CHALLENGES IN TRANSLATING AUTOPSY REPORTS

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Abstract
This article examines the nature of medical documentation, specifically focusing on lexical and stylistic features of autopsy reports. It explores the challenges of translating autopsy reports based on the analysis of medical documentation in English and Polish. The paper delves into the fundamental features of medical reports, followed by a detailed examination of the unique challenges encountered in the translation of autopsy reports. By analysing a range of sample autopsy reports, this study sheds light on variations in terms, style, register and degree of formality employed in both languages. The discrepancies identified highlight the need for translators to implement specific linguistic, stylistic and compositional alterations during the process of medical translation. The implications derived from this analysis provide insights for trainee translators and translator educators aiming to contribute to the enhancement of accuracy and coherence in medical communication, thus ensuring the effective transfer of information in this specialised field.

Keywords: medical translation, health communication, autopsy reports, medical translator expertise, medical reports

1. Introduction

In the domain of medical communication, effective translation stands as a pivotal factor in both disseminating knowledge and sharing new discoveries within the medical field, while also extending healthcare services to individuals from diverse cultural backgrounds. Medical translators face a number of challenges, such as medical terminology, lexical equivalence of medical texts, readability or quality issues (Karwacka, 2015, p. 275); thus, medical translation requires the translator to possess not only linguistic proficiency but also a comprehensive grasp of medical knowledge and cultural sensitivity. The accurate conveyance of medical

information is crucial, as even the slightest mistranslation can have serious consequences for patient safety and healthcare outcomes.

Due to the diversity of users and their varying communication needs, medical communication encompasses a range of styles and registers. Gonzalez-Davies and Montalt (2007, p. 29-31) distinguish research genres (e.g. case reports, doctoral theses, research papers), educational genres (e.g., treatises, patient information leaflets, training materials), commercial genres (e.g., catalogues, contracts, patents) and professional genres (e.g., lab tests, medical terminology glossaries, software interfaces etc.). All these types of medical documents have distinct linguistic and stylistic features, therefore, medical translation entails working on a broad spectrum of materials, including those intended for patients, educational resources for medical students and research papers intended for experts. Ensuring readability for the target audience requires adapting the text to the appropriate style and register with careful attention to the degree of formality. For instance, translating medical records and examination results may require a more formal and objective tone, whereas patient information leaflets might demand a simpler, patient-friendly language.

The subsequent sections briefly discuss the expertise needed in medical translation (section 2), then the characteristics of medical reports are explored (section 3) and the focus is laid on the nature of autopsy reports (section 4). Section 5 addresses specific challenges of translating autopsy reports, with particular attention to syntax (sections 5.1.1-5.1.4), lexis (sections 5.2.1-5.2.3) and technical issues (sections 5.3.1-5.3.3).

2. Medical translator expertise

Medical translator expertise can be defined as the ability to accurately convey complex medical content, which entails linguistic proficiency, a comprehensive grasp of medical knowledge and cultural sensitivity, all essential for effective medical communication. As observed by Badziński (2018, p. 67), medical translation surpasses a mere acquaintance with medical terminology and an extensive comprehension of the source and target texts. The process of medical translation entails a mindful consideration of diverse factors, encompassing disparities on lexical, syntactic, stylistic and cultural level as well as regional variations in medical practices, healthcare systems and legal regulations. As observed by Byrne (2006, p. 67), specialised translation is always bound by numerous laws, regulations and directives associated with the overall creation of technical documentation. These intricacies compel translators to employ a range of strategies and techniques so as to ensure cultural and contextual appropriateness in the translated material and, thus, yield an optimal target language rendition that caters to the needs of the intended.

Medical communication aims to meet the distinct needs of two recipient groups – patients and medical experts – characterized by specific requirements.

Consequently, it can be categorized into three levels: *expert–expert* (highly specialised discourse, e.g. research articles, books, monographs), *expert–semi-expert* (highly specialised discourse, but with additional explanations, e.g. textbooks, manuals, instructional materials) and *expert–non-expert/layperson* (discourse with fewer terms and simplified explanations, e.g. special interest columns in newspapers) (Trimble, 1992; Bowker and Pearson, 2003). Taking into account the extralinguistic knowledge, the classification implies what seems to be an important mutual feature of those user groups, namely that their members do not necessarily have full linguistic competence within a given subject field (Bergenholtz and Tarp, 1995).

Medical translators navigate these three distinct levels of communication, adapting their translation approach to ensure effective communication and avoid misconceived readership level or misjudged translation expectations (Fischbach, 1998, p. 1). The language used in expert–expert type of communication is often technical and tailored for experts who share a considerable amount of knowledge, so the translator 'can make frequent use of specialized terminology whose semantic value is taken for granted' (Gotti, 2008, p. 26). This type of medical discourse relies heavily on '"terms of art", key words that reflect the higher level of precision and expert typologies' (Witczak-Plisiecka and Platonova 2020, p. 238). Nonetheless, when working at the second level, i.e. expert–semi-expert, more information and everyday lexis will be used so as to find a balance between maintaining the specialised nature of the discourse and ensuring that it remains accessible to a wider range of readers. Translating at the third level, i.e. expert–non-expert/layperson communication, requires simplifying the language, reducing the usage of technical terms and providing explanations that are accessible to a non-expert audience.

Interestingly, in the classification by Bowker and Pearson (2003) translators are given the status of *non-experts*, i.e. people who have to use a specialised language which is unfamiliar to them, as opposed to *experts* (people trained in a given subject field) and *semi-experts* (subject field students and experts from related subject fields). This classification underscores the imperative need for ongoing knowledge enrichment among professionals such as translators and interpreters who engage with medical language. Mere exposure to specialised terminology does not confer expertise so translators need to deepen their background knowledge to perform their jobs responsibly.

3. Medical reports

As for medical reports specifically, they present a distinct difficulty for translators since this type of documentation comes in various formats and consists of compiled factual information that is customised to precisely convey the data and meet the recipients' requirements Like the majority of medical documentation, medical reports usually exhibit neutrality and clarity of message, which requires

the use of a logical and organised structure (see Vihla, 1999; Garcia and Montalt, 2002; Netzley and Snow, 2009; Montalt, Zethsen and Karwacka, 2018). Similarly to other medical genres, they also value patient privacy and confidentiality, which requires strict adherence to privacy regulations. Nevertheless, medical reports differ from other medical genres in a number of aspects and can be characterised by:

- **standardised structure** (specific formats that include distinct sections and tables, e.g. demographics, diagnosis, recommendations, treatment plans, etc.)
- **highly specialised terminology and professional jargon**
- **inclusion of numerical data** (e.g. test results, laboratory findings, imaging studies, data sources, etc.)
- **extensive use of abbreviations** (e.g. for clinical measurements, medical conditions, medications, medical specialties or departments, drug administration routes, frequency indicators, etc.)
- **documentation style** (high level of objectivity and precision)
- **scientific references** (e.g. to scientific studies, clinical trials or research papers to support the diagnosis, treatment choices or prognosis)
- **medical coding** (e.g. specific codes for diagnoses (ICD codes) and medical procedures (CPT codes)
- **inclusion of visuals** (e.g. images, charts, graphs or diagrams to visually represent data, especially in fields like radiology and pathology)

To exemplify, in patient-oriented documentation such information as specific codes for diagnoses would typically be replaced with common names of diseases. For instance, instead of *ICD-10-CM Diagnosis Code B01*, the name of the disease would be provided; moreover, instead of its specialised term *varicella*, a more everyday word would be used, i.e. *chicken pox*. Similarly, contrary to other patient-oriented genres, in medical reports, precise generic names of medications referring to its active ingredient, e.g *paracetamol* would be used more often than commercial brand names under which the drug is sold (e.g. Tylenol, Panadol, Meftan or Metacin, i.e. brand names from the pharmaceutical companies that market the medicine).

Medical reports vary not just in their design and utilization of distinct formats tailored to specific medical specialties (such as pathology reports, radiology reports, clinical notes, and autopsy reports) but they also differ from one hospital to another, and even from one medical center to the next, as each medical facility can have its unique format. Primarily though, what needs to be taken into account in translation, medical reports vary not only in their design across different regions of the world, with notable differences in layout and data presentation.

4. Translating autopsy reports

Within the realm of medical translation, autopsy reports present unique challenges. These reports serve as forensic records that can be utilized as evidence within judicial systems since they provide a comprehensive account of the findings and conclusions derived from a post-mortem examination. Conducted subsequent to the post-mortem procedure, autopsy reports carry substantial legal and societal significance. Given that autopsy reports contain highly technical and specialised terminology, translators must possess not only a deep understanding of medical terminology but also a familiarity with forensic medicine and the specific procedures involved in autopsies.

An autopsy report entails a detailed description of the physical examination conducted on a deceased individual, along with pertinent information such as the medical history, circumstances surrounding the death and external observations. The procedure of autopsy encompasses a thorough examination of the body's organs, tissues and bodily fluids, aiming to determine the cause and manner of death. This type of reports must be written 'in a form that will make them useful to the parties who read autopsy reports or to those who abstract information from autopsy reports. This includes pathologists, clinicians, family members, lawyers, risk management officers, researchers, epidemiologists, statisticians, and outcome analysts' (Hutchins et al., 1999, p. 1085).

Autopsy protocols vary among medical institutions, but common components are always included, such as 'the autopsy face sheet (demographics and list of anatomic diagnoses and findings), a clinical summary, an objective description of the gross autopsy observations, a slide and block catalog, reports of ancillary studies, and a clinicopathologic interpretive summary' (ibid.). Characterized by their meticulous level of detail necessary to describe the findings and relevant laboratory results, autopsy reports present a formidable task, requiring translators to navigate the intricate domain of highly specialised medical and forensic terminology with expertise and precision with the aim of providing accurate and objective content and thus ensure its reliability in legal and scientific contexts.

The expertise necessary for translating autopsy protocols goes beyond the knowledge of anatomical terms, pathological descriptions, technicalities and forensic procedures as the translator must also consider the sensitive nature of the content. Striking a balance between maintaining scientific accuracy and conveying the necessary empathy and respect is paramount. Each translated word and phrase carries the weight of potential legal, medical and emotional implications, underscoring the translator's responsibility to capture the intricacies of the original text while adhering to the target language's linguistic and cultural norms.

The translation process of autopsy reports in the Polish-English language pair necessitates careful consideration of the terminological and stylistic issues discussed above. The presence of an unfamiliar style or an abnormal arrangement

of words can have multiple consequences. Firstly, it can create a modified impact on readers who are unaccustomed to extraordinarily direct or excessively formal expressions. This altered impact may lead to a sense of disorientation, thereby causing unnecessary hesitation and prompting readers to reread the report (see Pietrzak, 2015). Consequently, this can result in an undesirable waste of valuable time for medical experts or family members. Therefore, translators must be attentive to these nuances to ensure accurate and effective communication between languages and avoid potential complications during the translation of autopsy reports.

5. Issues in the translation of autopsy reports

With characteristic features that are not present in other medical genres, autopsy reports in two different countries always vary. They may differ in the extent to which they include specific data such as demographics, test results, research findings, visuals, data sources, abbreviations, medical coding, linking expressions and other syntactic devices. Translating such reports in any language pair involves addressing and navigating differences and restructuring sentences to ensure the flow and overall readability of the target text. Thus, the aim of the analysis presented here is to identify variations and potential problematic issues in English and Polish to exemplify what areas may require translators' attention in a language pair.

The methodology employed in this study involved the utilisation of the collection of autopsy reports, along with their corresponding translations. The authors specifically focused on translating the source texts into Polish, enabling a broader analysis of the material. The next step involved an examination and comparison of the translated texts. The source material employed in the study comprised authentic autopsy reports specifically related to celebrities who have died in various circumstances. To conduct this study, the authors have chosen autopsy reports from the Autopsyfiles website. To ensure ethical considerations and privacy protection, personal details such as the identities of the deceased individuals have been omitted from the selected autopsy reports. The emphasis is solely on the essential aspects of the autopsies, providing a focused examination of the translation challenges posed by this specific type of content.

5.1. Differences at the syntactic level

The subsections below (5.1.1-5.1.4) provide examples and a discussion of issues on the syntactic level which, if disregarded, can potentially influence the accuracy and coherence of the translated content. Comparing English and Polish autopsy reports, most notable differences observed at the syntactic level involve the word order, specifically the use of verbless clauses, agentless clauses and passivisation, which contributes to the general degree of formality.

5.1.1. Modification

One of the significant differences in syntactical rules governing how sentences are built across languages lies in a specific preference for particular patterns of noun modification. Differences in these patterns are concerned not only with stylistic but also semantic aspect of the sentence since, in this case, different word order can actually change the meaning of the whole utterance. For this reason, the translator has to be very careful and follow target language (TL) conventions to avoid ambiguity or mistranslations. The example below shows a common tendency in Englih-Polish noun modification.

English: *Extensive burning of the left temporal parietal scalp.*

Polish: *Rozległe oparzenia płata skroniowo-ciemieniowego lewego.*

These sentences show a difference in how nouns are typically modified in medical English and Polish. While the source language (SL) sentence uses pre-modification, placing the adjective before the noun that it modifies, this is reversed in the TL translation, where post-modification with the adjective coming after the noun is more often used. Such a word order is used only in medical Polish and is not common in the language spoken everyday. In such contexts, the body part or a medical condition comes first in the sentence and is placed before the modifier as if it were more relevant to the reader than the adjective modifying them. Although such differences in modification patterns may not always influence the meaning of the utterance, this is a textual convention and should be taken into account in translation to ensure the idiomatic and natural feel to the expressed message.

The next example shows that pre-modified English nouns can sometimes cause ambiguity.

English: *Left mandible fracture.*

Polish: *Złamanie żuchwy po stronie lewej.*

In this case, the SL sentence is to a certain degree ambiguous due to multiple modifiers being placed before the noun *fracture*. The use of double pre-modification, in which a noun *mandible* is used as a modifier in the phrase *left mandible* calls for the translator's careful consideration. It needs to be resolved which noun is described by the adjective *left* to avoid false interpretation as if there were two mandibles, a left one and a right one. Due to the way modifiers are used in Polish, the potential phrase *lewa żuchwa* (lit. *left mandible*) would indicate that there are actually two mandible bones. Hence, the translator must make sure they are aware of the use of modifiers in both English and Polish to convey the meaning correctly.

5.1.2. Verbless clauses

In the English language, a subject-verb-object structure is typically used, while Polish not only favours a different order (i.e. subject-object-verb), but also tends to significantly distort the usual word order. For instance, in medical Polish language, very often copular verbs are omitted whatsoever:

English: *The adrenals are unremarkable. The thymus is not identified.*

Polish: *Nadnercza bez zmian. Grasicy nie stwierdza się.*

The underlined phrase is typical of medical Polish (Górnicz, 2014, Pietrzak, 2015). The most prominent stylistic feature in medical Polish is that the sentences are kept short and concise, leaving out the verbs and replacing them with verbless expressions like *nadnercza bez zmian* (lit. *adrenals without changes)*, which is also often abbreviated to b/z. This is further exemplified by the sentence below:

English: There is traumatic amputation of the right arm.

Polish: Amputacja urazowa ramienia prawego.

Here, the use of verbless structure and the characteristic feature of medical Polish to completely leave out verbs is particularly prominent. Even if the SL sentence is relatively short and only has one verb in it, the Polish translation makes it even shorter, only leaving out the actual name of the condition, since this is the only relevant part for medical professionals. Similar cases can be demonstrated below.

[1]

English: *There is no balding.*

Polish: *Łysienia brak.*

[2]

English: *There is no genital or anal trauma.*

Polish: Urazów narządów płciowych i okolicy okołoodbytniczej nie stwierdzono.

When translating from Polish into other languages, the translator should make sure that such agentless and verbless structures are clear for the target reader so full sentences should be used rather than literal translation (see also Górnicz, 2013, 2014; Pietrzak, 2015). Since sentences in English are required to follow the subject-verb-object order, the translator needs to adapt the syntax to ensure the semantic relationship within the clause. Hence, to follow English syntactical conventions, the translator may need to add expressions such as: *is/are visible* or *is/are shown/determined/detected/found* or a 'dummy subject' *there is/there are.*

For instance, when translating a sentence like *nadnercza bez zmian* into English, the translator might want to expand it and use, e.g. *No change was found/observed in the adrenals* or *The adrenals show/demonstrate no changes.*

In interesting example of a typical verb omission is demonstrated below to signal the resulting change in perspective.

> English: *Body Examination - The decedent is an adult Black male […]. He was wearing black pants, a sweater, underwear and a shirt.*
>
> Polish: *Oględziny zwłok - Denat to mężczyzna rasy czarnej […]. Denat ubrany w spodnie koloru czarnego, sweter, bieliznę i koszulkę.*

The verb *to be* used in the English sentence *He was wearing* has been omitted and a verbless structure is used in the Polish version. Such verbless clauses as *Denat ubrany* (lit. *Decendent clothed*) are commonly used in Polish medical documentation, which contributes to a greater formality of expression, compared to English (Pietrzak, 2015). Such syntax depersonalises the subject and distances the reader from the post-mortem examination procedures of undressing. When no verb is used, no action has seemingly been performed here, hence no one did the very action of getting dressed and undressed.

5.1.3. Focus on the object or 'patientless clauses'

Apart from verb omission, another feature of the Polish medical syntax that is very different from elaborate and patient-oriented English documentation is the focus on an object instead of the person. As observed by Puurtinen (1998, p. 182), 'participants can be deleted or given a peripheral syntactic status'. This phenomenon of replacing subjects for objects is very common in Polish autopsy reports and their translations, as exemplified below:

> English: *He has black hair, an unknown eye color and natural teeth.*
>
> Polish: *Włosy koloru czarnego, kolor oczu nieznany, zęby własne.*

In the English sentence, the third-person singular pronoun *he* functions as the subject of the phrase *He has black hair* (lit. *On ma czarne włosy*), but in the Polish version it is no longer there. Instead of the person about whom the statement regarding black hair is made, in Polish the subject is the word *włosy* (lit. hair). In the Polish phrase *Włosy koloru czarnego* (lit. *Hair colour black)*, the patient's hair is placed in the subject position due to the fact that the syntax employed in these medical documents tends to prioritize placing objects, events or states at the beginning of sentences, which imparts the text with a factual, distant and formal style.

5.1.4. Agentless clauses

Autopsy reports in Polish show instances of putting more focus on the actual procedures and conditions, i.e. on *what* is being done in general, rather than on *who* is performing them or *who* is suffering from the condition in question. The sentences below exemplify this phenomenon of agentless clauses where passive voice is used to avoid personal tone.

> English: *Upon external examination I observed significant trauma to his head, right arm and lower body.*
>
> Polish: *Po oględzinach zewnętrznych stwierdzono znaczne obrażenia głowy, ramienia prawego i dolnej części ciała.*

Instead of translating this sentence by using a personal structure *I observed* (lit. *Zaobserwowałem*) as in the English source text, a wording typical of medical Polish is used here, namely *stwierdza się* (lit. *[it] is observed*). This avoidance of personal structures and preference for impersonal structures is a common feature of medical language used in autopsy reports in Poland, that is why - rather than mirroring the English use of active voice – passive voice is recommended in translation into Polish.

5.2. Differences at the lexical level

In the following subsections (5.2.1-5.2.3), the focus is laid on terminological choices, phrasing and style typical of both English and Polish autopsy reports in order to identify nuances, variations and potential difficulties in translation.

5.2.1. Semantic false friends

One of the notoriously problematic issues in medical translation are semantic false friends, i.e. 'misleading terms that have a similar form in the source and the target language, which may suggest that their meaning is the same in both languages' (Gonzalez-Davies & Montalt, 2007). In some cases, such terms can be translated using the procedures of borrowing or calque (Vinay and Darbelnet, 1958/1995) with only slight adaptation to the morphological rules of the target language. A semantic false friend common in autopsy reports is the term *test*, which has its direct equivalent in Polish and it might sometimes be the case that a borrowed word is appropriate in certain contexts, for example such combinations as *an allegry test, antigen tests or pregnancy test* would be correct when translated as *test alergiczny, test antygenowy, test ciążowy.* However, in some collocations, it would be a mistake to translate the term *test* literally and the translator has to look for a less direct equivalent which is more natural and commonly used. For example, it would be wrong to borrow the term *test* when there is a more popular Polish term *badanie*, more suitable in such collocations as *blood tests* (lit.

testy krwi) which requires an idiomatic term *badania krwi* or *morfologia*; similarly, *imaging test*, *prenatal tests*, *toxicologic test*, *reflex test* – all require the term *badanie*, although the word *test* appears to convey the meaning well and thus may pose a challenge in translation.

As far as examination is concerned, an example of a more serious mistranslation would be the term *scan* mistranslated as Polish *skan*, The Polish word *skan* cannot be used in the medical context, as it refers to a physical document scanned by an office scanner and converted into digital data. Hence, translating *a liver scan* literally as *skan wątroby* would not be clear for the target audience. Moreover, another challenge in this case is the fact that the English term *scan* can stand for a range of examinations, such as CT scan, MRI scan or PET scan. The translator needs to take into account the type of examination to avoid equivalents such as *tomografia* (lit. *tomography*) or *rezonas magnetyczny* (lit. *magnetic resonance*); so if the type of scan is not known, a slightly broader term, *badanie wątroby*, must be used for *a liver scan*.

Another example of a term that can easily be borrowed but constitutes a false friends is the term *complications*, which refers to unsuspected circumstances, but in the medical context its exact meaning refers to medical conditions that arise as a result of another condition or treatment. In Polish, it could be most easily translated as *komplikacje*, but a more idiomatic medical equivalent would be *powikłania*. Similarly, there is a range of false friends common not only in autopsy reports but in medical translation in general; for instance, the term *system* (e.g. *urinary system*, *nervous system*), often wrongfully translated as *system* instead of *układ* (e.g. *układ moczowy*, *układ nerwowy*). The replacement of words that seemingly can be borrowed is considered necessary due to idiomaticity and stylistic reasons.

A problematic aspect of translating semantic false friends is also their collocability. For instance, the term *medical history* (lit. *historia medyczna*), which refers to the medically relevant information collected during doctor-patient interviews, illustrates a common phraseological difficulty. The Polish equivalent here is the term *wywiad (lit.* interview) which, as observed by Górnicz (2013, p. 140), 'happens to be homonymous with the noun for interview and the phrase to *take a history* is therefore commonly mistranslated as *przeprowadzić wywiad* (lit. *carry out an interview*), while the correct collocation is *zebrać wywiad* (lit. *collect a history*)'.

In fact, the collocability of semantic false friends is one of the most challenging areas as far as lexical changes are concerned in medical translation. For instance, the verb *collect* can be translated as both *zebrać* and *pobrać*. In the collocation *to collect a sample* it is translated as *pobrać* (lit. *to take*), but it does not imply that *pobrać* can always be translated into English as *to collect* since it depends on the type of substance that is taken for examination, e.g. in the translation of a phrase *pobrać krew* (lit. *to take blood*) the verb *collect* would not be correct since the correct collocability is *to draw blood* (lit. *ciągnąć krew*). What is more,

as observed by Tymczyńska (2016, p. 127) although some collocations seem fine in Polish, for instance *martwica zaatakowała tkankę* (lit. *necrosis attacked a tissue*), medical texts in Polish favour a different word order and a phrase *uległa martwicy* (lit. *underwent necrosis*) would rather be used more commonly. What is advised for medical translators is to follow textual conventionality and adhere to established linguistic norms, structures and styles within the target language to ensure accurate and culturally appropriate rendering of the source text.

5.2.2. Polysemy

In autopsy reports, some terms may have multiple different equivalents depending on the context. For instance, as mentioned in section 4.2.1, the term *medical history* can be understood as the medical record of the patient or as the doctor's interview with a patient. What is more, in post-mortem reports, the term *history* is also idiomatically used to refer to the circumstances surrounding the death of the person, e.g.

English: *History: Presumed victim of drowning.*

Polish: *Okoliczności: Przypuszczalnie ofiara utonięcia.*

Such terms can be considered polysemous as they carry a range of meanings depending on the context. More examples include terms such as *summary* which is not always translated directly as *streszczenie*, but in the case of *anatomical summary* or *clinical summary* it would be rendered as *obraz anatomiczny* or *obraz kliniczny*, so the term summary can also be translated as obraz. Interestingly, also in the opposite direction the Polish word *streszczenie* is not always summary, but for example a synopsis.

Similarly, the term *description* (lit. *opis*) can be translated differently depending on the word combination in which they occur. For instance, *external/internal description* – in Polish the word *opis* would not normally be used here, but rather *oględziny zewnętrzne* pertaining to the very action of investigating that led to the description. In some cases, the term description may also refer to the effect of the action of describing, e.g. *gross description* translated as *obraz makroskopowy* (lit. *macroscopic imaging*). Yet, in some cases the term description is simply translated as *opis*, e.g. *general description of body* in Polish would be *ogólny opis zwłok*. Here, an interesting lexical difference can be observed in the translation of the word body, which in autopsy reports in Polish is more often translated more impersonally as *zwłoki* (lit. *corpse)*, not *ciało* (lit. *body*).

In autopsy reports, the rendition of the term *evidence* can exhibit a range of nuances and perspectives. The English *evidence of injury* (lit. *dowód obrażeń*) is often translated as *stwierdzone obrażenia* to sound more formal and professional. Another usage of the term evidence is *evidence of therapeutic intervention*, which can be translated as *przebyte interwencje medyczne* (lit. *undergone medical interventions*). It can be observed here, that in the Polish medical language, there

is a tendency to describe medical procedures or conditions in a manner which emphasises that they have been performed/done/noted/observed by the doctor or experienced/undergone by the patient.

5.2.3. Stylistic considerations

In medical languages, some words are used in all the levels of communication, but some of them can be considered more or less appropriate in style and register than others (see section 2). For instance, the term *leg* seems to be neutral in style and it is usually translated as *noga*, but in more professional contexts, it would be more suitable and idiomatic to choose the term *kończyna* [lit. *extremity*]. This phenomenon is called double presentation and refers to pairs of words used in different registers (Džuganová, 2013, Karwacka, 2015). In general, the division can be made into technical and semi-technical terms (Fage-Butler & Nisbeth Jensen, 2016).

The use of such doublets is related to communication levels which highlights the importance of considering the stylistic context when translating specialised medical terms. In fact, not only terms but also lexical units associated with general register may require changes as far as style and register are concerned. For instance, in the analysed autopsy reports, the word *old* referring to old surgeries or old scars would be quite neutral when translated as *stare*, but the register here would be very low and if the level of communication is to be expert-expert, then a more professional term needs to be used, for instance *przebyte*, *pooperacyjne* or even the omission of the term is sometimes advisable due to stylistic reasons.

[1]

English: *There was a possible old puncture wound to her inner left elbow*

Polish: *Prawdopodobnie ślad dawnego wkłucia po wewnętrznej stronie łokcia lewego.*

[2]

English: *There is evidence of old surgery.*

Polish: Widoczne ślady pooperacyjne/Widoczne ślady przebytych operacji.

In autopsy reports, double presentation and differences in style and register emphasize the need for translators to be mindful of the specific terminology preferences and linguistic nuances of the target language, ensuring accurate and effective communication between medical professionals and their intended audience.

5.3. Technical aspects: editing and converting

Medical languages vary not only in syntax, terminology and culture-specific equivalents but also in editing-related technical issues, which can confuse the target audience and alter the intended meanings. The following subsections (5.3.1-5.3.3) discuss the principles of translating measurement units, date formats, punctuation, orthography and naming conventions.

5.3.1. Dates and time

In the United States, dates are provided in a month-day-year order, while the convention used in European countries follows a day-month-year format and Japan uses a year-month-day format instead.

> English: *On Saturday 11/30/2013 at 1538 hours, captain Hitchcock from the ENG156 brigade determined death.*
>
> Polish: *W sobotę, 30 listopada 2013 roku o godz. 15:38, kapitan Hitchcock z brygady ENG156 stwierdził zgon.*

While the difference may not be a problem when the date involves the 13th day of the month, the reader may get confused if this number is 12 or lower, being accustomed to a different format used in their country. The translator needs to be exceptionally cautious, always mindful of the date formats used in the source language, and adeptly convert them into formats, possibly incorporating month names for clarity and precision.

5.3.2. Measurement units

A challenge commonly faced in the translation of autopsy reports lies in units of measurements used in abundance in this type of reports across languages to provide basic dimensions like length, height or width.

> English: *A 1-1/2 x 1 inch laceration is noted to the right lateral lower chest.*
>
> Polish: *Rana szarpana o wymiarach ok. 3,75 na 2,5 cm w prawej dolnej części klatki piersiowej.*

When translating in a language pair of English and a language of a country where the metric system is adopted, the translator has to consider converting the units into the system known to the target audience rather than using the original units. It might be the case that such units may have a cultural or legal significance in the context, for instance for relevance and faithfulness in legal proceedings, but mostly, when measurement units are used just for the sake of measuring, the appropriate strategy in translation is to use the TL convention. However, due to the fact that the conversion rates between the units are sometimes very

precise, estimates are used to avoid unnaturally precise measurements which are not relevant in all contexts (e.g. *ok.*/*około* (lit. *approximately/c./circa/about*).

Both English and Polish have different conventions related to decimals, in this case used to provide information on temperature.

> English: *On Sunday 02/12/2012 at 0025 hours, the air temperature inside the living room was 67.0 degrees.*
>
> Polish: *W niedzielę, dnia 12 lutego 2012 o godz. 00:25, temperatura powietrza w salonie wynosiła ok. 19,5°C.*

Interestingly, the SL sentence does not even name the unit of temperature used for the measurement (Fahrenheits), as opposed to the TL sentence. The issue, however, is the way in which decimals are written in both languages. In most of the English-speaking countries, a dot is used a separator, while in non-English speaking countries like Poland, a comma is used.

As for medical laboratory test results, they can be presented both in traditional units (µg/dl) and in the International System of Units (SI) (µmol/l), with EU recommendation that the European standard is to use SI units in healthcare so as to 'to reduce the risk of post-analytical errors, e.g. misunderstanding and misinterpretation of laboratory reports and errors in communication between different health care personnel and organisations' (Lee Hansen, 2019, p. 250). It is another challenge in the translation of autopsy reports to make sure that the target text provides SI units, which may require knowledge of the principles of their application and conversion from traditional units to SI units.

5.3.3. Numbers and numerals

An interesting example of an occasion which requires using more functional and less literal equivalents is the issue of three-digit emergency numbers used to contact emergency services. These numbers differ across the globe and some countries use three different numbers for each emergency service apart from the general one.

> English: *The assistant called downstairs to call 911, 911 was called at 1543 hours and officers from the Beverly Hills Police Department and paramedics from the Beverly Hills Fire Department arrived on-scene.*
>
> Polish: *Asystentka zadzwoniła na recepcję, by wezwano pogotowie ratunkowe. Numer alarmowy został wybrany o godz. 15:43, a funkcjonariusze z komisariatu Policji w Beverly Hills i ratownicy medyczni z Oddziału Straży Pożarnej w Beverly Hills pojawili się na miejscu zdarzenia.*

The translator can leave the original number, which is the most faithful solution, but it may be unclear for the target audience as to what this number is

used for. Another option involves replacing it with the emergency number used in the target culture, which helps the receiver understand the context, but it can be argued that it strips the original text of the actual meaning and cultural layer of the message. The third and safest option is skipping the numbers altogether and replacing them with a universal term such as *numer alarmowy* (lit. *emergency number*). This solution ensures that no meaning is lost and the message is understood by any receiver, regardless of what culture they come from.

As far as numbers are concerned, English and Polish use different type of numerals in certain medical contexts. While Arabic numerals are commonly used in non-professional texts in both languages, the sentence below illustrates that Roman numerals are still applied in specific, medical contexts in Polish.

[1]

English: *Left anterior lateral ribs 3 through 6; right posterior lateral ribs 3 through 5.*.

Polish: *Żebra przednie od III do VI po stronie lewej; żebra tylne od III do V po stronie prawej.*

[2]

English: *Situated in the low anterior neck at approximately the level of the third and fourth tracheal rings is a 6.5 cm long transverse wound.*

Polish: *W dolnej części karku, w okolicach chrząstek krtani III i IV, poprzeczna rana o długości 6,5 cm.*

In English, there is no standardised convention for numbering bones and cartilages belonging to the same structures to differentiate between them, and both cardinal numbers and spelled out ordinal numbers are used. In Polish, however, Roman numerals are still used in such contexts. Using Polish ordinal numbers would require either including case endings – and, therefore, making the text longer and, in some cases, harder to read – or using a dot after the number, with both conventions being somewhat flawed stylistically in comparison to Roman numerals.

5.3.4. Punctuation and orthographic conventions

As already mentioned in section 5.3.2, in such numerical data, a comma is used in Polish and a dot is used in English. The illustrative sentence provided below also shows that the dimensions are presented with the use of specific orthographic conventions in their respective languages.

English: *There is a 6 x 5 inch laceration of the frontal scalp involving the right eye exposing the cranial vault.*

Polish: *Na skórze czoła rana szarpana o wymiarach ok. 15 na 12,5 cm sięgająca oka prawego i odsłaniająca sklepienie czaszki.*

In English, the dimensions are separated from one another by using the letter *x*, also commonly used to represent multiplication (in this case, the multiplied dimensions determine the surface area of the laceration). Conventionally, the Polish equivalent structure is *na* (due to the fact that the Polish alphabet does not include the letter x), even though non-professional texts sometimes opt for (or copy) the English way of presenting dimensions and use the letter *x*.

In some cases, different orthographic conventions may influence the meaning of the utterance. Such a situation occurs in the case of mixed colours, as exemplified below:

English: *The liver is about normal in size and it weighs 1450 grams. The capsular surface is smooth with a dark brownish-red color.*

Polish: *Wątroba o normalnym rozmiarze i wadze 1450 g. Powierzchnia torebki gładka, o kolorze ciemnobrązowoczerwonym.*

The colour name in the SL sentence is separated by a hyphen, as opposed to the TL sentence, where the whole name of the colour constitutes one word, with no separators used. Using the SL convention in the TL would make a significant difference in how such a colour would be perceived by the target audience. The colour in question is a mix of dark brown and red; however, if a hyphen were to be used in the TL, it would change the colour into half brown, half red, rather than a mix of those two colours. Therefore, to avoid mistranslation, again, the conventions of the TL have to be followed.

6. Considerations for translating autopsy reports: final reflections

This article aimed to explore and analyse some variations and divergences between autopsy reports texts in English and Polish. By examining the nature of these variations and identifying key features within the two languages in the context of autopsy documentation, the study sought to enhance the understanding and translation of autopsy reports. The focus was on linguistic aspects such as syntax, lexis and technical constraints. The analysis shed light on some challenges faced by translators, showing the importance of considering language-specific nuances when translating this type of medical texts between English and Polish and conforming to the standards, requirements and linguistic framework of the particular target language.

The main limitation for the translator of autopsy reports arises strictly from syntactic rules and preferences towards given structures and schemes rather than the target audience's knowledge. It is advised that the translator should follow the textual conventionality of the target language to retain the professional nature of the text. For instance, the difference between word order and the way modification

is used in both source and target language needs to be taken into careful consideration. The Polish syntax abounds in agentless structures and verbless clauses, as well as noun phrases or clauses where the copular verb is omitted. The translator of autopsy reports must remain mindful of all these syntactic and textual conventionalities, as well as lexical, stylistic and technical issues such as converting units of measurement, different graphical representations and formatting conventions of both languages to be able to spot them and render them accordingly. To recapitulate, a meticulous approach, attention to detail and continuous professional development are paramount for medical translators to ensure accurate and contextually appropriate communication in the field of healthcare.

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