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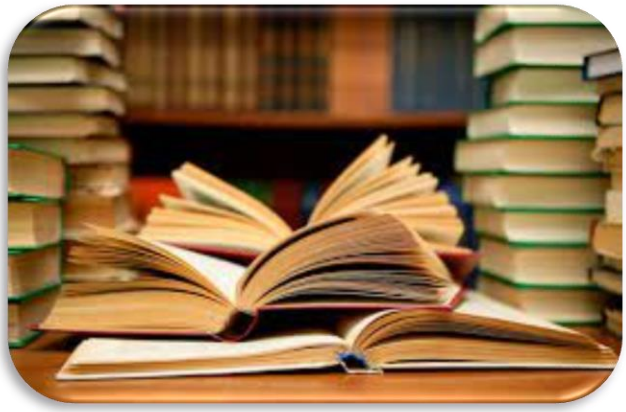

Communicative aspects of APLL Neologized Equivalents to English IT terms

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ABSTRACT

Equivalents or neologisms which are proposed by Academy of Persian Language and Literature (APLL) have always been chanllenging and sources of controversy among experts and researchers. The greatest concerns were about forms or morphology of APLL terms. Information Technology (IT) has a wide range of terminology which is brought about by internet and digital devices. In Iran, APLL tried to coin equivalents to these terms. These terms acceptance and communicative aspects were problematic. Therefore, this survey research aimed at evaluation of communicative aspects of APLL equivalents based on models of Picht and Draskau, (1985) and De Beaugrande and Dressler (1992). For this purpose, first the researcher synthesized these models into nine statements and then selected fifty most widespread equivalents and their English originals and converted them into a static questionnaire in Google Forms. After formation of the questionnaire, its link was created and sent to three hundred and sixty IT users and experts. Of them, 106 people visited the questionnaires and marked the statements. The questionnaires statements were analyzed in terms of frequencies and percentages of answers to the statements. The analysis indicated two types of respondents: those who were in favor of APLL equivalents and those who were against them. Then the researcher converted the frequencies into descriptive statistics. However, it was found that the group in favor of the APLL neologisms (Mean= 35) reported that they are appealing, consistent with Persian rules of morphology, socially accepted, semantically justifiable, genre related, concise and expected. On the other hand, the other group which was against the APLL equivalents to IT terms (Mean=70.55) reported that such terms are not consistent with Persian rules of morphology, socially accepted, semantically justifiable, genre related, concise and expected. Moreover, the group against the APLL equivalents outperformed the group in favor of such equivalents. In addition, the analysis of the significance level of the relationship between the two groups through a t-test indicated that since $p < 0.0001$, the difference between the two groups was statistically significant. The study has implications for teachers, students and researchers in language teaching, translation studies and linguistics.

Keywords: Equivalence, acceptability, communicativeness, neologism and information technology

جنبه‌های ارتباطی معادل‌های جدید APLL به اصطلاحات انگلیسی IT

معادل ها یا نو شناسی های مطرح شده توسط فرهنگستان زبان و ادب فارسی همواره چالش برانگیز و محل مناقشه کارشناسان و پژوهشگران بوده است. بیشترین نگرانی در مورد اشکال یا مورفولوژی اصطلاحات APLL بود. فناوری اطلاعات (IT) دارای طیف گسترده ای از اصطلاحات است که توسط اینترنت و دستگاه های دیجیتال به وجود می آید. در ایران، APLL سعی کرد معادل هایی برای این اصطلاحات ایجاد کند. این شرایط پذیرش و جنبه های ارتباطی مشکل ساز بود. بنابراین، این تحقیق پیمایشی با هدف ارزیابی جنبه‌های ارتباطی معادل‌های APLL بر اساس مدل‌های Picht و Draskau، (۱۹۸۵) و De Beaugrande و Dressler (۱۹۹۲) انجام شد. برای این منظور، محقق ابتدا این مدل‌ها را در ۹ عبارت ترکیب کرد و سپس پنجاه معادل رایج و اصل انگلیسی آن‌ها را انتخاب و به پرسشنامه ایستا در فرم‌های گوگل تبدیل کرد. پس از تشکیل پرسشنامه، لینک آن ایجاد و برای سیصد و شصت کاربر و متخصص فناوری اطلاعات ارسال شد. از این تعداد ۱۰۶ نفر از پرسشنامه ها بازدید و اظهارات را علامت گذاری کردند. بیانیه های پرسشنامه از نظر فراوانی و درصد پاسخ به اظهارات مورد تجزیه و تحلیل قرار گرفت. تجزیه و تحلیل دو نوع از پاسخ دهندگان را نشان داد: کسانی که موافق معادل های APLL بودند و کسانی که مخالف آنها بودند. سپس محقق فرکانس ها را به آمار توصیفی تبدیل کرد. با این حال، مشخص شد که گروه طرفدار نئولوژیسم های APLL (میانگین = ۳۵) گزارش دادند که آنها جذاب، سازگار با قواعد مورفولوژی فارسی، پذیرفته شده اجتماعی، توجیه معنایی، مرتبط با ژانر، مختصر و مورد انتظار هستند. از سوی دیگر، گروه دیگری که مخالف معادل‌های APLL برای اصطلاحات فناوری اطلاعات (میانگین=۷۰.۵۵) بودند، گزارش کردند که این عبارات با قواعد مورفولوژی فارسی، پذیرفته‌شده اجتماعی، قابل توجیه معنایی، مرتبط با ژانر، مختصر و مورد انتظار همخوانی ندارند. علاوه بر این، گروه در برابر معادل‌های APLL نسبت به این معادل‌ها بهتر از گروه عمل کرد. همچنین، تجزیه و تحلیل سطح معنی‌داری رابطه بین دو گروه از طریق آزمون t نشان داد که از $p<۰/۰۰۰۱$، تفاوت بین دو گروه از نظر آماری معنی‌دار است. این مطالعه پیامدهایی برای معلمان، دانش آموزان و محققان در آموزش زبان، مطالعات ترجمه و زبان شناسی دارد.

واژگان کلیدی: هم ارزی، مقبولیت، ارتباط پذیری، نوشناسی و فناوری اطلاعات

INTRODUCTION

Every day scores of goods and brands with absolutely new names cross the borders of the other languages. Technology is rapidly being used to produce modern and up-to-date goods. In the same way, the world is changing rapidly under the influence of technology. Extremely consumerist and expectant people also welcome the flood of these goods and services. These goods and services get completely new and special names to be better known and differentiated. Crossing the borders of different countries, these goods and services find their way into communities and families and nest within the language system of families. Since these goods do not have a domestic name and may be used for prestige, these names are established.

Major languages of the world hardly allow for inclusion of foreign terms in their repertoire of terminologies (Crystal, 2012). Therefore, they coin new terms, translate the original terms and domesticate them (Munday, 2016). That is mere foreignization may not be tolerated. These measures are SOMETIMES adopted to preserve the purity of languages and, in fact, the hybridity of languages (Schiffman, 2012). According to McCarty (2014), the phenomenon of purity of language is called linguistic purism or linguistic protectionism. This phenomenon is described as the way in which languages prefer the use of native, near native and native manipulated terms instead of foreign-derived ones (Schmid, Köpke, Cherciov, Karayayla, Keijzer, De Leeuw, & Polinsky, 2019).

Beside the preservation of purity of language, policy makers of languages consider some terms as cultural inappropriate since they are associated with fashions and characters and are not consistent with target language norms (Toury, 2012; Wardhaugh, 2011). Moreover, the incoming terms has complex structure which could not be easily spoken in the target society.

Linguists and fanatical Persian users wonder why always do not favor the APLL suggested and approved terms and sometimes go beyond this and ridicule the users of these words. Admittedly, according to Field (2005), the use of the equivalent word for some words makes it difficult for the listener to understand the meaning of the word, and for this reason many people prefer the Latin pronunciation of the word to the equivalent word. Nowadays, it is rare to find a person who uses the word "زیرموشی" instead of the word "mouse pad" or the word "ثقیل" instead of "cyberware".

Even some computer activists, despite the efforts of the APLL to find a word equivalent to IT terms, do not use these equivalent words and many of them have not even heard of them. For this reason, if one goes to one of the computer sales centers and ask for a 'دندان های ابی', a 'پویشگر', a 'وب بین' or a 'موش', no one will understand him, despite the academy's almost ten-year effort to equate IT terms. APLL believes that despite the many efforts that have been made in the field of equivalence for IT words, people in the community, even university professors and radio and television, etc., do not use these words and use them for pride. They prefer foreign words to Persian words

Critics of IT terminology believe that IT terms have been etched in the minds of computer users, even children, for years, and that alternative terms cannot be expected to be used in the short term. The problem with the academy's word choices is that they do not pay attention to the general atmosphere of the language and the everyday vocabulary or slang process. These word choices have an academic and formal aspect; they do not have an everyday aspect; however, these terms are to be used by general users of the language. Therefore, sometimes it turns out to be so ridiculous that it seems as if APLL wanted to make the audience laugh a little.

Statement of the problem

The degree of communicativeness of APLL terms, among them, IT terms, was not clear from the Persian written and spoken literature and the use of them was obscure, though some critics expressed dissatisfaction with them. However, this has been felt a problem its investigation could provide scores of insights to APLL authorities to be able to revise the earlier terms, suggest more acceptable terms, do needs analysis and conduct opinion polls regarding the terms of the different genres.

Purpose of the study

In order to tackle the problem of APLL' IT terms acceptability; the researcher adopted the system of standards of textuality proposed to text linguistics by Beaugrande and Dressler (1992) and Picht and Draskau (1985) principles of acceptability of neologisms. The first system is composed of seven principles or standards of cohesion, coherence, intentionality, acceptability, informativity, situationality, and intertextuality. In fact these principles account for communicativeness as well as acceptability of the discourses. In addition, the second system is composed of six principles of conciseness, conformity to target language rules, productivity, dreivationality, and conformity to morphological rules and target language word formation processes. They are elaborated on in detail in literature review. These two systems are mixed to be used in gauging APLL equivalents to IT terms. Besides, the perceptions of the IT experts were obtained regarding the same IT terms acceptability.

Research questions

RSQ1: How do IT experts and users perceive the IT Persian equivalents to English terms as suggested by APLL?

LITERATURE REVIEW

In the chapter of the study is devoted to the review of the related literature in relation to research topic and its variables. Before everything else, equivalent is taken into account.

Concept of equivalent

An exact look at this term shows that it is derived from 'equal'. This means that it comes from equal; that is, equal in from and meaning. It is a Latin word which descended from 'aequivalentem' (https://www.etymonline.com). As far the current study is not far unrelated to translation studies, according to Krein-Kühle (2014), equivalent is a basic, but also contentious subject in translation studies.

The term to translation studies was introduced by Jakobson (1987). Panou (2013) noted that equivalent is at the heart of cross-cultural studies. He added that this term implies sameness. Jakobson (2000) considered equivalent as a source of difficulty and untranslatability in translation. Pym (2000) referred to equivalent as a linguistic entity which has to set to parable entity. Pym argued that equivalent share the same value, level and feature in two languages. Șimon, Dejica-Carțiș, Stoian and Kriston (2018) staed that "although people get into contact with the educational terminology at least in their mother tongue, it is not always easy to translate it, and to find a proper equivalent in another language" (p. 1325). Jakobson

(2000) explained that that between code units of language, full equivalence cannot be obtained. He showed that cross-linguistic differences at levels of grammar, gender, aspect and semantic field cause lack of full equivalence between languages.

Nida and Taber (1982) classified equivalence as formal and dynamic; in the first the accurateness in terms of content and form is considered while in the second creation of the same effect on the target receptors is of interest. Koller (1995) believed that equivalence has to be communicative. Berman (2000) in his introduction of deformative tendencies noted that equivalence is needed to be avoided of deformation. Newmark (1981) believed in a communicative equivalence and claimed that this entity if required to be communicative it has to reproduce an effect on the readers similar to the source one, be unbiased, clear, idiomatic and readable.

A further aspect of equivalent which APLL disregarded, and culminated in opposing voices is aesthetic of equivalents it created. Jiang (2020) pointed to aesthetic of equivalent as an artistic image which is recreated through maximal preservation of linguistic information. He emphasized the formal properties of equivalents as the determining factors in face validity of them. Further, Jiang acknowledged that aesthetic property is a psychological stage described in a text and is mentally actualized which is scanned through readers visualization. Gerzymisch-Arbogast (2001) stressed the transparency of equivalents and suggested that it should establish equivalence in reality and preserve relevance to a particular context.

Target audience judgments

Perception is seemed to be attitude, recognition and impression. Szilagyi and Wallace (1980) defined perception as "the process by which learners attend to incoming stimuli, organize and then interpret such stimuli into a message that in turn indicates an appropriate action or behavior" (p. 158). Adipranata (2010) viewed perception as cognitive conscious process which involve observing, understanding and responding to a particular stimulus. Chen, Liu and Kager (2015) defined perception as "learners' viewpoints or opinions toward in class and out of class activities" (p. 162). Lupyan, Rahman and Boroditsky and Clarck (2020) equated perception with belief and way of seeing things. Munhall (2008) suggested that perceptions are lessons which learners view the realities through them.

Khanji (1999) emphasized the role of users in determining the acceptability of the terms coined by academies. These terms are required to be efficient and acceptable. The terms which APLL coins are in line with Persianization movement so that keep Persian pure. Fishman, Das Gupta, Jernudd and Rubin (1971) said that the technical terms which are newly coined have to undergo implementational processes by the speakers and reader. Fishamn (1968) believed that without audience acceptance, the efforts of coining new terminologies fail. As far as neologisms are to be accepted by users, Sanches, Blount and Gumperz, (1975), claimed that the speech communities use of those neologisms is necessary, otherwise, the attempts are not permanent. The members of speech communities develop different linguistic reactions toward terminiologies which include use, lack of use and dislike (Hesabi, Amirian & Nazari, 2017). Fishman (2001) believed in proper language planning, a system in which interest of users, their sensitivity, their needs and beauty of language are to be taken into account. Doğançay-Aktuna (1997) the new corpora as are developed through language planning, have to attain the functions for which were developed, otherwise, modification and elaboration are necessary.

Language academies

In almost all counties there are centers responsible for control of naming objects, coining new terms, amending the literature, etc. For instance, Turkish Language Society is active in Turkey, APLL in Iran, Arab League Educational, Cultural and Scientific Organization, Russian Academy of Science, Serbian Academy of Sciences and Arts, Kohl McCormick Academy of Outstanding Educators, Royal Society of Arts, Académie Française and American Philosophical Society. These academies and centers, according to Hesabi, Amirian and Nazari (2017) are founded to maintain originality of languages, coin new terms, keep solidarity among speakers and users, keep authenticity, preserve standard quality, refine language, etc. In fact, the national language academies duties are part of language planning.

Evaluation of academies neologisms

In the literature, some models have been introduced which provide rather acceptable principles to examination of acceptability and communicativeness of equivalents and terms. Picht and Draskau (1985) suggested six standards to evaluate Arabic terms acceptability. These criteria are:

1. The term should be precise, that is, it should accurately reflect the concept which is represents
2. The term should conform to the phonological and grammatical structure of the target language
3. The term should be potentially productive of derivations
4. The term should be as concise as possible so long as it is understood
5. The term should essentially not be polysemous, and it should not have synonyms or homonyms
6. The form should be consistent with the morphological patterns of the terms already developed

The next system of standards to evaluation of the terms and equivalents was developed by De Beaugrande and Dressler (1992). This system is in fact composed of cohesion, coherence, intentionality, acceptability, Informativity, Situationality and Intertextuality. Cohesion and coherence are related to the relationships between the text elements and participants who may get involved in text interpretation. Besides, intentionality concerns the attitudes and purposes of the text or discourse producers and including them in the discourses. Moreover, the acceptability concerns the use, positive treatment, application and well-interpretation. Furthermore, Informativity concerns the extent to which the discourse information is rich, known and expected. Besides, Situationality deals with relatedness of the terms, information and discourses to the genre, situation and participants. Lastly, Intertextuality deals with the interpretation of the text, information and equivalents in other genres and contexts.

METHODOLOGY

The present part of the study is devoted to the methodology of research which includes corpora, design, collection of data, instruments and models and data analysis.

Corpus

The corpus of this study was composed of the Persian Neologized equivalents coined by APLL to replace the IT English terms. In fact, the group of specialized word selection of computer and information technology categorized computer related neologisms into three groups: basic, general, and specialized.

Basic neologisms are used in computer training. Public neologisms are those computer neologisms that have entered the language of the general public and are also used in public media. Specialized neologisms are used only by specialists in this field and are not used in basic education and do not find their way into the general language. These neologisms were those terms were associated with internet, computer, data systems, soft-wares and hard-wares, information, and windows. Some examples of which were 'download-دانلود', 'upload-بارگزاری', 'mouse-موشواره ', 'accumulator-انباشتگر', 'applet-برنامک', 'backbone-مازه', 'biometrics-زیست سنجه', 'click-تلیک ', 'data flow-داده شار', etc. of these types of neologisms, one hundred and twenty five of the most practical and familiar ones were selected from the list of IT neologisms of APPL and transformed into a checklist. These terms were check listed along with their English original terms.

Instruments and models

With respect to research instrument, it has to be noted that the Research Instrument is a method used to compile data pertaining to the research. These instruments are most widely used in education to evaluate students and teachers and include interviews, assessments, surveys, or checklists. They are typically determined by the researcher and are related to the methodology of the experiment. In the current research, instrument was a checklist composed of neologisms which were exposed to IT experts as users of such terms.

Regarding models, two models were focused upon. These models were developed and suggested by Picht and Draskau (1985) and De Beaugrande and Dressler (1992). The first model was concerned with acceptability of neologisms and the second one concerned the communicativeness of the terms. For obtaining better results and managing the analysis of the data, the two models were combined and then translated into Persian. This means that the Persian version of the checklist was used to obtain experts opinions. The suggested model is as follow:

- Precision: neologism should precisely reflect the English term which is represents
- Formal conformity: neologism should conform to Persian morphology and grammar
- Conciseness: The term should be as concise as possible to be understood
- Intentionality: The neologism should satisfy its ideal user need
- Informativity concerns the extent to which the occurrences of the text are expected vs. unexpected or known vs. unknown/uncertain.
- Situationality concerns the factors which make a text relevant to a situation of occurrence.
- Intertextuality concerns the factors which make the utilization of one text dependent upon knowledge of one or more previously encountered texts.

Design

The data which were collected for analysis were a handful of neologisms created by APLL to IT English terms. The neologisms were exposed to perceptions of IT experts through a survey created in Google Forms. Therefore, the study followed survey method of research. In fact, the type of survey was a questionnaire in which the IT English terms and their Persian equivalents, each pair was accompanied

by two statements. Each statement was used to ask the attitude of respondents regarding the type of communicativeness standard included in that statement.

Data collection

First of all, a number of fifty IT neologisms were selected from the APLL archive of coined neologisms. They were situated beside-their English originals. Then they were converted to a questionnaire in Google Forms. The neologisms and the Persian combination of models of Picht and Draskau, (1985) and De Beaugrande and Dressler (1992) were converted to nine statements in the questionnaire in Google Forms. After finishing the questionnaire, a LINK was created and sent to three hundred and sixty IT users and experts through Telegram, Whtsapp and E-mail. The respondents were asked to mark one of the two choices allocated to each statement. Then, as each respondent visited the link, the filled questionnaire entered into the original Google Forms. There in the Form, the responses were collected, analyzed and prepared for further statistical analyses by the researcher.

Data analysis

The percentages and frequencies of the responses and categories of the models were obtained through automatic calculation of Google Forms. In addition, the descriptive statistics of the collected responses through Google Forms questionnaires were obtained and the mean scores computed through t-tests. Lastly, through t-test the *p*-value of the groups of the respondents was calculated. The results were presented though graphs and tables.

RESULTS AND SAMPLES

The results of the study - the assessment of acceptability and communicativess of APLL neologisms- are presented in the present chapter. Beside the results, some of the samples are put and explained in the light of the favorite standards. The samples are included to show the ways the respondents treated them. In presentation of the sample equivalents, whenever the percentage of lack of qualification is high, it means that, that neologism is not acceptable and is not communicative.

Sample 1:

With regard to the neologism ‘موشی’ for ‘Mouse’ by APLL, 83% of the respondents reported that It cannot reflect the target term semantically; while 17% of them reported that it reflect the target term in terms of semantic considerations.

Sample2:

Concerning the ‘وب بین’ for ‘Webcam’, 70.5% of the respondents reported that ‘وب بین’ cannot meet the needs of the users in terms of daily uses and interactions. On the other hand, only 29.5% showed that such an equivalent is favorable.

Sample3:

The other IT term which APLL coined an equivalent was ‘Cut and Paste’. The suggested equivalent for this expression was ‘ببر و بچسبان’. As this neologism was exposed to users and experts perceptions, 67.6%

of the respondents reported that this neologism is not expected, rich and explicit in Persian. This is while only 32.4% of the respondents reported that such a neologism has the mentioned criteria.

Sample4:

'Bluetooth' was another IT English term for which APPL coined an equivalent in Persian. The proposed equivalent was 'دندان های ابی'. The experts and users of IT, something about 74.3% reported that such neologism is not suitable and usable in the context of use of IT. On the other hand, 25.7% showed that such an equivalent has the specified characteristics.

Sample5:

In the questionnaire, the aesthetic value of the APLL neologisms was also gauged. The other term for which APLL coined an equivalent is 'screen saver'. APLL suggested 'پرده بان' for this technical term. Of the total number of the respondents, 71.4% reported that 'پرده بان' is not appealing and 28.6% reported that this equivalent has aesthetic value.

Sample6:

In terms of Intertextuality of the APLL neologisms, the term 'caps lock' Persian neologism 'تبدیل قفل' was evaluated by IT users and experts. Of the total number of the respondents, 75.2% reported that this neologism does not have Intertextuality or interpretability in other disciplines and about 24.8% reported that it is qualified.

Sample7:

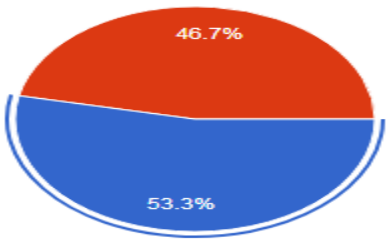
The other term for which the respondents were asked to announce their judgment, was 'menu'. APLL coined 'گزینگان' for it. Its social acceptability and popularity evaluation by respondents showed a 68.9% lack of such qualification, while 31.1% reported that it is socially qualified and acceptable.

Sample8:

'Clipboard' is a term used in IT, for which APLL coined 'بریده دان'. In order to assess its conciseness and shortness, it was exposed to users and experts of IT. 61.9% of the respondents reported that such an equivalent is not concise and 38.1% reported that it is concise and to the point.

Figure 1

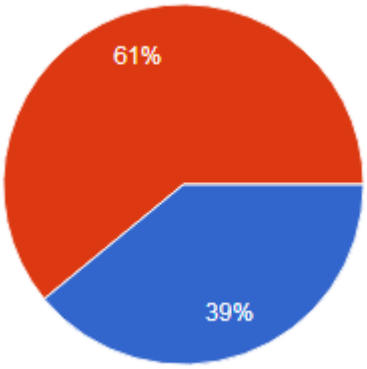
Percentage of neologisms semantic reflection



Regarding the semantic reflection of APLL neologisms, as the Figure 1 shows, of the total number of 106 respondents, 53.3% reported that such equivalents do not reflect the original IT terms semantic characteristics. On the other hand, 46.7% showed that APLL equivalents reflect English terms semantic features. This shows that, the APLL neologisms are not representative of the original IT terms.

Figure 2

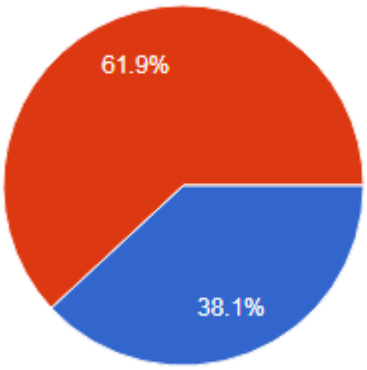
Percentage of neologisms conformity to Persian morphological rules



As Figure 2 shows, in evaluating the conformity of APLL neologisms to Persian morphological rules, 61% of the respondents reported that such neologisms to IT terms do not follow Persian morphological rules. On the other hand, 39% announced that the APLL terms are in conformity with Persian morphological considerations.

Figure 3

Percentage of neologisms conciseness and shortness

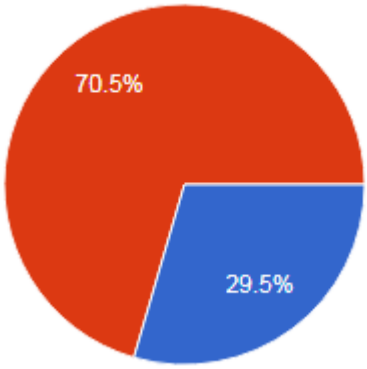


Another feature of communicativeness and acceptability of APLL neologisms which was exposed to users and experts perceptions was ‘conciseness and shortness’ of them. Regarding some of the equivalents, 61.9% of the respondents reported that such equivalents are not concise and short enough to

be used. Moreover, the 38.1% reported that such neologisms are concise enough to be employed in their real contexts of use.

Figure 4

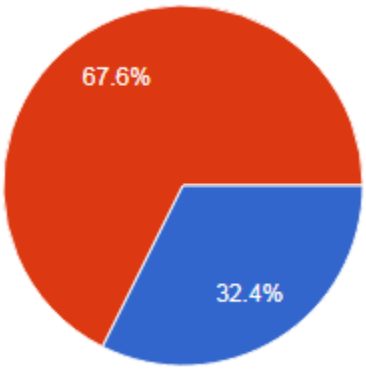
Percentage of neologisms in meeting users needs



The neologisms which are field specific should meet the needs of the users. IT neologisms coined by APLL which were assessed by experts and users, based on Figure 4, were showed by 72.5% of the respondents that with the present characteristics, do not meet the users needs and 29.5% announced that they have the potential to meet the users needs.

Figure 5

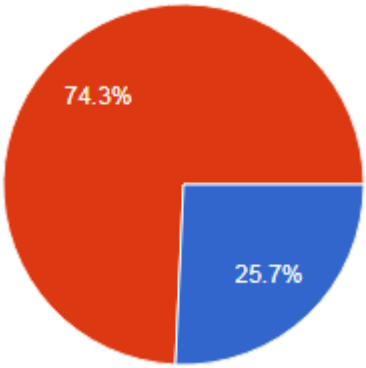
Percentage of neologisms richness, explicitness and expectedness



According to the Figure 5, dealing with the richness, explicitness and expectedness of the APLL equivalents to IT terms, 67.6% of the respondents reported that such equivalents are not rich, explicit and expected; whilst, 32.4% reported that they posses such characteristics.

Figure 6

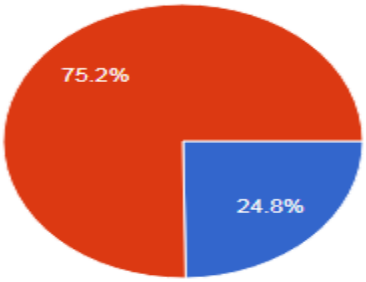
Percentage of neologisms genre relatedness



Based on what Figure 6 indicates, with regard to APLL equivalents to IT terms in Persian, 74.3% of the respondents marked the equivalents as without enough characteristics to be used by IT users and in IT genre; on the other hand, 25.7% pointed to genre relatedness of the APLL equivalents.

Figure 7

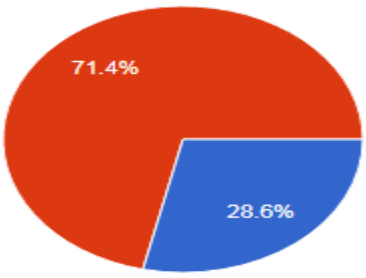
Percentage of neologisms Intertextuality



As Figure 7 shows, regarding the Intertextuality or interpretability of the APLL neologisms in other contexts, 75.2% of the respondents reported that such equivalents are not usable and readable in other disciplines and 24.8% reported that they are interpretable in other contexts.

Figure 8

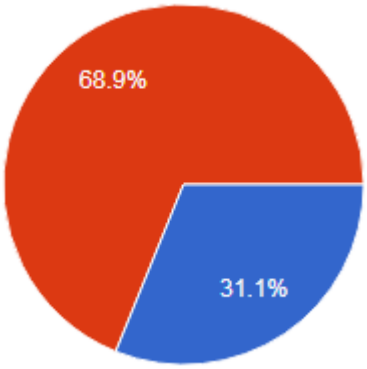
Percentage of neologisms aestheticity



In terms of aestheticity qualification of the APLL neologisms, 71.4% of the respondents, as the Figure7 shows, reported that such neologisms are not beautiful and appealing to them. On the other hand, 28.6% showed that such equivalents have aesthetic characteristics.

Figure 9

Percentage of neologisms social acceptability



Beside assessment of technical aspects of APLL neologisms, the social acceptability of those neologisms to IT terms was also gauged by respondents' perceptions. Of the total number of the respondents to the questionnaire, 68.9% reported that the APLL neologisms are not realistic and acceptable and 31.1% noted that they are acceptable socially.

Table 1

Descriptive statistics of the respondents in favor of APLL neologisms

Count	**9**
Sum	315
Mean (Average)	35
Median	31
Mode	30, appeared 2 times
Largest	56
Smallest	26
Range	30
Geometric Mean	34.02
Standard Deviation	8.90
Variance	79.33
Sample Standard Deviation	9.44
Sample Variance	89.25

The Table 1 illustrates the descriptive statistics of the group of respondents in favor of APLL equivalents to IT English terms. The mean of this group' responses equal 35. In addition, the standard

deviation of the scores is 8.90 and the sample variance is 89.25. In table 3 the mean of this group is compared to the mean of the respondents who were against APLL equivalents.

Table 2

Descriptive statistics of the respondents against APLL neologisms

Count	**9**
Sum	635
Mean (Average)	70.55
Median	73
Mode	All values appeared just once.
Largest	79
Smallest	56
Range	23
Geometric Mean	70.17
Standard Deviation	7.07
Variance	50.02
Sample Standard Deviation	7.50
Sample Variance	56.27

Table 2 is indicative of the descriptive statistics of the group of the respondents who were against the APLL equivalents to IT terms. This group statistical mean of responses equals 70.55. in addition, the standard deviation and sample variances are 7.07 and 56.27 respectively.

Table 3

Comparing the two groups in favoring APLL neologisms

Difference	**-35.550**
Standard error	3.789
95% CI	-43.5819 to -27.5181
t-statistic	-9.383
DF	16
Significance level	P < 0.0001

Table 3 is indicative of the comparison of the mean scores of the two groups (those in favor and those against APLL equivalents to IT terms) of responses. As Table 1 and Table 2 showed, the mean of the group in favor of APLL neologisms was 35 and that of the group against them was 70.55. The means were compared and the results of the comparison are included in Table 3. The difference between the means is 35.550. In addition, judging based on the mean scores, the mean of the group of respondents against APLL equivalents is higher than that of the group in favor of the APLL equivalents. However, as far as p-value is smaller than $p < 0.0001$, it is statistically significant.

DISCUSSION

Before discussing the results, in order to give direction to the discussion, the research question is re-stated and answered. Then building upon the research question, the results are discussed.

RSQ1: How do IT experts and users perceive the IT Persian equivalents to English terms as suggested by APLL?

Answering this question, the results provided information about two groups of respondents regarding the APLL equivalents to IT terms. One group was in favor of communicativeness of the equivalents, and one group against their communicativeness. The group in favor of the APLL neologisms (Mean= 35) reported that they are appealing, consistent with Persian rules of morphology, socially accepted, semantically justifiable, genre related, concise and expected. On the other hand, the other group which was against the APLL equivalents to IT terms (Mean=70.55) reported that such terms are not consistent with Persian rules of morphology, socially accepted, semantically justifiable, genre related, concise and expected. Moreover, the group against the APLL equivalents outperformed the group in favor of such equivalents.

Based on the results, it was proved that APLL equivalents to IT terms are not acceptable and communicative. By communicativity, Newmark (1981) meant that communicative equivalents reproduce an effect on the readers similar to the source one, are unbiased, clear, idiomatic and readable. Mphahlele (2001) suggested that communicative equivalents keep semantic similarity to source text and target language forms. House (2014) asserted that communicative equivalents renew the original terms in the target text under new conditions. She added that in the same conditions, a give and take between sender and receiver has to be achieved. Besides, Saule and Aisulub (2014) believed that "communicative equivalence should be tolerant to the type of the receiving audience" (p. 121). They added that communicative equivalence is achieved if the readers' competence plus cultural differences are taken into account. Considering the results of the present study, one understand that APLL equivalents are not qualified enough to call upon them in contexts of use. The IT terms, when they are created in their original situations, are created to base on the function of the device, software, type of message, type of assistance, need of user, etc. This means that they are authentic in their original situation, and if not used and removed of their original characteristics, they lose these features. For example, the term 'screen saver' is a series of patterns, colors and images which cover the screen of the mobiles and computers when they are on sleep or hibernation mode or idle. APLL has replaced this term in Persian with 'پرده بان' which is vague and thoroughly ridiculous for users. They may not understand the meaning of 'پرده' in mobile and computer. In addition, for so many users 'بان' is a suffix added to a term to denote 'keeper' and 'owner'. It is clear that such terms are coined to reduce the danger of *Language Attrition* and preserve the original qualities of Persian; but such equivalents failed to be used. There must be an argument behind why a word is not popular. Sometimes the problem is the word itself, sometimes it is a shortcoming on the part of the organizations that should use the word but do not. Viewing this issue sociolinguistically, it has to be mentioned that language change takes place in different directions. In some directions, like imposition of foreign terms, one should not high speed of language change. This is because people are used to some words and it is hard to quit them.

Zarinkhi (2009) proposed that APLL equivalents are not selected from the existing ones and for the current terms, but it selects terms or coins terms which have different meaning and functions. He called

APLL processes re-semanticization and neologization, processes which ignore metaphorical characteristics of the source terms, ignoring the register and readers and ignoring the terminological as well as linguistic characteristics. The researcher believes in purity of Persian language, but borrowing or inclusion some other foreign terms in other genres is not highly problematic. The processes of word formation are divers and languages adopt all of them in the world. Investing on coining neologisms by APLL is sometimes wasting of time and costs; because users avoid using the proposed terms. The poor morphological quality of APLL terms can be boosted through needs analysis and consulting users based on genres.

CONCLUSION

Dealing from the results of the study, a series of conclusion as well as implications are drawn and noted. The first conclusion is that APLL neologisms to IT terms are not communicative and acceptable. This means that such equivalents are in line with principles of textuality of Picht and Draskau (1985) and De Beaugrande and Dressler (1992). The second conclusion to draw is that APLL neologisms neglect the authenticity and originality of English IT terms. In addition, APLL undermines the functions of the terms as well as the relationship of them with the IT objects, devices and products they represent. The third conclusion is that APLL ignores the processes of Needs Analysis in coining neologisms. This may helps APLL in providing it with a variety of equivalents to terms. In addition, this causes the users to adopt the suggested terms easily. The fourth conclusion is that, lack of acceptance of many of APLL IT terms is the result of lack of inclusion of the terms in the books and printed materials.

The current study has implications for language teaching as well as translation studies. Students reading this study are motivated to delve into word formation processes, functions of various terms, the relationship between eh terms and their realities in the real world. There are many academies like APLL in the world which have rules and principles in making and changing the terms. EFL learners may search for them to get familiar with them. In addition, terms have different qualifications and requirements. Of them acceptability, communicativeness, tolerability and applicability are important. Each of which has implications for linguistics and translation studies. As such neologisms are appeared in the textbooks, due to their clumsy morphology; teachers should develop strategies to teach them efficiently. In translation classes and in the profession of translation, strategies of translation of neologisms should be adopted to transfer the meaning successfully and establish the best type of equivalents. Literature of translation studies is rich of the best translation strategies which replace the attempts of APLL. Such strategies are naturalization, literal translation, adaptation, recognized translation and substitution.

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