1. INTRODUCTION

The verification procedure was developed in order to determine whether the passage:

IUBILAE => SLAVES

could be considered a rare result or a coincidence that can be easily reproduced.

To do so, the same method applied to IUBILAE was extended to a broader database of Latin and English words. In practice, the analysis was not limited to the specific case, but instead examined how many other Latin words or stems could be extracted from the envelope sequence and how many of these, after an alphabetical shift, could generate English words.

The verification was therefore structured as follows: starting from the actual sequence of characters on the envelope, Latin words or stems compatible with the order of the characters are searched within it; then all possible alphabetical shifts are applied; finally, using an English dictionary, it is verified whether the resulting sequences can generate English words with one residual letter.

The purpose is to estimate to what extent the result IUBILAE => SLAVES emerges as a particular case, or whether it instead belongs to a mechanism capable of producing many coincidences across other sequences as well.

I therefore transcribed the characters from the envelope while preserving their original order of appearance:

DOTT DELLA MONICA SILVIA PROCURA DELLA REPUBLICA 50I00 FIRENZE

For the purposes of the analysis, the numbers were converted according to the A=0 cipher:

- 00 = A
- 0 = A
- 5 = F

2. SEARCH FIELDS

A reference Latin dictionary was applied to this sequence, distinguishing two search fields:

narrow field = complete 7-letter Latin words
broad field = first 7 letters of longer Latin words

The broad field was introduced because some sequences found on the envelope do not necessarily correspond to autonomous Latin words, but may instead coincide with the beginning of longer Latin forms. This makes it possible to verify not only complete words, but also plausible lexical stems.

Example:

IUBILAEUM => **IUBILAE**

In this case, IUBILAE is not an autonomous complete Latin word, but rather the initial stem of a longer Latin entry.

3. ANAGRAM

We then verified which Latin words or stems could be constructed starting from the envelope sequence. The criterion was not to create a free anagram by choosing letters arbitrarily, but rather to preserve as much as possible the order in which the characters appear on the envelope. In practice, some letters could be skipped, but the reading always had to proceed forward: once a character had been passed, it could not be retrieved later. Only a small local swap between two adjacent letters was allowed, in order to account for minimal inversions in the composition of the sequence.

For example, from the sequence:

- I U B **L I** A E

it is possible to obtain:

- I U B **I L** A E

by locally swapping the positions of L and I.

In this way:

- IUBLIAE => IUBILAE

The form IUBILAE can therefore be recognized as a Latin stem, without turning the entire procedure into a completely free anagram.

4. ALPHABETICAL SHIFT

For each identified Latin word or stem, we then applied a second verification step: the alphabetical shift. The idea was to determine whether a 7-letter Latin sequence, once shifted within the alphabet, could generate a sequence compatible with English words.
In order to avoid arbitrarily choosing a single displacement, all possible alphabetical shifts were tested, from +1 to +25. In practice, each letter is advanced by a certain number of positions.

Example:
- shift +1: A => B
- shift +2: A => C
- shift +3 A => D

With IUBILAE, for example, applying a +10 shift to the non-fixed letters produces:
- IUBILAE => SELSVAO

This step is not yet intended to demonstrate the existence of a message, but rather to generate all possible alphabetical transformations to be subsequently checked against the English dictionary.

5. RICERCA PAROLA INGLESE

After applying the shift, each transformed sequence was compared against an English dictionary. The sequence obtained after the shift always contains 7 letters. For this reason, we applied an additional rule: removing one letter at a time and verifying whether the remaining 6 letters could form an English word through anagramming. The excluded letter is not discarded from the reasoning process: it is recorded as a residual and then, if useful, converted into a number using the A=0 system.

Observed example:
- SELSVAO

If we remove the letter O, the remaining letters are:
- SELSVA

These six letters can be rearranged into:
- SLAVES

The residual letter is: O

Using the A=0 cipher:
- O = 14

The result is therefore recorded as:
- 14 SLAVES

In this way, not only the English word obtained is considered, but also the residual letter produced by the procedure.

6. ANALYSIS

I therefore initiated the verification procedure using Codex and two reference dictionaries, one Latin and one English.

The dictionaries used contain:

- Latin dictionary: 130,451 normalized entries
- English dictionary: 48,192 normalized entries

Within the Latin dictionary, two search fields were distinguished:

- narrow field = complete 7-letter Latin words
- broad field = initial 7-letter stems extracted from longer Latin words

Within the narrow field, that is, considering only complete 7-letter Latin words, the dictionary contains:

- 17,234 Latin 7-letter words

Among these, applying the envelope rules, the following were found compatible:

- 753 Latin words

Therefore, within the narrow field, approximately one 7-letter Latin word out of every 23 can be reconstructed from the envelope sequence:

- 17.234 / 753 ≈ 22,9

If the data are instead compared against the entire normalized Latin dictionary, the ratio is approximately:

- 130.451 / 753 ≈ 173

that is, approximately one entry out of every 173.

Within the **broad field**, on the other hand, the initial 7-letter stems extracted from longer Latin words were considered. In this case, the following were found compatible with the envelope sequence:

- 4.002 Latin stems

Compared against the entire Latin dictionary, these correspond to approximately:

- 130.451 / 4.002 ≈ 32,6

that is, approximately one entry out of every 33.

7. FIRST RESULT

After this initial Latin phase, the alphabetical shift test and the English dictionary test were applied. For each compatible Latin word or stem, all shifts from +1 to +25 were tested, then a 6-letter English word plus one residual letter was searched for.

The results were:

- narrow field: 753 compatible Latin words, 505 produce at least one English solution, percentage: 67.07%;
- broad field: 4,002 compatible Latin stems, 2,754 produce at least one English solution, percentage: 68.82%.

These data show that finding an English word after a shift is not extremely rare if the procedure is applied to many Latin words or stems. In other words, the passage:

- base Latin stem => shift => English word + residual

can produce many coincidences.

For this reason, the value of the IUBILAE case cannot lie solely in the fact that SLAVES emerges from it. The most important point is that IUBILAE does not arise from a free selection of letters, but from an independent and highly specific rule:

- **pages with a single clipping**

Indeed:

1. IUBILAE originates from single-contribution pages;
2. those pages are anomalously concentrated in the final part of the envelope;
3. only after this independent selection is the shift test applied.

8. IDENTIFICATION OF CLUSTERS

After verifying the general behavior of the method on the Latin and English dictionaries, a second check was performed: the search for possible alternative clusters within the envelope.

The purpose was to determine whether the IUBILAE case was truly particular, or whether other groups of letters, selected according to different rules, could also produce similar results. For this reason, several control clusters were defined, namely groups of letters extracted from the envelope according to recognizable criteria:

- pages whose digit sum equals 10
- last line of the envelope
- pages containing the digit 7
- numerical cluster 42–47
- pages ending with the digit 5
- pages beginning with the digit 2
- pages whose digit sum equals 9
- pages whose digit sum equals 8
- single pages

Each cluster was then subjected to the same type of verification:

1. search for complete Latin words;
2. search for Latin stems;
3. possible application of the shift;
4. search for English words with a residual letter;
5. direct verification of possible Italian, English, or Latin words.

This step serves as a comparative control: if many different clusters produced results similar to IUBILAE, then the main case would lose strength.
If, on the other hand, the alternative clusters produce null, weak, or non-comparable results, then the IUBILAE case remains more specific. Before the cluster analysis, it is useful to specify that the main verification maintained the same structure as the IUBILAE case: the search for 7-letter Latin words or stems, followed by a possible alphabetical shift and the verification of a 6-letter English word plus one residual letter. Direct checks in Italian, English, or Latin involving words of different lengths were considered only exploratory and not equivalent to the main method.

1. Page Digit Sum = 10

Pages: 19, 28, 37
Letters: ODDAVLAEDELLAZ
Characters: 14

Result:
- complete Latin words: 0
- Latin stems: 0
- productive shifts: 0

Outcome: negative.

2. Last Line

Segment: CA 50I00 FIRENZE
Letters with A=0 conversion: CAFAIAFIRENZE
Characters: 13

Result:
- complete Latin words: 0
- Latin stems: 0
- productive shifts: 0

Outcome: negative.

3. Pages Containing the Digit 7

Pages: 37, 47, 57, 78
Letters with A=0 conversion: DELLAURPIFAIZ
Characters: 13

Result:
- complete Latin words: 0
- Latin stems: 0
- productive shifts: 0

Outcome: negative.

4. Cluster 42–47

Pages: 42, 44, 45, 47
Letters: IRCRAEUCAIE Characters: 11

Result:
- complete Latin words: 0
- Latin stems: 1

Stem found:
- **IRRAUCE**

from **IR**C**RA**E**UC**A**IE**, derived from the word IRRAUCESCO, meaning “to become hoarse”.

With shift:
- IRRAUCE => shift +9 => **RANDAL + J**

RANDAL is a proper name.

Outcome: weak.

5. Final 5 Cluster

Rule: pages ending with the digit 5
Pages: 35, 45
Letters: MICIPRCRAEL
Characters: 11

Result:
- complete Latin words: 0
- Latin stems: 0
- productive shifts: 0

Outcome: negative.

6. Cluster 25 + 28

Rule: pages beginning with the digit 2
Pages: 25, 28
Letters: TTDAVLAE
Characters: 8

Result:
- complete Latin words: 0
- Latin stems: 0
- productive shifts: 0

Outcome: negative.

7. Page Digit Sum = 9

Pages: 36, 45
Letters: EIRCRAE
Characters: 7

Latin result:
- complete Latin words: 0
- Latin stems: 0
- productive shifts: 0

Direct check:
- ARCIERE
- CERERIA

Outcome: exploratory positive.

Reason: the identified sequence produces two complete Italian words when anagrammed, but they are not fully relevant to the context of the envelope.

8. Page Digit Sum = 8

Pages: 8, 35, 44
Letters: IMICPLU
Characters: 7

Result:
- complete Latin words: 0
- Latin stems: 0
- productive shifts: 0

Outcome: negative.

9. Single-Page Clusters

The pages containing the highest number of letters were considered individually:

- p. 28 => DAVLAE
- p. 34 => ONSLAO
- p. 35 => MICPL
- p. 37 => DELLAZ
- p. 45 => IRCRAE
- p. 57 => URPI
- p. 120 => FIRN

Direct results:

- p. 34 => ONSLAO => SALOON (English)
- p. 34 => ONSLAO => LANOSO (Italian)
- p. 45 => IRCRAE => CARRIE (English / proper name)
- p. 57 => URPI => RUPI (Latin)

Subsequent shifts on RUPI:

- RUPI => TURK (English), shift +2
- RUPI => FIDI (Latin), shift +14

<u>Outcome: isolated results.</u>

Reason: some words emerge, but they are not fully relevant to the context of the envelope.

9. OTHER ANAGRAMS RELATED TO “SLAVES”

In the constrained case, that is, keeping fixed the A derived from the 00 block and applying shift +10, the resulting sequence is:

- SELSVAO

From this sequence, by removing one residual letter at a time, not only SLAVES emerges, but also other English words.

The identified outputs are:

- LOAVES + S
- SALVES + O
- SLAVES + O
- SALVOS + E
- SOAVES + L
- SOLVES + A

With the residual converted according to A=0:

- LOAVES + S => S = 18
- SALVES + O => O = 14
- SLAVES + O => O = 14
- SALVOS + E => E = 4
- SOAVES + L => L = 11
- SOLVES + A => A = 0

This step is important because it prevents SLAVES from being artificially isolated as if it were the only possible output. In reality, the same procedure produces several valid English words.

From a semantic point of view, however, the outputs do not all carry the same weight. Terms such as LOAVES, SALVES, SALVOS, SOAVES, and SOLVES are lexically valid, but they do not present an evident connection with the theme of the envelope or with the context of the analysis. SLAVES, on the other hand, is the most thematically marked output, because it directly evokes an image of dominated subjects, victims, or people deprived of freedom. Furthermore, in this specific case, it leaves as residual the letter O, which in the A=0 system corresponds to 14, namely the number of victims from the 1974 murder to 1985.

The interpretation:

SLAVES + O = 14

should therefore not be presented as a unique or demonstrative result, but rather as the semantically most significant output within a group of alternatives produced by the same procedure.

With A fixed from 00 and shift +10, the sequence produces multiple English words. Among them, SLAVES is the one that is semantically most relevant to the context.

10. CONCLUSION

The analysis shows that the simple transition from a Latin stem to an English word through shifting is not, by itself, a sufficient element to support an intentional reading. The dictionary checks have in fact shown that, by applying many shifts and allowing one residual letter, it is possible to obtain numerous lexical correspondences.

The IUBILAE case nevertheless remains particular because it does not arise from a free selection of letters, but from an independent rule: the pages contributing a single clipping.

This rule produces the sequence:

- I U B L I 00 E

which, with 00 => A and a small local swap, becomes:

- IUBILAE

What makes the case more interesting is also the fact that the single-contribution pages appear anomalously concentrated in the final part of the envelope. This is the strongest element of the analysis, because it precedes any lexical or cryptographic interpretation.

The interpretation:

- IUBILAE => SLAVES + O = 14

should therefore be considered exploratory, not autonomous proof. However, the fact that the fixed letter A derives from the numerical block 00 provides a non-arbitrary internal criterion for applying the test. Under this restriction, only shift +10 produces solutions, and among these SLAVES is the semantically most significant output, even though it appears together with other lexically valid but less relevant alternatives.

The alternative clusters analyzed did not produce fully comparable results. Some were negative, others generated isolated or weak words, but none displayed the same combination of elements:

- independent selection rule
- 7-letter sequence
- recognizable Latin stem
- internal constraint given by 00
- English output with numerical residual
- positional anomaly

In summary, the result does not by itself demonstrate the presence of an encrypted message, but it identifies a non-trivial combination of conditions that deserves to be reported and distinguished from the simple lexical coincidences produced by broader tests.