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Euphony in Czech Translations
of *The Raven* by E. A. Poe:
An Attempt at Quantitative Measurement

Bachelor's thesis

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Euphony in Czech Translations of *The Raven* by E. A. Poe: An Attempt at Quantitative Measurement

Eufonie v českých překladech básně *The Raven* od E. A. Poea: pokus o kvantitativní měření

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Annotation

The thesis quantitatively focuses on the phenomenon of euphony in Czech translations of *The Raven* by Edgar Allan Poe. A corpus of 42 translation versions is created and analysed using the Euphonometer application. The principles of the application and the corresponding algorithm are discussed with respect to the relative merits of using quantitative methodology. Special attention is also paid to the complex nature of euphony in connection to Poe's work. Interpreting the obtained data is crucial, with a key component being the comparison of the translations based on their level of euphony. The main aim is to obtain new potential findings about Czech translations in general while primarily focusing on the aspect of sound.

Keywords: euphony, translation, poetry, The Raven, Edgar Allan Poe, quantitative measurement, Euphonometer

Anotace

Práce kvantitativně zkoumá eufonii v českých překladech básně *The Raven* od Edgara Allana Poea. Pro účely práce je nashromážděno 42 překladových verzí, předpokládaná většina, které jsou následně analyzovány v aplikaci Eufonometr. Je představeno fungování aplikace a princip příslušného algoritmu a nastíněny jsou též relativní přínosy kvantitativního přístupu. V návaznosti na dílo Poea se práce také zabývá komplexní povahou eufonie jako takové. Stěžejní je poté interpretace výsledných dat, přičemž klíčovou složkou je především porovnání překladů na základě míry eufonie. Hlavním cílem je získání nových potenciálních poznatků o českých překladech, pozornost je věnována především zvukové stránce.

Klíčová slova: eufonie, překlad, poezie, Havran, Edgar Allan Poe, kvantitativní měření, Eufonometr

I hereby declare that I have written this bachelor's thesis on my own and have provided references to all cited or used sources.

Prohlašuji, že jsem tuto diplomovou práci vypracoval samostatně a uvedl úplný seznam citované a použité literatury.

V Olomouci dne 26. 6. 2024   Richard Macků

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Introduction

The Raven by Edgar Allan Poe is generally regarded as one of the most prominent pieces of American poetry, popular both among the public and scholars of various fields, with its indisputable sound qualities possibly being one of the reasons (Silverman 1991, 237–239). Despite not being comparative in nature, the thesis was prompted by a pilot analysis of the sound devices used in the original. Since its euphonic complexity is likely also reflected in the translations, introducing the author and the original, especially in connection to the level of sound, seems appropriate. Not only does it establish an important link between them, but it also alludes to the intricate nature of euphony, discussed in more detail below.

Importantly, it is crucial for this work to appropriately grasp the concept of euphony. However, as Místecký et al. (2019, 27) put it: "… as is common for the majority of 'basic' notions of this kind (e.g. *word*, *sentence*, *text* in linguistics), an all-encompassing definition of the phenomenon has not been introduced yet …" The pleasant aspect of euphony, as opposed to cacophony, is discussed, and attention is paid to the relevance of meaning. Seeking to explore the background of euphony, the thesis hints at its complex nature and the varying points of view, which focus both on its form and the effect it produces in readers.

The thesis works with the principle proposed by Gabriel Altmann, who approaches euphony quantitively as a non-random reoccurrence of speech sounds significantly differing from an expected occurrence (Altmann 1966a). In line with Shklovsky's (1991) psychological principle of foregrounding, it is then likely to be perceived by the reader as unusual, deviating from a standard. The expected standard is based on a reference corpus, therefore, the issue of an adequate quasi-population is addressed as well. Altmann's principle and the corresponding algorithm are examined in detail, especially focusing on the relative merits of quantitative methodology. While likely not covering euphony in its entirety, it nevertheless produces relevant and novel data.

Regarding the translations, the presented corpus includes a total of 42 different translation versions into Czech.[1] Since the thesis aims to analyse most of the available Czech translations, collecting the texts in digital form and creating a revised bibliographical list is an integral part of the work as well. The nature of the collected versions is diverse, including, for example, several adaptations, modified versions by the same translator, and translations published online. With the first translation being published about 155 years ago, time is also taken into consideration. This variety allows one to explore different potentially influencing factors and relations between the versions, as mentioned below.

Before the measurement itself, quantitative preprocessing was done to ensure smooth and proper processing; the details are described. The measurement is then carried out in the Euphonometer application (Plecháč 2017), which processes text on the basis of the aforementioned Altmann's principle, with slight modifications (Plecháč & Říha 2014). The main result is a value indicating the level of euphony of the given text. Moreover, the output includes a chart showing speech sounds contributing to the measured euphony together with

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[1] To the best of my knowledge, the corpus likely contains the vast majority of available published translations, although not necessarily claiming to contain all of them.

their weight. Attention is also paid to a chart comparing the euphony level of the processed text with the referential corpus.

The obtained results provide for a variety of possible interpretations, not only with respect to euphony. Although the main component is a ranking of translations based on their level of euphony, several other emerging patterns are discussed. Attention is paid to the modified versions produced by the same translator to investigate any potential change to the euphonical quality – whether it benefits from the author's changes or not. The possibility of time-related patterns in the usage of euphony is also observed, i.e. differences depending on time periods. The behaviour of adaptations is observed as well. Lastly, the comparison of the analysed texts with the texts in the referential corpus might offer an insight into how euphony in translations behaves compared to original poetic texts in the target language. One of the main aims of this work is to highlight the type of data which can be obtained through such methodology, seeking to examine new potential findings about Czech translations

1 *The Raven* and Edgar Allan Poe

1.1 Edgar Allan Poe

Edgar Allan Poe was one of the most prominent figures in American literature of the 19th century, and his influence is still felt today even across the borders of his country. He was an editor, literary critic, and writer best known for his poems and short stories. His significance lies particularly in connecting a short story's innovative form with the emerging fiction genre. Mysticism, melancholy, insanity, hallucination, horror, or macabre are themes often associated with Poe's name and present in his poem *The Raven* as well. His other famous works include titles such as *The Fall of the House of Usher, The Pit and the Pendulum, The Talle-Tale Heart* or *The Masque of Red Death.*

Poe was a thorough literary critic, paying attention to the works of others and especially to his own work as well, as seen in *The Philosophy of Composition* (1846). Regarding euphony, it can, therefore, be assumed that he was aware of the importance of the level of sound. A sound connection across his works is found, for example, in female names – not only Lenore, but Annabel Lee, Helen, Ligeia, Eulalie, Morella, and Ulalume too– all include the letter "L" (Kopley & Hayes 2002). An interesting remark is also made by Botting (2015, 74), who focuses on Poe's usage of sound in connection to his concepts mentioned above – "In Edgar Allan Poe's writings, sound is usually entwined with the decorative surfaces that set the stage for imaginative disturbances, perturbations of reality and tremors of body and consciousness.". As we can see, sound was an essential aspect for Poe, found not just in *The Raven* but generally throughout his repertoire.

1.1.1 The Philosophy of Composition

> It is my design to render it manifest that no one point in its composition is referrible
> either to accident or intuition — that the work proceeded, step by step, to its completion
> with the precision and rigid consequence of a mathematical problem. (Poe 1846, 163)

Poe's mathematical approach to *The Raven* was perhaps one of the stimuli which prompted the quantitative approach of this thesis. *The Philosophy of Composition* is an essay published in 1846, a year after the poem itself, in which Poe describes how he composed the poem and formulates his literary principles and theories.

Regarding his relationship to the aspect of sound, several inferences can be drawn from the work. Firstly, his attention to the importance of sound-related structures is evident, reflecting upon and describing the rhyme, meter, refrain, etc. Moreover, Poe was aware of these components and ascribed great significance to them. His first allusion to repetition deals with its "sense of identity", having a pleasurable effect on the reader in connection to the refrain. Notably, he ascribes this effect not only to the repetition of the depressive meaning but to the sound as well. And not just to the word "Nevermore" as a whole but also to the "… long *o* as the most sonorous vowel, in connection with *r* as the most producible consonant" (Poe 1846, 165), focusing on repetition of individual speech sounds; what is more, even determining the character of the refrain based on it. This is clear evidence that at least some repetition of phonemes in the poem is intentional, non-random, with an intended effect of accentuation.

Proof that this repetition is not attached to refrain only is, in turn, found when he refers to alliteration and to rhyme, as principles extensively applied along his original combination of rhythm and meter – "The effect of this originality of combination is aided by other unusual, and some altogether novel effects, arising from an extension of the application of the principles of rhyme and alliteration" (Poe 1846, 166). Alliteration, indeed, is a consistently used figure in *The Raven* – consider the examples (7a) and (7b) below. As can be seen from the examples (1)–(6), overall repetition is present, not only alliteration. With the previous deductions in mind, it can thus be stated that even these repetitions are likely not naturally occurring and, therefore, intentionally used with some intended effect. As the core of the analysis in this thesis is formed on the idea that significant reoccurrence of speech sounds, as dealt with in detail below, is highly unlikely to be random, i.e. natural or by chance, it is convenient to hint at this link of intentionality between the measured euphony of the translations and the original.

Lastly, however, it should be noted that although *The Philosophy of Composition* was undoubtedly written by Poe himself, it is regarded as potentially parodic or untrue by some (Silverman 1991, 296). The criticism revolves around the conflict between the usually attributed chaotic, intuitive, and spontaneous creation of art in contrast to Poe's claimed organised, intentional, and logical methodology. The nature of the work perhaps remains a matter of opinion. Nevertheless, the description of the poem's form itself is accurate and adequate.

1.2   *The Raven*

The Raven, one of Poe's most notable poems, was first published with his name in January 1845 in the *New York Evening Mirror*. Appreciated by many readers, it quickly spread across the country, implying its uniqueness and quality. The poem has a narrative character, telling the story of a man contemplating his lost love. His company is a mystical bird, a raven, famously croaking "Nevermore" in response to his philosophical questions. In line with Poe's overall atmosphere stylisation, the themes again include death, sorrow, fear, or mystery. The poem's originality does not, however, lie only in its abstract side but on the surface of the poem, too. The relatively rigid verse structure, the consistent meter and rhyme, the repetition of words and phrases, and, importantly for our thesis, the usage of sound figures – are some of the frequently discussed form aspects of the poem.

1.2.1 *The level of sound*

Concerning *The Raven*, Creangă (2022, 164) says that "[it] is one of Poe's most representative poems in terms of sound symbolism, orchestration, and aesthetic discourse, so much so that it has become a landmark of poetic discourse in world literature." A few examples are presented here to illustrate Poe's usage of sound in the poem.[2] Since the focus is on the sound form, working with phonetic transcription seems appropriate. Attention is paid especially to the repetition of speech sounds as a tool to achieve euphony, as described below in detail. Consider, for example, the following repetition of the phoneme /n/:

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[2] Unless stated otherwise, the source text used in this thesis is from Poe (1845).

(1)   /fɔr ðə rɛr æ**n**d reɪdɪə**n**t meɪdə**n** hum ði eɪ**n**dʒəlz **n**eɪm lə**n**ɔr/
       For the rare and radiant maiden whom the angels name Lenore—   (line 11)

Often, the repetition of one phoneme in a line is accompanied by a second one, as in the case of the already mentioned /n/, now interwoven with the repetition of /r/:

(2)   /fɔ**r** ðə **r**ɛ**r** ænd **r**eɪdɪənt meɪdən hum ði eɪndʒəlz neɪm lənɔ**r**/
       For the rare and radiant maiden whom the angels name Lenore—

Even vowels are repeated:

(3)   /fɔr ðə rɛr ænd r**eɪ**dɪənt m**eɪ**dən hum ði **eɪ**ndʒəlz n**eɪ**m lənɔr/
       For the rare and radiant maiden whom the angels name Lenore—

Importantly, aside from equality, the similarity of sound, or what Bishop (1975, 17) calls "the principle of proximity", could be taken into account (see also 4.3.1). Phonemes sharing similar features can be in an interplay, such as in the case of the nasals /n/ and /m/ in our example:

(4)   /fɔr ðə rɛr æ**n**d reɪdɪə**n**t **m**eɪdə**n** hu**m** ði eɪ**n**dʒəlz **n**eɪ**m** lə**n**ɔr/
       For the rare and radiant maiden whom the angels name Lenore—

This principle, again, is true for vowels as well – consider the back vowels together with schwa in the following example:

(5)   /ænd iʧ sɛprət daɪɪŋ ɛmb**ə**r r**ɔ**t ɪts g**oʊ**st **ə**p**ɑ**n ð**ə** fl**ɔ**r/
       And each separate dying ember wrought its ghost upon the floor.   (line 8)

Returning to the examples (1)–(4), it is apparent how dense the repetition of various sounds in a line can be. With the repetitions combined and tentatively allowing for the one of /d/ and /ə/ in addition, the density stands out:

(6)   /fɔ**r** ð**ə r**ɛ**r** æ**n**d **r**eɪdɪə**n**t **m**eɪdə**n** hu**m** ði **eɪ**ndʒəlz **n**eɪ**m** lə**n**ɔr/
       For the rare and radiant maiden whom the angels name Lenore—

The tentative consideration, however, raises another point – the somewhat subjective question of what is or is not regarded as a relevant euphonious repetition, who decides, and how. An objection could be raised not only to including /d/ and /ə/ but even to the claimed repetition of the other mentioned phonemes. This disputation on the nature of euphony is dealt with in 2.

Meanwhile, another important aspect of sound repetition should be paid attention to – the repetition of sounds in certain positions, such as alliteration. As was indicated, Poe himself confirmed the application of alliteration in *The Raven*; providing a brief outline of this phenomenon to illustrate the usage of sound in the poem, therefore, seems reasonable.

The definitions of alliteration may differ, especially with respect to stress and including non-initial phonemes. Consider the following two examples:

(7)　a.　　*/waɪl aɪ **n**ɑdɪd **n**ɪrli **n**æpɪŋ sʌdənli ðɛr keɪm ə tæpɪŋ/*
　　　　　While I nodded, nearly napping, suddenly there came a tapping,　　(line 3)

　　　b.　　*/ænd ðə **s**ɪlkən **s**æ, ən**s**ɜrtən rʌ**s**lɪŋ ʌv iʧ pɜrpəl kɜrtən/*
　　　　　And the silken sad uncertain rustling of each purple curtain　　　(line 13)

While in the first example, the alliteration is quite indisputable, in the latter, a question of whether the /s/ in *uncertain* and *rustling* are still part of the figure could be raised. This is reflected in its usually rather broad definitions. The *Merriam-Webster Dictionary* defines alliteration as "the repetition of usually initial consonant sounds in two or more neighbouring words or syllables …."[3] Abrams & Harpham (2012, 10) also highlight the frequent inclusion of consonants only and add that the term is used usually "only when the recurrent sound is made emphatic because it begins a word or a stressed syllable within a word." Such definitions would be sufficient, encompassing even the case of (7b).

2　Euphony

2.1　Definitions

In the examples above, the euphonic effect was ascribed to the repetition of speech sounds in a line. The real nature of the phenomenon, however, is not so straightforward. As Wimmer et al. (2003, 55) put it: "The concept of euphony is – being also true for most classic textology concepts – quite unclear."[4] A similar view can also be seen in Popescu et al. (2015, 21): "In literary studies, euphony is a fuzzy concept originating from an individual perception of a text and the intuitive aesthetic evaluation of this perception." Let's compare several definitions to see if any potential generalisations can be made.

A simple definition for English students by the *Oxford Advanced Learner's Dictionary* is "the quality in words or sounds of being pleasant to listen to."[5]

Merriam-Webster provides two definitions: "pleasing or sweet sound" and "a harmonious succession of words having a pleasing sound."[6]

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[3] *Merriam-Webster.com Dictionary*, s.v. "alliteration," accessed April 1, 2024, https://www.merriam-webster.com/dictionary/alliteration.

[4] Translated from Slovak: "Pojem eufónie je – a platí to o väčšine klasických textologických pojmov – dosť nejasný." Unless stated otherwise, all cited translations in this thesis are my own.

[5] *Oxford Advanced Learner's Dictionary*, s.v. "euphony," accessed April 1, 2024, https://www.oxfordlearnersdictionaries.com/definition/english/euphony?q=euphony.

[6] *Merriam-Webster.com Dictionary*, s.v. "euphony," accessed April 1, 2024, https://www.merriam-webster.com/dictionary/euphony.

Abrams & Harpham (2012, 115) say that "[e]uphony is a term applied to language which strikes the ear as smooth, pleasant, and musical, as in …", and provide an example from a poem. Then, they address euphony in more detail, as discussed in 2.1.2.

Cuddon (1999, 292) states that it "denotes pleasing, mellifluous sounds, usually produced by long vowels, rather than consonants; though liquid consonants can be euphonious." Then, he proceeds with an example, too.

A similar pattern of defining euphony can be generally seen elsewhere as well, quoting Popescu et al. (2015, 21): "Definitions that can be found en masse in dictionaries or on the Internet say that euphony is a pleasing or sweet sound or a harmonious succession of words with a pleasing sound – which is simply a tautology, not an operational definition." Despite that, at least two conclusions can be drawn from these example definitions. Firstly, euphony is undoubtedly connected to sound, and secondly, it is associated with certain pleasantness. Regarding its status as a sound device, it is important to stress its separation from orthographic form – from letters, which often do not in many languages correspond to the respective phonetic form. Hence the phonetic transcription.

2.1.1 Aesthetic aspect of euphony

As for the pleasantness of sound, it touches upon a sensitive, rather broad, but important topic of objective beauty. The term "euphony" itself is "formed by combining the prefix eu- ('good') and phōnē ('voice'),"[7] which somewhat presupposes its inherent quality of positive perception. The same applies to its Czech equivalent, "libozvuk", translated freely as "pleasing + sound." In *The Philosophy of Composition*, Poe (1846) assigns cardinal importance to beauty, even capitalising its first letter. In connection to *The Raven,* he says: "… Beauty is the sole legitimate province of the poem." The question is whether this quality is truly inherent or whether it can be inherent at all. This agelong question of the objective or subjective nature of beauty is found to be controversial in many domains, with phonoaesthetics being our case (see for example Crystal 1995), where it is connected to the arbitrariness of forms. As was shown, euphony is undoubtedly connected to some perception of aesthetics; the relevance of this aspect thus cannot be denied. Even Čech et al. (2011, 16) refer to the "melodious sounding" of certain languages. Moreover, they provide an example of a Czech tongue-twister, "Strč prst skrz krk"[8], where a relevant repetition of the /r/ sound occurs but which would, according to them, be hardly perceived as euphonious. Certain hesitation regarding the final effect on the reader can also be seen in (Altmann & Köhler 2015). Despite using the wording "euphonic" consistently, "(eu)phonic" is used twice, with reference to the effect. In connection to the meaning of the prefix eu-, this could be perhaps interpreted as an awareness of this issue.

Nonetheless, as the thesis strives for an objectivised approach to the phenomenon, the possibility of subjective evaluation of the effect is not taken into consideration here. Instead, the work focuses on the underlying effect as such, stripped of its subsequent possibly subjective reactions. A reaction, no matter if positive or negative, is still a reaction, heightening of senses

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[7] *Merriam-Webster.com Dictionary*, s.v. "euphony," accessed April 3, 2024, https://www.merriam-webster.com/dictionary/euphony.

[8] Translated literally into English as "Stick a finger through a neck/throat."

caused by a stimulus – in our case, significantly improbable re-occurrences of phonemes, as explained below. This understanding and delimitation stems from Mukařovský's (1948) ideas, as he also departs from the "libozvuk" etymology of the word. Euphony is not evaluated; it is observed, or at least its structure. Nonetheless, he is aware of its varying potency, caused by the probability of occurrence (Mukařovský 1948, 248). This variable level of euphony does not state "how" euphony is perceived, but rather "how much."

At this point, it is then that the often-mentioned dichotomy of euphony, as opposed to cacophony, should be addressed. Cacophony is often put in contrast to euphony, as its opposite, defined, for instance, by Abrams & Harpham (2012, 115) as "language which is perceived as harsh, rough, and unmusical." For the reasons mentioned above, this distinction is not taken into account in the approach of this thesis, which does not distinguish between pleasant and unpleasant. The possibility of its potential incorporation is suggested in 3.1.

2.1.2 Euphony and meaning

Returning to the extended definition of euphony by Abrams & Harpham (ibid.), they point to another relevant aspect of euphony to weigh – that of meaning. Compare the following examples:

(8) a. *The murmur of innumerable bees*
     b. *The murder of innumerable beeves*

According to Abrams & Harpham (ibid.), in the example (8b) by the American critic John Crowe Ransom, the original euphony of Tennyson's (8a) is destroyed, "not by changing one speech sound and inserting others, but by the change in reference." This is, however, rather a strong claim; the murdering of beeves could still be euphonically relevant, at least for some individuals. And similarly, for a person who is afraid of bees, (8a) would not bear pleasant connotations either.

Nevertheless, Abrams & Harpham (ibid.) raise a valid point, which, again, touches upon the arbitrariness of form, and sound symbolism. Meaning undeniable plays a role, yet again, its objective encoding in the form is still in discussion. In conclusion, it is not regarded as relevant for the purposes of this work. Quoting Altmann (1966b, 64): "… we cancel the functional relations in all levels of the language; and finally, we do not take the meaning into account." As discussed earlier, the term euphony is associated with the pleasantness of "sound", not meaning. Concerning the comment of Abrams & Harpham (ibid.), it could, therefore, be questioned if euphony is really embedded only on the level of phonetics, and if not, what its connection to semantics is.

In the example (8b), the meaning is linked to entire words. When it comes to the phonetic level, many claim that there are some associative connections even with individual phonemes or phonetic features. With regard to the uneasy task of translation of euphony, Levý (2011, 267) illustrates this by mentioning a few theoretical literary works in which the authors are connecting, for example, the nasal feature with sounds produced during erotic activities. Levý, however, points out that these connections vary a lot based on context and states that "[i]ndividual sounds express nothing in themselves, of course" (2011, 267).

Rather undoubted is the concept of onomatopoeia, "the naming of something with a word whose sound suggests the thing itself … "[9] Levý (2011, 269) gives an example of the 13th line of *The Raven* (see (7b)). In this line, it is not a single word that carries the "suggesting sound." Instead, it continues throughout the whole line. Yet still, the connection is a secondary reaction to the underlying repetition of the phoneme /s/. Besides, onomatopoeia does entail euphony and vice versa. For this reason, onomatopoeia is not being analysed here either.

To conclude, this thesis restricts itself to the understanding of euphony as it is implied by Mukařovský (1948; 1977) and mathematised by Altmann (1966a), among others. An abnormal repetition of the same or similar speech sounds is the key element. It cannot be stressed enough that this point of view does not claim to be the self-righteous; the ones aware of the complexity of such a phenomenon are always tentative and considering other possibilities. Eventually, "… euphony is just a concept having many possible definitions and ways of computation" (Čech et al. 2011, 16).

2.2 Psychological basis

Altmann (1966a) ascribes the origins of euphony to the repetition of speech sounds. The important part is that this repetition must be significant enough for the readers to be aware of it. Or in other words, significantly deviating from what the readers subconsciously expect it to be, from the level they are used to. In fact, repetition is present all the time, not only in poetry; however, it is only when it is unusually prominent that we notice the change. Altmann (1966b) begins his second article of that year with: "The poetic text does not contain any such entities or combinations of entities which would not occur in the 'nonpoetic' text. Its specific character results from the fact that particular entities or combinations of entities occur therein either more frequently or more rarely than could be expected by chance." The question of what is rarer, i.e. more significant, can be easily responded to by introducing the conventional levels of significance and incorporating one into the calculations. E.g., with the significance level of 0,05, a given detected repetition would be highly unlikely to happen, less than 5 %, thus being rare and significant enough to be considered euphonic. As Mukařovský (1977, 22) puts it: "Even in texts lacking a euphonic, indeed an aesthetic, intentionality, an accidental configuration of the same speech sounds … occurs because of a limitation of the speech sound repertoire … [b]ut such configuration generally escapes the reader's attention." Although some deviation happens in everyday speech, it is usually not significant enough.

It is important to highlight that such a quantitative approach is not merely a computation of numbers but that its origin is reflecting psychological theories about human behaviour. According to Místecký et al. (2019, 30), this principle is likely based on Shklovsky's (1991) idea of foregrounding, which connects this with the field of literary stylistics. This concept was particularly discussed within the Prague Linguistic Circle, especially the term *aktualisace* (literally translating as "actualisation"). It designates "… usage of language devices in such manner, which itself attracts attention, and is accepted as unusual, stripped of automatization,

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[9] *Cambridge Academic Content Dictionary*, s.v. "onomatopoeia," accessed April 13, 2024, https://dictionary.cambridge.org/dictionary/english/onomatopoeia.

deautomatized" (Havránek 1932, 53).[10] Regarding euphony, it can be seen as particular highlighted deviation of language, so that it can be detected and processed by the reader. The particular language stimulus is made engaging to the reader. Then, it can be subjected to some evaluation, as discussed 2.1.1. But the prior heightened awareness is present, nevertheless.

Even foregrounding has its possible flaws. Despite believing it to be "a useful, even crucial, concept in stylistics, providing a bridge between the relative objectivity of linguistic description and the relative subjectivity of literary judgement," Childs & Fowler (2006, 91) also mention some potential issues, even with connection to euphony: "Deviations and parallelisms often seem to have a background rather than a foreground function, and resist critical justification except in terms of vague principles, such as euphony and variation." Nevertheless, it remains an established concept in literary stylistics and is deemed adequate for the purposes of this thesis.

3 Altmann's approach

So far, the focus has been primarily on the effect that euphony produces in readers. In text, euphony originates from the unusual patterning of speech sounds. Mukařovský (1977, 21) claims that euphony is caused by the arrangement of what he calls the speech sound sequence, which he distinguishes from the speech sound organisation. The sequence is realised through the repetition of individual or more speech sounds or their clusters, which may also display tendencies to form various patterns. The organisation is more about the representation of speech sounds in the given text – whether there is, for instance, a prevalence of certain phonemes. Quite a similar description of different euphony manifestations is offered by Altmann (1966a).

The repetition of clusters was connected to the algorithm by Místecký et al. (2019), it is not part of the functionality of the Euphonometer application (Plecháč 2017), and so it is not measured in here either.

Focusing on this repetition, Altmann (1966a) proposes a method of its measurement. Its functioning is described in detail in 3.3. Here, the term euphony and the concept it refers to should be clarified again, as outlined in 2Euphony. Altmann (1966a) points out the fact that euphony may appear in various forms. It is not euphony itself that is being measured, but rather its manifestation in text. The issue seems to arise with terminology. Since "euphony" traditionally designates the pleasant effect, the manifestation itself should not be referenced to in the same way. As Altmann says, the effect can be achieved through other manifestations, not only the one measured here. Yet perhaps even the effect itself should not be called euphony, for the underlying deviation in form can give rise to both the pleasant and the unpleasant.

In conclusion, it is the change to the phonetic form that is being measured. Through Shklovsky's (1991) foregrounding principle, this change then results in an effect on the reader. This effect is then subconsciously evaluated by the reader and ascribed to certain aesthetics. If positive, these aesthetics are labelled as "euphony" in the traditional sense. In Altmann's sense, it appears to denominate the effect on the reader before evaluation. The effect is simply special,

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[10] Translated from Czech: "… užití jazykových prostředků takovým způsobem, že samo budí pozornost a je přijímáno jako neobvyklé, jako zbavené automatisace, disautomatisované."

not in a good or a bad way – an umbrella concept for the traditional "euphony" and "cacophony".

3.1 On quantitative approach

The core of quantitative analysis should be its objectivity. Following Wimmer et al. (2003, 56), analysing euphony this way has several merits. Firstly, it is intersubjective – if conducted properly, every research will achieve similar results. Secondly, an error rate assessment is included in the measurement, minimalizing the possibility of inclusion of non-euphonious units. Thirdly, it states not merely whether euphony is or is not present, but if so, what its origin is – what causes it. Popescu et al. (2015, 22) also add that "it involves quantification of a very fuzzy concept and can be used for comparisons, classifications, studying the evolution of a writer …."

Clearly, no approach is ideal and without drawbacks. Čech et al. (2014, 97) say that "to some, statistical approaches might appear too reductionist – disregarding the complex nature of the investigated phenomena."[11] As was shown in 2, this complexity is undeniable. Altmann's principle does not, for example, take into account the perceived aesthetic aspect of pleasantness. However, even the mentioned distinction between euphony and cacophony could be potentially incorporated, as the results from the Euphonometer application (Plecháč 2017) include an index of which phonemes contribute to the euphony and how much. An assertion about the euphonic or cacophonic qualities of a text could be possibly made by analysing the prevalence of phonemes associated with each.

Apart from Altmann's method, two other possibilities of analysis are suggested by Wimmer et al. (2003, 56). Either addressing the author themselves or the readers. Both methods are relevant, yet both, again, generally have certain disadvantages. These become even more apparent with respect to this work; asking all the authors about their translations is impossible, as many of them are not alive, and asking the readers would be hardly feasible, especially in terms of the size and representativeness of the sample. Hence the statistical approach. Its suitability was already indicated by both Levý (2011, 271–272) and Mukařovský (1977, 20–21), among others.

3.2 Reference corpus and population

In 2.2, it was stated that the reader is expecting some standard level of speech sound distribution, and that euphony is basically a significant deviation from this level. Thus, euphony is a relative concept, and it is reflected in its measurement too. It depends on the frequency of occurrence of speech sounds in a language. This frequency, as shown below, is part of the calculation. Therefore, one needs to obtain these expected values first from the population. Čech et al. (2014, 98), however, claim that in language, it is not possible to delimit a population, so it is practically impossible to obtain some standard and general reference values. Consequently, one has to strive to get as close as possible to an objective quasi-population suitable for the

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[11] Translated from Czech: "statistické postupy se mnohým mohou jevit jako příliš redukcionistické, nedbající na komplexní povahu zkoumaných jevů."

given analysis. Wimmer et al. (2003, 57–58)[12] mention the following possibilities: 1) the entire poem, 2) all the poems of the author, 3) the entire poetry of the given language, and 4) all the texts of the given language. In our case, it could possibly be calculated from all the translations. However, the Euphonometer application (Plecháč 2017) has an incorporated number of corpora from which the population can be computed.

For the computation of the expected reference phoneme frequency, the default Corpus of Czech Verse is selected here. It contains a total of 76 699 poems (=14 592 037 words) published between the years 1780 to 1989, with the majority around the turn of the 19th and 20th centuries. Despite being adequate for this work, it is not entirely ideal, especially for two reasons. Firstly, it is not a corpus consisting of translations but original poetry in the Czech language, and secondly, the period does not fit the span of the translations; many transfers were published even after 1989, while there are no transfers before 1869. The difference in time would be especially notable if we were to compare, for instance, contemporary work with poetry from the 17th century. Some literary periods were also more inclined toward euphony than others. However, as there is still an overlap of one hundred years, this variable is not expected to affect the final data significantly. An issue might arise concerning the translations vs. Czech poetry. Translations might behave differently when juxtaposed with these comparable texts (Williams & Chesterman 2002, 7). This issue, however, might be used to our advantage since one of the outputs of Euphonometer is a comparison with the corpus. This offers a possibility of exploring whether the level of euphony in translations generally differs from the original Czech work, as seen in Discussion.

3.3 Algorithm

For the explanation of the algorithm, Čech et al. (2014), Místecký et al. (2019), and Wimmer et al. (2003) will be followed as they explain Altmann's principle in detail. The following stanza from Macek's transfer (2008)[13] of *The Raven* will be taken as an illustration. For the sake of brevity, this stanza is considered here as the whole poem.

(9) a.   Jeho příchod, směšně prudký, v úsměv proměnil mé smutky,
                ten jeho cit pro dekorum, ty způsoby vybrané!
                „Pelichá ti ovšem peří, to ti nikdo neuvěří,
                že jsi krutý katan z pekla, když máš peří sedrané,
                jakpak dole říkají ti, když máš peří sedrané?"
                Krkavec hned kráká: „Ne."

      b.   */jɛɦo pr̝iːxot smɲɛʃɲɛ prutkɪː v uːsmɲɛʃ promɲɛɲɪl mɛː smutkɪ*
              tɛn jɛɦo ͡tsɪt pro dɛkorum tɪ spuːsobɪ vɪbranɛː
              pɛlɪxaː cɪ oʃʃɛm pɛr̝i: to cɪ ɲɪgdo nɛuvjɛr̝ɪː

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[12] In connection to Orlov, J. K., M. G. Boroda, and I. Š. Nadarejšvili. 1982. "Sprache, Text, Kunst: Quantitative Analysen". *Quantitative Linguistics 15*. Bochum: Brockmeyer.

[13] Unless stated otherwise, all the Czech translations of *The Raven* will be referenced by the name of the translator in this thesis, for the reason of clarity.

ʒɛ jsɪ kruti: katan s pɛkla gdɪʃ ma:ʃ pɛr̝i: sɛdranɛ:
jakpak dolɛ r̝i:kaji: cɪ gdɪʃ ma:ʃ pɛr̝i: sɛdranɛ:
kr̩kavɛts ɦnɛt kra:ka: nɛ/   (stanza 8)

The main result of the Euphonometer application (Plecháč 2017), which is used to rank the translations in this thesis, is an indicator of the euphony level of the poem (or, in our case, this example stanza) = E_{poem}. Its value is computed from the euphonic values of each line = E_{line}, which are correspondingly computed from the euphonic phonemes that contribute to it = $E_{phoneme}$. See Figure 1, the main output of the Euphonometer application. E_{poem} is the number at the top with upper case *E*, E_{line} is indicated under each line in bold with lower case *e*, with the $E_{phoneme}$ values of individual phonemes in brackets to the right of it:

Figure 1: Example of the Euphonometer application output

As can be deduced, the final euphonic value – 1.77 – is the mean euphony per line. To calculate it, we add up all the E_{lines} and divide the total by their number. Here is the corresponding formula:

Formula 1: Euphonic coefficient of a poem

$$E_{poem} = \frac{1}{n} \sum_{j=1}^{n} E_{line\ j}$$

where *n* is the total number of lines; the fraction computes the mean; and the sum indicates that the process of addition repeats for each value of E_{line} up to *n*. In our example, we have the total of 6 lines, three of which are euphonic and have the values 5.45, 0.57, and 4.59. Hence:

$$(10) \quad E_{stanza\ 8} = \frac{1}{6} \sum_{j=1}^{6} E_{line\ j} = \frac{1}{6}(5.45 + 0 + 0.57 + 0 + 0 + 4.59) = \frac{10.61}{6} = \mathbf{1.77}$$

It is crucial to highlight that *all* the lines are calculated, even the non-euphonic ones with zero value. The reason for this is easily explained in an example situation – a poem with a total of 10 lines, all euphonic, would have a comparable weight to a hundred-line poem with only 10 euphonic lines had the other 90 lines with zero value not been allowed for.

The E_{lines} needs to be calculated first. Again, rather simple task – it is the sum of all the $E_{phonemes}$ which contribute to the euphony of the line. The formula is:

Formula 2: Euphonic coefficient of a line

$$E_{line} = \sum_{i=1}^{k} E_{phoneme\ i}$$

where k is the number of the contributing phonemes. E.g., in the first line, where /m/ and /ɲ/ are considered euphonic:

(11) $\quad E_{line\ 1} = \sum_{i=1}^{2} E_{phoneme\ i} = 0.59 + 4.86 = \mathbf{5.45}$

This time, no mean is applied. Also, a condition should be introduced – stating that E_{line} will be given a zero value if it contains no $E_{phoneme}$:

Formula 3: Condition for the Formula 2

$$E_{line} = \begin{cases} if\ k \geq 1 & E_{line} = \sum_{i=1}^{k} E_{phoneme\ i} \\ otherwise & 0 \end{cases}$$

I.e., the algorithm proceeds to Formula 2 only if there is at least one euphonic repetition (*k*) in the line. As for the calculation of the line, two things should be clarified. Firstly, not all the phonemes, but only those considered euphonic, are now part of the calculation – unlike with the lines. Secondly, the original Altmann's approach uses the mean again (cf. Altmann 1966a; Altmann 1966b; Wimmer et al. 2003; Čech et al. 2011). Using only the sum instead is based on Plecháč & Říha (2014); Euphonometer uses this setting as well.

The key question is why some phonemes are seen as euphonic while others that also repeat are not. Phonemes are deemed euphonic when their repetition is significant enough. Here, a threshold must be set – in the form of the level of significance, conventionally 0.05.[14] Only those phonemes for which it is improbable to occur so many times, with less than a 5 % chance, will pass. Naturally, only those phonemes which occur at least twice will be allowed for. In the first line, it is the following phonemes: /p, t, s, m, ɲ, r, k, ɛ, o, iː, u, ɪ/. Not all of them, however, contribute to the computed euphony in the line. The phoneme /ɛ/, for instance, occurs five times, the same as /m/ and /ɲ/.[15] Unlike the latter ones, however, it is not assumed to be

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[14] Also 0.01 or 0.10.

[15] Or perhaps even six times, if we consider the long /ɛː/ to be equal.

euphonic. It is because /ɛ/ is quite common, so it is not significantly unusual that it occurs so many times in the line. It might be that it is still quite unlikely, perhaps it has only a very small chance, but not less than 5 % – consequently, it does not pass the threshold and is automatically given the value of 0. If the phonemes are deemed euphonic, their probability of occurrence in given positions is subtracted from the level of significance. Hence, the smaller the probability, the bigger the value of $E_{phoneme}$. This imaginary sieve can be formulated as:

Formula 4: Euphonic coefficient of a phoneme

$$E_{phoneme} \begin{cases} if \ \alpha > P(X \geq x_i) & 100[\alpha - P(X \geq x_i)] \\ otherwise & 0 \end{cases}$$

where α is the level of significance, and $P(X \geq x_i)$ is the phoneme's probability of occurrence in the given number of positions. Being the central element of the algorithm, this probability is dealt with in more detail below (see Formula 5). For now – in the case of /m/ from our example, the $P(X \geq x_i)$ is $P(/m/ \geq 5)$, because /m/ is in 5 positions in the line. The probability that /m/ will occur 5 or more times in this line is approximately 0.0441 (computed below), so it passes the a condition; it is less likely than 5 %. It is then multiplied by 100, simply for a better visualization.

(12) $E_{phoneme} = if \ 0.05 > 0.0441 \qquad 100(0.05 - 0.0441) = 100 \times 0.0059 = \mathbf{0.59}$

Owing to subtraction, the final $E_{phoneme}$ value is presented in a more comprehensible way – the bigger it is, the more euphonic it is. Moreover, all the values range from 0 to 5, corresponding to the chosen level of significance.

In our case, four phonemes from the entire stanza pass the imaginary threshold, and are therefore deemed euphonic enough: /m, ɲ, ɾ, k, /. Their values are, respectively: 0.59, 4.86, 0.57, 4.59. Despite repeating the same number of times, /m/ and /ɲ/ produce considerably different results. This is a clear illustration of the role of probability. Being generally less frequent, the phoneme /ɲ/ is much less likely to occur six times in a row than /m/. Thus, its contribution to the overall euphony is deemed more significant. Importantly, it is not calculated how unlikely it is that the phoneme will repeat, but how unlikely it is that it will repeat that many times or more.

Before computing $P(X \geq x_i)$, the probability of occurrence of a phoneme in given positions, several variables need to be introduced. Firstly, the relative frequency, i.e. how often the phoneme occurs normally. This number is obtained from the population, as was introduced in 3.2. Secondly, the positions in which the phoneme can occur in the line. This equals the number of phonemes of the same type (consonants vs. vowels) in the line. And lastly, how many of these positions the given phoneme actually occupies – how many members of the phoneme are there in the line. This entire process can be formulised as:

Formula 5: Probability of occurrence of a phoneme in given positions

$$P(X \geq x_i) = \sum_{k=x_i}^{n} \binom{n}{k} p^k \ q^{n-k}$$

where $P(X \geq x_i)$ is the probability that a given phoneme X will occur in x_i or more positions; n is the number of other phonemes of the same type (consonants or vowels); p is the relative frequency from a corpus; and q is other cases, i.e. the probability that there will be any other different phoneme ($q = 1 - p$). Again, best illustrated in our example:

$$(13) \quad P(/m/ \geq 5) = \sum_{k=5}^{31} \binom{31}{k} 0.063516125^k (1 - 0.063516125)^{31-k} =$$

In the first line of the stanza, there are 31 consonants, 5 of which are /m/. We expect /m/ to occur with a frequency of approximately 0.063516125 normally.[16] We are asking how likely it is that /m/ will occur 5 or more times out of 31 possible, i.e. P (/m/ ≥ 5). The algorithm will compute the probability for every imaginary occurrence starting from 5 up to 31 and add them up. Hence, the k variable will be raised by one with every round. A fundamental operator is the binomial coefficient $\binom{n}{k}$, which calculates all possible combinations of k occurring in n. Being rather short, the last stanza would be best for further illustration of the coefficient: /kr̥kavɛts ɦnɛt kraːkaː nɛ/. There are 12 consonants, with /k/ occurring four times, contributing to euphony. It can occur in the following twelve places, where X designates the places of consonants:

(14) /XXXaXɛX XXɛX XXaːXaː Xɛ/ = xxxxxxxxxxxx

thus, for example, in the following combinations:

(15) KKKKxxxxxxxx
      xxxxxxxxKKKK
      xxxKxKxKxKxx
      xxxxKxKKKxxx
      KxKxxKxxxKxx etc.

In fact, the total number of all possible combinations for 4 out of 12 is 495. But, again, the principle works with k or more occurrences, so consequently, the algorithm would then continue to calculate the combinations for 5 out 12, 6 out of 12, etc.

Formula 5 is then calculated for every type of phoneme which occurs at least twice. The values are then filtered based on Formula 4, so only those which repeated significantly enough are kept. Significantly contributing phonemes are considered euphonic. Together, they comprise the euphony of a line. The average euphony per line is the overall euphony indicator of the entire poem.

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[16] The referential frequencies are not available in Euphonometer; this is an approximation based on a reverse calculation from the result.

4 Analysis

4.1 Translations overview

The thesis aims to analyse most of the available Czech translations, thus, bibliographical research had to be carried out. Apart from own search, the collection of translations was based on several works: Arbeit & Vacca (2000), Šuchman (2019), Grúz (2014), Pavlíková (2016), and namely Poe (1985)[17]. To the best of my knowledge, the list contains the vast majority of available published Czech translations, however, it does not claim to contain all. All the texts are included in the Appendix 3. Table 1 includes a total of 42 collected translation versions, ordered by year.

Table 1: Overview of the 42 collected Czech translation versions of *The Raven*

	Translator	Year	Attributes[18]	Publication	Text accessed at:
1	ŠEMBERA Vratislav Kazimír	1869		*Květy* magazine 4 (46), p. 57, 18. 11., Prague	https://cs.wikisource.org/ wiki/Havran_(p%C5%99e klad_%C5%A0embera)
2	VRCHLICKÝ Jaroslav	1881	ver1	*Lumír* magazine 9 (36), p. 566, 30. 12., Prague	https://cs.wikisource.org/ wiki/Havran_(p%C5%99e klad_Vrchlick%C3%BD_ 1881)
3	MUŽÍK Augustin Eugen	1885	adj	*Květy* magazine 7 (7), p. 57, Prague	https://cs.wikisource.org/ wiki/Havran_(p%C5%99e klad_Mu%C5%BE%C3% ADk)

[17] In accord with the official publication data, the publication *Havran: šestnáct českých překladů* is being referred to in here as Poe (1985), . The main credit, however, goes to the work of the editors – namely Havel, whose bibliographical section in the book was crucial for this thesis.

[18] Adp. – adaptation, mod. – modified, adj. – adjusted, onl. – online, kr. – *krkavec*, ver1–3 — different versions. Explained below the table and in 4.2.2 in detail.

4	VRCHLICKÝ Jaroslav	1891	ver2 adj	*Edgar Allan Poe, Havran a jiné básně,* Prague: Bursík & Kohout	*Havran: šestnáct českých překladů,* Prague: Odeon, 1985
5	DOSTÁL-LUTINOV Karel	1918	mod	*Archa* magazine 6 (6), p. 168, Olomouc	https://cs.wikisource.org/wiki/Havran_(p%C5%99eklad_Dost%C3%A1l-Lutinov)
6	NEZVAL Vítězslav	1928		"E. A. Poe," in *Prokletí básníci* series, volume no. 2, Prague: Rudolf Škeřík	https://zsjesenice.cz/files/vyukove-materialy/cj/literatura/8/dejiny-literatury/poe-havran.pdf
7	BABLER Otto František	1930	ver1	*The Raven/Havran,* Olomouc: Stanislav Vrbík	https://dk.upce.cz/handle/10195/60403?show=full, Havran: šestnáct českých překladů, Prague: Odeon, 1985
8	VÁCHAL Josef	1937	adp mod	*Váchalův Havran,* personal print, Prague – Vršovice	*Havran: šestnáct českých překladů,* Prague: Odeon, 1986
9	TAUFER Jiří	1938		bibliophile edition, Bratislava	https://dk.upce.cz/handle/10195/60403?show=full
10	STOKLAS Eugen	1939		*Archa* magazine 27 (1), p. 40, Olomouc	https://dk.upce.cz/handle/10195/60403?show=full
11	HAVEL Rudolf	1941	ver1	bibliophile edition, published in Stará Říše in 1946	https://dk.upce.cz/handle/10195/60403?show=full,

					Havran: šestnáct českých překladů, Prague: Odeon, 1985
12	ČAPEK Jan Blahoslav	1944	ver1	typewritten original for Rudolf Havel in *Havran: Šestnáct českých překladů,* with some handwritten edits	https://dk.upce.cz/handle/10195/60403?show=full, Havran: šestnáct českých překladů, Prague: Odeon, 1986
13	WAGNEROVÁ Dagmar	1945	adj	personal print by Drahomíra Rotterová	https://dk.upce.cz/handle/10195/60403?show=full
14	ČAPEK Jan Blahoslav	1947	ver2	*Literární noviny* periodical 40 (3–4), p. 42, Prague	https://dk.upce.cz/handle/10195/60403?show=full
15	RESLER Kamil	1948	ver1	bibliophile edition, under pseudonym Jan Jordán, Prague: Jaroslav Picka	https://dk.upce.cz/handle/10195/60403?show=full
16	RESLER Kamil	1950	ver2	bibliophile edition, Prague: Jaroslav Picka	https://dk.upce.cz/handle/10195/60403?show=full, Havran: šestnáct českých překladů, Prague: Odeon, 1986
17	BIEBL Konstantin	1950	adp mod	*Lidové noviny* newspaper, 20. 8.	https://web2.mlp.cz/koweb/00/04/68/70/58/bez_obav.pdf
18	ČERNÝ Rudolf	1952		manuscript, published in *Havran: šestnáct českých překladů*, Prague: Odeon, 1985	https://dk.upce.cz/handle/10195/60403?show=full

19	SLAVÍK Ivan	1953		published in *Havran: Šestnáct českých překladů,* Prague: Odeon, 1985	https://dk.upce.cz/handle/10195/60403?show=full
20	RESLER Kamil	1956	ver3	a single copy, Kladno: Josef Cipra & Julie Fučíková	https://dk.upce.cz/handle/10195/60403?show=full
21	VRCHLICKÝ Jaroslav	1963	adp adj mod	"Moderní havran," in *Žeň času,* p. 293, Prague: SNKLU, from a handwritten original	https://cs.wikisource.org/wiki/Modern%C3%AD_havran
22	KADLEC Svatopluk	1964		*Kulturní tvorba* magazine, 3. 12.	https://dk.upce.cz/handle/10195/60403?show=full
23	BEJBLÍK Alois	1984		published in *Havran: Šestnáct českých překladů,* Prague: Odeon, 1985	https://dk.upce.cz/handle/10195/60403?show=full
24	BABLER Otto František	1985	ver2	*Havran: Šestnáct českých překladů,* Prague: Odeon	https://dk.upce.cz/handle/10195/60403?show=full
25	HAVEL Rudolf	1985	ver2	*Havran: Šestnáct českých překladů,* Prague: Odeon	https://dk.upce.cz/handle/10195/60403?show=full
26	MACEK Miroslav	1993	kr	"Krkavec," *Polyhymnia* series (74), Prague: Nadace Lyry Pragensis	"Krkavec," *Polyhymnia* series (74), Prague: Nadace Lyry Pragensis
27	POSPÍŠIL Jaroslav	1993	adp	"Havran," *Polyhymnia* series (74), Prague: Nadace Lyry Pragensis	"Havran," *Polyhymnia* series (74), Prague: Nadace Lyry Pragensis
28	POKORNÝ Martin	1997		*The Raven/Havran,* Nehradov: Emmanuel Ranný	https://eldar.cz/myf/txt/poe_-_havran_the_raven.html

29	NAJSER Jan	1999		Prague: Tomáš Novotný	https://theses.cz/id/x0vyhg/K_vybranm_pekladm_bsnick_skladby_The_Raven_od_E__A__Poea_.pdf
30	ČERNÁ Nataša	2002	onl ver1	"Havran (sedmnáctý? šeský překlad)," in *TOTální E Magazín* online magazine, username Naty, WEB2U	http://www.totem.cz/enda1.php?a=23630
31	PETLAN Ivan	2005		published in *The Raven / Havran*, Brno: Kunštát PRO FUTURO, 2015	https://artbrutbrno.art/files/10.pdf
32	KOZÁK Martin	2005	onl	"Havran," *Písmák* server, username Marko, 3. 5., Oldřich Neuberger	https://www.pismak.cz/dilo/159964/
33	ČERNÁ Nataša	2006	onl ver2	"Havran," in *TOTální E Magazín* online magazine, username Naty, WEB2U	http://www.totem.cz/enda1.php?a=139150
34	KRAJNÍK Filip	2006	onl kr	"Krkavec," *Divoké víno* online magazine 06 (25), 19. 1., Ludvík Hess	https://www.divokevino.cz/2006/krajnik.php
35	JACKO Tomáš	2008	kr	*Krkavec / The Raven*, Prague: Aleš Prstek	https://theses.cz/id/x0vyhg/K_vybranm_pekladm_bsnick_skladby_The_Raven_od_E__A__Poea_.pdf
36	JÍCHA Jan	2008	adp onl kr	*Krkavec, Honza Jícha: Web Site Story* website	www.honzajicha.cz/krkavec.html[19]

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[19] Accessed through the Wayback Machine, as explained in 4.2.1.

37	PINKAVA Václav Zdeněk Jaroslav	2008	onl kr	"Krkavec / The Raven," in *Vybrané překlady básní z angličtiny, Václav ZJ Pinkava*'s website	https://www.vzjp.cz/verse.htm#Poe
38	ŘEZANKA Marek	2008	onl	"The Raven (překlad E, A, Poea, Marek Řezanka)," *Písmák* server, username Muamarek, 25. 2., Oldřich Neuberger	https://www.pismak.cz/dilo/276473/
39	SKOPEC Luboš	2014	onl	in *Dobré víno nestárne, Skopoezie – stránky plné veršů* website, published by URSIS	https://skopoezie.wbs.cz/basne/havran_cj.pdf
40	KOREIS Vojen	2015	adj kr	"Krkavec (často nesprávně překládaný jako 'Havran'," Brisbane: Booksplendour	https://books.google.cz/books?id=wqucCgAAQBAJ&lpg=PP1&hl=cs&pg=PA4#v=onepage&q&f=false
41	KRUL Petr	2015		*Havran / The Raven*, Prague: Radix	*Havran / The Raven*, Prague: Radix
42	PASTYŘÍKOVÁ Barbora	2018	adj	*Havran / The Raven*, published by H. R. G.	*Havran / The Raven*, published by H. R. G.

The first translation (Šembera 1869) was published 155 years ago, 24 years after the original. The last one so far is by Pastyříková (2018).[20] In most translations, the year indicates the year of publication. In some, it is the year of their presumed origin, confirmed for example by the translator themselves in Poe (1985). Differing in various aspects, the translations are grouped and labelled based on their several traits.

Out of the 42 versions, 5 are considered adaptations (*adp*) here. These versions do not strive to represent the original faithfully. Some differ from the original in their very nature, like Jícha's (2008) parody, or structure, for example Biebl's adp. mod. (1950) usage of free verse, and are therefore expected to behave differently with respect to euphony.

With the arrival of a new millennium, a tendency to publish translations online (*onl*) can be seen. Since 1992, the generally accepted year of the official public introduction of the internet in the Czech Republic, almost a half (8 out of 17) of translations have been published online. The attribute (*onl*) is included only as an additional information.

Several transfers use a different Czech equivalent for the word *raven*. The word *havran* was traditionally used. Macek (1993) was likely the first one to officially introduce the name *krkavec*. Since then, both approaches can be seen. *Krkavec* is often argued to be a more accurate zoological equivalent, *havran* is said to denote not the *raven*, but the *rook*. This label (*kr*), again, is purely for informational purposes.

In some translations, several versions (*ver1–3*) by the same translator are available. Resler ver1 (1948) and Resler ver3 (1956), for instance, differ significantly and thus are expected to differ in euphony as well. The comparison of non-identical translation versions by the same translator enables one to explore whether euphony benefits from the changes or not. Versions differing only in punctuation or fewer than a couple of lines were not included. While for some translations, the other versions were available readily, some versions were manually rewritten from Poe (1985).

The attributes (*adj*) and (*mod*) are discussed in the next chapter with respect to quantitative preprocessing.

4.2 Quantitative preprocessing

For the measurement of euphony, the input data in the form of 42 different texts had to be prepared in digital form. For some texts, it is available readily; some needed to be manually rewritten or photocopied with text recognition. Subsequently, the texts are accordingly modified in order to ensure accurate processing in the Euphonometer application (Plecháč 2017). Some changes are made to all the texts. Firstly, punctuation is deleted in all texts, being irrelevant to the analysis. Although it is not a prerequisite, it helps avoid potential unwanted errors. Secondly, many texts contained flaws, such as typos or missing lines. The data are, therefore, manually cleaned of such cases.

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[20] To the best of my knowledge. Considering the extent of internet, it is practically impossible to say with certainty that there are no recent online translations.

4.2.1 Digital form

Not only the bibliographic list but the actual texts in digital form had to be obtained for this work. While some are readily available on the internet, many have to be searched for and accessed in various ways.

For the translations accessible online, the link is provided in Table 1. Particularly helpful turned out to be Šlahora's (2015) thesis appendix, where many of the older translations had already been transcribed into digital form. Very useful were also the links provided in Grúz (2014). An issue arose with the translation by Jícha adp. onl. kr. (2008) since it cannot be found on his website anymore. The issue was dealt with through the online tool Wayback Machine, providing access to older archived versions of websites. Thus, the translation was retrieved from the 2008 version.

Where needed, the print form of several translations was obtained through different library services. Subsequently, they were photocopied, processed through text recognition tools, and manually fine-tuned. The following translation versions were created based on the other associated version, with the corresponding differences manually edited following Poe (1985)[21]: Babler ver1 (1930), Havel ver1 (1941), Čapek ver1 (1944), and Resler ver2 (1950).

4.2.2 Modification and adjustment

Four texts, three of which are adaptations, contained word forms which were found mistranscribed during pilot tests. These forms are usually of foreign origin. Working with the Czech language only, the Euphonometer application is not able to transcribe them correctly. Modification (*mod*) is needed to obtain the expected pronunciation of the words.

Dostál-Lutinov (1918) decided not to translate the refrain *nevermore*. Euphonometer renders /nɛvɛrmorɛ/, not the expected /nɛvr̩moːr/. The form is thus modified to *nevrmór*.

Váchal's adp. (1937) translation contains a reference to the *grimoirů* magic books and one to the Czech artist *Teige*. They are modified to *grimoárů* and *Tejge*, respectively.

In Biebl adp. (1984), only a single word needed to be changed. The possessive case of Poe's name, *Poeův*, was used. It is modified to *Pouův*.

Lastly, Vrchlický's adaptation (1963) abounds with names of foreign origin. These are modified as follows: *Molière – Moliér, Heyduk – Hejduk, Schulz – Šulc, Winter – Vintr, Zeyer – Zejer, Svoboda X – Svoboda IKS.*

Adjustment (*adj*) was carried out on those texts whose verse structure differed from the original. *The Raven* contains 108 lines, 6 per stanza, being almost equally long, except for the refrain, which is half the length. Most translators follow this structure to a large extent; some, however, use a different one. Six translations had all the lines, except for the refrain, halved, producing twice the number of lines, 11 per stanza. Thus, their length changes as well. In pilot tests, these translations generally had much smaller euphony values compared with the rest. In order to obtain comparable results, these translations were adjusted to contain 18 six-line stanzas, too. The original results with unadjusted line structure are shown in Table 3. It should be noted that, according to Silverman (1991, 239), even Poe was aware of the possibility of this split and contemplated it.

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[21] As mentioned before, referencing rather to the work of Havel.

4.3 Euphonometer

Euphonometer (Plecháč 2017) is an online euphony measurement application. It is based on Altmann's principle with a minor modification (see 3.3). Importantly, automatic phonetic transcription is included. Moreover, the application enables the user to adjust several processing parameters.

4.3.1 Input

Despite being designed especially for poetry, the application can measure any Czech text in digital form. Punctuation is automatically omitted. Euphonometer can also be used for phonetic transcription only, allowing one to choose from four different systems – IPA, CPT (Czech Phonetic Transcription), X-SAMPA, and PhoEBE. Five processing parameters can be adjusted for the measurement of euphony, apart from the transcription system.

Firstly, an appropriate reference corpus can be selected from seven possibilities. Since the calculation itself, and consequently, the results too, depend on it, it is a crucial variable to consider (see 3.2).

Secondly, the level of significance can be adjusted, again being a key component to consider (see 3.3). Three conventional levels of significance – 0.01, 0.05, and 0,10 – are available.

The third important parameter is the minimal frequency, i.e. the least admissible number of occurrences of a sound in order to be tested for euphony. As the entire principle is based on repetition, the minimal possible number is two.

Sound equivalence allows one to set which phonemes will be considered identical by the algorithm. By default, all syllabic and non-syllabic consonants, as well as all long and short vowels, are set as equivalent.

Both the transcription system and the output format do not affect the results. The output format parameter enables the user to choose the form in which they want the resulting data.

In this work, the parameters are set as follows: reference Corpus of Czech verse, 0,05 significance level, minimal frequency of two, default sound equivalence.

4.3.2 Output

As mentioned, the form of the output can be adjusted. The input text, together with its transcription, is always included. Under each line, its euphonic coefficient and the contributing phonemes are displayed. At the top, the euphonic coefficient of the entire poem is indicated. See Figure 1.

In the application format, three charts provide additional information about the euphony of the text. The first shows the sum of the euphonic coefficients of individual phonemes, i.e. which phonemes contribute to the euphony of the poem and how much (Figure 5 & Figure 6). In the second, the frequency of the phonemes is displayed, juxtaposed with their frequency in the corpus. The third chart indicates how euphonic the input text is compared to the texts in the reference corpus (Figure 7). See also the Appendices 1 and 2.

5 Results

In Table 2, the translations are ranked based on their total euphony level. In Table 3, the unadjusted versions are provided. The graphs showing the phonemes' contribution and comparison with the reference corpus are included in the Appendices 1 and 2; the frequency chart is not analysed here.

5.1 Total euphony

Table 2: Total euphonic value obtained from the measurement

	Translator	Year	Attributes	Total euphony
1	BIEBL Konstantin	1950	adp mod	0.76
2	VÁCHAL Josef	1937	adp mod	1.29
3	POSPÍŠIL Jaroslav	1993	adp	1.39
4	NEZVAL Vítězslav	1928		1.50
5	ČERNÝ Rudolf	1952		1.63
6	ČAPEK Jan Blahoslav	1944	ver1	1.68
7	ŘEZANKA Marek	2008	onl	1.81
8	SKOPEC Luboš	2014	onl	1.81
9	VRCHLICKÝ Jaroslav	1891	ver2 adj	1.85
10	TAUFER Jiří	1938		1.85
11	KOREIS Vojen	2015	adj kr	1.87
12	ŠEMBERA Vratislav Kazimír	1869		1.89
13	ČERNÁ Nataša	2006	onl ver2	1.89
14	ČAPEK Jan Blahoslav	1947	ver2	1.90
15	PINKAVA Václav Zdeněk Jaroslav	2008	onl kr	1.92
16	NAJSER Jan	1999		1.96
17	DOSTÁL-LUTINOV Karel	1918	mod	2.00

18	JACKO Tomáš	2008	kr	2.01
19	KRAJNÍK Filip	2006	onl kr	2.02
20	POKORNÝ Martin	1997		2.06
21	VRCHLICKÝ Jaroslav	1881	ver1	2.07
22	VRCHLICKÝ Jaroslav	1963	adp adj mod	2.09
23	MUŽÍK Augustin Eugen	1885	adj	2.10
24	BABLER Otto František	1985	ver2	2.12
25	RESLER Kamil	1948	ver1	2.14
26	BEJBLÍK Alois	1984	ver2	2.14
27	KOZÁK Martin	2005		2.14
28	ČERNÁ Nataša	2002	onl ver1	2.19
29	PASTYŘÍKOVÁ Barbora	2018	adj	2.20
30	PETLAN Ivan	2005	onl	2.21
31	HAVEL Rudolf	1985		2.22
32	SLAVÍK Ivan	1953		2.28
33	KRUL Petr	2015		2.29
34	BABLER Otto František	1930	ver1	2.32
35	KADLEC Svatopluk	1964		2.32
36	HAVEL Rudolf	1941	ver1	2.37
37	RESLER Kamil	1956	ver3	2.41
38	WAGNEROVÁ Dagmar	1945	adj	2.52
39	STOKLAS Eugen	1939		2.54
40	JÍCHA Jan	2008	adp onl kr	2.57

41 RESLER Kamil	1950	ver2	2.63
42 MACEK Miroslav	1993	kr	2.77

5.2 Total euphony in unadjusted versions

Table 3: Total euphonic value of the unadjusted versions

Translator	Year	Attributes	Total euphony
1 KOREIS Vojen	2015	adj kr	1.09
2 PASTYŘÍKOVÁ Barbora	2018	adj	1.42
3 VRCHLICKÝ Jaroslav	1891	ver2 adj	1.45
4 MUŽÍK Augustin Eugen	1885	adj	1.46
5 VRCHLICKÝ Jaroslav	1963	adp adj mod	1.46
6 WAGNEROVÁ Dagmar	1945	adj	1.58

6   Discussion

While the main objective of the thesis is the measurement of euphony, the gathered data provide a possibility to draw conclusions about the Czech translations of *The Raven* in general. It is essential to highlight that although this thesis claims to contain most translations of *The Raven*, those are only the ones that were officially or semi-officially published and are generally available. Grúz (2014) lists several translations which either remain unpublished or have not been preserved. Moreover, there is likely a large number of translations that are for personal use only, not available at all. To conclude, the present corpus is solely a representation of a bigger population, from which more relevant conclusions could be drawn but which is unfortunately unobtainable. Thus, all deductions are based mainly on this corpus. Nevertheless, potentially relevant and novel findings can still be obtained, serving as fragments of a bigger picture.

The translations were generally produced by men. Out of the 34 presented translators, only three are women: Wagnerová (1945), Černá (2002 & 2005), and Pastyříková (2018). Since the field of language services is generally thought to be either gender-balanced or female-inclined (CSA Research, 2017), this is rather a surprising finding. Considering the time span from the publication of the original, a potential reason for this asymmetry could be observed from a diachronic point of view. In connection to the representation and role of women in history generally, this equality of possibilities in the field of translation was not always a matter of course. This could partially explain the male prevalence, especially in the older transfers. Thus, this could be expected to be different for the contemporary transfers. However, these are

also unequal. No general tendencies are inferred. Another possible explanation could be relatively straightforward, connected to the nature of literary translations, in which a certain degree of freedom of choice can be found. A literary translator very often chooses the work; it is not selected for or required of them. Therefore, it is not unreasonable to assume that one of the factors possibly affecting this imbalance could be simply the freedom of preference, with men generally more interested in *The Raven* than women. Possibly due to the fact that the poem itself is written by a male author.

As for the freedom of preference, it can be observed that the poem is still a popular choice; in fact, its popularity seems to be even slightly increasing. Different translations are being published more frequently. This is caused not only by an increase in publishing overall but also likely by the introduction of internet, as can also be seen in the online translations in this work. Sharing translations online is more easily accessible than in print, rendering the process more approachable and strengthening the motivation of potential translators.

Regarding time, certain periods of both more and less publication clearly emerge (see Figure 2). This thesis does not aim to examine the translations from a diachronic point of view in depth; many factors are involved. Some of the possible causes of the emerging patterns are, therefore, only implied. At first, translations were being published only sporadically. There is a gap of almost thirty years between 1891 and 1918. This gap roughly corresponds to the First World War and the pre-war period. From 1928, rather constant interest is clear, followed by a second gap with no publications, 1964–1984, which could potentially be linked to the period of "normalisation" in Czechoslovakia. The interest was perhaps stimulated again by the publication of *Havran: šestnáct českých překladů* (Poe 1985). As mentioned above, from the beginning of the new millennium, we may observe a phenomenon that could be metaphorically labelled as an "online unkindness of ravens," a sudden surge in publishing connected to the increasing internet usage. The last translation recorded here was published in print by Pastyříková in 2018; therefore, it could be expected that a translation from a new translator or a different version of an existing one is quite likely soon to be published.
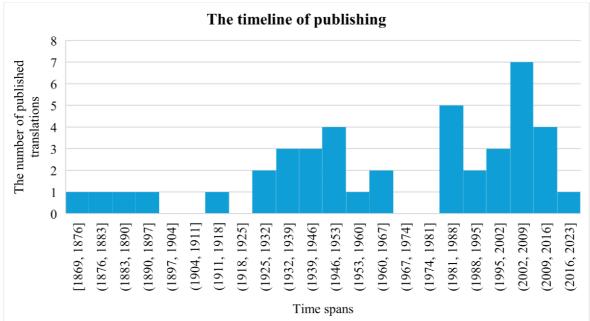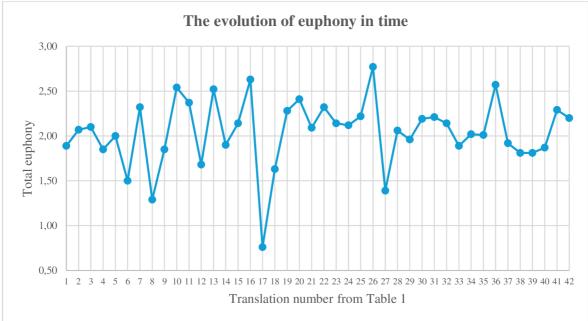
Figure 2: The timeline of publishing of Czech translations[22]

In connecting the aspect of time to euphony, no clear patterns emerge. The evolution of euphony is unstable, especially considering the first 18 translations. Perhaps if Jícha's adaptation (2008) was excluded, it could be suggested that since Pokorný (1997), the level of euphony has been relatively stable, around 2.0. The overall average is 2.04. In the following graph, the translations are represented by numbers from Table 1:

Figure 3: The evolution of euphony in time

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[22] Including Slavík's (1953) version, which was created in 1953, but first published in 1985, and Petlan (2005), published in 2015.

Potentially excluding Jícha brings us to another relevant point to discuss – whether the adaptations behave differently in any way. Clearly, they do. Out of five, three scored as the least euphonic versions overall. The length and number of lines, as discussed below, could be of potential relevance considering Biebl adp. mod. (1950) and Pospíšil adp. (1993). Both versions have irregular line structures, and Biebl's transfer is even much shorter in nature. This might indicate the relevance of the verse structure. Váchal's adaptation (1937), however, has quite a regular structure and an even bigger number of lines than the original. Its ranking, thus, could be explained simply by the possibility that to achieve euphony was not one of Váchal's main aims. Ultimately, it is an adaptation, and as such, it does not have to seek to represent the original faithfully or does not do so at all. Vrchlický adp. adj. mod. (1963) is in the middle of the ranking, perhaps quite surprisingly, right next to his first translation version (1881), with almost no difference in the level of euphony between them. The other extreme is Jícha adp. onl. kr. (2008), which is the third most euphonic version overall. Again, being an adaptation, this version could be considered a counterexample to Váchal – instead of opting not to preserve one feature of the original, it highlights it. Jícha's attention to sound could also be explained by the fact that he is a songwriter.

Returning to the relevance of the number of lines or their length, it is evident that it influences the result. All unadjusted versions would be ranked below the average; in fact, they would be the lowest-ranking versions, excluding the adaptations and Nezval (1928). Adjusted, all the versions yield comparable results, and they rank variously. The importance of this aspect was also noted in Čech et al. (2011, 12).

Concerning the different translation versions, 4 out of 6 translators made changes that did not favour euphony. Apart from Resler, only Čapek decided to add more euphony in his second attempt. Particularly interesting are Resler's transfers. He first made quite a significant jump and produced, in fact, the second most euphonic version overall. He then proceeded to lower this level in his last version. However, this could be viewed as a balanced approach; he could have made way for other translation features that needed to be attained, but still retained some of the euphony he had achieved in the previous version.
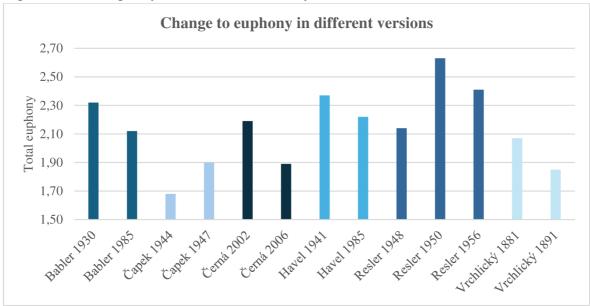
Figure 4: Total euphony in different versions by the same translator

Change to euphony in different versions

Looking at the results in Appendix 1, a thorough statistical analysis would have to be carried out with hard data to draw firm conclusions, but one pattern can still be inferred. Translators use not only individual phonemes but also varying strategies to achieve euphony. Providing Resler ver2 (1950) and Čapek ver2 (1947) as an example (Figure 5 and Figure 6, respectively), both the phonemes used and their distribution are not similar. While Resler's ver2 (1950) euphony resides in the usage of mainly two phonemes, /r/ and /a/, Čapek ver2 (1947) alternates the phonemes more, with the two most used ones being /o/ and /t/.
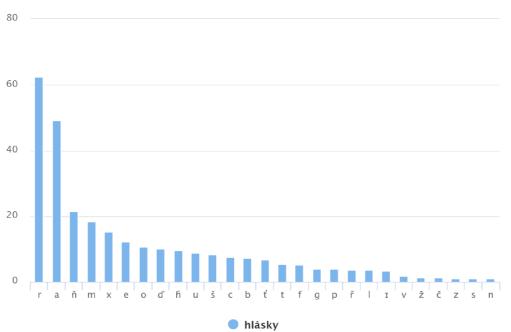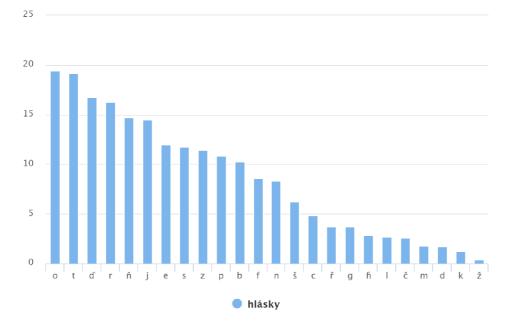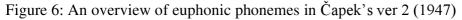
Figure 5: An overview of euphonic phonemes in Resler's ver2 (1950)

Figure 6: An overview of euphonic phonemes in Čapek's ver 2 (1947)

A rather unexpected trend is found in the results concerning the comparison with the reference corpus containing original Czech poetry (Appendix 2). The distribution of euphony in the reference corpus is Gaussian; and quite unexpectedly, the vast majority of the translations took a position in the second half of the curve, i.e. they are more euphonious than the majority of the corpus. See, for instance, Macek kr. (1993) in Figure 7. Following Williams and Chesterman (2002), this could be interpreted as a strange behaviour. In connection to the distinctive sound qualities of *The Raven* discussed in 1, it might be questioned whether these qualities are projected into the translations. Speaking metaphorically, if this is not merely a euphonious shadow cast on the translations by the original.
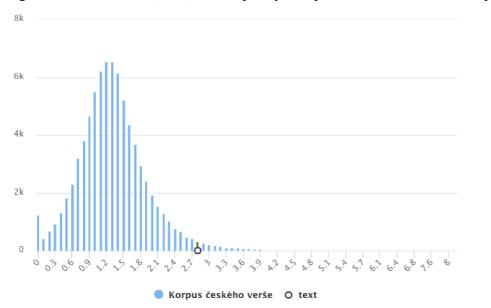
Figure 7: Macek's kr. (1993) total euphony compared to the referential corpus poems

Lastly, the obtained ranking could be compared with some general expectations. Being generally one of the most popular ones, Nezval's (1928) transfer unexpectedly ranked as the least euphonic serious transfer. On the other hand, many lesser-known versions are placed among the most euphonic ones. Apparently, Nezval's translation is sought after for reasons other than euphony, or, more importantly, it might comprise a different manifestation of euphony than the one measured in this work. In conclusion, this method of measurement is an established one and has yielded positive results before (Místecký et al. 2019), yet the complex nature of euphony, and poetry itself, hinders the drawing of major conclusions and rules, valid universally. Nonetheless, quantitative measurement might provide us with outlines and indicators of the sound qualities of texts, enabling one to describe possible trends, assess implications, and discuss ideas. The key to success, perhaps, lies in its balanced connection with qualitative research.

Conclusion

The main aim of the thesis was an attempt at a quantitative analysis of euphony in 42 different translation versions of *The Raven* by Edgar Allan Poe into Czech. In order to do so, a solid approach to euphony itself had to be introduced. As discussed, euphony is a complex phenomenon with varying definitions used in various contexts. Opinions differ on what type of phonemes and in what kind of combinations can and should be considered euphonious. Moreover, the question of the inherence of the pleasant aspect in certain euphonic sounds and patterns has been debated. Perhaps because of this complexity, it is often addressed qualitatively. While the merits of a qualitative approach are not doubted, this thesis addresses the issue quantitatively. No matter the intricate nature of euphony, the reoccurrence of identical or similar speech sounds in a given text segment is its very core. As was shown, this repetition suggests itself as a phenomenon suitable for a quantitative, statistical measurement. It allows one not only to state whether euphony is present and to what extent but also to locate its source. The potential drawbacks of this method are mentioned, nonetheless.

To introduce the analysis material and highlight its expected connection to euphony, the original text and its author were briefly discussed. Edgar Allan Poe was likely aware of the sound patterns he used in *The Raven*. Sound, and consequently euphony, were important factors for him. This fact provides additional support to the notion of non-randomness of the phoneme reoccurrence, upon which the crucial element of significance is built.

The method used in this thesis has been successfully applied in other works before. The euphonic effect is claimed to consist in a significantly unexpected deviation of phoneme distribution. This heightened repetition was found in the 42 translation versions measured in this work as well. To process the texts, the Euphonometer application (Plecháč 2017) was used. Its functioning was found suitable, and it yielded positive results. Apart from the analysis of euphony, a major part of the work lay in collecting the translations themselves and creating an up-to-date bibliographical list.

A ranking of translations based on their measured euphony level was made. The top three ranks belong to Macek kr. (1993), Resler ver2 (1950), and Jícha's adaptation (2008), respectively. More unexpected and interesting, however, are the bottom ranks. The three least euphonic versions were all adaptations, differing in several factors, structure and length among others. Such results hint at the possible interference of these factors in the measurement process. Moreover, the fourth lowest rank was taken by Nezval (1928), generally considered one of the most popular Czech translations. A significant difference was also found in the gender of the translators, with only 3 out of 34 translators being women. The evolution of publishing, together with the evolution of euphony in time, was discussed as well. Changes to the level of euphony in different versions from the same author were of particular interest. The analysis then proceeded to evaluate the distribution and contribution of speech sounds in two selected versions to compare different strategies used by the translators. The translators seem to vary in both the range of phonemes used and their distribution – while some use only a few combinations extensively, others tend to be more balanced. Perhaps one of the most surprising findings revealed itself after a comparison with the reference corpus. The level of euphony in

the translations appears to be generally higher in average compared to the original Czech texts in the corpus, suggesting that translations behave differently.

To conclude, this bachelor's attempted to fulfil several of its objectives. Firstly, it explored the phenomenon of euphony and drew attention to its connection to E. A. Poe's work. Secondly, the majority of Czech translation versions of *The Raven* was gathered in digital form and an up-to-date overview was created. Thirdly, and most importantly, an attempt was made to analyse and compare the level of euphony in these translations. Bearing in mind both the possibilities and limitations of quantitative methodology, it did not seek to claim that such an approach is the ultimate one. The intent was rather to explore and highlight these possibilities, focusing on the contribution of the data it yields. As mentioned above, it is suggested that relevant findings and insight could be gathered by balancing the qualities of both the quantitative and the qualitative approach.

Resumé v českém jazyce

Práce se kvantitativně zaměřuje na prvek eufonie v českých překladech básně *The Raven* (*Havran*, či *Krkavec*) od Edgara Allana Poea. Pro účely práce bylo nashromážděno 42 překladových verzí, předpokládaná většina. Ty jsou následně zpracovány v nástroji Eufonometr (Plecháč 2017), který měří jejich úroveň eufonie. Výsledná data jsou interpretována z eufonických i jiných relevantních hledisek a na jejich základě je sestaven žebříček dle míry eufonie. Práce zkoumá možnosti kvantitativního přístupu a zaměřuje se na to, jaké poznatky lze tímto způsobem získat. Jejím hlavním cílem je analýza eufonie, v teoretické části je tak nastíněna její komplexní povaha a způsoby, kterými se může projevovat. Předcházející bibliografický průzkum a sestavení revidovaného seznamu většiny dostupných českých překladů nicméně umožňuje zkoumat i jiné aspekty, jako například vývoj publikace či převažující pohlaví překladatelů / překladatelek.

První kapitola teoretické části přibližuje autora a báseň, zejména pak ve spojení s použitím zvukových prvků. Výhodou je možnost využití poznatků z eseje *The Philosophy of Composition* (*Filozofie básnické skladby*), ve které sám E. A. Poe báseň rozebírá a představuje čtenáři způsob, kterým ji tvořil. Je nastíněn autorův vztah ke zvukovým prostředkům, tedy i k eufonii, a jejich přítomnost v básni je demonstrována na několika příkladech. Záměrem kapitoly je představit základní informace a navázat důležité propojení s výchozím textem, byť tato práce není komparativního charakteru.

Jedním z cílů je i prozkoumat podstatu eufonie. Definice i přístupy k ní se liší. Rozmanitá může být zejména ve formě, ve které se v textu vyskytuje, jak je znázorněno i na příkladech z originálu. Zkoumána je ale i sémantická stránka – samotný pojem „eufonie", v češtině ostatně též „libozvuk", je totiž většinou spojován s jistým aspektem příjemnosti znění hlásek, či příjemnosti spojené s významem, které však v přístupu zvoleném v této práci reflektovány nejsou. Důraz je tedy kladen i na psychologické principy s eufonií spojené.

Práce využívá metody navržené Gabrielem Altmanem (Altmann 1966a), ve které je eufonie chápána jako signifikantně nadměrné nenáhodné opakování podobných či stejných hlásek. Toto opakování, které se výrazně odlišuje od běžné očekávané normy, poutá svou jinakostí čtenářovu pozornost. Je tedy vnímáno jako zvláštní či nečekané, ne vždy nutně libé. Altmannův princip včetně příslušného algoritmu pro měření eufonie je zde představen a rozebrán. Pozornost je také věnována dané očekávané normě, která vychází z příslušné populace. Z praktického hlediska je pak tato norma vypočítávána ze zvoleného referenčního korpusu, který se snaží populaci reprezentovat. Tato kapitola tedy zkoumá otázku kvantitativní metodologie, konkrétně pak především zvoleného přístupu. Záměrem práce není prosazovat správnost kvantitativního uchopení, nýbrž zjistit, jaké jsou jeho případné možnosti a nedostatky.

Praktická část je spojena s bibliografickým průzkumem a se samotným měřením nashromážděných překladových verzí. Práce si klade za cíl analyzovat většinu dostupných českých překladů básně, podstatnou součástí je tedy i tvorba aktuálního a pokud možno kompletního přehledu překladových verzí. Přehled, včetně základních bibliografických údajů, je prezentován v Tabulce 1 (Table 1). Celkem obsahuje 42 překladových verzí, což je dle mého nejlepšího vědomí předpokládaná převážná dostupná většina. Verze jsou rozličného charakteru,

což umožňuje další zkoumání – například několik upravených verzí od téhož překladatele nebo verze lišící se v překladu ústředního slova *raven* („havran/krkavec"). Co se měření týče, je provedeno ve zmíněné aplikaci Eufonometr pracující na základě Altmannovy metody. Je popsáno rozhraní aplikace a zmíněn je též sběr textů v elektronické podobě a jejich úprava pro následné měření.

      Hlavním prvkem této práce je zejména sestavení žebříčku překladů na základě míry jejich eufonie. V tomto ohledu je na první pozici překlad Macka (1993), druhá je Reslerova verze 2 (1950) a třetí Jíchova adaptace (2008). Výsledky viz. Tabulka 2 (Table 2). Překvapivé jsou poslední příčky, které všechny obsadily překladové verze považované za adaptace, z čehož vyplývá, že se adaptace chovají z hlediska eufonie neobvykle. Zajímavé je také například zjištění, že autory překladů je 34 překladatelů a pouze 3 překladatelky, čehož možné důvody jsou dále nastíněny. Práce také sleduje časovou osu publikací a pozoruje možné rozdíly v eufonii související s časem. Po eufonické stránce jsou též důležité výsledky v přílohách 1 a 2 (Appendices 1 & 2), které zobrazují rozložení a poměr eufonických hlásek v jednotlivých překladech a porovnání míry eufonie překladů s eufonií původních českých textů v referenčním korpusu. Bylo zjištěno, že autoři dosahují eufonie za použití rozdílných způsobů, a překvapivý je pak především fakt, že převážná většina překladových verzí je eufoničtější než paralelní české poetické texty v korpusu. V neposlední řadě lze na výsledky pohlížet dle jistého širšího obecného očekávání – v tomto ohledu poměrně vyčnívá Nezval (1928). Nezvalův překlad by se dal považovat za jeden z nejčtenějších, přesto se však, co se eufonie týče, umístil ihned po třech nejméně eufonických adaptacích, ze seriózních překladů tedy nejníže.

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List of appendices[23]

Appendix 1: Phoneme contribution
Appendix 2: Reference corpus comparison
Appendix 3: Translations

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[23] Considering their size, appendices are not included in this document. Appendices 1 & 2 are available in IS/STAG together with the thesis. Appendix 3 is submitted to the supervisor and the examiners only, due to legal reasons.