INTER-FAMILY TRANSLATION MODELS
(Identifying Economic Terminology, Using Bridge Language in Translation)
Part II

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While teaching terminology there exists a difficulty in creating a translation lexicon from scratch, because it requires time-consuming work by experts trained in both languages. Even partial dictionaries for lower-density languages would essentially decrease the translators' work solicited to erect machine translation systems.

The course of Terminology (one of compartments deals with 18 categories of goods included in the Harmonised System of export and import with Ukraine and 66 subcategories starting with edible meat offal, tanning extracts up to immersion heaters and railway or tramway rolling stock ,etc.) aimed at mastering economic terms for AESM students, compare the lexicons of arbitrary languages using models of cognate pairs (terms with common roots), where words from two close languages(i.e. from the same intra-family languages) share both meaning and a similar surface form, arising when both words are derived from an ancestral root form (e.g. *"nepot"* in Romanian (Ro.), *"nephew"* in English (Engl.) or **Ro**. *"sora"*, **Ru**. *"сестра"*, **Engl**. *"sister"* [Buck, 1949], as well as **Ro**. *"părinţi"*,

Engl."*parents*",etc.). Among terms of export and import there are a lot of *cognate pairs* 'categorized in Section V of the "National Bank of Moldova Statistical Book, Chisinau, 2012" – "*Mineral Products*". External trade with Ukraine, p. 135-137. Here are some examples of Romanian - English cognate pairs (according to NBC selections on imports by country of shipmen , shuttle trade is not included and the bridge language is Russian). **Ro**. *Uleiuri din petrol sau obţinute din minerale bituminoase*. Engl. *Petroleum oils and oils obtained from bituminous minerals* (**Ru**. *Нефть и другие* газообразные *углеводороды)*. In the first two sentences the cognate pairs match more than 95% of accuracy, although the average match of inter-family test pairs is considered 30-68% of accuracy. In the second comparison of the next two sentences the *cognate pairs' accuracy power match* is also more than 95%. A great number of cognate pairs may get 100% of accuracy, although the Source Language (SL) and the Target Language (TL) belong to two different families of languages, the former is a Romance language and the latter – a Germanic one, i.e. these cognate pairs constitute the *arbitrary distant language pairs* generated by a combination of *inter-family translation models* used for **cross-family dictionaries.** Another harmonized category of terms included in Harmonized System of Goods (HS) that covers 18 categories, namely, in Section VI – "**Products of chemical industries**" shows that out of seven subcategories, six of them share the same accuracy. Only a single item doesn't match the desired accuracy because of cross-family roots: E.g. 1.**Ro**. Medicamente. **Eng**. Medicaments*,* **Ru**. Лекарства, 2.**Ro**. Îngrăşăminte (pentru fertilizare). **Eng.** Fertilizers, **Ru**. Удобрения. The lack of direct cognate pairs in the 7th example, namely, **Ro**. "*antigel*" and **Eng**. "anti-freezing" represents a cross-family difficulty in translation (lexicon) for the students who don't know other Indo-European languages (but Romanian and English). Obviously, some common roots as "genial" can mislead the translator. Ex. **Ro**. "genial" is translated into **Eng**. as "blînd" (in "*genial weather*"), "drăguţ" (in "*a genial kid*"), "jucăuş" (in "*a genial dog*"), because historically related, they are distant enough to be challenging to the model (e.g. **Eng**. "*trivial button*" and **Ro**. "*floare de butonieră*"). The way how closely two languages are related, they may share more or fewer cognate pairs. Analyzing another section of articles designated for the external trade with Ukraine by the main "Harmonized System" (HS) categories of goods one can identify both a number of cognate pairs as well as distance pairs. Ex.1. **Ro**. Carne de bovine **Eng.** Meat of bovine animals, **Ru**. Говядина 2. **Ro**. Carne de ovine **Eng**. Meat of sheep. **Ru.** Баранина; 3. **Ro**. Lapte şi produse lactate **Eng**. Milk and dairy products **Ru**. Молочные продукты. The translation demonstrates that languages are often close enough with their roots, i.e. beloning to the same language family (both Romance and Germanic languages are of Indo-European Family of Languages). So, the ‚*cognate pairs'* of the terms of 2 languages are common or have common roots, meaning that a significant portion of the translation lexicon can be induced

with high accuracy. (In Section 1 there is only one cognate pair – **Ro**. "bovine" and **Eng**l. "bovine"). There are several cognate pairs in the HS category *"Vegetable Products"*.Ex. 1. **Ro**. Mere, <u>pere</u> şi gutui, proaspete*;* **Eng**. Apples, <u>pears</u> and quince, fresh **Ru**. Яблоки, груши и свежая айва 2. **Ro**. Legume în stare proaspătă sau refri-gerate, **Eng**. Vegetables, fresh or chilled **Ru**. Свежие или замороженные овощи; the cognate pair in the first translation lexicon (TL) or item is represented by **Ro.** Pere **Engl.** Pears. In the second – there is no one; in the third – there are two cognate pairs: **Ro**. cireşe **Eng**. cherrie*s,* and **Ro**. prune **Eng**. plumb. In the forth TL lexicon there isn't a single cognate pair. The **Ro**. term *stafide* is not lexicalized in English; there are two cognate pairs in the fourth TL lexicon: **Ro**. seminţe **Eng**. seeds and the next one is **Ro**. floarea soarelui **Eng**. sunflower.

Although English and Romanian belong to different language groups especially in the vocabulary, historically, they become closer. English was substantially enriched by French and Latin words possessing common roots in export and import terms either.

Literature

1. Simard M. Using cognates to align sentences in bilingual corpora / M. Simard, G. F. Faster, P. Isabelle. – Quebec, 1992. – 264 p.