Н.Н. Хиоарэ, И.Г. Андони

Студенты становятся все более мобильными и часто нуждаются в общении на разных языках в современном глобализированном мире. Изучение нового языка - это вложение в человеческий капитал. Экономические исследования показали, что свободное владение доминирующим языком важно для экономического успеха и повышает экономическую эффективность. Однако поддержание языкового разнообразия также имеет значение, поскольку язык также является выражением культуры народа.

Доминирующий язык позволяет людям общаться с другими людьми в том же регионе или стране, а наличие общего международного языка расширяет эту способность за пределы национальных границ. Изучение доминирующего или общего языка - хорошее вложение в человеческий капитал, но люди также ценят свой родной язык и хотят его сохранить. Между этими двумя целями есть компромисс, но их можно будет решать вместе, если больше людей станут двуязычными или многоязычными.

Ключевые слова: родственная пара, текст на исходном языке, стажер, лингвистические навыки, неоплаченные расходы

THE VALUE OF SECOND LANGUAGE SKILLS ON LABOUR MARKET (AN ANALYSIS FROM THE ECONOMIC PERSPECTIVE)

N.N. Hioară, I.G. Andoni

Students are increasingly mobile and often need to communicate across different languages in today's globalized world. Learning a new language is an investment in human capital. Economic studies have shown that fluency in a dominant language is important to economic success and increases economic efficiency. However, maintaining linguistic diversity also has value since language is also an expression of people's culture.

A dominant language enables people to communicate with others in the same region or country, and having a common international language extends that ability beyond national boundaries. Learning the dominant or common language is a good investment in human capital, but people also value their native language and want to preserve it. There is a trade-off between the two objectives, but they can be pursued together if more people become bilingual or multilingual.

When the experts evaluate the costs of investment in second languages as elements of human capital there arises a number of difficulties. Individuals getting an education usually endure some costs: those connected with expenditure on books, tuition, video films, etc., and, naturally forgone expenditures (go without something desirable). The first type of cost involves direct expenditure on school materials, though not nil, being relatively minor and can be assumed away (that meanwhile would not result in a major difference in the estimating rates of return in the nearest or in the remotest future). The second cost that concerns forgone expenditures, in the terms of the cost for second language skills tend to zero for learners under legal working age.

Keywords: source language text, target language, cognate pair, trainee (student), linguistic skills, forgone expenditures

Moreover, the latter expenditures would not be allowed to sell time, for higher earning, not spent at school. Consequently, the forgone expenditures can't be traded for a wage on the labour market, because there was no time specifically taken away, from language classes. The same is adequate for those who paid for evening classes because the continuing education was arranged, done privately, not a state imposed policy.

There is no data on the component of education spending provided by the state and therefore the current education accounting practices fall short in terms of analytical data (the aggregate spending figures one may derive from the Switzerland's language teaching cost. Approximately 10% of total education spending is devoted to second-language, teaching. According to our estimation a 'short stream' education covers 4,5% and the 'long-stream' education -7%). The cost of language education should not be different in various linguistic environments. Just on contrary the educational policy should embrace limitless diversity, although advantages and drawbacks (benefits or costs) are not confined to monetary return.

The linguistic policy should be considered an ill-advised economic standpoint, since it underestimates the benefits and overestimates the cost of diversity. Both the benefits and the costs vary when the picture covers different linguistic environment.

Now turning from expenditures on linguistic skills, we try to direct to the aggregate data dealing with "earnings" or the so-called" private rates of return" to second language (SL) skills. The survey data including information about: 1) earnings, second level skills, education and age are not collected by the national census (the Canada census being notable an exception) conform the supposition that

they are expensive and technically demanding. The data includes four skills (understanding, speaking, reading and writing) and for each skill (separately) four skill levels (fluent, good, basic, none), non-school of L2 acquisitions, L2 use on the workplace and standard social characteristics covering labour income. The data of the entire survey calculate the average earnings of groups in terms of their competence, choices (active, receptive, oral or written competence). The result reveals that there is a direct correspondence (a strong correlation) between earnings and competence.

This survey was provided by the future employees using not reported income but the full-relevant equivalent of reported income.

Better paying jobs, higher education, better educated people (some data include whether the applicants have had more Latin at school than others that don't necessarily conclude that they are rewarded for some skills to translate Renaissance authors), specialized courses in certain fields of economics are priorities to be taken on in order to obtain high earnings.

We tried to go on with these abilities dealing with language skill education and started to work with economic terminology for export and import (to and from Russia).

The scientists' efforts are directed to working out certain methods (models) that will accelerate the assimilation of the most difficult lexical (or grammatical) element, by using the principle of conscious learning aiming at training specialists (experts) on the regional and global levels. The proposed approach (model) represents a method for inducing translation lexicons (terminology) based on transduction models of cognate pairs via bridge languages (in our paper the bridge language is English). Bilingual lexicons within language families (see Germanic languages in the North: Icelandic, Norwegian, Faeroese, Swedish, Danish; in the West: English, Fission; in the South: Flemish, Afrikaans, Dutch, Yiddish, German and Gothic in the East) are induced using probabilistic string edit distance models. Translation lexicons for arbitrary distant language pairs are then generated by a combination of these intra-family translation models (as the Romance family of languages as: Romanian, Italian, Sardinian, Portuguese, French, Spanish, Catalan, Occitan, Rhaetia) and one or more cross-family (as, for example, a Germanic language and a Romance language dictionaries). The best translation, especially of terms, up to 95% exact match accuracy may be (is) achieved on the target vocabulary. The data of 30-68% was achieved on inter-family test pairs. Thus substantial portions of translation lexicons (especially terms) can be generated (reached) accurately for languages where no bilingual dictionary or parallel corpora may exist.

Although a translation lexicon is considered to be a mapping from words in the source language (SL) to words in the target language (TL), still for each word in the SL many (good) dictionaries provide one or more words in the TL, out of which not all the variants might be appropriate translations in some contexts.

Many of the world's major language lexicons are available even on-line, but

they might be often quite limited because of possible intellectual property constraints. To less-spread (or lower-density) languages the terms or the so-called translation lexicons usually exist as a hard-copy (on paper) dictionary, if at all.

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 is aimed at mastering terms for AESM students, comparing the lexicons of arbitrary languages using models of <u>cognate pairs</u>, 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.), Ru. "племянник", "nephew" in English (Eng.) or Ro. "sora", Ru. "sestra", Eng. "sister" (Buck, 1949), as well as Ro. "părinți", Ru. "родители", Eng. "parents", etc.

Among terms there are a lot of cognate pairs* categorized in Section V – "Mineral Products" from Annex 23. External trade with Russia:

Romanian-English cognate pairs:

1) Ro. Gaz de sondă (petrol) și alte hidrocarburi gazoase. Ru. нефтяные газы и прочие газообразные углеводороды

Engl. Petroleum gases and other gaseous hydrocarbons.

2) Ro. Uleiuri din petrol sau obţinute din minerale bituminoase. Ru. нефтяные масла и масла, полученные из битуминозных полезных ископаемых.

Engl. Petroleum oils and oils obtained from bituminous minerals.

3) Ro. Ghips; anhidrit

Engl. Gypsum; anhydrite.

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 two sentences the cognate pairs' accuracy power match is also more than 95%.

The discrepancy is constituted by the conjunctions "şi" and "and as well as" the prepositions "din", "from", respectively.

The third cognate pair has got 100% of accuracy, although the SL and the TL are of two different families of languages, the former is a Romance language and the latter – a Germanic one, i.e. this cognate pair constitutes an arbitrary distant language pair generated by a combination of inter-family translation models used for crossfamily dictionary.

Another harmonized category of terms included in Section V "Products of chemical industries show that out of seven items (articles), six of them share the same accuracy as in the previous Section V. Only a single (N°7) item doesn't match the same accuracy because of cross-family cognate pairs: E.g.

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- 1. Ro. Medicamente Ru. Engl. Medicaments
- 2. Ro. Îngrășăminte (pentru fertilizare) Ru. Удобрения Engl. Fertilizers
- 3. Ro. Săpunuri Ru. мыло Engl. Soap
- 4. Ro. Insecticide, rodenticide, fungicide, erbicide Ru. Инсектициды, родентициды,

фунгициды, гербициды Engl. Insecticides, rodenticides, fungicides, herbicides 5. Ro. Produse cosmetice şi de parfumerie Engl. Cosmetic and perfumery products

6. Ro. Carbonați; percarbonați; carbonat de amoniu tehnic

Engl. Carbonates; peroxocarbonates; commercial amonium carbonate

7. Ro. Preparate <u>antigel</u> și lichide pentru <u>degivrare</u>

Engl. <u>Anti-freezing</u> preparations and prepared <u>de-icing</u> fluids

The lack of direct cognate pairs in the 7th example, namely, Ro. "antigel" and Engl. "anti-freezing" or Ro. "degivrare" and Engl. "de-icing" represents a cross-family difficulty in translation (lexicon) for the students who don't know other Indo-European languages.

Obviously, not all translations are cognates (e.g. Ro. "genial" is translated into Engl. as "blind" (in "genial weather"), "drăguţ" (in "a genial kid"), "jucăuş" (in "a genial dog"), "prielnic" (in "a genial atmosphere", etc.), because historically related, they are distant enough to be challenging to the model (e.g. Engl. "trivial button" and Ro. "floare de butonieră").

Depending on how closely two languages are related, they may share more or fewer cognate pairs.

Analysing another section of the article designated for the external trade with Russia by the main "Harmoised System" (HS) categories of goods (Section1) one can identify a number of cognate pairs as well as cognate distance.

- E.g. 1. Ro. *Carne de bovine*/ Ru. Мясо крупного рогатого скота / Engl. Meat of bovine animals
- 2. Ro. *Carne de ovine*/ Ru. мясо баранины / Engl. Meat of sheep 3. Ro. *Lapte şi produse lactate*/ Ru. Молочные продукты / Engl. Milk and dairy produce

The translation demonstrates that languages are often close enough to others with their language family (both Romance and Germanic languages are of Indo-European Family of Languages) so that cognate pairs between the two are common, and significant portions of the translation lexicon can be induced with high accuracy. In Section 1 only one cognate pair was depicted – Ro. "bovine" and Engl. "bovine".

There are several cognate pairs in Section 2 "Vegetable Products". E.g. 1. Ro. *Mere*, *pere și gutui, proaspete* Ru. Свежие яблоки, груши и айва. Engl. Apples, <u>pears</u> and quince, fresh

- 2. Ro. Legume în stare proaspătă sau refrigerate Ru. Овощи свежие или охлаж-денные / Engl. Vegetables, fresh or chilled
- 3. Ro. *Caise*, *cireşe*, *piersici*, *prune*, *proaspete* Ru. Свежие абрикосы, сливы, вишня, персики / Engl. Apricots, <u>cherries</u>, peaches, <u>plumb</u>, fresh
- 4. Ro. Struguri, proaspeţi sau uscaţi (stafide) Ru. Виноград свежий или сушенный Engl. Grapes, fresh or dried
- 5. Ro. <u>Semințe</u> de <u>floarea-soarelui</u> Ru. Семена подсолнечника / Engl. Sunflower seeds
- 6. Ro. Făină de grâu sau maslin Ru. Пшеничная и маслинная (оливковая) мука / Engl. Wheat and maslin (olive) flour

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. *cireșe* / Engl. **cherries**, and Ro. *prune* / Engl. **plumb**. In the forth TL lexicon there isn't a single cognate pair. The Ro. word "**stafide**" is not lexicalized; there are two cognate pairs, in the fourth TL lexicon: Ro. *semințe* /Engl. **seeds** and the next one is Ro. *floarea soarelui* / Engl. **sunflower**. The external trade terms included in section 2 enumerate five cognate pairs.

Section III entitled "Animal or vegetable fats and oils" represented by two translation lexicons as cognate pairs.

Ex. Ro. Margarină, amestecuri alimentare de grăsimi Ru. Маргарин; пищевые смеси или готовые продукты из животных или растительных жиров

Engl. Margarine; edible mixtures or preparations of animal or vegetable fats Engl. Vegetable oils; Ru. Растительные масла; Ro. *Uleiuri vegetale*

Out of the first two items of translations four cognate pairs were registered: Ro.

margarină / Ru. маргарин/ Engl. margarine_, the second pair is Ro. amestecuri / Ru. смеси/ Engl. mixtures, the next one, the third cognate pair is Ro. vegetale/ Ru. овощ/ Engl. vegetable, and the fourth cognate pair is Ro. ulei(uri) / Ru. масла/ Engl. oils. Here area a number of cognate pairs in in Romanian and English in section III: băuturi/ напитки/ beverages; tutun /табак/ tobacco; vin/вино/wine; preparate / препараты/ preparations; fructe / фрукты/ fruit, alte / other; părți / parts; plante / plants; alcool etilic nedenaturat /неденатурированный этиловый спирт/ undenatured ethyl alcohol; lichioruri / ликеры/ liqueurs; băuturi spirtoase / спиртные напитки/ spirituous beverages; sosuri /соусы/ sauces; condimente / приправы/ condiments; muștar /горчица/ mustard; cereale / хлопья/ cereals; făinuri / мука/ flour; produse / products; patiserie / кондитер/ pastry (cook); bere /

пиво/ bear; *malţ* / солод/ malt; *ciocolată* / шоколад/ chocolate; *conţine cacao* / containing cocoa; *ţigări de foi* / *trabucuri*, *ţigarete* / **cigars, cigarillos, cigarettes**; *conserve* / консервы/ **preserve**s; *zahăr* / caxap/ **sugar**. In section VIII "Raw hides and skins, leather, fur skins" there wasn't identified cognates pair. These words were

historically distant enough and can't be challenging to model. These words don't share cognate pairs. Articles from section "Wood" IX such as: wood continuously shaped (Ro. lemn profilat), (Ru. дерево нерерывной формы) particle board and similar board (Ro. plăci aglomerate și panouri similare), (Ru. ДСП и аналогические плиты) fibreboard of wood or other ligneous materials (Ro. panouri fibrolemnoase sau din alte materiale lemnoase), (Ru. древесноволокнистая плита из дерева или других древесных материалов), plywood, veneered panels and similar laminated wood (Ro. placaj, lemn furniruit și lemn stratificat similar), (Ru. фанера, пони-рованные панели и аналогичный клееный брус) share only one cognate pair (similar / similar). Historically related they are distant enough and share the fewest number of cognate pairs.

The same picture is repeated in section X: "Pulp of wood; paper and paperboard". Among the translation lexicons as English uncoated paper and paperboard, in rolls or sheets (Ro. hârtii și cartoane necretate în rulouri sau coli), (Ru. немелованная бумага и картон в рулонах или листах) printed books, newspapers, pictures and other products of the printing industry (Ro. cărți, ziare, ilustrate imprimate și alte produse ale industriei poligrafice) (Ru. печатные фотографии другая продукция полиграфической газеты, И промышленности) there are only two cognate pairs Ro. rulouri / Ru. рулоны/ Engl. rolls, imprimat / printed (without those mentioned earlier). In the section "Textiles and textile articles" as well as in section "Footwear, headwear, umbrellas the translated lexicon (TL) demonstrates that the cognate distance model dominates. It is clearly shown that the terms are of distant origin. Compare: Carpets and other floor coverings (Ro. covoare și alte acoperitoare de podea din materiale textile), (Ru.ковры и другие напольные покрытия); knitted or crocheted fabrics (Ro. materiale textile tricotate sau crosetate), (Ru.трикотажные или вязанные ткани); articles of apparel and clothing accessories (Ro. îmbrăcăminte și accesorii de îmbrăcăminte), (Ru. предметы и аксессуары для одежды); man-made, staple fibres (Ro. fibre sintetice sau artificiale discontinue), (Ru. искусственные штапельные волокна); woven fabrics of synthetic filament yarn (Ro. tesături din fire de filamente sintetice), (Ru. ткани из синтетической нити); bedlinen, table linen, toilet linen, and kitchen linen (Ro. lenjerie de pat, albituri de menaj sau de (Ru.постельное белье, столовое белье, туалетное, bucătărie: полотенца); (from secția XII) footwear, headwear, umbrellas (Ro. încălțăminte, pălării, umbrele), (Ru.обувь, головные уборы, зонты); footwear with outer soles of rubber (Ro. încălțăminte cu fețe (talpă) din cauciuc), (Ru. обувь на резиновой подошве). There were identified 7 cognate pairs: Ro. umbrele / Engl. umbrellas, textile / textile; crosetat / crocheted; accessorie / accessories; fibre / fibres; sintetic / synthetic; toaletă / toilet. The rest pertains to cognate distance. The products for export trade from section XIII contain articles of stone, plaster, cement or similar materials; ceramic products, glass and glassware, enumerate four items of translation lexicons: articles of asphalt or of similar material (Ro. articole din asfalt și din

materiale similare), (Ru. изделия из асфальта или аналогичного материала); ceramic tableware, kitchenware, other household articles and toilet articles (Ru.керамическая посуда, кухонные принадлежности, прочие предметы домашнего обихода и туалетные принадлежности); (Ro. veselă și alte articole de menaj, de igienă din ceramică), articles of asbestos-cement, of cellulose fibrecement (Ru. изделия из асбестоцемента, из целлюлозно-волокнистого цемента); (Ro. articole din azbociment, celulozociment), carboys, bottles, jars, phials (Ro. damigene, sticle (garafe), borcane, fiole); (Ru.бутыльки, банки, склянки).

The following five cognate pairs are identified: Ro. asfalt / Ru.acφαльm/ Engl. asphalt; ceramică / κεραμικα/ ceramic; azbociment / asbestos – cement; celulozociment / cellulose (fibre) ciment; fiole, ampule / phials. The above mentioned articles predominately use models of cognate distance, as they don't share neither meaning nor similar surface form. Cognate distance models usually arise when both words are derived from different root forms.

The translation lexicon embracing terms as "Pearls precious or semi-precious stones, precious metals, metal clads (metale placate) with precious metal, imitation, jewellary, coins included in section XIV concerning external trade with Russia enumerate such items as: articles of jewellery and parts thereof (Ro. articole de bijuterie sau de giuvaiergerie și părți ale acestora) enumerate more cognate pairs: Ro. perle / Ru. жемчуг/ Engl. pearls; metal / metal; pretios, semi-pretios / precious, semi-precious; imitație / imitation, giuvaiergerie/ jewellery. The translation lexicons used for rendering articles from base metal, section XV include: articles of cast iron, iron and steel (Ru. изделия из чугуна и стали); (Ro. articole din fontă, fier si otel), stoppers, caps and lids, seals and other packing accessories of base metal (Ru.пробки, колпачки и крышки, пломбы и другие упаковачные аксессуары недрагоценных металлов); (Ro. dopuri, capace, sigilii și alte accesorii pentru ambalaje din metale comune). The following cognate pairs can be identified: capace/caps, accesorii / accessories. The next sector (XVI) includes a great number of cognate pairs. It reflects the electrical machinery and equiment, reproducers, airconditioning machines, air and vacuum pumps, gas compressors, refrigerators, freezers (congelatoare), washing machines, taps, valves, pipes, tanks (articole de robinetorie), graders (nivelatoare) as well as transport equipment (section XVII). The last sector (XVIII) includes technical novelties as optical, medical, musical instruments and parts and accessories threof, where more than 95% are translated using the cognate pairs model. In order to translate arbitrary distant languages, the educators (the translators) use a two-step model via bridge language.

CONCLUSIONS

- 1. Existing available dictionaries, (an on-line or a hard-copy one) representing a source language and a language from another language family (Germanic or Slavic) should include intra-family cognate models to yeild translation lexicons from the source language to the bridge languages' entire family.
 - 2. The students (the future translators of economic texts) may acquire

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additional performance of bridge models that can substantially improve language accuracy.

- 3. Mastering three (at least) or more languages any trainee (student) can identify and use cognate pairs models and cognate distance models in order to overcome contextual non-equivalents.
- 4. Various learning techniques, models covering co-training at seminars, could employ these additional measures to create better estimates.

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ПАРЕМИИ С КОМПОНЕНТОМ *УТКА* В РУССКОЙ ЯЗЫКОВОЙ КАРТИНЕ МИРА (НА ФОНЕ КИТАЙСКОГО ЯЗЫКА): ЛИНГВОКУЛЬТУРОЛОГИЧЕСКИЙ АСПЕКТ

Хо Сяоцзюн

В данной статье рассматриваются русские паремии с компонентом утка на фоне китайского языка. Анализируются культурная коннотация и символьное значение слова «утка». Проведенное лингвокультурологическое исследование позволяет выявить сходства и различия в системе ценностей двух культур на материале паремий с компонентом – орнитонимом.

Ключевые слова: паремия, лингвокультурология, языковая картина мира, символ, утка