

Summer Quiz Crypto No.4

Correspondence of Houses of Nobility / Nomenclators

Introduction

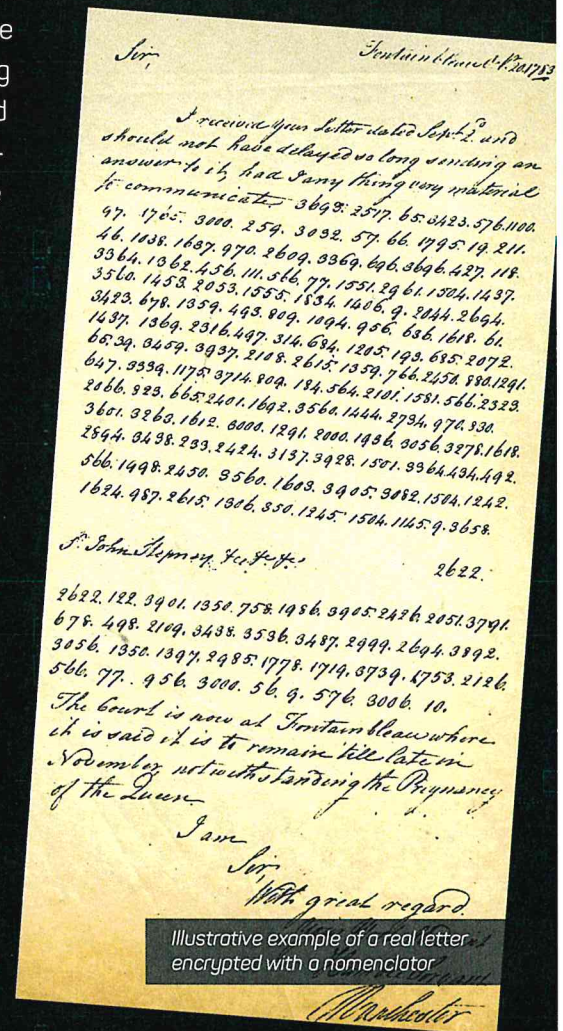
Age of nomenclators

At the beginning of the fifteenth century, a new encryption method began to spread in southern Europe, arising from the need to find a cypher resistant to frequency analysis and allowing the relatively simple creation of an individual cypher. The method evolved from a homophonic substitution where, for greater complexity, codes for duplicate letters and frequent syllables were gradually added, and codes for the most widely used words and names were added, and finally, so-called deceivers, a non-significant group of characters - were added. All this was to make crypto-analysis of encrypted texts more difficult. The cypher thus created started to be called a nomenclator. This method had held for more than 500 years, even when much better and improved encryption methods were already known. The technique has an insurmountable advantage: its application is straightforward and, with a bit of skill, rapid. Anyone can also create their own nomenclator for themselves and their contacts!

During the Thirty Years' War, the use of nomenclators spread among noble families in the Kingdom of Bohemia. Hundreds of preserved encrypted letters and dozens of nomenclators preserved in Czech archives attest to this. For example, in the state district archive in Pilsen, several nomenclators from the 2nd half of the 17th century are preserved in the family archive of the House of Windischgrätz. Nomenclatures are available under inventory number 1403, and this is in Archive Carton 164. If you want to see them, you don't have to go to Pilsen, but you can download them here <https://ecsc2021.cz/quizfiles/04/Karton164.zip>

The Task

Based on this information, decipher/decrypt the following ciphertext. We will reveal that this is a fictional letter that describes the infamous events on the Liechtenstein estate of Velké Losiny, where the most extensive witch trials in Bohemia took place in the 1780s. In total, 250 people were burned, including Dean Lautner, who defended the witches.



The Letter

Dear cousin,

I still remember our last hunting meeting with Uncle Alfred. But, unfortunately, a lot has happened since then and made me so busy that I didn't even get to write a letter.

I have good news. As you probably know, as the heir of my late beloved wife Annalicia Slavutová, for many years, I did not quite successfully try to assert my inheritance claims and question the legitimacy of the composition of the property of the Slavut family. My dispute has now been settled, in part in my favour. I received compensation of 300 thousand gold pieces and a promise of service at the court of our gracious Emperor Leopold I.

However, some events weigh me down. You probably know that the Levaton estate in Vlččí Loviny and Šumpeck has been a great witch trial for several years; the witches did their mean business here to an unprecedented extent. Dozens have already been burned, but the process does not seem to end.

Regent Alvis Lautner, the Dean of Šumpeck, is also among those accused of witchcraft. No one can believe it. He is known as a faithful Catholic, an educated man and kind to the people.

12 38 74 54 43 96 64 39 53 28 41 33 19 21 41 84 39 10 39 11 27 54 53 85 54 43 92 97 33
22 39 11 70 70 20 70 46 49 87
39 12 38 20 92 12 55 70 46 74 22 27 49 39 99 37 70 3 37 88 79 49 37 68 46 84 45 54 53
58 33 47 50 39 12 55 53 39 10 39 78 89 60 54 49 82 41 51 43 84 45 54 53 56 74 36 46 85
42 12 55 49 41 88 70 46 51 46 37 46 39
95 8 33 50 39 11 72 88 42 46 37 60 57 19 37 20 7, 11 7 37 70 54 54 73 89 33 97 38 38 42
19 39 11 34 78 39 38 49 41 88 46 51 46 78 37 46 39
12 38 46 77 97 38 13 77 38, 13 41 57 22 37, 44 68 28 39 82 82 17 48 60 42 45 43 15 40
39 26 37 38 78 44 16 37 50 43 21 33, 41 13 7 70 5 37 47 56 54 12 38 46 71 97 38 78 19 74
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77 26 47 56 33 47 46 10 33 50 48 39 11 78 86 39 88 78 40 92
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96 77 49 92 68 15 90 26 37, 58 33 47 58 97 37 22 33 78 39 54 43 35 4 43 99 37 12 55 44
33 47 12 38 44 60 78 54.

Pass my greetings to your beautiful wife, Kevndula.
Write, if you can,

Eggtlieb Antonadeus Windischgrätz

In the encrypted part, in addition to the names of Dean Lautner and the Inquisitor, there is another name. As proof that you have deciphered the ciphertext, send the person's last name (in capital letters).



Quiz solution please fill before September 10th 2021 on web link:

<https://forms.office.com/r/fDAnyqRvfY>

All solutions of the summer quizzes will be published at the time of the European Cyber Security Challenge (ECSC) 28.9-1.10.2021 at www.ecsc2021.cz



The ECSC Challenge

The European Cyber Security Challenge is an initiative of the European Union Agency for Cybersecurity (ENISA). It works with cybersecurity talent across Europe and helps connect them with leading organisations in the field.

Its main objective is to highlight the importance of national competitions and support with young people in the field of cybersecurity.

This year ECSC will take place in Prague between 28. 9. and 1. 10. 2021, and is organised by the AFCEA Czech chapter (as part of the activities of the European Cybersecurity Month). For more information, see www.ecsc2021.cz