Towards Linking
User Interface Translation Needs
to Lexicographic Theory*

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Abstract: In a time of proliferating electronic devices such as smartphones, translators of user interfaces are faced with new challenges, such as the use of existing words in new contexts or in their obtaining new meanings. In this article, three lexicographic reference works available to translators in this field are compared: the *Kuberwoordeboek/Cyber Dictionary* (Viljoen 2006), the Pharos Afrikaans–Engels/English–Afrikaans Dictionary (Du Plessis et al. 2010) and the Microsoft Language Portal (www.microsoft.com/Language 2015). A list of selected examples (in English) is used to determine the extent to which each of these three works fulfils the needs of the user in terms of meaning discrimination for translating into Afrikaans. After determining this, an attempt is made to indicate whether the use of meaning discriminators such as part-of-speech markers, punctuation, paraphrases of meaning, and contextual and co-textual guidance (as indicated by Beyer 2009: 11) may have contributed to the success or failure of the given reference work, in order to arrive at a conclusion about the link between lexicographic theory and usability.

Keywords: TRANSLATION, TRANSLATORS, BILINGUAL DICTIONARIES, MOBILE DICTIONARIES, LEXICOGRAPHIC THEORY, MEANING DISCRIMINATION, EQUIVALENT DISCRIMINATION, PARTS OF SPEECH, SMARTPHONES, USER INTERFACE

Opsomming: 'n Ondersoek na die verband tussen leksikografieteorie en die behoeftes van koppelvlakvertalers. In 'n tydvak waar die gebruik van elektroniese toestelle soos slimfone hand oor hand toeneem, word vertalers deur nuwe uitdagings in die gesig gestaar, soos die gebruik van bestaande woorde in nuwe kontekste of die verwerwing van nuwe betekenisse. In hierdie artikel word drie leksikografiese naslaanbronne wat vir vertalers in hierdie veld relevant is, vergelyk: die *Kuberwoordeboek/Cyber Dictionary* (Viljoen 2006), Pharos se Afrikaans–Engels/English–Afrikaans-woordeboek (Du Plessis et al. 2010) en Microsoft se taalportaal (www.

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microsoft.com/Language 2015). 'n Lys gekose voorbeelde (in Engels) word gebruik om te bepaal in welke mate elk van die drie bronne die gebruiker se behoeftes in terme van betekenisonderskei-ding vervul wanneer daar in Afrikaans vertaal word. Vervolgens word daar gepoog om aan te dui of die gebruik van betekenisonderskeiers soos woordsoortmerkers, punktuasie, betekenisopsom-mings en kontekstuele en ko-tekstuele leiding (soos deur Beyer 2009: 11 aangedui) bygedra het tot die geslaagdheid al dan nie van die betrokke bron ten einde 'n afleiding te maak oor die skakel tus-sen die leksikografieteorie en bruikbaarheid.

Sleutelwoorde: VERTALING, VERTALERS, TWEETALIGE WOORDEBOEKE, SELFOON-WOORDEBOEKE, LEKSIKOGRAFIESE TEORIE, BETEKENISDISKRIMINASIE, EKWIVALENT-DISKRIMINASIE, WOORDSOORTE, SLIMFONE, GEBRUIKERSKOPPELVLAK

Introduction

Technological innovations such as smartphones result not only in the creation of new words, but also in the use of existing ones in new contexts or in their obtaining new semantic values (Fontenelle 2013: 1097). Furthermore, users of these innovations need the language these devices speak to be their own (Kelly and Zetzsche 2012: 250). Translators are therefore faced with unique challenges when translating the text in the user interface (UI) of these devices.

The global market for smartphones is dominated by two operating sys-tems — Apple iOS and Google Android, sharing 96.3% of the market as of 2014 (Apple with 14.8% vs. Google with 81.5%). In the fourth quarter of 2014, Android hit the one billion mark, selling 1.06 billion units for the year eventu-ally. More phones with Android as their operating system were sold in 2014 than total smartphone sales combined in the previous year (IDC 2015).

Smartphone usage in South Africa, as in the rest of the world, is also experiencing this kind of exponential growth. In 2014, approximately 19 mil-lion people in South Africa (out of a total of 42 million phone users) used smartphones, with this number set to rise to above 23 million in 2015 (Van Zyl 2015). Especially "low-cost Android phones" are seen to be an important con-tributor to this growth and these kinds of figures (ibid.). The South African smartphone market is "becoming an Android market" (Goldstuck in Van Zyl 2015).

The Android operating system supports 44 international languages in its UI, along with Australian, American and British English (https://support. google.com/googleplay/android-developer/table/4419860?hl=en). Afrikaans is one of these languages and along with Amharic, Swahili and Zulu, form the African contingent in the group. Judging by the proliferation of devices like smartphones, as well as Android's overwhelming market share and its multi-tude of UI language options, it would stand to reason that this field is one of the most prolific and important types of technical translation undertaken in the world today. These are also the reasons why we have decided to use text from the Android UI for this investigation.

Translators of UI text in these languages are faced with numerous problems, one of which is the expansion in meaning of existing words (mostly nouns and verbs) when used in a UI environment. Byrne (2006: 4) posits that a failure to comply with target language text conventions can undermine not only the credibility of the text itself, but, by implication, also that of the author and the information in the text. To reach the goal of having the device speaking the user's language, it is therefore imperative that translators have access to sources that can help guide them through this veritable minefield.

Therefore, in this preliminary investigation, this problem is used as a springboard for comparing three authoritative lexicographic reference works commonly used by UI translators working from English into Afrikaans. These three works are the *Kuberwoordeboek/Cyber Dictionary* (Viljoen 2006), the Pharos Afrikaans–English/English–Afrikaans dictionary (2010) and the Microsoft Language Portal (www.microsoft.com/Language 2015). The first is the only explicitly named specialised bilingual dictionary in the computer-related field for this language pair. The second is the most popular comprehensive Afrikaans/English English/Afrikaans dictionary readily available in South Africa. The third is a free online terminology list owned by Microsoft, described in literature as a "remarkably multilingual" company that is "represented on the majority of the world's computers" (Kelly and Zetzsche 2012: 250). This list caters for the target users translating numerous types of UI text, although it originated specifically for use when translating UI text for Microsoft.

It should be mentioned at this point that for the purposes of this article we will not be looking at the use of other online forums, chat groups and term lists/databases also utilised by translators, which should form a future investigation in its own right, but only at these three existing lexicographic reference works.

A list of selected examples (in English), each with more than one potential part-of-speech possibility and, therefore, at least two senses of meaning, is used to determine the extent to which each of the three works mentioned above fulfils the needs of this target user group when translating into Afrikaans by not being inadequate or inconsistent in the recognition of the manifold semantic values of the given words. The purpose of this article is not to formulate value judgements on the acceptability or adequacy of a given translational equivalent, but to determine the extent to which each of the three lexicographic reference works succeeds in indicating different senses of a given word. We have attempted to determine whether the application of lexicographic principles to a given reference work can be indicated to have an effect on its utility for the translator of UI text.

Theoretical overview

According to Gouws (2006: 85), a dictionary should never be compiled at random — the user must be the central consideration in all processes of lexico-

graphical production and the lexicographer has to remain aware of the specific situations in which the dictionary will be used. Potgieter (2011: 3) furthermore points out that discussions relating to the compilation of specialised dictionaries have traditionally not paid significant attention to translators as target users, despite their being a group with particularly challenging requirements. These requirements can range from paraphrases of meaning, exact and recognised terminology, to contextual and co-textual guidance (De Foglio and Lubbe 2002: 121). Burkhanov (2004: 22) states that the ideal translation-orientated bilingual dictionary should be able to satisfy the "translator's attempts to produce an adequate target text that conforms to the requirements of translational norms." Therefore, in order to enable translators to extract maximum value from a dictionary, it is imperative that data must be presented in the most useful and accessible fashion.

Zgusta (1984: 147) points out that "[a bilingual] dictionary should offer not explanatory paraphrases or definitions, but real lexical units of the target language which, when inserted into the context, produce a smooth translation." Zgusta's statement has merit, but it is easier said than done. In order to produce a smooth translation, a target user might require more contextual information than just lexical units of the target language. In the case of translators, the target user is one who has a good linguistic knowledge of both source and target languages, but does not necessarily have specialised knowledge as it pertains to the subject field. In such a case it becomes evident that bilingual dictionaries or translation-orientated dictionaries must provide more information than just the translation equivalent. A bilingual dictionary should therefore strive towards semantic-pragmatic and communicative equivalence (Beyer 2009: 2).

From the abovementioned it can be derived that a bilingual dictionary must guide the user through functional dictionary entries by means of equivalent discrimination so that communicative equivalence can be reached (Beyer 2009: 2-3). The importance of equivalence discrimination is given by Al-Kasimi (1977: 63):

(i)   No word (or semantic unit) ever has exactly the same meaning in two different utterances.
(ii) There are no complete synonyms within a language.
(iii) There are no exact correspondences between related words in different languages.
(iv) Absolute equivalents, which have exactly the same semantic and grammatical function in both languages, are rare.

Subsequently, a bilingual dictionary should provide "meaning discriminations which enable the user to select the appropriate equivalent or the proper sense of an equivalent" (Al-Kasimi 1977: 68). The need for clearly distinguishable equivalents cannot be denied. However, this can only be achieved if, as Robert (1990: 219) states, "semantic and stylistic discrimination of equivalents, detailed

grammatical information, and collocational specifications for each headword and [...] for each sense division of the headword" are also provided. Here Robert suggests the idea of facilitating contextual and semantic data in the pursuit of semantic and communicative equivalence.

Apart from the dictionary or lexicographer, the user must also play an active role in the achievement of communicative equivalence (Beyer 2009: 4). This relates to the encoding of lexicographic data in the dictionary and the decoding of the data or information by the user (Beyer 2009: 4). The encoding and decoding of lexicographic data ultimately facilitates successful or unsuccessful equivalent discrimination, i.e. a dictionary user selects an appropriate or inappropriate communicative translation equivalent in a given translation equivalent paradigm (Beyer 2009: 5). This is where discrepancies come to the fore. Translators rely on dictionaries to provide accurate data so that communicative equivalence can be achieved (Gouws 1992: 38), but, as alluded to earlier, there is an existing trend that bilingual or translation orientated dictionaries do not meet these requirements or satisfy translator needs (Burkhanov 2004: 26).

Moreover, Beyer (2009: 5) notes that there are cases where bilingual dictionary entries provide adequate facilitating translation or meaning discriminators that lead to successful equivalent discrimination (called functional facilitated successful equivalence), but that this can also occur in the absence of such discriminators. Beyer (2009: 5) refers to this as incidental successful equivalent discrimination. In a translator's case, it would be more accurate to link this to the translator's apt dictionary usage skills, language proficiency or translation experience, rather than an accidental success. Therefore on this basis we propose another distinction when the success of equivalence discrimination is measured in the case of translators — successful intuitional equivalent discrimination. Regardless of how proficient or skilled the translator or user is, no dictionary user should be left to rely solely on his/her intuition, or fate, in the pursuit of communicative equivalence. Following from this, Beyer (2009: 5) correctly notes that it is lexicographically unjustifiable to apply or rely on unsuccessful, incidental or even intuitional, equivalent discrimination.

Potgieter (2011: 97) states that most South African translation-orientated dictionaries succeed in helping users achieve semantic equivalence, but very few of these dictionaries also succeed in helping users achieve communicative equivalence. Beyer (2009: 4) echoes this point when he argues that Afrikaans bilingual dictionaries are often inadequate for the accomplishment of communicative equivalence, as they contain inadequately encoded lexicographic data and/or the data is inadequately decoded. For translators [and other user groups — AdP and MS] the problems stem from inadequate equivalence discrimination in bilingual dictionaries (Crafford 2005: 27). This issue again relates to contextual data or guidance. In different contexts, translation equivalents can be semantically equivalent, but if these different contexts aren't given to the user, communicative equivalence cannot be achieved (Gouws 1992: 37).

Likewise Beyer (2009: 6) focuses on the need for contextual data and distinguishes between primary and secondary contexts: Semantic equivalence can be regarded as the primary context in which translation equivalents are presented in the bilingual dictionary, but the broader discourse situation, i.e. communicative equivalence, must also be taken into account as a secondary context. Crystal's (1991: 78-79) definition of context emphasises the need for extra information to make meaning transparent and shows the important distinction between linguistic context or co-text, and pragmatic context:

> A general term used in linguistics and phonetics to refer to specific parts of an utterance (or text) near or adjacent to a unit which is the focus of attention [...] The everyday sense of the term is related to this, as when one 'puts a word in context', in order to clarify the meaning intended, as in dictionary entries. Providing a context in this way is referred to as contextualisation. [...][Furthermore it refers] to the features of the non-linguistic world in relation to which linguistic units are systematically used [also referred to as situational context]. In its broadest sense, situational context includes the total non-linguistic background to a text or utterance, including the immediate situation in which it is used. […] Further distinctions are usually made in semantics and stylistics, distinguishing, for example, referential and emotive meaning from contextual meaning, i.e. information is signalled about the kind of use a linguistic unit has in its social context, e.g. whether it has a 'restricted' use (as in social pleasantries, or religious settings), or how it relates to such factors as age, sex or class of the speakers.

From Crystal and Beyer's definitions it becomes clear that contextualisation should be an important consideration when working with lexicographic data, as it can facilitate successful communicative equivalence in bilingual dictionaries. Beyer (2009: 8) also refers to contextualisation when a lexicographer encodes primary or secondary contextual data in an equivalent discriminatory dictionary entry. It must be noted that contextualisation does not automatically lead to functional facilitated successful equivalence, as the data should still be encoded and decoded in an adequate and functional manner (cf. Beyer 2009). Herein lies the possible key to success for translators or other users when using a bilingual dictionary. As with any dictionary, bilingual and translation-orientated dictionaries' data must be provided in a consistent and accurate manner so that the user can be led to achieve semantic and communicative equivalence.

Contextual guidance can be achieved through the use of different types of equivalent discriminators. Iannucci (1967), Al-Kasimi (1977) and Beyer (2009; 2013) propose a range of context-giving and meaning/equivalent discriminators, which we have adapted into four different types:

— Part-of-speech indicators, which differentiate syntactic functions;
— Punctuation, which provides negative discrimination by using different punctuation marks to separate different equivalents;
— Contextual and co-textual guidance, like (lexicographic or subject-field) labels, glossaries, collocations, example sentences and translation compo-

nents, which highlight the secondary context in which the particular equivalent operates, i.e. its pragmatic potential; and

— Paraphrases of meaning, which differentiate between polysemous values in order to determine the primary context.

Using these four types of meaning discriminators, we have performed a practical investigation into the extent to which each is used in the translation equivalent discrimination for words from the Android UI.

Practical analysis

For the comparison of the three texts in terms of the abovementioned four types of meaning or equivalent discriminators, we selected a list of 30 words based on a group of UI translators' indicating difficulty in finding suitable translations for a word, or for all its different senses. The translators comprised a group of six individuals all working as freelancers in the field of computer-related (including UI) translation. Due to contractual requirements and professional reasons, they asked to remain anonymous. They provided a list of words they have had difficulty translating, with reasons, and from this list we selected 30 words where the difficulty arose from the fact that these words can act in more than one part-of-speech. It should be stated at this point that the translators did not limit their reporting to words from the Android UI as such, and most of these words are also found in the UI of numerous other environments. We have, however, limited this investigation to words which are all found in the Android interface. Furthermore, we have specifically selected those words that are not computer terminology as such, but rather general words mostly indicating actions and their products. This list is provided alphabetically below:

English word	Part-of-speech
access	n. & v.
add	n. & v.
archive	n. & v.
bookmark	n. & v.
cache	n. & v.
caption	n. & v.
comment	n. & v.
crash	n. & v.
display	n. & v.
dock	n. & v.
download	n. & v.

draft	n. & v.
edit	n. & v.
flag	n. & v.
install	n. & v.
launch	n. & v.
like	n. & v.
overlay	n. & v.
preview	n. & v.
remote	n. & adj.
request	n. & v.
search	n. & v.
share	n. & v.
sign up	n. & v.
support	n. & v.
tag	n. & v.
text	n. & v.
update	n. & v.
upgrade	n. & v.
upload	n. & v.

The words were looked up manually in each of the three reference works and then scored according to whether they appear in the given text at all, as well as the extent to which their meaning discrimination is presented.

In the case of the *Cyber Dictionary*, it was found that 28 of the 30 words are indeed included in the dictionary (please refer to Appendix A). In 3 cases, only one part-of-speech is indicated; in 11 cases no indication of this kind is provided, and in the remaining 16 cases the parts-of-speech are indicated more comprehensively. Punctuation as a meaning discriminating aid is used in 5 out of the 30 cases and in 11 out of the 30 there is some form of contextual and co-textual guidance. Only in a single case, the somewhat unusually treated "flag", is there a paraphrase of meaning:

> **flag (*sentinel*)** vlag (*'n veranderlike wat 'n toestand verteenwoordig*); merker

> **flag** [*v*] merk, vlag

It should be noted that this dictionary is explicitly marked as a dictionary related to this particular subject field, so it is to be expected that the use of punctuation would be relatively low, because these words should all fall within the related field, broadly speaking. Nonetheless, it is quite telling that almost half of the words show inadequate treatment of their part-of-speech possibili-

ties — most basically, this comes down to incomplete assistance to the user. Of course, this dictionary is approximately 10 years old and many of the semantic extensions may be of more recent vintage, but this is merely speculative.

For the Pharos dictionary it must be noted that the discriminating elements were scored both for explicating the computer-related use of the word, for example by marking it with a label such as "rek." (or "comp." in English, indicating that the term is in some way computer-related), and for merely distinguishing between different usages in general, since this distinction could also very often aid the translator in discriminating between different senses, albeit by means of applying intuitional knowledge to entries which do not provide suitable equivalents explicitly. In the Pharos dictionary, every example is included in the text (please refer to Appendix B). 5 words have no indication of part-of-speech, 6 have only one form indicated, and the remaining 19 are treated more comprehensively. Punctuation is used in all but a single case (the word "download", which is arguably an especially subject-specific word and therefore doesn't need as thorough discriminating treatment). 25 out of the 30 words have some form of co-textual or contextual guidance, which would implicitly or explicitly aid the translator even if by process of elimination or substitution. Paraphrases of meaning are not included, this being a bilingual dictionary.

The Microsoft list is, of course, not a dictionary as such. The results page is not structured like a dictionary article; rather, it makes use of columns containing the English word, its Afrikaans equivalent, and a definition:

Microsoft Terminology Collection

Showing 1 - 4 of 4

English	Translation	Definition
archive	argief	A compressed file.
archive	argiveer	To move selected items to another location for long term storage.
Web archive	Webargief	A presentation saved in MHTML format that integrates all supporting information, including graphics and other files, into a single file.
Online Archive	Aanlyn argief	A repository that is separate from the user's mailbox and that allows items to be archived on the server.

Therefore, the punctuation category and the co-text/context category were both excluded in the case of this work. 29 of the 30 words do, however, appear in the list and all of these have definitions included. When scoring for parts-of-speech in the case of this work, the criterion used was whether more than one part-of-speech is included for the user, whether in the form of different equivalents or different paraphrases of meaning, though not explicitly marked as such. Using this guideline, 18 out of the 30 words are treated in such a way that the translator would easily see both forms in the results of a single search query, thus getting essentially the same information as they would get from a part-of-speech label.

Three further points of interest stem from the Microsoft list. Firstly, closer investigation revealed that in 7 out of the 30 cases, the word itself is actually not included in the list on its own in both forms, but found in compounds. This kind of compound formation in this subject field and in this language pair could form the basis of a following investigation, although it falls beyond the scope of this article. Secondly, it became clear that the Microsoft list seemingly requires the greatest amount of intuitional knowledge from the translator, but also yields very comprehensive results. Thirdly, there is the case of the verb form "sign up". When searching for "sign up", only the verb form is found in Afrikaans in the Microsoft list. However, when removing the space and searching instead for "signup", a nominal form is actually found at the end of a seemingly unrelated semicolon-separated list of other words. This kind of contraction indicating the difference between a nominal form and a verbal form is also found in a number of other UI-related words, such as "log in"/"login", and deserves further investigation in a separate study.

Conclusion

What becomes clear from this preliminary investigation, is that in all probability, no single reference work out of the three mentioned would be adequate in terms of the requirements described in the theoretical framework presented above. Some words are not included in one or more of the works. Often, manifold meanings are not included, whether implicitly or explicitly. In a number of cases, the word itself is not included, but only appears as part of a compound or another structure. All of these shortcomings could cause translators difficulty.

Notably, the Microsoft list, which is the one that ostensibly is the "least lexicographical" of the three, seems to be potentially the most useful to the translators if judged in terms of the criteria of indicating, whether implicitly or explicitly, parts-of-speech, as well as meaning paraphrases. However, the user must apply significant intuitional knowledge to unlock this utility. This is not an ideal situation, lexicographically speaking, as indicated in our theoretical framework.

Equally unjustifiable, although the work scores well in our framework, is the fact that the Pharos dictionary is so inconsistent and often borders on confusing in the way it treats entries themselves. It is troubling that the bilingual dictionary that is widely regarded as the most authoritative one for this language pair is suffering from such persistent and serious problems.

Similar issues are also seen in the explicitly marked subject dictionary in our selection, in that 28 out of 30 words are included, but just about half of them are not treated comprehensively or in a way that could aid the translator in discriminating usages or meanings. Considering that this is both a bilingual dictionary and a dictionary for specialised purposes (and here it must be noted that although this may or may not be the intention of the compilers, it is still a

source that translators indicate they turn to for guidance), this situation is quite dire. One could surmise that the fact that this dictionary is almost 10 years old at this point is one of the root causes of its unsatisfying performance, considering the rapid technological advancement inherent in this field. However, it should be reiterated that 28 of the 30 words are actually there. The problem is that they are not always treated in a way that is lexicographically justifiable. The user needs to perform a significant amount of incidental or even intuitional equivalent discrimination — pointed out by Beyer (2009: 5) as problematic.

From a lexicographical standpoint, there is room for improvement in all three of the works referenced. There are numerous cases where the meaning discriminations are either insufficient or completely absent. What becomes clear, is that the print dictionaries, especially the subject dictionary in this case, have trouble keeping up with developments in this highly dynamic and ever-evolving subject field, whilst the electronic resource, although not a traditional dictionary, is best suited to this practical reality. Therefore, in a follow-up article, we will undertake an investigation into which other online resources translators use and whether their degree of adherence to lexicographic principles makes a difference in their usability.

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Appendix A: Scoring for *Cyber Dictionary*

Item	Included	Part-of-speech	Punctuation	Context/co-text	Paraphrase
access	1	2	0	0	0
add	1	1	0	0	0
archive	1	2	0	0	0
bookmark	1	2	0	0	0
cache	1	2	0	0	0
caption	1	0	0	0	0
comment	1	2	0	1	0
crash	1	0	0	0	0
display	1	2	0	1	0
dock	1	0	0	0	0
download	1	0	0	0	0
draft	1	1	0	1	0
edit	1	0	0	1	0
flag	1	1	1	1	1
install	1	0	0	1	0
launch	1	2	1	1	0
like	0	0	0	0	0
overlay	1	3	0	0	0
preview	1	2	0	0	0
remote	1	0	0	0	0
request	1	2	0	0	0
search	1	2	1	0	0
share	1	2	0	1	0
sign up	0	0	0	0	0
support	1	2	0	0	0
tag	1	2	1	1	0
text	1	0	0	0	0
update	1	2	0	1	0
upgrade	1	2	1	1	0
upload	1	0	0	0	0

Appendix B: Scoring for Pharos Dictionary

Item	Included	Part-of-speech	Punctuation	Context/co-text
access	1	1	1	1
add	1	0	1	1
archive	1	0	1	0
bookmark	1	1	1	0
cache	1	2	1	1
caption	1	1	1	1
comment	1	2	1	1
crash	1	2	1	1
display	1	2	1	1
dock	1	2	1	1
download	1	2	0	1
draft	1	2	1	1
edit	1	1	1	1
flag	1	2	1	1
install	1	2	1	1
launch	1	2	1	1
like	1	2	1	1
overlay	1	2	1	0
preview	1	2	1	0
remote	1	0	1	1
request	1	2	1	1
search	1	2	1	1
share	1	2	1	1
sign up	1	1	1	1
support	1	2	1	1
tag	1	2	1	1
text	1	0	1	1
update	1	0	1	0
upgrade	1	2	1	1
upload	1	1	1	1

Appendix C: Scoring for Microsoft Language Portal

Item	Included	Part-of-speech	Paraphrase
access	1	1	1
add	1	1	1
archive	1	1	1
bookmark	1	0	1
cache	1	1	1
caption	1	0	1
comment	1	0	1
crash	1	1	1
display	1	1	1
dock	1	1	1
download	1	1	1
draft	1	0	1
edit	1	1	1
flag	1	1	1
install	1	1	1
launch	1	0	1
like	0	0	0
overlay	1	0	1
preview	1	0	1
remote	1	0	1
request	1	0	1
search	1	1	1
share	1	1	1
sign up	1	0	1
support	1	0	1
tag	1	1	1
text	1	1	1
update	1	1	1
upgrade	1	1	1
upload	1	1	1