

The Voynich's manuscript

Reading an elegant enigma

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We know that certainty is out of the question in deciphering the manuscript. But on the other hand, the convergence towards the solution naturally accommodates successive approximations. For example, and to resume folio 116v, whether the letter "o" is the abbreviation of "*omnis*" or "*omnen*", or that "la" is of "*littera*" or "*litteram*", do not change the inescapable convergence of "oladabas" into the abbreviated Latin solution "*omnem litteram dabas*". Is this the solution of this enigma, as suggested by the author of folio f116v? In the bulletin ARCSI 2017, we detected that what appeared to us to be Voynich's words were to be considered as propositions of words associating the Latin abbreviations and codes. The effort since then has focused on the reconstruction of the coding table and on the *modus operandi* of the elaboration of the sentences in order to solve the Voynich's enigma.

Our first results, submitted to latinists, confirm that in addition to the fact that the sentences cannot be fully translated thanks to a simple dictionary of the classical Latin, this text seems "*to be in Latin very late marked by regional structures*"; major clue since corresponding to the period of the 15th century during which the manuscript was written.

Indeed, in the 15th century is born¹ the "*latinus grossus*," a language of exchange mixing the Latin of the elite and the "vulgar" language (Italian, Provencal, French) which allows people more or less educated to communicate. This state of linguistic impregnation is found in the urban bureaucracy, in the legal area and in the university.

However, what is the share of the "classical" Latin and that of the "vulgar" Latin present in the manuscript? Are we able to identify the origin of this manuscript and thus deduce the regional features? The question cannot be fully answered in this article. However, some clues are beginning to emerge, both on the question of the grammar used, on its theme and on its regional origin.

¹ Macaronea, TIFI ODASI, Padoue, 1450-1492. But also in 1534, François Rabelais wrote the harangue of master Janotus Bragmardo in Gargantua to recover the bells of Paris, in *Latinus grossus* (Gargantua, Chapter 19)

Coding Systems

The author of the manuscript uses a system of letter coding conjugated to a phonetic system. These two systems inherit the techniques conventionally used in the abbreviated writing of the Latin.

Coding of the Letters

The large letters $\text{ll} \text{p} \text{pp} \text{z} \text{z}$ are used to encode a word in its entirety or only a subset of it. For example, the letter z alone can mean “*circum*” and also play the role of a radical in “*circumcisis*.” The letter p , meanwhile, will only mean “*per*” and may also be a suffix in “*opere*.” In a general way, the letters $\text{ll} \text{p} \text{pp} \text{z} \text{z}$ are used in the manuscript as words, radicals, prefixes and suffixes.

Phonetic of the Letters

Voynich's letters have the ability to represent phonemes. We discovered it by trying to solve oll as a form of syllogism “*omnis talis*” because by exploring other possible combinations between o and ll , remained without result, it appeared the hypothesis that o could be a “sound” and not a letter constraining the spelling of the word. The letter o could then be phonetically representative of “o, au, ho.” From this opening was born a field of possibilities allowing considering a solution to combine a system of abbreviation, kind of coding method (a letter for a Latin word) and a phonetic system, based on poly-substitution method, because proposing several letters or a group of letters for the same phoneme. Also, in the specific case of the assembling of the letter o and the letter ll in oll , the search for a word, in medieval Latin, containing a phoneme [o] previous [talis], gave the following words:

[**o*talis***] → *occidentalis, orientalis*.

[**au*talis***] → *augmentalis, Augustalis, auspicalis*.

[**ho*talis***] → *holosericalis, horizontalis, hospitalis, hospitalissimus*

The most favorable cases, among these results (low Hamming distance, adequacy with the least Zipf effort and to a certain extent the adequacy with the “context”) being here “*auspicalis*” for “divinatory” and “*hospitalis*”² for “a guest, hospital.”

² In this case the [h] would be absent from the Voynich's alphabet.

Similarly, in the case of the letter **δ**, a questioning of the phonetic value of this letter was imposed. Indeed, the use of the **δ** for the sound [d] is common in abbreviated Latin, the word **δαν** in "*damnum*" confirmed this deduction. However, the repercussion of [d] in Voynich's other words showed that Zipf's law was no longer respected (resulting in "rare" words) and that the high Hamming distance implied to admit many letters as variables in the word. It was necessary to revisit the phoneme of the letter **δ** and by indirect effect those with which it was associated (**δαν**, **δγ**, etc.) It is by listing the Voynich's words containing: the letter **δ** and one unknown letter, then by searching their patterns in medieval Latin word lists that the letter **δ** proved to be more favorably the phoneme [s]. According to the same process, the confrontation of the words **δπ**, **δπ**, **πγ** allowed us to identify **π** as the phoneme [vis] and **εεδγ** the word "*quoquoversus*". Similarly, the letter **γ** turns out to be the letter **ϣ** of the abbreviated Latin and corresponds to the phonemes [l] and [le].

Phonetic Depending on the Position

In an abbreviated Latin system, the phonetic behavior of letters may vary depending on the position of the letter into the word. For example, as in an abbreviation system from "classical" Latin, the Voynich's **γ** will mean "*us*" at the ending and "*con, com*" at the beginning of a word.

This type of behavior must be studied in depth on the letters of the manuscript in order, for example, to identify the letters associated with the phonemes [b], [d], [f], [g] and [n] which are currently missing from the coding table.

Rare Letters

The Latin alphabet consists of 26 letters. The letters "k, u, y, z, x" are rarely used. Indeed, the letters "k, y, z" are found in words having a Greek origin. However, since the letter "k" can be obtained with the letter **ε** and the letter "x," whose sound is [ks], can be obtained by assembling the letter **ε** and the letter **δ** to form the [ks], it is very likely that only the following rare letters will remain to be identified: "u, y, z."

Coding Table

FSG ³	Latin	Phoneme	S.M.E ⁴	Use
Ɑ	ǎ / ā	[a] brief / long	sme	ⱭⱮ <i>are</i>
Ɱ	k, c t q/quo/que/qua	[k] strong [t] [k/kwo/kwe/kwa]	sme s sme	ⱮⱮⱮ <i>quoquoversus</i> ⱮⱮ <i>tus</i>
Ɱ	talis,tis	[talis/tis]	me	ⱮⱮ <i>talis, tis (at the end)</i>
Ɱ	l, le	[l] short [le] long	sme	ⱮⱮⱮ <i>alus, oleo, ole, ale</i>
Ɱ	pro	[pro,e,a,ae]	m	ⱮⱮ <i>pro, prae, pre, pra</i>
Ɱ	ūs, ūs con/cun	[ous] bref/long [kon/koun]	e s	ⱮⱮⱮ <i>areus</i> ⱮⱮⱮ <i>comperi</i>
Ɱ	vīs , vīs	[wis]	sme	ⱮⱮ <i>ovis, levis, visus</i>
Ɱ	ī, ī y	[i] bref/long [y] consonant	m	ⱮⱮ <i>a ire</i>
Ɱ	li	[li]	m	ⱮⱮ <i>altum</i>
Ɱ	m ūm, ūm	[m] [oum] brief/long	e	ⱮⱮ <i>anum</i>
Ɱ	ltum	[l'toum]	e	ⱮⱮⱮ <i>saltum</i>
Ɱ	ium	[ioum]	e	ⱮⱮⱮ <i>sanium</i>
Ɱ	ō / ō ho	[o] bref / [o] long [ho]	sme	ⱮⱮ <i>hospitalis</i>
Ɱ	per	[per]	se	ⱮⱮ <i>per, opere</i>
Ɱ	r	[r], [re]	sme	ⱮⱮ <i>are, ore, rarus</i>
Ɱ	circ, circum	[kirk/kirkoum]	sm	ⱮⱮⱮ <i>circumcisis</i>
Ɱ	contra	[kontra]	sm	ⱮⱮⱮ <i>contractus</i>
Ɱ / Ɱ	ct	[k't]	m	ⱮⱮⱮ <i>precatus</i>
Ɱ	ti	[t'i]	m	ⱮⱮⱮ <i>peritis</i>
Ɱ	in	[in]	se	ⱮⱮⱮ <i>in usualius</i>
Ɱ	s	[s]	sm	ⱮⱮ <i>sa(l/n)um</i>

Table 1 : Proto-coding table of the Voynich's manuscript

3 Only the Voynich's letters for which we have identified a phonetic sense are listed in this column.

4 SME to specify if the phoneme is present at the (S) start, (M) middle, (E) end of the word.

Linguistic explanations

Structure of the Sentences

The sentences of the manuscript have multiple structures. We find the simple sentence or "independent proposition" related to any other proposition, it can be a verbal sentence or a nominal sentence. Compound or even complex sentences are also present and can therefore contain independent, coordinated or juxtaposed propositions. The verbal propositions identified in the manuscript express the tenses of the present, of the perfect and of the imperative, to the passive and active forms.

Voynich's propositions show a point of difficulty. They are divided into blocks⁵ of words called Voynich's words⁶. However, as there is no punctuation and the sentence can be extended in several lines, the reader will be confronted with the difficulty to find the syntax and the semantic of each sentence.

Grammar Cases

The assembling of words in blocks impacts directly the use of the Latin grammatical cases by omitting sometimes one of them. In abbreviated Latin, it is a common process, it uses distinctive signs placed in superscript to specify the grammatical case. In the Voynich's manuscript these indicators are absent. This absence implies that the words must sometimes be broken down by the reader and obliges the reader to exert a consistent effort to unambiguously translate the abbreviated text. For example, **oif** for "*hospitalis*" is unified in the nominal group **oifad**, so that "*hospitalis*" must be granted by the reader to the correct grammatical case.

Extracting Words

The word is circumscribed with spaces but it is also terminated or triggered by the large letters **ifff 2 2**, so: the block **oifcc89** will be read in two words. The first word will be **oif**, the big letter ending here this word and introducing the second word **cc89**. In the following case, the big letter will act as a break in the **ccff89** group, splitting this group in two words: **cc** and **ff89**

5 For example, the sentence "This is not possible; this is not French. "Is transformed into" Thisisnotpossible thisisnotFrench."

6 **oif89 oifaxcc89** contains two verbal propositions composed of five Latin words.

Lexicon

The author uses his own dictionary of knowledge to select the words of the manuscript. This dictionary or lexicon is based on a grammatical simplification of the Latin. It could be the result of the linguistic movement from Latin to Proto-Italian and Romance languages, but could be more likely the use of an abbreviation system.

The author translates the words of his lexicon, from the Latin to Voynich, according to the Zipf's law. He selects them preferably according to their frequency and their phonetic proximity. In the sense that the author focuses on the dominant phonemes of the word and then, by sorting, selects the shortest word with the "code + phonetic"⁷ characteristics. Thus, the author develops a minimal effort to code the most appropriate word.

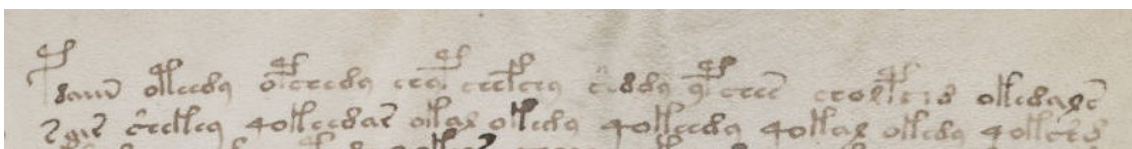
Although this method allows a fast writing, as is the brachygraphy, it shows limits in its reading. The reader does not necessarily share the same lexical culture, and because of this, the choice of the word obeying a structure "code + phonetics" may be competing with other words in the reader's lexicon. The ambiguity becomes all the more important that the reader will attempt to read the manuscript from a lexicon of "classical" Latin, sometimes too distant from the cultural and linguistic context of medieval Latin.

The second consequence of such a system is that this system traps the author by inexorably leading to a use of the most easily accessible abbreviations, in his lexicon, and thus to create a redundancy in the use of the same words, not translating not the same thought, increasing polysemy and thus reducing the apparent diversity of vocabulary used.

7 This method gives a statistical behavior to the text as if it were a consonantal text.

Decrypting the first line - f66r

The first attempt at a decryption was to consider $\text{P}\delta\text{aw}\text{D}$ as “*per-savium*”, but the grammatical case did not match⁸. We then remembered that we had been questioned by a latinist who reacted spontaneously to another formulation: “*per saltum*”. In projecting this idea on the proto-dictionary of the manuscript, we felt that this could be a solution.



Extract From the First Line of Folio f66r

The second point that guided our analysis is that the $\text{cc}\text{P}\text{cc}$ form had to reveal the use of the letter P because it was placed at the center of this word, framed by two “*contra **”, and had to be able to bind the other two contexts. Having used many combinations, none giving results, it was necessary to go to the evidence that an additional distinction had to exist between these two “*contra **”.

The radicals of the words framing the letter P are cc and cc . We find that at first glance these are similar. However, the second word differs in its more vertical and less curved form than in the first word. Later in this same sentence, we also notice the form cc . However, the discretization of these forms in the Voynich’s alphabet is only represented by “ cc ”. In fact, these three cases placed on the same line would mean different abbreviations: cc would be the abbreviated form identified by “ cc ” for “cc”, cc would show that the second sign would be a “t” and thus form “ct”, the last abbreviation cc would be “ti” with an “i” as the second letter.

The decryption of the first line of the folio f66r says that the author is in the narration of an event confronting him with a suffering person. He says :

*"The believer was contracted in all directions during a spasm
Fighting against tremors
On the other hand, I learned prayers to diminish them (tremors)
I learned on the contrary (certainly) to block them
Exhale the scent in front of the guest experts from northern Italy
Surround! like yellow bugle⁹ on the way ... "*

8 Although the hypothesis of “*latinus grossus*” would have consolidated us in this way by accepting it as a linguistic “sprain”. But also, the translation of “*savium*” into “salts” could have elegantly matched with the little pots drawn at the bottom left of the same folio, which could have contained “salts” for medical use, for example.

9 *Ajuga chamaepitys*.

The corresponding grammatical analysis is presented in the table below, sentence by sentence, by Voynich's word.

𐌱	𐌸𐌹𐌸	𐌰	𐌵𐌸𐌵	
<i>pēr</i> <i>prep.¹⁰ + a.</i>	<i>sāltūm</i> <i>a.s. perf.</i>	<i>ōvīs</i> <i>n.s.</i>	<i>quoquovērsus</i> <i>adv.</i>	
<i>The believer was contracted in all directions during a spasm</i>				
𐌰	𐌵	𐌵𐌸𐌵	𐌵𐌸𐌵	
<i>ōpěřě</i> <i>abl.s.</i>	<i>cōntrā</i> <i>prep. + a.</i>	<i>quāssūs</i> <i>a.p.</i>		
<i>Fighting against tremors</i>				
𐌵	𐌱	𐌵	𐌱𐌵	
<i>cōntrā</i> <i>adv.</i>	<i>Cōmpěřī</i> <i>1.per.s. perf.ind.active</i>	<i>cōntrāct(ī)</i> <i>n.p. v.passive</i>	<i>precatus</i> <i>a.p.</i>	
<i>On the other hand, I learned prayers to diminish them (tremors)</i>				
𐌵𐌸𐌵	𐌱	𐌵	𐌵	
<i>cīrcūmsēsūs</i> <i>n.s. parf.</i>	<i>Cōmpěřī</i> <i>1.per.s. perf.ind.active</i>	<i>cōntrā quīn</i> <i>prep. + a.</i>		
<i>I learned on the contrary (certainly) to block them</i>				
𐌵	𐌰	𐌱𐌵	𐌰	𐌵𐌸
<i>cōntrā</i> <i>adv.</i>	<i>ōlē</i> <i>2.per.s. imper.active</i>	<i>pěřītīs</i> <i>d.p.</i>	<i>hōspītālīs</i> <i>a.p.</i>	<i>cisālpin(ī)</i> <i>g.s.</i>
<i>Exhale the scent in front of the guest experts from northern Italy</i>				
𐌵	𐌵	𐌱	𐌵	
<i>īn a īřě</i> <i>prep.+abl.</i>	<i>cīrcūmītě</i> <i>2.per.p. imper.active</i>	<i>tālīs</i> <i>g.s.</i>	<i>tūs</i> <i>a.s.¹¹</i>	
<i>Surround! like yellow bugle on the way ...</i>				

Table 2 : Decoding the first line of folio f66r

10 From the Latin grammar : accusative(a), ablative(abl), dative(d), nominative(n), singular(s), plural(p), person(n°.per), present(pr), imperative(imper), perfect(perf), indicative(ind), adverb(adv), voice(v), preposition(preposition), supine(sup)

11 An alternative of 𐌵 would be "cuius".

Decryption of the frieze - f80r

The decryption of the folio f80r frieze shows that the author stages and gives the floor to the characters.



The corresponding grammatical analysis is presented in the table below, sentence by sentence, by Voynich's word.

oꝛ	oxo	ox	czδg
ōrē abl.s. ¹⁰ <i>I exhale a scent by the mouth</i>	ōlēō 1.per.s.pr.ind.active	ōlē 2.per.s. imper.active	cōntrusus n.s. perf. <i>Exhale the scent having been pushed with force!</i>
oꝛꝛ	axg	oꝛꝛ	oxo
hōspītālīs d.s. <i>The guest's big comfrey</i>	alus n.s.	hōspītālīs g.s	ōlēō 1.per.s.pr.ind.active <i>I exhale a welcoming scent</i>
oꝛꝛ	arēg	oꝛꝛ	oꝛ
hōspītālīs d.s. <i>The guest's genus arum</i>	arēus n.s.	ōpĕrĕ abl.s.	ōrē abl.s. <i>[Set] to work by the mouth</i>
ox	lꝛg	oꝛꝛax	czczδg
ōlē 2.per.s. imper.active <i>Exhale such a scent!</i>	tālūs a.s.	ōvīs ālē n.s. / a.p.	cīrcūmcīsus n.s.perf. <i>The believer cut the garlic</i>
oꝛꝛ	arē	oꝛꝛ	ad
hōspītālīs d.s <i>The guest's genus arum</i>	are n.s.	hōspītālīs n.s.	ānūm a.s. <i>The guest is an old woman</i>

Table 3 : Decoding the f80r frieze labels

Decryption of two writing systems - f66r

The bottom down of the folio f66r contains an elongated person and surrounded by two particularly interesting texts because apparently not belonging to the same language.




At the top of this person, a sentence written in Voynich.

A second language at the left of this person.




The sentence written in Voynich

This sentence has often challenged the cryptologists. For the Dr. Levitov, this sentence was to be a Franco-German mixture "ailvia tem vilteh the deesviseth" that he translated "when one is a sick as he is, he wants to know death". This result is understandable by the status of this person but reveals the methodological danger to be influenced by the drawings to interpret the Voynich's text. Let's review this sentence in order to bring it a translation in accordance with the coding table and the previously identified linguistic rules.

offccco δawd ccllg gllc(t)z ccg¹²

Let us first remark that in this sentence a particular letter "t" does not belong to the Voynich's alphabet. It is placed after the "c" to form  and represent the notation "c.t.". This Latin abbreviation means the abbreviated Latin "certum tempus" (see

12 The last letter is an "δ" corrected in "g". It should be noted that at this level of analysis, it is necessary to work directly on the folios of the manuscript. Computer discretization has introduced errors in the actual value of the letters : confusion between "c" and "v", between "o" and "a" and between "z" and "q" to name only the most obvious.

Bulletin ARCSI 2017 - decryption of the folio f116v) that the author should have noted  and no . This clue tends to show that he mastered the art of the Latin abbreviations, but in a lapse of time, like the author of the folio f116v, he wrote mechanically  to shorten "certum tempus". What does the decryption of the sentence accompanying the elongated person in the folio f66r tell us?

"I manage a sudden leap of the believer by fighting against appearances (symptoms) and to restrain contractions for a certain time. "

It says that the author is in the narration of an event confronting him with a suffering person and whose meaning is related to the decryption of the first sentence of the same folio.

The corresponding grammatical analysis is presented in the table below, sentence by sentence, by Voynich's word.










							
<i>ōvī(s)</i>	<i>cōntrāctō</i>	<i>sāltūm</i>	<i>cōntrā</i>	<i>visūs</i>	<i>cōntētīs</i>	<i>cērtūm tēmpūs</i> <i>in</i>	<i>cōntrāctūs</i>
<i>d.s.¹⁰</i>	<i>1.per.s.pr.ind.active</i>	<i>a.s.</i>	<i>prep.+a.</i>	<i>a.p.</i>	<i>d.p.perf.sup.</i>	<i>prep. + a.</i>	<i>a.p.</i>
<i>I manage a sudden leap of the believer by fighting against appearances (symptoms) and to restrain contractions for a certain time.</i>							

Table 4 : 1st writing system - Decoding the Voynich's labels of the f66r





We find that the enigma of the abnormal redundancies of words and of propositions can be explained by the polysemy of the Latin words. The sentence will find all its meaning in the grammatical cases applied to its words. Comparing the use of  in the context of the first sentence of the folio f66r with its use in the context of the sentence above, we obtain two possible translations because the former expresses a past perfect of the verb and the second expresses a name to the accusative singular.

The Cross Written in Latin

The folio f66r contains another annotation located at the bottom left of the folio. This annotation is written with an alphabet other than that of Voynich. Having worked on and decoded folio f116v, the last written page of the manuscript, we have seen similarities between the morphology of the abbreviations of the folio f116v and those of the letters in this annotation. The consistency and color of the ink reinforce the idea that these two writings are the works of the same author. This observation tends to prove that this annotation is posterior to the Voynich's manuscript and contemporary to the folio f116v.

		
	<i>Vide / Versus</i> "Look (in this direction)"	
		
<i>Renuntiando</i> "To have told the story"		<i>Miscere / Mistura Vestra</i> <i>Beatitudo</i> "Join your happiness"
		
	<i>Relicta / Relegit</i> "Abandon / read again"	

Table 4 : 2nd writing system - Decoding the abbreviated Latin of f66r

The annotation in question is arranged in a cross. At the top of this cross, we find the letter . It is used in the Latin abbreviated system of the 15th century to mean "vide" or "versus". The other words on this cross contain letters from the folio f116v. What are they? In the word , the letters are "Rel" to abbreviate the Latin word "relicta" or "relegit". The letters "mvB" constituting the abbreviation  and whose developed form is "miscere vestra beatitudo". Then, in , the letters are "Ren" to abbreviate "Renuntiando".

Herbarium - Plants Potentially Solutions

The herbarium contains drawings of plants not definitely identified. It is suspected that these representations may contain a "hidden" meaning related to a kind of esotericism. For all that, and concerning the questioning of the accuracy of these sketches, we know, and Pliny had already remarked, that painting was often misleading because it is sometimes difficult to faithfully reproduce a color. What do we also know about the exact conditions in which the author made his drawings, knowing that it was common for a sketch to be made on the basis of a dry plant sent from a collection or conservation site and that, contracted and curled up by desiccation, the dried plant, maceration in cold water, could take up some fragments and the form it had alive?



ALUS

ALIUM

TUS



ARUM MACULATUM

ARUM ITALICUM

The decrypted text, meanwhile, reveals the name of plants and bulbs in a rather medical context. We propose below their brief descriptions with the aim of starting to build the link between the medical use of these plants and the Voynich's text.

Arum – genus arum

This very toxic plant was used in medicine as an expectorant, purgative, antirheumatic, and against respiratory affections, coughs, catarrhs, rheumatism and hemorrhoids. Otherwise used in white magic, it was known to repel evil spirits.

Alus - Great Comfrey

Its medicinal use has been known for a long time. Its comfrey name means "helping to weld" fractures. For the Greek Dioscoride, who was a military doctor in a Roman legion, the comfrey was a wonderful remedy. It contains allantoin, a substance that stimulates cell multiplication, accelerates healing, and, acting as a bacterial inhibitor, slows the growth of bacteria until they are destroyed. In external use, it is used against varicose ulcers, warts and other skin disorders such as the treatment of nipple burns and crevices. In internal use, it relieves some arthritic pain and seems to bring about a muscular relaxation, acting on the central nervous system.

Alium - Garlic

Wild garlic or "garlic of the bears" possessed magical powers. The pregnant women kept in their pockets to protect the unborn child, it was also thrown in the rivers to purify the water. In the Middle Ages existed a ritual inherited from Hippocrates medicine and Egyptian medical papyri which consisted of inserting a fragrant bulb into the vagina to find out if a woman was or was not pregnant. Indeed, the belief was that if the uterus were open then the smell of the bulb inserted should come out through the mouth and thus announce that the woman was pregnant. In the opposite case, where the uterus was closed, then the odor could not go up to the mouth and thus confirmed that the woman was not pregnant.

Tus - Yellow Bugle

It is a plant with a strong odor. Pliny the Elder describes it in its *Naturalis Historia* as being suitable for healing wounds and colic. It is traditionally used against gout and rheumatism. It would be diuretic and emmenagogue, that is, able to provoke or regulate the menstrual cycle.

Proto-dictionary

2	<i>In</i> - in	lf	<i>Talis</i> - so great, so excellent
2ax2	<i>Inalpine</i> - located in the Alps	lf9	<i>Talius / Talibus</i> - so big, so good
2av2	<i>In a ire</i> - on the way	9lf	<i>Levis</i> - light, agile, smooth, hard sounds
29	<i>Inus</i> – Cadmus and Harmonie's daughter, Athamas' wife, king of Thebes	999	<i>Precatus</i> - spasm
29x9	<i>Inconsultus</i> - rash, misguided, thoughtless, inconsiderate; did not ask or consulted; <i>in usualius</i> - in the ordinary	9lf	<i>Contentis</i> - to restrain
8	<i>Se</i> - him, oneself, she, them, themselves, each other	99	<i>Comperi</i> - to learn, to be informed of, to come to know, to perish together
8av2	<i>Saltator</i> - dance, dance performance	999	<i>Visus</i> - visit, view, vision, appearance
8av2	<i>Salire</i> – spasm, eject under the force of a fluid	98av2	<i>Australior</i> - from the south; brought by the south wind, southern hemisphere
8av2	<i>Sa (l / n) um: sanum</i> - healthy; sensitive.	9lf	<i>Hospitalis</i> - hospital, guest
8av2	<i>Salum</i> - salt, finesse of spirit,	9x	<i>Ole</i> - smell like, exhale an odor of
8av2	<i>Saltum</i> - spasms, throat	9x0	<i>Oleo</i> - cf. OE
8av2	<i>Sare</i> - him, oneself, she, them, themselves, each other	9lf	<i>Ovis</i> - faithful, believer
8av29	<i>Sarus</i> - Cappadocia River	99	<i>Opere</i> - work
a	<i>A</i> - to, from, after, by, against	99	<i>Ore</i> - mouth
cr2	<i>Certum tempus in</i> - for a while	999	<i>Oror</i> - beg, ask, pray, invoke, worship
ax	<i>Ale</i> - garlic	99	<i>Per</i> - for, through
ax9	<i>Alus</i> - great comfrey	9998	<i>Peritis</i> - experienced, who is expert
av2	<i>Alum</i> - garlic	2av29	<i>Rarus</i> - rare, thin, little
av2	<i>Anum</i> - old, elderly woman	2	<i>Circe</i> - circle, circum - in circle
av2	<i>Altum</i> - cherish, deep, noble, obscure	2889	<i>Circumsessus</i> - send on a mission
av2	<i>Aer</i> - Smell, air, Are - genus arum	2c	<i>Circumite</i> - deceive to get something, circumvent, go around, visit successively, go from one end to the other
av29	<i>Areus</i> - genus arum, cuckoo-pint from Italy	2c89	<i>Circumcisis</i> - riddled, pruned
c2	<i>Quin</i> - how / why do not ..?	c	<i>Contra</i> - against, on the contrary, on
c8ax2	<i>Cisalpine</i> - Northern Italy	cc	<i>Contracts</i> - gather, gather, converge in one point, crisper
c89	<i>Quassus</i> - trembling	cc9	<i>Contractus</i> - contractions
cc	<i>Quoque</i> - really	cc0	<i>Contracto</i> - laying a hand on, caressing
cc8av2	<i>Quoque sare</i> - really oneself	cc9	<i>Contrusus</i> - a crowd, put pressure
cc89	<i>Quoquoversus</i> - in all directions (movement)		
c9	<i>Tus</i> - incense, yellow bugle		

Conclusion

The Voynich's manuscript was understandable in its time, the author told us in his notes left at the conclusion of the manuscript, in the folio 116v. We have discovered that this same author has written in other places in the manuscript, especially in folio f66r. He also told us that we were in the presence of an asceticism practice, allowing progress in the spiritual field. We can say for certain that this practice was also associated with the medical and the herbalism fields.

We learn that the author of the manuscript was, in contact with "guests" from northern Italy, in an area endemic to yellow bugle. Thus, we could almost deduce that it was in the Mediterranean region at an altitude between that of the sea and that of the middle mountain, and by exclusion, in a region other than that of northern Italy.

As for the process, it does not currently reveal any use of Lullian language or syllogisms. However, some letters remain encrypted and could be the source of a demonstrative logical expression that remains to be demonstrated.

We see it today. At this stage of our analysis we can confirm that the author of the Voynich wrote, in Latin, using a list of Latin abbreviations combined with the use of a list of phonemes. The consequence of this method being that, at first analysis, the text appeared to us consonantal.

It is not yet certain that it constitutes a handwritten work in "*latinus grossus*", contemporary with the burlesque poem "*Macaronea*" by Tifi Odasi whose text mixes Latin with Italian dialects Tuscan and Venetian. Some "missing" endings are more the result of the use of abbreviations than of a drift of the Latin. However, let us beware of any definite conclusion before being assured by a complete decipherment of the manuscript.

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Références

- [1] Raymond LULLE, *ars magna*, 1277.
- [2] Antoine CASANOVA, Thèse de doctorat, Université PARIS 8 (France), Méthode d'analyse du langage crypté : Une contribution à l'étude du manuscrit de Voynich, Paris, 1999.
- [3] Antoine CASANOVA, Les codes informels - Éléments de lecture du manuscrit de Voynich, Bulletin de l'ARCSI, 2016.
- [4] Antoine CASANOVA, Les codes formels - Éléments de décryptage du manuscrit de Voynich, Bulletin de l'ARCSI, 2017.
- [5] A. CAPPELLI, *Lericon Abbreviaturarum*, Dizionario di Abbreviature latine ed italiane, Settima edizione 2011.
- [6] Glossarium mediae et infimae latinitatis, Domino Du Cange, 1883.
- [7] Bernhard BISCHOFF, Paléographie de l'antiquité Romaine et du Moyen-Âge occidental, Grands manuels Picard, 1985
- [8] Jacques STIENNON, Paléographie du Moyen-Âge, Armand Colin, 1999.
- [9] Henri OMONT, Dictionnaire d'abréviations latines publié à Brescia en 1534, Bibliothèque de l'école des chartes, 1902, tome 63.
- [10] Arnaud BAUDIN & Laurent MORELLE, Les pratiques de l'écrit dans les abbayes Cisterciennes (XIIème – milieu du XVIème siècle), Actes du colloque international, Troyes-Abbaye de Clairvaux, 28-30 octobre 2015
- [11] Giorgio Bernardi PERINI. 2001. Macaronica verba. Il divenire di una trasgressione linguistica nel seno dell'Umanesimo, In Integrazione, mescolanza, rifiuto. Incontri di popoli, lingue e culture in Europa dall'Antichità all'Umanesimo, ed. Gianpaolo Urso, Roma, L'Erma di Bretschneider, p. 327–336
- [12] Jean-Baptiste SAINT-LAGER, Histoire des Herbiers, Publications de la Société Linnéenne de Lyon, Notes et Mémoires, 1885