Secret Communication from Ancient Times to the Internet*. New York: Scribner, 1996, p. 78.

37. Gerhard F. Strasser. "The rise of Cryptology in the european Renaissance." In *The History of Information Security: A Comprehensive Handbook*. Edited by Karl de Leeuw and Jan Bergstra. Amsterdam: Elsevier, 2007, p. 278.

38. Friedrich L. Bauer. *Decrypted Secrets: Methods and Maxims of Cryptology*. Berlin: Springer, 2007, p. 47.

39. José María Bover, and José O'Callaghan. *Nuevo Testamento Trilingüe*. Madrid: BAC, 2001.

40. Jorge Dávila Muro. "Criptología y Seguridad." *Cuadernos Cátedra ISDEFE-UPM* 4 (2008): 13.

41. Màrius Serra Roig. *Verbalia: Juegos de Palabras y Esfuerzos del Ingenio Literario*. Barcelona: Círculo de Lectores, 2000.

42. Maria Fronczak. "Atbah-Type Ciphers in the Christian Orient and Numerical Rules in the Construction of Christian Substitution Ciphers." *Cryptologia* 37 (2013): 338–44.

43. Bernhard Bischoff. "Übersicht über die nichtdiplomatischen Geheimschriften des Mittelalters." *Mitteilungen des Instituts für Österreichische Geschichtsforschung* 62 (1954): 3.

44. Raymond E. Brown. *Introducción al Nuevo Testamento. Cartas y otros Escritos*. Madrid: Trotta, 2002, pp. 881–908.