# COMPARATIVE-CONTRASTIVE APPROACH TO ROMANIAN-ENGLISH TECHNICAL TRANSLATIONS: NUMERALS

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**Abstract:** *THIS STUDY INVESTIGATES ROMANIAN TO ENGLISH TRANSLATION OF NUMERALS. IN THE SPECIFIC TYPE OF TRANSLATION PRACTICE INVESTIGATED, NAMELY TECHNICAL TRANSLATIONS, THE OCCURRENCE OF NUMERALS CREATES SITUATIONS, WHERE THE INTUITIVE, WORD-FOR-WORD TRANSLATION, THE VARIANT MOST SIMILAR TO THE SOURCE LANGUGE PATTERN OF RENDERING NUMERIC MEANING, NEEDS TO BE ALTERED BY PROVIDING A DIFFERENT TRANSLATION SOLUTION. THE RESULTING AMMENDMENTS TO WORD-FOR-WORD TRANSLATIONS IN FAVOUR OF CORRECT PHRASING IN THE TARGET LANGUAGE, ARE NOT OPTIONAL, BUT RATHER MANDATORY FOR RENDERING THE SPECIFIC SEMANTIC CONTENTS. THE METHODOLOGY USED, IMPLIED ERROR ANALYSIS IN ROMANIAN TO ENGLISH TRANSLATIONS OF NUMERALS (ON VARIOUS TRANSLATION SAMPLES AND THE COMPARATIVE-CONTRASTIVE ANALYSIS OF THE LANGUAGE PAIR LINGUISTIC STRUCTURES), SYNTHESIS OF FINDINGS (IN TERMS OF OCCURRENCE PROBABILITY OF SPECIFIC ERRORS) AND CONCLUDING ON, WHICH THEREOF CAN BE CONSISERED PREDICTIBLE ERRORS TO BE EXPECTED IN ROMANIAN TO ENGLISH TRANSLATIONS OF NUMERALS.*

**Keywords:** NUMERALS, TRANSLATION, APPLIED LINGUISTICS, INTERLINGUAL ERROR ANALYSIS

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## INTRODUCTION

The less frequented branch of applied linguistics, known as contrastive linguistics, was founded in the past century by linguists such as Charles Fries (1945) and continued by Robert Lado (1957) and revisited modern linguists such as Anthony Pym (2010).

The predominant impact of the source language upon the target language, in most translation types was under study by analysis of translated source language samples focusing on target language results. The interlingual transfer identified serves as a predictability pattern for certain language transfer results. Identification of flawed translation results, or predictable interlingual transfer errors, as they can be coined, serves proof-reading and teaching purposes equally.

## 1. THEORETICAL BACKGROUND

The results of comparative-contrastive parallelism of any two languages and the comparative-contrastive approach to morphological structures emerges as an useful tool in applied linguistics, especially in translation studies, for rendering a clear mapping of focal points for error analysis.

The idea of anticipating the occurrence of specific mistranslations for a certain type of phrase or morphological group proved to be meaningful and efficient in language teaching, language acquisition, translation studies and proof-reading as well. Performing a contrastive analysis provides the necessary contextualization for relevant translation error interpretation.

Outlining records of high-risk structures, that is, translation products that can be assessed as likely to have occurred due to interlingual transfer, serves as a core instrument both for language teaching and for translation practice, since erroneous phrasing resulting from predictable source language transfer can hereby be predicted, identified and thus avoided.

This paper on Romanian to English translation of numerals, aims at identifying the interlingual transfer errors occurring in translation of numerical content into English. The comparative-contrastive study of Romanian to English translation of this particular morphological structure entails initial prediction and ulterior validation or invalidation, when performing the error analysis statistics on the relevant Romanian to English translation samples.

## 2. METHODOLOGY

The translation corpus of Romanian to English translations consists of samples obtained from Romanian native speakers, who also speak English as a second language at least at upper intermediate level (B2 or above). The morphological structure is contrasted by opposing two linguistic patterns used in each of the languages of the specific language pair and by creating a theoretical forecast to be validated or invalidated by the error analysis on the relevant corpus of translation tests. Applying the source language word-for-word translation to the target language produces examples of erroneous constructions, that are highly likely to occur for that specific group of language users. The subsequent analysis of errors that are most common outlines the high-risk structures.

## 3. CONTRASTING LANGUAGES AND LANGUAGE STRUCTURES

### Counting in different languages

English, as the international language predominantly used worldwide for professional communication, implies quite frequent occurrence of numeric structures that need to be transferred into the other language. Apparently, the common ground of mathematics, as a different code in itself, should not allow gaps in the logical mechanism of translating numbers, as mathematical units, into numerals, as linguistic units, and then rendering the inherent meaning into the target language.

However, the starting point of the underlying investigation was the difference between the meaning of any number higher than one thousand e.g. 1.987 in Romanian and in English. While Romanians interpret this number to be one thousand nine hundred and eighty-seven, a native English speaker will interpret the above indicated number as one point nine eight seven. The semantic difference is obvious and not at all neglectable. The difference between approximately two thousand or approximately two (mm, kg, ppm, fps etc.) is enormous. Therefore, such divergence of interpretation, calls for further investigation of the entire group of morphologic structures involved in both languages.

### Numerals
### 3.1. Cardinal Numerals

0 - zero/zero, o, nought, (nill, love sports) 1 – unu/one, 2 – doi/two, 3 – trei/three, 4 – patru/four, 5 – cinci/five, 6 – șase/six, 7 – șapte/seven, 8 – opt/eight, 9 – nouă/nine, 10 –zece/ ten, 11 – unsprezece/eleven, 12 – doisprezece/twelve.

The first divergence is that patterns used in Romanian by the addition of -sprezece to the corresponding cardinal numeral less than ten starts at 11, whereas in English the pattern of adding -**teen** is applied starting at 13 only.

R1: (13,14…19 Cardinal Numeral+teen)

13 – treisprezece/thirteen, 14 – paisprezece/fourteen, 16 – șaisprezece/sixteen, 17 – șaptesprezece/seventeen, 18 – optsprezece/eighteen, 19 – nouăsprezece/ nineteen, 20 – douăzeci/ twenty.

The second common mistake involves the difference in pronunciation and sometimes in spelling of two semantically different numerals. Romanian natives tend to use 13/thirteen – instead of 30 thirty and vice-versa, due to the similarity in pronunciation of the final syllable.

R2: (20,30…90 -ty)

The third issue involving interlingual transfer is the incorrect spelling of numerals in English by using separate words, as in Romanian, instead of hyphenating the tens-units constructions. The Romanian copulative **și** is replaced by a mandatory **hyphen** in English.

R3: =(Tens-Units)

21 – douăzeci și unu/ twenty-one, 32 – treizeci și doi/ thirty-two, 43 – patruzeci și trei/ forty-three, 54 – cincizeci și patru/ fifty-four, 65 – șaizeci și cinci/ sixty-five, 76 – șaptezeci și șase, 87 – optzeci și șapte/ eighty-seven, 98 – nouăzeci și opt/ ninety-eight, 100 – o sută/ a/one hundred.

The fourth dissimilarity is the use of the copulative in Romanian and English Numerals. A significant change in position of the copulative is to be noted. While the Romanian *și* is always used between tens and units, in English, if used, the copulative *and* needs to be placed after numeral indicating the number of hundreds and before the one indicating the number of tens. If the number of tens is zero, then the *and* is still used, after hundreds preceding directly the number of units. The Romanian copulative is mandatory to separate tens and units, whereas the English copulative is optional for separating hundreds and tens.

101 - /o sută unu /a/one hundred **and** one ((Hundreds ***and*** Units)

R4: (Hundreds (***and***)Tens – Units)

110 – o sută unu/ a/one hundred (*and*) ten, 111 – o sută unsprezece/ a/one hundred (*and*) eleven, 148 – o sută patruzeci *și* opt/ a/one hundred (***and***) forty-eight, 352 – trei sute cincizeci *și* doi/ three hundred (***and***) fifty-two,1.001 – o mie unu = 1,<u>001</u> one thousand (***and***) one.

Another common source of erroneous English phrasing is the plural use of the numerals for hundreds, thousands, millions, billions, trillions etc. While the Romanian forms take indeed, plural endings 100 - o sută - 200 - două sute, 1000 – o mie - 2000 – două mii, 1.000.000 un million – 2.000.000 două milioane 1.000.000.000 un milliard – 2.000.000.000 două miliarde, the English does not change by the addition of a plural ending: 100 one hundred – 200 two hundred~~(s)~~, 1,000 one thousand – 2,000 - two thousand~~(s)~~, 1,000,000 one million – 2,000,000 two million~~(s)~~, 1,000,000,000 one billion – 2,000,000,000 two billion~~(s)~~.

R5: ~~Trillions, billions, millions, thousands, hundreds~~ have no plural form when used as specific numerals.

However, in English there are also plural forms in use, fact that only further deepens the confusion. Romanian speakers use them as source language transfer translation variants identical to those in their native language, but such plural forms are only used in English as approximations in phrasing such as: e.g. *Millions (of people) died in that war*.

The plural is correct in contexts where it stands as an indicator of the approximate amount, while in exact numerals the plural is incorrect in English: e.g. *Two million~~(s)~~ people died in that war*.

Moreover, numerals like 11,347 – should not to be mistaken for the decimal numeral (transfer translation as ~~eleven point three hundreds forty seven~~). The number 11,347 is the corresponding number for the Romanian 11.347 – unsprezece mii trei sute patruzeci și șapte – eleven thousand~~(s)~~ three hundred~~(s)~~ (*and*) forty-seven.

Therefore, the following predictable errors were confirmed when evaluating the interlanguage transfer pattern in a numeral like 587,587,587,587 – five hundred~~(s)~~ *and* eighty-seven billion~~(s)~~ five hundred~~(s)~~ *and* eighty-seven million~~(s)~~ five hundred~~(s)~~ and eighty-seven thousand~~(s)~~ five hundred~~(s)~~ *and* eighty-seven.

### 3.2. Ordinal Numeral
R6: The+1st/2nd/3rd/4th –nth. (Definite article +Cardinal Numeral -suffix)

1$^{st}$ – prim(u)l/a/ the fir<u>st</u>, 2$^{nd}$ – a(l) do(ilea)ua/ the seco<u>nd,</u> 3$^{rd}$ –a(l) trei(le)a/ the thi<u>rd,</u>4$^{th}$ – a(l) patr(ule)a/ the four<u>th,</u> 5$^{th}$ – a(l) cince(le)a/ the fif<u>th</u>, 6$^{th}$ – a(l) șase(le)a/ the six<u>th,</u> 7$^{th}$ – a(l) șapte(le)a/ the seven<u>th,</u> 8$^{th}$ – a(l) opt(ule)a/ the eigh<u>th</u>t<u>h,</u>9$^{th}$ – a(l) nou(ăle)a/ the nin<u>e</u>t<u>h,</u>10$^{th}$ – a(l) zece(le)a/ the ten<u>th,</u> 11$^{th}$ – a(l) unsprezece(le)athe eleven<u>th,</u>12$^{th}$ – a(l) doisprezece(le)a/ the twel<u>fth,</u> 13$^{th}$ – a(l) treisprezece(le)a/ the thir**teen**<u>th,</u>14$^{th}$ – a(l) paisprezece(le)a/ the four**teen<u>th,</u>**15$^{th}$ – a(l) cincisprezece(le)a/ the fif**teen**<u>th,</u> 20$^{th}$ – a(l) douăzeci(le)a /the twen**tie**<u>th.</u>

R7: When tens are higher than 1 (Tens>1) spelling errors occur frequently due to preserving the y, when adding the ordinal suffix th. Thus, the correct spelling of such numbers is ending in **tie**th, e.g. the twen*ty*+th = the twent~~y~~ieth. Just like in Romanian, only the last word in a complex numeral is used as and ordinal, by addition of **st/nd/rd** or **th**, so there are no errors in this respect.

21$^{st}$ – the twenty-first, 22$^{nd}$ – the twenty-second, 23$^{rd}$ -the twenty- third, 100$^{th}$ – the one hundred<u>th,</u>101$^{st}$ – the one hundred and fir<u>st</u>, 110$^{th}$ – one hundred and ten<u>th</u>, 111$^{th}$ – one hundred and eleven<u>th,</u> 148$^{th}$ – the one hundred and forty-eigh<u>th,</u> 352 – the three hundred and fifty-seco<u>nd</u>, 831$^{st}$ – the eight hundred and thirty-fir<u>st,</u>

1.000$^{th}$ al o mielea/ the one thousand<u>th</u> (1,000$^{th}$), 1.001$^{st}$ – the one thousand **and** first (1,001), 11.347 – the eleven thousand three hundred and forty-seven<u>th,</u> 1.000.000 al un milionulea /the one million<u>th</u> (1,000,000th), 587,587,587,587$^{th}$ – the five hundred and eighty-seven billion five hundred and eighty-seven million five hundred and eighty-seven thousand five hundred and eighty-seven**th**.

### 3.3.Multiplicative Numeral
X1- o data/singular/ once/ one *time*/ single/one<u>fold</u>, X2 de două ori/dublu/twice/ two *times*/ double/two<u>fold</u>, X3 de trei ori/triplu/ thrice/ three times/ triple/ three<u>fold</u>, X4 de patru ori/ cvadruplu/ four *times*/quadruple/fourfold, X5 de cinci ori/ cvintuplu/ five *times*/quintuple/ fivefold, X6 de șase ori /sextupleu/ six *times*/ sextuple/ sixfold, X7 de șapte ori/ septuplu/ seven *times*, septuple, sevenfold, X8 de opt ori/ octuplu/ eight *times*, octuple, eightfold, X9 de nouă ori/ nine *times*, nonuple, nine<u>fold</u>, X10 de zece ori/ înzecit/ *times*, ten<u>fold</u>, X17 de șaptezsprezece ori / seventeen *times*, seventeen<u>fold</u>, X20 de twenty *times*, twenty<u>fold</u>, x100 – a hundred *times*, a hundred<u>fold</u>

R9: [Cardinal Numeral + *times*/-**le** -<u>fold</u>]

### 3.4.Decimal Numeral
0,5 – zero virgulă cinci, but 0.5 – (zero/o/nought) ~~comma~~ **point** five

Most Romanian to English translations contain one variant of the 0 numeral (which is optional in English) and the word *comma* (which is the word-for-word translation for the punctuation mark used in Romania, but it does not apply in this case). I English the numeral for 0 (is mostly omitted before the decimal *point,* which is pronounced as such.

15.1|5 – fifteen **point** ~~fifteen~~ one | five

Most predictable language transfer errors imply translating both the numerals before and those after the decimal point as one single number, as it is in Romanian, while in English the numerals after the decimal point are to be read as separate numbers.

R10 = [Cardinal Numeral+*point*+Cardinal Numeral | Cardinal Numeral]

### 3.5. Fractional Numeral

½= o jumătate/ one half, 1/3=o tremie/ one third, 2/3 = doua treimi = two thir~~d~~s, 1/5= o cincime/ one fif~~th~~, 2/5= două cincimi/ two ~~fifs~~ fif~~th~~**s**

R11 = [Cardinal Numeral/[Ordinal Numeral] and if  [Cardinal numeral>1/Ordinal Numeral+**s**]

2/15= două cincisprezecimi/ two ~~fifteens~~ fif*teen*~~th~~**s**, 11/100= unsprezece sutimi/ eleven ~~hundreds~~ hundred~~th~~**s,** 13/1000=treisprezece miimi/ thirteen ~~thousands~~ thousand~~th~~**s** 3/1.000.000=trei milionimi/ 3 ~~millions~~ million~~th~~**s**

Since in English, the fractional numerals contain ordinal numerals, that end most often in 2 or even three consonants, the addition of the *th-* suffix for the ordinal numeral and of the *s*-plural results in fractional numerals that are quite difficult to pronounce and spell. This is the underlying cause for turning the fractional numerals into the most misspelled or mispronounced numerals, when translated from Romanian, where there is no ordinal numeral at all, but only plurals added to cardinals.

## 4. PARTICULAR USE IN SPECIFIC CONTEXTS

### 4.1.Cardinal Numeral versus Ordinal Numeral

There a several cases where the type of numeral used in Romanian is different from the one used in English, in certain contexts. There are mandatory shifts to another type of pronoun, that are predictably omitted by Romanian native speakers.

Etajul *1* (Cardinal Numeral) = *First* floor ~~one~~ (Ordinal Numeral)

Capitolul *al doilea* (Ordinal Numeral) = ~~second~~ Chapter *two* (Cardinal Numeral)

Lectia a *treilea* (Ordinal Numeral) = ~~third~~ Lesson *three* (Cardinal Numeral)

Actul 1(Cardinal Numeral)= *First* act ~~one~~(Ordinal Numeral) / Actul 2 (Cardinal Numeral)

= *Second* act ~~two~~ (Ordinal Numeral),  Actul 3 (Cardinal Numeral)= *third* act ~~three~~ (Ordinal Numeral)

Secolul 15 (Cardinal Numeral)= 15th century ~~fifteen~~ (Ordinal Numeral)

### 4.2.Comma versus Point

Due to the fact that in Romanian the punctuation used in numbers to separate groups of hundreds-tens-units in numbers higher than one thousand is a point, while in English the comma is used for that, the predictable error is mistaking the interpretation of the number itself, thus being exposed to serious misunderstandings due to semantic errors.

1.001 = o mie, ~~one point o o one~~ one thousand,  3.587 (<4000) = trei mii cinci sute  optzeci şi şapte is ~~three point five eight seven~~  three thousand five hundred ând eighty- seven. The Romanian use of point to separate thousands from hundreds, needs to be replaced by the English

use of a comma to separate thousands from hundreds and spelled 3,587 for preserving the meaning of the number. Otherwise the numeral is interpreted as thew decimal 3.587, which in English is (<4).

Vice versa, 3,587 (<4) is the decimal numeral using a decimal comma in Romanian, ~~= three thousand five hundred and eighty seven~~ three point five eight seven. The Romanian number spelled with a decimal comma, needs to be correctly spelled using a decimal point in English, otherwise it might be interpreted differently by English speakers, namely as a cardinal numeral higher than one thousand, three thousand five hundred  3.587 (<4000) . Thus numerals like 3.587.682,07 are to be spelled as 3,587,682.07 in English context.

### 4.3.Word order in indicating calendar dates

Romanian dates are always used in day-month-year order, while English numeric coding might be day-month-year or month-day-year. Thus, dates where the day is in the range of 1 to 12 there is typical misinterpretation risk, due to mistaking the day for the month. The date of 11/06/1977 is the 11th of June, 1977, whereas it may be also interpreted as the 6th of November, 1977 by English speakers. Several variants of dates are in use in contemporary English, such as the long form, the 11th of June, 1977, or the shorter one June 11th, 1977, or the numeric variants thereof 11/06/1977 ore 6/11/1977.

**CONCLUSIONS**

The process of anticipating the occurrence of specific interlingual translation errors for a certain type of phrase or morphological group, due to language transfer in word-for-word translations, proved to be a meaningful procedure, its results being useful not only for language teaching and language acquisition, but also for translation studies. Performing a contrastive analysis provides the necessary contextualization for translation error anticipation, also serving as a highly efficient language teaching/ acquisition and translation instrument.

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