ONLINE ARABIC-ENGLISH-ARABIC SPECIALIZED DICTIONARIES

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ABSTRACT

This study analyzed a sample of online Arabic-English-Arabic specialized dictionaries of the Arabization Center in Morocco, the Arabic Language Academy in Cairo, the Saudi Terminology Databank (BASM), School Arabia glossaries, Dictionary Bay, and Babylon, to identify their entry design, entry components, breadth of coverage, whether they include the most recent terms, accuracy of translational equivalents and inclusiveness of meanings given. The study revealed several shortcomings of those online specialized dictionaries such as limited coverage, inaccuracy and inclusiveness of some meanings and slow up-dating. Some recommendations are given to improve the practicality and usefulness of online Arabic-English-Arabic specialized dictionaries to translation students.

Keywords: Arabic-English-Arabic dictionaries, Online dictionaries, Internet dictionaries, specialized dictionaries.

1. INTRODUCTION

Internet dictionaries are becoming increasingly popular among learners and teachers. More than 70% of students interviewed at the Hong Kong Polytechnic University use edictionaries more often than traditional bulky paper products (Lan, 2005). Faculty members at the English Department, King Saud University use printed dictionaries the most, followed by online dictionaries, electronic device dictionaries, and dictionaries on CDs. Monolingual dictionaries were found to be more accessed than multilingual dictionaries, mini-dictionaries were more accessed than encyclopedic dictionaries, and multi-field dictionaries were more accessed than single-field dictionaries. Meaning and textual information were the most obtained information in online dictionaries (Abouserie, 2010).

Compared to hard-copy dictionaries, Internet dictionaries are characterized by ease of access and quick searching. They are regularly and easily updated. They are useful in areas where there is rapid terminological growth, because new words can be added to them faster than hard-copy dictionaries (Storrer & Freese, 1997). EFL Learners, teachers and translators can effortlessly access a wide variety of electronic dictionaries well suited to a multiplicity of lookup operations (Rizo-Rodriguez, 2010).

Despite the uncountable number of Internet dictionaries in all languages and subjectareas, a review of the literature has shown few studies that focused on Internet dictionaries. For example, Rizo-Rodriguez (2010) gave a concise description of the treatment of syntax and semantics in online English monolingual dictionaries. de Schryver (2003) reviewed, listed and compared 182 dictionaries for 117 African languages available on the Internet.

Like other languages, a multitude of specialized Arabic-English-Arabic dictionaries compiled by Arabic organizations, academies, Arabization centers, and individuals are available online. Such dictionaries are of ultimate importance for students majoring in Arabic-English-Arabic translation at the College of Languages and Translation (COLT), King Saud University, Saudi Arabia who take 6 interpreting courses and 18 translation courses in 18 subject areas: Engineering, medicine, physical sciences, media, Islamic studies, business, military, humanities, sociology, commerce, education, politics, agriculture, literature, petroleum, computer, security, law, in addition to a translation project. The students always face challenges with new English and Arabic terms that are being coined and rapidly spread through the media and Internet as a result of technological, scientific, social, economic and political developments. Results of an exploratory study with 187 students majoring in translation at COLT showed that students have difficulty understanding words that they hear on satellite TV such as *depleted uranium*, *privatization*, *federal and confederal governments*, money laundering, Polisario, technocrats, genocide, mass graves and ethnic cleansing. They feel frustrated when they cannot find a new term, when a new meaning is not included or when an inaccurate equivalent is given by the dictionary. They ask their instructors to recommend a good online dictionary where they can find accurate equivalents to emerging technical terms. To help both translation students and instructors evaluate currently available specialized online dictionaries and provide information on the usefulness of such dictionaries for translation, the present study aims to examine a sample of online Arabic-English-Arabic specialized dictionaries to identify their entry design, entry components, breadth of coverage, how up-to-date they are, i.e., whether they include the most recent terms, accuracy of translational equivalents and inclusiveness of meanings given.

2. DICTIONARIES: DEFINITIONS AND TYPES

According to the Webster's Online Dictionary, a dictionary is: (i) A reference source in print or electronic form containing words usually alphabetically arranged along with information about their forms, pronunciations, functions, etymologies, meanings, and syntactical and idiomatic uses; (ii) a reference book listing alphabetically terms or names important to a particular subject or activity along with discussion of their meanings and applications; (iii) a reference book listing alphabetically the words of one language and showing their meanings or translations in another language. The first definition applies to general dictionaries, the second applies to specialized dictionaries and the third applies to bilingual dictionaries.

Bergenholtz, Duva & Tarp (1995 classified specialized dictionaries into: (i) Multi-field dictionaries that broadly cover several subject fields such as business (covering economics, accounting, management and others ogether); (ii) Single-field dictionaries that narrowly cover one particular subject field such as engineering; (iii) Sub-field dictionaries that cover a single field such as educational technology, idioms or constitutional law.

As for online dictionaries, there are three types: (i) Hand-held; (ii) dictionaries on CD-ROM, and (iii) dictionaries on the Internet. Internet dictionaries are also categorized into: (i) Dictionaries available by subscription, (ii) dictionaries in the public domain because they are out of copyright or are unfinished products such as Webster's and Roget's Thesaurus, and (iii) collaborative projects in the process of construction by contributing users (Nesi, 1998).

البنية الهيكلية معاجر موحدة جديدة	من١١ الى ١٠ من مجموع ١٧ مصطلح				
العمل المعجمي و					
لمصطلحي المعاجم الموحدة	• انجليزي technical skills •	 فرنسي habiletés techniques 	 عربی مهارات نظیة 	 المجان التقتيات التربوية 	
انشطة المكتب دورية اللسان الغربي قائمة منشورات المكتب	technique •	technique •	• نظية	 النقربات التربوية 	
للاتصال بنا للاشتراك	technique •	technique •	• ئىنبە	 الفنون التشكيلية 	
			(نقنى)(الوسلال التقنية التي يستخدمها الفنان والتي تعطيه شخصيته المستظة)		
	reverse transfer of technology	transfert • inverse de technologie	 نظر عكسى للتقنية 	 الاقتصاد 	
	technique •	technique •	• ئىنىپە	الصبحة وجسم الإنسان	
	technological • transfer	transfert • technologique	، نظّ المعرفة التقتية	• الاقتصاد	
	technological • unemployment	chômage • technologique	 بطالة نظرة 	• الاقصاد	
	technology •	technologie •	• ئىنىپە	و الاقتصاد	
	core technology	technologie • mécullaire	جوهر النظبة	 التجارة والمحاسبة 	
	design standards	caractéristiques techniques	مواصفات نقنبة	 التجارة والمحاسبة 	
			(منعارف عليها)		

Webpage (1): Entry Page from the Arabization Center Dictionaries 3. DATA COLLECTION AND ANALYSIS

The present study examined the content of 6 Internet (online) specialized Arabic-English-Arabic dictionary hubs: (i) The Arabization Center in Morocco; (ii) Arabic Language Academy in Cairo; (iii) Saudi Terminology Databank (BASM); (iv) School Arabia; (v) Dictionary Bay; and (vi) Babylon.

A sample of English and Arabic terms such as *aphasia*, *globalization*, *system*, *technique*, *technical*, *confederal*, *federal*, *fighters*, تعاهدية، شركة ذات مسئولية ، تعاهدية، شركة فابضة شركة ذات مسئولية ، تقانة ، تقاني محدودة ، مشير ، مدفع رشاش ، مقاتلات ، was looked up in each. The following aspects were examined: Entry design, entry components, whether

the term is available, number of meanings given, accuracy of equivalents, contexts, domain, pronunciation, grammatical information given, derivatives and their meaning, explanatory equivalents, illustrative examples, typographical, linguistics and spelling errors and how up-to-date the content is. Results of the analysis are reported qualitatively below.

5.1 Dictionaries of the Arabization Center in Morocco¹

The Arabization Center in Morocco was established by the Arab League Educational, Scientific, and Cultural Organization (ALESCO). It hosts 35 dictionaries covering Linguistics, general and nuclear physics, math and astronomy, music, chemistry, health and human body, history and archaeology, biology, geography, business and accounting, renewable energy, vocational and technical education, humanities (philosophy, sociology, education and anthropology), law, petroleum, environment, mechanical engineering, fine arts, communication, journalism, educational technology, meteorology, tourism, seismology, hydrology, information technology, remote sensing, marine sciences, electronic war, food technology, genetics, pharmacy, civil engineering, anatomy and civilization (home economics). In addition, 9 specialized dictionaries are currently in progress: General lexicon, educational policies, semiotics, adult education, special education, curriculum and instruction, early childhood education, physical education, and educational administration.

4. RESULTS

The dictionaries are not regularly updated. Two of those dictionaries were compiled in the 1980's, 21 in the 1990's and 10 after 2000. The typical dictionary has 2828 terms, with a range between 846 and 8846 terms. The dictionaries are trilingual: Arabic-French-English. The entries are arranged in tables with 4 columns for the domain, Arabic term, English term and French term respectively. Headwords are listed in the rows. When an Arabic term is entered, equivalents are given without a context, the meaning is not explained in Arabic, English or French (See Webpage 1).

5.2 Dictionaries of the Arabic Language Academy²

The Arabic Language Academy in Cairo hosts a collection of specialized Arabic-English-French dictionaries in more than 20 subject-areas. Headwords are displayed in a bulleted alphabetical list, with equivalents given in the second row, and an explanation or definition given in the third row. Entries are color-coded: headwords are marked in blue, equivalents in red and definitions in grey (see Webpage 2). When multiple equivalents are given, the search engine does not tell in which dictionary, nor which discipline it is used. I found 18 English equivalents for "تقانية, i.e. *technology*". However in each of the 18 equivalents, تنفع was confused with *"technical"* and was mistranslated as *"technique"* not *'technology"*. I did not find other derivatives such as in sused as in alphalic, acument in phrases or compounds that show the contexts in which the term is used as in alphalic, acument and the show the contexts given are not inclusive. I did not find common expressions as *weighter* with *"technical"*. There are some errors such as *"tidewighter"* not *"technology"*. Alticate a material is a context of the term is used as an equivalent to *"informatics"*. Although, i.e. *linguistics*"; "advance" and equivalent to *"informatics"*. Although,

¹ Website: <u>http://www.arabization.org.ma/Standarddesdictionnaires.aspx</u>

² Website: <u>http://www.arabicacademy.org.eg</u>

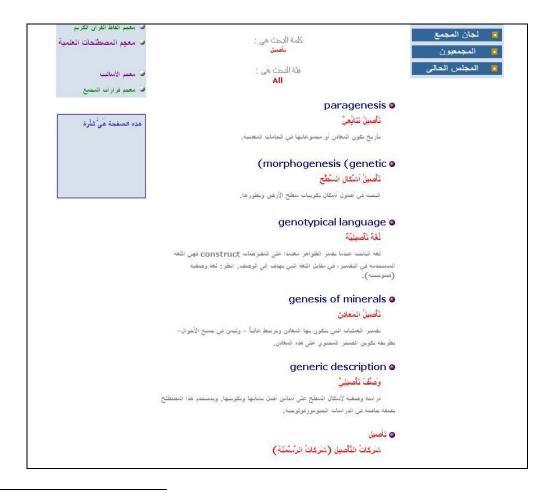
the dictionaries cover multiple disciplines, the coverage is limited. Recent derivatives of some Arabic terms are not given.

5.3 The Saudi Terminology Databank (BASM)³

It is a multilingual Arabic-English-French-German specialized terminology databank that contains 460,000 terms in 214 sub-fields created by King Abdul-Aziz City for Science and Technology in Riyadh. The BASM dictionaries can be either independently searched by selecting the domain in the searching page or can be all concurrently searched.

Terms and equivalents are listed in tables with 6 columns for the Term code, domain, Arabic term, English, French, German equivalents. Headwords are listed one per row. BASM specifies the domain and context in which each equivalent is used. However, equivalents are sometimes given in one language and missing in others and meanings are given in some domains and missing in others (see Webpage 3). The gaps might be due to ongoing additions to the database.

As for coverage and accuracy, BASM gives the equivalent to " محرك بحث, i.e. search engine" in GIS but not Internet search engines. 'System' has 181 contexts with Arabic equivalents given in medicine, nutrition, biology and zoology, but not those used in computer science and physics. Some equivalents are also inaccurate. Like the Arabization Center and Language Academy dictionaries, BASM confuses techniques,



³ <u>http://basm.kacst.edu.sa/</u>

Webpage (2): Entry Page from the Arabic Language Academy Dictionaries technical & technological. There are spelling mistakes such as منشئات الطاقة النووية instead of منشأت

			*- •		
273757	هندسة الفضاء والطيران		Propulsion system	Groupe propulsion	
277827	هندسة الفضاء والطيران		Propulsion system manufacturer	Motoriste	
130713	هندسة الفضاء والطيران		Vestibular system	Appareil vestibulaire	
7°7AV+*	هندسة الفضاء والطيران		Sensori-motor system	Systeme sensori-moteur	
17775	منشئات الطاقة النووية	وعاء إحتواء مع نظام إخماد الضغط من نوع "ب و ر"	containment vessel with pressure suppression system of BWRs	enceinte de confinement a suppression de pression des BWR	Sicherheitsbehlter mit Druckabbausystem
٤٧٢٣٠١	الأتصالات وتقنية المعلومات	DSN	System DSN		
٤٦٩٨٠	الأتصالات وتقنية المعلومات	Microsoft Disk Operating System	Microsoft Disk Operating System		
٤٧١٧١	الأتصالات وتقنية المعلومات	Windows System Resource Manager	Windows System Resource Manager		
172271	نقل القدرة وهندسة الكيبلات	إنزان إستقراري لنظام القدرة	Steady-state stability of power system		statische *Netzstabilitt
***	عام	إجراء تسليم الفاتورة بعد شحن البضاعة	Post billing system		
11705	برمجيات	إجراءات لتوليد برنامج النظام	System generation procedure	Procedure de generation de systeme	Systemgenerierungsprozedur
17.77	منشئات الطاقة النووية	إحتياطي التدويم لنظام	spinning reserve of a system		
11702	برمجيات	إحلال النظام	System overlay	Recouvrement de systeme	Berlagerungsphase des systems
11707	برمجيات	إختبار النظام	System test	Essal du systeme	Systemprufung
77177	عام	أخطاء إتساق نظام معالجة بعيد	Remote computing system consistency errors		
۲٤•١٨١	عام	أخطاء في تركيب الحمل أو في إعرابها موجودة في برنامج جهاز طرفي	Remote computing system syntactic errors		
٤٨١٢٨	الوقاية من الاشعاع	إخفاق نظام التحذير	Failure alarm system		

Webpage (3): A BASM Entry Page

5.4 Glossary from School Arabia⁴

School Arabia is a web-based knowledge establishment based in Jordan. It is a hub for a comprehensive Chemistry, Computer and Meteorology sub-field glossaries. Each glossary has an Arabic and an English alphabetical term index. When a letter is clicked, all terms beginning with that letter appear in a list. Clicking on a term, 2 entries appear per page. Each includes the source term, its equivalent, and an encyclopedic definition. Headwords and their equivalents are color-coded (see Webpages 4, 5 & 6).

⁴ <u>http://www.schoolarabia.net/kemya/general_chemistry/glossary/index.htm</u>



Webpage (4): English Term Index and Term List from School Arabia Glossaries



Webpage (5): The Arabic Term Index and Term List from School Arabia Glossary



Webpage (6): An Entry Page School Arabia Glossaries

5.5 Dictionary Bay⁵

It hosts 16 specialized dictionaries. Terminology in each dictionary is accessed and searched independently by clicking the dictionary of interest. Only equivalents used in one domain are given. Searching for 'Aphasia", the equivalent term is displayed without definitions, synonyms or compounds showing contexts and domains. Coverage is too limited. Equivalents to many terms such as 'field marshal, genocide, mass graves, التطهير, التطهير, التطهير, مناعر رشاش are jucking. Some equivalents are inaccurate. ''Fighter'' was

⁵ <u>http://www.dictionarybay.com/milit_ea_e.aspx</u>

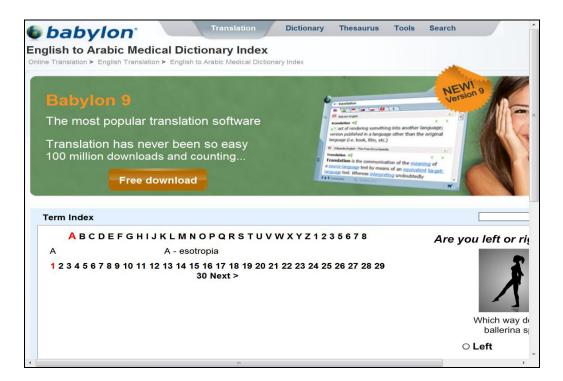
translated as "مقاتل، not "مقاتلة ومقاتلات". Other equivalents of *"fighter"* such as "مقاتل" are not listed (See Webpages 6 & 7).



Webpage (7): Specialized Dictionaries from Dictionary Bay



Webpage (7): Entry Page from dictionary Bay



Webpage (8): The Babylon Alphabetical Letter Index



Webpage (9): The Babylon Translation Page

babylon' Try it Now!	
Look up: English-Arabic-Dictionary	
aphasia	Define
Get Babylon's Translation Software! English-Arabic-Dictionary Included. III Free Download Now!	
aphasia	
Found in thesaurus: encephalopathy, brain disorder, brain disease	
😵 A Concise English-Arabic Dictionary	Download this dictionary
aphasia	
	اسْم : الحُبْسَة . فَقْد القدرة على الكلام
📚 English 2 Arabic	Download this dictionary
APHASIA	
	الاسم إخْتِتَاسُ الكَلامِ ؛ حُبْسَة ؛ حَصَرٍ ؛ عِيّ
	ethar1@yahoo.com
English 2 Arabic Glossary	Download this dictionary
aphasia	حبسه ، فقدان القدرة على النطق
🚺 Medicine English-Arabic	Download this dictionary
aphasia	
	حُبْسَة [ج: حُبْسات]
Broca's aphasia	حُبْسَةُ بروكا
ataxic aphasia	حُبْسَةً لَاانتظامِيَّه
expressive-receptive aphasia	
expressive-receptive aprilasia	حُبْسَهُ تَعْبِيرِيَّهُ اسْيَقْبِالِيَّه

Webpage (10): A Babylon Entry Page.

5.6 Babylon⁶

Babylon 9 is a commercial Translation Software that features 75 languages and over 2,000 dictionaries among those Arabic-English-Arabic dictionaries in *dentistry*, *economics*, *auditing*, *Bible names*, *currency codes*, *countries*, *a glossary of birds and an automotive glossary*.

Babylon dictionaries have an alphabetical letter index. When a letter is clicked, all the terms beginning with that letter are listed. Clicking on a term, Arabic equivalents are given together with synonyms, a definition and/or an explanation and the dictionary where each equivalent can be found. Babylon also provides the part of speech, plural form, and uses diacritics to show pronunciation. Related compound terms are also displayed in the same page as sub-entries that show the domain and context in which the term is used, together with their Arabic Equivalents.

A term can be also looked up using the Babylon translation software, where it is entered in the left window and after selecting the language pairs, the equivalent appears in the right window together with a definition of the term in the target language. Unlike the dictionary, only one equivalent is displayed. No synonyms and compounds are given (See Webpages 8, 9, 10).

5. DISCUSSION

The present study revealed several shortcomings of online Arabic-English-Arabic specialized dictionaries such as limited coverage, inaccuracy and inclusiveness of some meanings. Findings are consistent with other studies in the literature conducted with hard-copy dictionaries. For example, Mansour (2010) found that some of the Arabic translations of appraisal adjectives in Arabic-English-Arabic dictionaries are misleading, as they do not reflect the full information of the word. Fareh & Moussa (2007) reported that English-Arabic dictionaries were a potential source of error for Arab learners while translating English metaphorical expressions into Arabic, as those offer inadequate help to translators in terms of providing equivalents to metaphorical expressions. A dictionary also posed problems of syntactic complexity, idiomaticity and cultural specificity for EFL learners due to inappropriate explanations and examples Amritavalli (1999). Similar shortcomings were also reported by English Department faculty in Saudi Arabia which included: Ignoring new terms, required illustration, incomplete information, limited coverage, false information, not being up-to-date and inaccessibility (Abouserie, 2010).

6. CONCLUSION

To help translation students and instructors access all kinds of online specialized Arabic-English-Arabic dictionaries, the study recommends that all single-field specialized dictionaries be conglomerated in a single location, as in the *OneLook Dictionaries*. A team of subject-area specialists, lexicographers and linguists should collaborate to constantly update the content and make sure equivalents are accurate and inclusive. Collaborative and interactive dictionaries can be also created to ensure a fuller, more accurate coverage. An alphabetical term index can be added. All compounds, derivatives, parts of speech, an

⁶Website: <u>http://translation.babylon.com/english/to-arabic/English-to-Arabic-Medical-Dictionary/</u>

encyclopedic definitions should be included in the entries. These improvements would increase the usefulness of online dictionaries to translation students.

REFERENCES

Abouserie, H. (2010). Evaluating online dictionaries from faculty prospective: A case study performed on English faculty members at King Saud University. ERIC Document No. ED514314.

Amritavalli, R. (1999). Dictionaries are unpredictable. ELT Journal, 53(4), 262-69.

Bergenholtz, H., Duva, G. & Tarp, S. (1995). (Eds.). *Manual of specialized lexicography: The preparation of specialized dictionaries*. John Benjamins Publishing Company.

Boguslavsky, I., Cardenosa, J. & Gallardo, C. (2009). A novel approach to creating disambiguated multilingual dictionaries. *Applied Linguistics*, 30(1), 70-92.

de Schryver, G. (2003). Online Dictionaries on the Internet: An overview for the African languages. *Lexikos 13*, 1-20.

Fareh, S. & Bin Moussa, M. (2007). Practicality and usefulness of English-Arabic dictionaries in translating English metaphors. *Babel*, *53*(*1*), 32-47.

Lan, Li (2005). The growing prosperity of on-line dictionaries. English Today, 21, 16-21.

Mansour, S. (2010). *Appraisal emotional adjectives in English/Arabic translation: A Corpus linguistic approach*. UCCTS Conference Proceedings. Edge Hill University, UK.

Nesi, H. (1998). Dictionaries on computer: How different markets have created different products. Symposium on Language Learning and Computers. Chemnitz University of Technology.

Rizo-Rodriguez, A. (2010). Syntactic and semantic specifications in online English learners' dictionaries. *Indian Journal of Applied Linguistics*, *35*, *1*, 25-43.

Storrer, A. & Freese, K. (1996). Wörterbücher im internet. Deutsche Sprache 24(2), 97-153.