Research Article

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Borrowing or code-switching? Single-word English prepositions in Hong Kong Cantonese

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Abstract: With reference to a dataset of single-word English prepositions in Hong Kong Cantonese, this article re-examines the controversial distinction between single-word code-switches and lexical borrowing. These English prepositions may bring along syntactic structures of English into Cantonese, but they may also be morphosyntactically integrated into Cantonese and behave as verbs or coverbs. Accordingly, it is virtually impossible to pin down these prepositions as borrowing or code-switching based on morphosyntactic integration. Neither are they directly inserted into a sentence morphosyntactically framed in Cantonese, which has postpositions rather than prepositions. Considering that 'languages' are not discrete systems and words of different 'languages' are connected in a vast mental network, it is suggested that the boundary between lexical borrowing and single-word code-switching must be fuzzy. Freed from such distinction, it is plausible to see degrees of morphosyntactic integration and frequencies in single-word transfer or replication (i.e. borrowing/code-switching) due to word class or even specific properties of a word (e.g. *for vis-à-vis* other prepositions in Hong Kong Cantonese).

Keywords: English prepositions, Hong Kong Cantonese, (lexical) borrowing vs (single-word) code-switching, the Nonce Borrowing Hypothesis, the Matrix Language Frame Model

1 Introduction: Revisiting the distinction between single-word code-switching and lexical borrowing

This article re-examines the controversial distinction between single-word code-switching and lexical borrowing, deploying a dataset of English prepositions in Hong Kong Cantonese.[1] Tremendous efforts have been invested into classifying various language contact phenomena; yet, definitions are still under debate, and views diverge as to the precise criteria for differentiating these phenomena. One major issue of contention is whether single words adopted from another language are instances of lexical borrowing or code-switching. A prominent position is that all single words transferred from another language – whether they are established (i.e. the *loanwords* that appear frequently) or ephemeral (i.e. the *nonce* forms that are not recurrent) in a speech community – are borrowings (Poplack 2012, 2018, Poplack and Dion 2012, Poplack et al. 2020) insomuch as they undergo morphosyntactic integration with the recipient language. In this view, borrowing can be less frequent (i.e. the nonce forms) or more frequent (i.e. established borrowings), and therefore, frequency is not

1 The data analysis (starting from Section 3) is situated in the discussion of single-word code-switching and lexical borrowing. Readers interested in a fuller account of the phenomenon are referred to Chan (2018).

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the (only) criterion with which a single-word transfer is classified as lexical borrowing (which is supposed to be more frequent) or code-switching (which is supposed to be less frequent). Neither is phonological adaptation an indicator of the borrowing/code-switching status of single words from another language (or 'Lone Other Language Items/LOLI' in Poplack's terminology), since variability is high among speakers in the phonetic realization of these elements (Poplack et al. 2020). Multi-word elements (or Multiword Units/MWUs – Treffers-Daller (2023)) from another language that invoke the grammar of the donor language are treated as code-switches (Poplack and Meechan 1995, Poplack 2018), which is less controversial and consistent with other approaches (e.g. Myers-Scotton 1992, 1993), although most recently Treffers-Daller (2023) has argued that these multiword units can be borrowings which are formulaic and listed in the lexicon of the recipient language.

A different paradigm is presented by Myers-Scotton (1992, 1993). In her African data, both phonological and morphosyntactic integration may vary among single words drawn from another language (i.e. 'LOLIs'), and so frequency and meaning are brought to the fore as the main defining criteria for distinguishing single-word code-switches and lexical borrowing. More specifically, compared with established loanwords which recur and introduce a new concept to the recipient language (i.e. the so-called 'cultural B forms' – Myers-Scotton (1993)), single-word code-switches, which often have meaning equivalents in the recipient language, are rare. Nonetheless, for Myers-Scotton (1992, 1993), these singly occurring morphemes may be 'core B forms', in other words, borrowings. The major difference between single-word code-switches and lexical borrowing (i.e. 'core B forms') is that the former are drawn from the lexicon of the donor language (or 'Embedded Language/EL'), while the latter (either 'core B forms' or 'cultural B forms') are drawn from the recipient language (or 'Matrix Language/ML' – see Myers-Scotton (1992, 33) and Myers-Scotton (1993, 207)). Nevertheless, as Myers-Scotton (1992, 1993) argues, since both singly-EL morphemes (i.e. code-switches) and the B forms enter a sentence by the same process of lexical insertion, the difference is not directly observable. As a singly-occurring EL morpheme (i.e. a code-switch) comes to be used repeatedly and entrenched in a bilingual community, it may become a 'core B form' and eventually a 'cultural B form' in the bilingual community; hence, Myers-Scotton's (1992, 30, 1993, 171) conception of single-word code-switching and lexical borrowing is more of a 'continuum' rather than a categorical distinction.

At first glance, the difference between these two approaches lies mainly in naming or terminology. More concretely, what Poplack (2012, 2018) has called 'nonce forms' are treated as 'core B forms' or single-word code-switches (singly-occurring EL morphemes) by Myers-Scotton (1992, 1993). Despite the different treatments, empirically speaking, these single words from another language (or LOLIs) may undergo morphosyntactic integration with the recipient language (or Matrix Language/ML) on a par with its native words, which is acknowledged in both approaches. The key to understanding the underlying schism between the two approaches – which has often been overlooked in more recent discussions (except Matras (2009)) – is that they are intertwined to the very different syntactic models or constraints which these researchers proposed for code-switching. In Myers-Scotton's (1992, 1993, 2002, 2006, etc.) Matrix Language Frame (MLF) Model, according to the 'System Morpheme Principle', 'content morphemes' (largely content words such as nouns and verbs) may be drawn from the Embedded Language (i.e. donor language or EL) but 'system morphemes' (largely function words and bound morphemes) are only drawn from the Matrix Language (ML). Accordingly, a single word from the donor language (or Embedded Language/EL) can of course be a code-switch, provided that it is a content morpheme. Morphosyntactic integration is accounted for by the other tenet of the System Morpheme Principle; that is, this word (or 'root') may be inflected with affixes or bound morphemes, that is, system morphemes, from the ML. Furthermore, the word is inserted into a slot in a grammatical structure derived from the ML; particularly, its word order follows ML grammar in accordance with 'The Morpheme Order Principle'. Indeed, these single-word code-switches – content morphemes inserted into an ML-framed sentence – are the core or prototypical cases which the MLF Model seeks to explain, as Myers-Scotton (2002) calls them 'classic code-switching'. On the other hand, the multi-word elements from another language, which are uncontroversial code-switches for both Myers-Scotton and Poplack, do not fit comfortably into the MLF Model. Specifically, such phrases may show a grammatical structure or word order absent in the ML, thus flouting the 'Morpheme Order Principle'. To capture this potential contradiction, the MLF Model invokes another principle, that is, the 'EL Island Principle' (Myers-Scotton 1993, 2002) according to which a phrase with all words from the EL is formed in the grammar of EL rather than ML.

Crucial in Poplack's approach is the idea that borrowing is morphosyntactically integrated into the recipient language whereas code-switching is not. The presumption was formalized as the two well-known constraints, namely, the Free Morpheme Constraint (Poplack 1980), which rules against word-internal code-switches, and the Equivalence Constraint, which allows code-switching only where the structure or word order is shared by the two participating languages. Nonce forms which may be morphologically inflected with affixes from the recipient/ML potentially violate the Free Morpheme Constraint, but there would be no violation if these nonce forms are treated as a phenomenon distinct from code-switching. Poplack (2012) recalls that Poplack et al. (1988) is the first attempt to differentiate code-switching and borrowing in a large French-English corpus collected in Ottawa-Hull. The concept of 'nonce borrowing' is operationalized in the study as single words from another language (or 'lone other language items/LOLIs') which occur only once in the corpus (Poplack et al. 1988, 57). However, there are very few instances of nonce borrowing in the Ottawa-Hull corpus (Poplack et al. 1988, 57), and the study focuses on the variability of borrowings (established and nonce, but mainly established borrowings) in relation to different social variables rather than the necessity of nonce borrowing. As Poplack et al. (1988, 93) recalled, "[i]n French-English bilingualism, however, there are often no morphological or syntactic criteria for determining whether a single lexical item is following English or French rules; noun morphology is most frequently null in both languages, and word order is very similar. Is there any point, then, in attempting to conform to the theoretical distinction between code-switching and borrowing at the single-word level?" In this connection, a full-length exposition of 'nonce borrowing' is in fact to be found by Sankoff et al. (1990) who analyse a corpus of Tamil–English data. In the corpus, there are apparently many single-word code-switches with English nouns appearing in pre-verbal object position and inflected with Tamil case markers, as with Tamil nouns in a typical Tamil SOV sentence. These data defy not only the Free Morpheme Constraint but also the Equivalence Constraint (Poplack 1980), which rules out code-switching between verb and object in Tamil, an SOV language, and English, an SVO language. In this context, nonce borrowings, as distinguished from single-word code-switches, seem to be primarily driven by an attempt to reconcile the Tamil-English data with the Free Morpheme Constraint and the Equivalence Constraint, although Sankoff et al. (1990, 96) emphasized "that the goal in this study has not been to rescue the code-switching constraints." Putatively, Sankoff et al.'s (1990) suggestion that these English elements are nonce borrowing is independently grounded in quantitative analysis; that is, the English nouns, whether established or nonce, are shown to closely parallel the native Tamil nouns in both syntactic distribution and case-marking. 'The Nonce Borrowing Hypothesis' is proposed to capture the idea that there is no difference between nonce and established borrowings in their being morphologically and syntactically assimilated with the recipient language (Sankoff et al. 1990, 94). More recently, Poplack and Dion (2012, 311) echoed the claim that nonce borrowing is empirically based but not theoretically driven, reiterating that the necessity of nonce borrowing does not 'emerge from any theory-internal considerations'. Notwithstanding, Poplack and Meechan (1995) do make explicit reference to the Equivalence Constraint (Poplack 1980) in their analysis of lone words and multi-word fragments from French in Wolof and Fongbe.

It is at this juncture that Stammers and Deuchar (2012) pose a serious challenge to the Nonce Borrowing Hypothesis according to which established borrowings and nonce forms undergo the same kind and rate of morphosyntactic integration. In their Welsh-English corpus, there is a statistical difference between English-origin verbs which are established borrowings (as listed in dictionaries) and those which are not, in other words, the nonce forms. Succinctly, while the former tend to undergo soft-mutation as native Welsh verbs, the latter tend not to, although frequency of a verb (Welsh or English-origin, listed or unlisted) in the corpus has proven to be another determining factor. The distinction between established borrowings and nonce forms is more in line with the alternative approach – the MLF Model (Myers-Scotton 1992, 1993) – in which the unintegrated words (e.g. the English-origin words which do not undergo soft mutation in Stammer and Deuchar's (2012) corpus) are more appropriately analysed as single-word code-switches but the integrated ones as (established) borrowing. It is, however, important to note that the key point underlying Myers-Scotton's (1992, 1993) 'continuum' is not that lexical borrowing and single-word code-switches are different in their degree of morphosyntactic integration. As Myers-Scotton (1993, 183) states, "[a] major reason to argue against morphological integration as the categorical criterion which will separate CS and B forms is that there are many cases of partial integration for B forms as well as for CS forms." Morphosyntactic

assimilation and frequency can be used as possible criteria, but they cannot differentiate code-switching and borrowing in a clear-cut, unequivocal manner, especially between single-word code-switches and 'core B forms' which are similarly rare. What Myers-Scotton (1992, 30, 1993, 176) means by 'continuum' is that a single-word code-switch (CS) can become a B form when it recurs and becomes gradually more frequent in bilingual discourse.

In response to Stammers and Deuchar (2012), Poplack (2012, 645) stressed that the Nonce Borrowing Hypothesis does *not* treat all single words from another language (or 'lone other language items/LOLIs') as borrowings. Only those which are morphosyntactically integrated with the recipient language are, but single-word code-switches are supposed to be overwhelmingly rare (also see Poplack 2018, 211, Poplack and Meechan 1998). Poplack (2012, 646–7) further argued that variability in soft mutation of English-origin verbs may be some kind of phonological variation which is susceptible to confounding factors other than frequency, and listedness is not a good indicator of the borrowing/code-switching status of the English items.

In a follow-up study, Deuchar and Stammers (2016) broadened their scope of investigation and examined other types of morphosyntactic integration of the English-origin verbs in their Welsh corpus in addition to soft mutation. While most of these verbs take the Welsh derivational suffix '*-io*' as the Welsh verbs do, none of them appear in the synthetic construction (i.e. inflected with Welsh tense/agreement suffixes) where most Welsh verbs do. Instead, these English-origin verbs appear in a periphrastic construction with another Welsh dummy auxiliary verb taking up the tense/agreement suffixes, where few Welsh verbs do. Put in Poplack's framework, according to different yardsticks, the same set of English-origin verbs would be counted as lexical borrowing (by virtue of '*-io*' inflection) or single-word code-switches (by their appearance in synthetic/periphrastic constructions). Deuchar and Stammers (2016, 14–5) concluded that lexical borrowing may be of various degrees of frequency but is highly integrated with the recipient/ML; on the other hand, single-word code-switches are low in both frequency and integration with the recipient/ML.

Revisiting a dataset of single-word English prepositions in Hong Kong Cantonese, this article adds weight to the idea that morphosyntactic integration *cannot* be the criterion for distinguishing lexical borrowing and single-word code-switches, countering Poplack (2018). This set of data is intriguing in multiple ways: First, previous studies have focused on corpora where the single-word transfer (i.e. borrowing or code-switching) examined is primarily nouns (e.g. the Ottawa-Hull corpus as in Poplack et al. (1988)) or verbs (e.g. Stammers and Deuchar (2012)), but the behaviour of single-word prepositions from another language has received relatively little attention. Second, contrary to nouns and verbs, prepositions (or adpositions) are more akin to function words or a functional category, but in some languages, the word class may well be a mixed bag. In English, for instance, some prepositions are more contentful (e.g. *for* in English) than others (e.g. *of* in English), the former ones being closer to content words whereas the latter ones being more similar to function words. Thirdly, in Cantonese, most adpositions which indicate temporal or spatial relationships are postpositions or 'localizers', a term widely used in the literature of Chinese/Cantonese grammar (e.g. Matthews and Yip 2011). Following an NP complement, a localizer is reasonably treated as a postposition. Interestingly, in Cantonese, a localizer is optionally preceded by a nominalizer, and hence, it may be treated as nouns, albeit of a special type (Chan 2018). There may be a few prepositions in Cantonese (e.g. *jau4* (from)), but then another predicate is required after the prepositional phrase (i.e. NP PP VP), and hence these 'prepositions' are also called 'co-verbs' (i.e. they have to be accompanied by another verb – Matthews and Yip 2011). On the other hand, the structure (NP COP PP – e.g. *The book is on the table*), which is grammatical and quite common in English, is absent in Cantonese (Chan 2018). These typological differences between Cantonese and English enable us to identify whether a mixed sentence involving an English preposition is morphosyntactically adapted to Cantonese or introduces an English structure. More elaboration of these typological differences between Cantonese and English regarding prepositions and related constructions that encode spatial(-temporal) relationships is presented in Section 3.

The primary observation is that these English prepositions are indeed integrated into Cantonese morphology and/or grammar in some constructions where they would be classified as borrowing, but the same prepositions may also introduce distinctive structures from English where they would be counted as code-switching or, better still, structural borrowing (Chan 2018) or constructional borrowing (Chan 2022). Accordingly, it is impossible to judge whether these English prepositions are borrowing or code-switching without

Table 1: Frequency of single-word English prepositions in order of frequency

Preposition	Data in the literature (1992–2012)	2012/2013 mini-corpus	Combined
for	3	27	30
under	3	2	5
from	0	5	5
over	1	4	5
before	3	1	4
on	1	3	4
as	0	3	3
through	2	1	3
of	3	0	3
after	2	0	2
within	2	0	2
above	1	0	1
among	1	0	1
because of	1	0	1
instead of	0	1	1
against	0	1	1
out	0	1	1
TOTAL	23	49	72

considering the actual grammatical constructions in which they are used. Furthermore, the fact that these English prepositions may bring along an English structure to Cantonese defies the MLF Model (Myers-Scotton 1993, etc.). Last but not least, the repetitive occurrences of *for* as a recurrent form in Hong Kong Cantonese makes it plausible to analyse the preposition as lexical borrowing (see Table 1 and discussion below), although *for* may bring along English structures, challenging the idea that lexical borrowing must be integrated with the recipient/ML (Deuchar and Stammers 2016).

2 Single-word English prepositions in Hong Kong Cantonese: History and data

Single-word English prepositions were observed in Hong Kong Cantonese in very early studies of 'code-mixing', the term that used to be more popular than code-switching for intra-sentential alternation of languages (e.g. Gibbons 1987), and ever since they have appeared in different works on Cantonese-English code-mixing/code-switching (Chan 1992, Leung 2001). Despite their relative infrequency in comparison with single-word English nouns, verbs and adjectives (B. Chan 1992, A. Chan 2023, Gibbons 1987, Lam 2005, Y-B. Leung 1987, T. Leung 2001), the enduring presence of single-word English prepositions and their appearance in different constructions (see more discussion below) suggests that the single-word English prepositions (and related constructions) have been entrenched as a linguistic or communicative resource among Hong Kong speakers.

The data for analysis here are based on naturalistic speech documented in the existing literature on Cantonese-English code-switching that are accessible, including published books (Gibbons 1987) and papers (Chan 1998, Luke 1998) and, to a greater extent, unpublished dissertations (Chan 1992, Lam 2005, Y-B. Leung 1987, T. Leung 2001, etc.). It turns out that there are not a lot of examples in which a single-word English preposition appears in a code-switched Cantonese-English sentence (i.e. altogether 23 tokens). This dataset is then compared to another mini-corpus which was compiled from June 2012 to June 2013 by the diary method with which code-switched sentences with an English preposition were recorded. The source of this mini-corpus is primarily from two Hong Kong radio stations, namely, Radio Television Hong Kong Channel Two (RTHK2) and Commercial Radio Two (CR2), which I tuned to regularly from 11 am to 1 pm and from 11 pm to 1

am during the weekdays within the above-mentioned period of time. The radio programmes all involved conversation among two or more participants who were either hosts or guests, as in conversation the bilingual speakers are presumed to speak more spontaneously and to engage in code-switching more frequently. These data were then double-checked by reviewing the sound files of the programmes on the websites of respective radio stations. A second source is spontaneous conversations in which I was either a participant or an eavesdropper, and the examples were jotted down by pen and transcribed on the computer as quickly as I could afterwards. Admittedly, there are various limitations with this kind of data collection method; for instance, the transcription may not be totally accurate, especially of those examples from spontaneous conversations which cannot be double-checked. Nevertheless, considering the relative infrequency and unpredictability of the constructions, in addition to the observer's effect (these constructions may well be seen as some kind of language mixing or code-switching which may draw negative attitudes) and the likelihood that some bilingual speakers do not use these constructions at all, the diary method is perhaps more realistic in eliciting naturalistic language data than tape-recording a conversation in which the targeted constructions may not be attested.[2]

Other instances of English prepositions in Cantonese have not been documented in the literature in more recently collected corpora except Chan (2023). There are two examples involving *in* and *from* (Chan 2023, 184–5), respectively, in which the speakers were indicating directions by using these spatial prepositions in a map task. Occasionally, English prepositions can be found in Hong-Kong-based Facebook forums in posts written in the style of spoken vernacular Cantonese, suggesting that the English prepositions are still in use in Hong Kong Cantonese currently.[3] Due to their sporadicity, these more recent examples are discarded from the current analysis which is based on the older datasets.

In the 2012/2013 mini-corpus, the preposition *for* is significantly more frequent than other prepositions (Table 1). Not only does the preposition *for* top the frequency list in the mini-corpus, but also its tokens outnumber those of others significantly. The emergence of *for* as a recurrent form raises the possibility of treating it as an instance of lexical borrowing rather than code-switching in Hong Kong Cantonese (Section 4).

Holistically, the single-word English prepositions offer various contrasts with other major English word classes in Hong Kong Cantonese, namely, nouns, verbs, and adjectives (Chan 2018). Not only are English prepositions less frequent than English nouns, verbs, and adjectives in various corpora (B. Chan 1992, A. Chan 2023, Gibbons 1987, Y-B. Leung 1987, T. Leung 2001, etc.). They also emerged more recently than the latter categories in Cantonese-English contact. More specifically, before Gibbons (1979, 1987) first documented instances of English prepositions in Hong Kong Cantonese, many established loanwords borrowed from English had been widely used in Cantonese. These borrowed words are clearly phonologically assimilated into Cantonese (Cheung 1972, Luke and Lau 2008), and many of these loanwords even have standard written forms in Chinese characters as used in newspapers and popular books in Hong Kong (Bauer 1996, Chan and Kwok 1982, Wong et al. 2009), as illustrated in Table 2.

In all lists of established loanwords borrowed from English, nouns, verbs, and adjectives are attested; however, prepositions are conspicuously absent (Bauer 2006, Chan and Kwok 1982, Luke and Lau 2008, Wong et al. 2009). In terms of language ecology, there is a sense that the English prepositions emerged in the late 1970s (Gibbons 1979, 1987) when Hong Kong bilingual speakers became linguistically more creative in drawing from English more boldly; not only was there less phonological adaptation with the nouns, verbs and adjectives, the speakers also mixed other English categories such as the prepositions, conjunctions and adverbs,

2 Here, we are actually facing double uncertainty; one, the Hong Kong bilinguals speak Cantonese but may not produce code-switching in tape-recorded speech; and two, the bilingual speakers may produce code-switching in the recording, but they may not invoke those constructions with English prepositions that are relatively infrequent than English nouns, verbs and adjectives.

3 The following example was uploaded on the page *New CUHK Secret* (https://www.facebook.com/newcuhksecrets) on March 18, 2024.

想	知	龐*can*	豆腐	個	醬	究竟	係	***for***	純素	定	蛋奶素
Want	know	[Name]	tofu	CL	sauce	whether	COP	for	vegan	or	vegetarian

"(I) want to know whether the sauce for the tofu served in the Pong canteen (i.e. a canteen at the Chinese University of Hong Kong (CUHK)) is for vegans or vegetarians."

Table 2: Common examples of lexical borrowing/loanwords from English to Cantonese

English word	Borrowing in Cantonese	Written form
bus/bʌs/(Noun)	baa1 si2[a]/ba.si/	巴士
fail/feɪl/(Verb)	fei4 (lou2)/feɪ.(lou)/	肥(佬)
romantic/rəʊˈmæn.tɪk/(Adjective)	long3 maan3/lɒŋ.man/	浪漫

[a]Transcriptions of Cantonese in this article follow the Cantonese Romanization Scheme (粵拼/Jyutping) devised by the Linguistic Society of Hong Kong (https://www.lshk.org/jyutping).

including longer fragments (i.e. phrases and sentences), albeit less frequently (Chan 1992, 1998). If code-switching (or code-mixing) implies more extensive deployment of linguistic resources – including words and constructions – from the donor language, English prepositions apparently lean towards the latter.

Whereas loanwords that are phonologically adapted to Cantonese and ascribed Chinese characters document established borrowing from English in an earlier phase, there may be more recent borrowings from English which are not phonologically integrated and/or assigned Chinese characters. Drawing on large corpora of informal writing mostly in the style of spoken Hong Kong Cantonese, Li et al. (2016) found that most single-word English insertions are printed in English alphabets rather than Chinese characters. Although Li et al. (2016) call these insertions 'transfer' (following Clyne (2003)) and avoid differentiating single-word code-switches from lexical borrowing, many of these examples may well be analysed as lexical borrowing on grounds of morphosyntactic integration (with Cantonese) and frequency in the corpus. In particular, Li et al. (2016) attested far more monosyllabic English words (i.e. *high*, *cool*, *band*, *keep*, *send,* etc.) than polysyllabic ones, which they explain by the idea of 'monosyllabic facilitation'. That is, as Cantonese words tend to be monosyllabic, the monosyllabic English words are more easily transferred (or borrowed) to Hong Kong Cantonese with *less* phonological adaptation. The longer English words would probably be truncated to the preferred word length, a kind of phonological adaptation too, when borrowed into Hong Kong Cantonese (e.g. *interview* becomes *in* – also see Luke and Lau 2008). In this light, the English prepositions, most of which being monosyllabic (e.g. *for*, *in*, *on*, *at*, *from*, *through*, *of*, etc.) are also predisposed to transfer or borrowing on phonological grounds. However, single-word English prepositions are rare in comparison with other English word classes such as nouns, verbs, and adjectives (B. Chan 1992, A. Chan 2023, Gibbons 1987, Y-B. Leung 1987, T. Leung 2001, etc.), and hence, 'monosyllabic facilitation' (Li et al. 2016) does not seem to apply to the former. In this light, again, the English prepositions appear to be quite deviant from borrowing and, by default, closer to single-word code-switches. As mentioned above, what makes English prepositions particularly interesting in Cantonese-English contact is that the syntax of adpositions and related constructions are radically different in the two languages in contact, which will be elaborated below.

3 Morphosyntactic behaviour of single-word English prepositions in Hong Kong Cantonese

3.1 What are prepositions (or adpositions) in Cantonese?

English prepositions appear to be a rather homogenous class in terms of syntactic distribution. Semantically, they encode spatial or temporal meaning and other 'grammaticalized meanings' (e.g. *for* conveys PURPOSE) whereas syntactically they are heads of a prepositional phrase (PP) taking a noun phrase complement (Pullum and Huddleston 2002). The PP in turn typically appears in the following constructions:

(1) a. *She is cooking [$_{PP}$ **in** the kitchen].* (PP as an adjunct)
b. *The child is [$_{PP}$ **with** his parents].* (PP as a predicative complement)
c. *The mug [$_{PP}$ **on** the table] is mine.* (PP as a postmodifier in a complex noun phrase)

In Cantonese or Chinese grammar, there is still no clear consensus as to what are prepositions. Following Matthews and Yip (2011), this article presumes that a localizer is a postposition (e.g. *leoi5-min6* (inside) in (2a)). Another word which may be analysed as a preposition is the locative marker *hai2* (roughly *at* in English), but it is treated as a verb here as it can take a verbal suffix *saai3* (see (2a)).[4] Yet another class of words whose meaning corresponds to that of English prepositions are the coverbs, which are prenominal heads of an adjunct phrase before a predicate/VP (i.e. NP [**COV** NP] VP). Whereas Matthews and Yip (2011) are inclined to treat the co-verbs as verbs (also see Francis and Matthews 2006), a few co-verbs which are not inflected with aspect markers or verbal particles can be treated as prepositions in Cantonese (e.g. *jau4* (from) in (2b) – also see Chan (2018)).

(2) a. *keoi5* *dei6* ***hai2-saai3*** *gaan1* *fong2* ***leoi5-min6***
3 PL LOC-PRT CL room inside (P)
"They are all inside the room."
(Localizer as postposition)

b. *san1* *kuai1-ding4* ***jau4*** *haa6-sing1-kei4* *hoi1-ci5* ***sang1-haau6***
new regulation COV/P next week start has-effect (V)
"The new regulation starts to be in effect from next week."
(Coverb as preposition)

3.2 Introducing English syntactic structure

In a major pattern in the dataset, a single-word English preposition heads a PP which appears as a predicative complement after the Cantonese copula verb *hai6* (i.e. NP COP **P** NP), as exemplified in (3).

(3) a. *jau5* *sei3-cin1-gei2* *jan4* *hai6* ***on*** *hak1-ming4-daan1*
EXIST four-thousand-some person COP on blacklist
"Some four thousand people are on the blacklist."
(2012/2013 mini-corpus)

b. *seoi1-jin4* *keoi5* *hai6* ***from*** *laap6-saap3* [...]
although 3 COP from rubbish
"Although it (i.e. a material) is (recycled) from rubbish [...]"
(2012/2013 mini-corpus)

c. *jat1* *go3* *chef* *hai6* ***for*** *loeng2* *go3* *branch*
NUM CL chef COP for NUM CL branch
"One chef is for (i.e. works for) two branches (of a restaurant)."
(2012/2013 mini-corpus)

The sequence of NP COP P NP is more similar to an English syntactic structure in which PP is a predicative complement (e.g. (1b)). Chan (2018) argues that the English preposition brings along the English construction of NP COP P NP to Cantonese. In this construction, the English preposition encodes a relationship between the two NPs, and the PP (i.e. P + PP) is conceptualized as a property of the subject NP. Such a construction would be expressed in 'pure' Cantonese[5] in other constructions, such as one with a localizer (e.g. (4a)), a coverb construction (e.g. (4b)), or else the English preposition is replaced by a verb (e.g. (4c)).

4 Refer to Chan (2018, 57–8) for further arguments for *hai2* being a verb rather than a preposition.

5 'Pure' Cantonese here refers to Cantonese without English in the form of borrowing or code-switching. In everyday communication, however, Hong Kong speakers always mix English into their Cantonese and still consider themselves to be speaking Cantonese, hence the inverted commas.

(4) a. *jau5* *sei3-cin1* *gei2* *jan4* ***hai2*** *hak1-ming4-daan1* ***soeng6-min6***
EXIST four-thousand some person LOC blacklist on (LOCALIZER)
"More than four thousand people are on the blacklist."
(Paraphrase of (3a))

b. *seoi1-jin4* *keoi5* *(hai6)* ***jau4*** *laap6-saap3* ***zoi3-zou6****...*
although 3 COP from(COV) Rubbish recycle(V)
"Although it (i.e. a material) is recycled from rubbish [...]"
(Paraphrase of (3b))

c. *jat1* *go3* *chef* *(hai6)* ***zou6*** *loeng2* *go3* *fan1-dim3*
NUM CL chef COP work-for(V) NUM CL branch
"One chef serves two branches (of a restaurant)."
(Paraphrase of (3c))

Another pattern which shows syntactic influence from English involves an English preposition which remains prenominal although its counterpart is a postnominal Cantonese localizer (i.e. postposition). In the following examples, it appears in a PP which is a sentence-initial adjunct.

(5) a. ***After*** *ni1* *go3* *review* ***zi1-hou6****,* *zau6* *bei2* *zing3-fu2* *caam1-haau2*
after DEM CL review after then give government reference
"After this review (is completed), (we) will give (it) to the government for reference."
(Chan 1992)

b. ***Before*** *ni1* *tou3* *hei3* ***zi1-cin4****...*
before DEM CL film Before
"Before this movie (was broadcast) [...]"
(2012/2013 mini-corpus)

c. ***Among*** *li1-dou6* *gam3* *do1* *jan4,* *zi2-jau5* *jat1* *go3* *jan2* *jeng4*
among here so many person only NUM CL person win
"Among so many people here, only one person will win."
(Leung 2001, 79)

Interestingly, in (5a) and (5b), the Cantonese postposition/localizer which encodes the meaning of the English preposition also shows up (i.e. *zi1-hau6* (after) in (5a) and *zi1-cin4* (before) in (5b)). Though relatively rare, these portmanteau constructions in which a syntactic head (mainly verbs, prepositions, and subordinators) is doubled have been attested in different datasets involving typologically diverse language-pairs (Chan 2015b). The portmanteau construction, nonetheless, is not obligatory, as shown in (5c) where the corresponding postposition of *among* in Cantonese (i.e. *leoi2-min6* or *leoi2-bin6* (among)) is absent.

In the last construction which shows English influence, an English preposition heads a PP which is a postmodifier in a complex noun phrase. The postmodifier construction is English in origin, since in Cantonese and other Sinitic languages, modifiers, including the longer and more complex relative clauses, are all prenominal (Chan 2015a, Matthews and Yip 2011).

(6) a. *nei5* *jau5-mou5* *jat1* *fan6* *ming4-daan1* ***of*** *nei5* *go2*
2 have-NEG NUM CL list of 2 CL
loeng5 *zou2* *jan4?*
NUM CL Person
"Do you have a list of your two groups of people?"
(Chan 2015a)

b. *ling6-oi6* *jat1* *go3* *ging1-lik6* ***for*** *ngo2* *ne1* *zau6-hai6...*
another NUM CL experience for 1 PRT is
"Another experience for me, it is [...]"
(2012/2013 mini-corpus)

c. *zan1-hai6* *lo2* *dou2* *hou5-do1* *hou5-do1* *hou5-do1*
really get ASP much much much
ging1-jim6 ***as*** *jat1* *go3* *singer*
experience as NUM CL singer
"(I) really got much, much experience as a singer."
(2012/2013 mini-corpus)

3.3 Morphosyntactic integration

Although English prepositions appear to introduce English syntactic constructions into Cantonese, and prepositions are generally not morphologically inflected, single-word English prepositions may undergo morphosyntactic assimilation to Cantonese. In relation to morphology, these prepositions may be reanalysed as a Cantonese verb which takes on verbal morphology in Cantonese (Chan 2018), such as a Cantonese aspect marker (e.g. (7a)), a verbal particle (e.g. (7b)), or partakes the morphological structure of A-not-A, a well-known strategy in Sinitic languages which turns a sentence into a yes-no question (e.g. (7c)).

(7) a. *keoi5* *ge3* *sing4-zikl* *mei6* *cang4* ***above-gwo3*** *average.*
3 LNK result NEG ever above-ASP average
"His/her (academic) results have not scored above average."
(Leung 2001, 78)
b. *go1-ci4* *jau6* ***for-faan1*** *go2* *go3* *ket6*
lyrics also for-PRT DEM CL drama
"The lyrics (of the theme song) are also for (i.e. echo/correspond to) the drama."[6] (2012/2013 mini-corpus)
c. *zoeng1* *coupon* ***o-m4-over*** *go3* *due* *day* *gaa3?*
CL coupon over(A-not-A) CL due day SFP
"Is the coupon over the due date (i.e. expired)?"
(Leung 2001, 153)

First observed by Leung (2001), the reanalysis of English prepositions may well be a later development. Chan (2018) argues that the process is semantically motivated, as the English prepositions, now turned into verbs, encode more dynamic processes. For instance, the meaning of (7a) is that *his/her results* have been changing though they have not scored *'above average'*. In (7b), *his/her blood pressure* rose over the threshold but has come under it now. In terms of Cognitive Grammar, the subjects (i.e. *his/her results* and *his/her blood pressure*), though inanimate, are better construed as a MOVER (Chan 2018, Langacker 2008). Likewise, in (7c), *the coupon* is construed as moving towards the due date, and the question is about whether it has passed the due date (i.e. expired). Looking beyond Hong Kong Cantonese, Setter et al. (2010, 65) reported some instances in which an English preposition is turned into a verb in Hong Kong English.

As for syntactic integration, it is illustrated by an English preposition behaving as a Cantonese co-verb heading an adjunct phrase before the main verb/predicate (e.g. (8)). In English, PP adjuncts appear after the main verb/predicate (e.g. (1a), also see the English translation in (8)).

(8) *go3* *coi4-fung2* *ngo5* *m4* *hai6* *zik6-zip3* *heoi3* *man6,*
CL tailor 1 NEG COP direct go ask
hai6 ***through*** *pang4-jau5* *heoi3* ***man6***
COP through friend go ask

6 In a radio programme, a songwriter is talking about the theme song of a television drama she wrote. The drama inspires the lyrics of the song, and the song lyrics echo the drama.

"I didn't ask the tailor directly; I asked (him) through a friend."
(Chan 1992)

4 Frequency and meaning

Apart from morphosyntactic integration, Myers-Scotton (1992, 1993) propose that frequency and meaning may be appealed to as criteria for differentiating single-word code-switches and lexical borrowing, and these two criteria are now applied to the single-word English prepositions in Hong Kong Cantonese.

As Table 1 (Section 1) indicates, *for* became much more recurrent than the other single-word English prepositions, which is non-trivial, as in other contact varieties the preposition has also emerged as a regular feature (e.g. Nigerian Pidgin and Ghanian Pidgin English – Corum 2015) or even the most frequent English preposition among others (e.g. isiXhosa – Simango 2019). By the criterion of frequency, it is plausible to treat *for* as an instance of lexical borrowing in Hong Kong Cantonese (and in the above-mentioned contact varieties too), whereas others attested in the datasets can be analysed as single-word code-switches. For Myers-Scotton (1992, 1993), the 'cultural B forms' are much more frequent as they introduce new concepts into the recipient language; on the other hand, the 'core B forms' or the 'CS forms' (i.e. code-switches) are less frequent and they often have equivalents in the recipient language. However, *for* does not introduce new concepts to the language/variety. In many examples involving *for*, the word or the sentence may be roughly translated into Cantonese. In (9a), *for* introduces a BENEFICIARY (Pullum and Huddleston 2002, 654) and may be translated by a coverb and a predicate VP (*wai6* NP *ji4-cit3*). In (9b), *for* marks FUNCTION (Lindstromberg 2010, 229) and may be substituted by a verb *jong6-zok3* (used for). In (9c), *for* implies SUPPORT for the human participant represented by the prepositional object (Lindstromberg 2010, 227, Pullum and Huddleston (2002, 654) describe this meaning as IN FAVOUR OF), but it means CORRESPONDENCE in (9d) (Lindstromberg 2010, 227). In both examples, the meaning of *for* is typically expressed by verbs in Cantonese (i.e. *zi1-ci4* (support) in (9c) and *fu1-jing3* (match/correspond to)).

(9) a. *li1* *go3* *course* *hai6* ***for*** *di1* *lecturers* *gaa3*
DEM CL course COP for QUAN lecturers SFP
"This course is actually for the lecturers."
(***for*** *di1 lecturers* → ***wai6*** *di lecturers* ***ji4 cit3***, Leung 2001, 66)

b. *go2* *di1* *caan2-ban2* *hai6* ***for*** *si1-jan4* *jung6-tou6*
DEM QUAN product COP for private use
"Those products are for private use."
(*for* → *jong6-zok3* (used for), Chan 1998, 196)

c. *ngo5* *m4* *hai6* ***for*** *keoi5* *waat6-ze2* *against* *keoi5*
1 NEG COP for 3 or against 3
"I'm not supporting him or opposing him."
(*for* → *zi1-ci4* (support), 2012/2013 mini-corpus)

d. *go1-ci4* *jau6* ***for****-faan1* *go2* *go3* *ket6*
song lyrics also for-PRT DEM CL drama
"The lyrics were also written in a way that corresponds to the drama."
(*for* → *fu1-jing3* (match/correspond to), 2012/2013 mini-corpus)

In these senses, *for* is more like a 'core B form', if not code-switches, but it could behave as a 'cultural B form' introducing new concepts to Cantonese. There are instances in which *for* does not seem to have an exact equivalent in Cantonese, as exemplified in (10). In this example, *for* indicates PURPOSE (Lindstromberg 2010, 229, Pullum and Huddleston 2002, 655) but the purpose (*i.e. drinking coffee only*) is arguably also the FUNCTION and even one of the TERMS of the subject (*i.e. the coupon*).

(10) *keoi5* *hai6* ***for*** *zing6* *jam2* *gaa3-fe1* *sin1* *jau5-jong6*
3 COP for only drink coffee PRT useful
"It (the discount coupon) is useful for drinking coffee only (i.e. it is not useful for ordering other food or drinks)."
(2012/2013 mini-corpus)

The examples in (9) and (10) suggest that *for* is frequent because of its polysemy.[7] After all, logically speaking, it is possible that *for* is frequent and yet it expresses the same meaning in the data, as in other established English borrowings in Cantonese (e.g. *baa1-si2* (bus)). Pullum and Huddleston (2002, 655) comment that "*[f]or* is perhaps the most polysemous of the prepositions of English." Therefore, it becomes much more convenient and economical to use the same form (i.e. *for*) to express a wide range of meanings in various contexts. Whereas polysemy may explain the higher frequency of *for* in comparison with most other English prepositions, it does not explain the rarity of *of* which is also polysemous (see Lindstromberg 2010, 205–13; Pullum and Huddleston 2002, 658–9; it does appear in some Hong Kong Cantonese data albeit very rarely – Chan 2015a, see (6a) above). *For* and *of* are in fact similar in many ways; they are both non-prototypical English prepositions in that their meanings are largely non-spatial/temporal, and yet both are frequent and polysemous in English. The reason why *for* is more frequent than *of* in Hong Kong Cantonese is indeed intriguing. One difference between the two prepositions appears to be their distribution. In the data, *for* appears in a PP that is a predicative complement (e.g. (3c), (9a)–(9c), (10)), or a postmodifier (e.g. (6b)). In addition, *for* may behave as a verb (e.g. (7b)) or even a complementizer between a verb and a clause (e.g. (11)).

(11) *jan1-wai6* *bun2* *zi6-din2* *m4* *hai6* ***for*** *nei2* *zing6-hai6*
because CL dictionary NEG COP for 2 only
caa4 *ni1* *go3* *zi6* *aa1-maa3*
check DEM CL word SFP
"Because the dictionary is not for you to check this word only!"
(2012/2013 mini-corpus)

On the other hand, *of* only appears in a PP postmodifier (e.g. (6a)). These distributions largely parallel those of the two prepositions in English. Whereas *for* expresses various meanings in a wider range of constructions, *of* most often appears in a complex noun phrase (i.e. N *of* NP) expressing various meanings (Pullum and Huddleston 2002, 659).[8] In particular, *of* rarely appears in a PP predicative complement, a position where *for* is often used in English and most frequently found in the Hong Kong Cantonese data here (e.g. (3c), (9a)–(9c), (10)). In sum, syntactic versatility may well be another factor contributing to the frequency of *for* in our data.

At any rate, *for* can be regarded as borrowing due to its frequency. One major issue is that *for* may introduce English syntactic structure to Hong Kong Cantonese (e.g. (3c), (6b)), which is inconsistent with the popular conception that borrowings are always morphosyntactically integrated with the recipient language (i.e. Cantonese in our case). Another caveat is that borrowings (e.g. *dik1-si2* (taxi)) seem seldom as polysemous and syntactically versatile as *for* in Hong Kong Cantonese.

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7 The other English prepositions which have multiple occurrences in this dataset (Table 1) do seem to convey the same meaning, except *under* which may mean 'under a certain standard' or 'subordinate to'. At any rate, no other preposition is as polysemous as *for* in the data.

8 In corpus-informed online dictionaries, including the Cambridge Dictionary (https://dictionary.cambridge.org/dictionary/english), the Collins Dictionary (https://www.collinsdictionary.com/dictionary/english) and the Longman Dictionary of Contemporary English Online (https://www.ldoceonline.com), most examples show *of* in a PP postmodifier (i.e. N *of* NP) but *for* in a wider range of constructions. The use of *of* after a verb or an adjective (e.g. *I am thinking* ***of*** *you.*) is discarded as it appears more of a case-marker here.

5 Discussion

5.1 Borrowing vs code-switching as two ends of multidimensional continua

Seeing that prepositions are more of a class of function words, one may assume that they are more closely linked to the grammar of the donor/source language, and in language contact, they are more likely to be single-word code-switches. Indeed, in Hong Kong Cantonese, the English prepositions do bring along English syntactic structures (Section 3.2); yet, they may be morphologically or syntactically integrated with Cantonese too (Section 3.3). Accordingly, morphosyntactic integration does not seem to work as an effective criterion in determining the status of these English prepositions. This is contrary to Poplack (2018) and previous works (Poplack and Meechan 1995, Sankoff et al. 1990) in which lexical borrowing (established or nonce) is morpho-syntactically integrated whereas single-word code-switches are not. One more technical issue in applying Poplack's framework to the data is that the English prepositions can be seen as morphologically integrated with Cantonese after they are reanalysed as verbs in Cantonese. However, it is unclear whether this pattern fits into the Nonce Borrowing Hypothesis (Sankoff et al. 1990), which somehow assumes that a borrowed word undergoes the same kinds of morphological inflection with a native word, albeit of the same category (e.g. in Tamil-English, borrowed nouns from English would be like native Tamil nouns in syntactic distribution, that is, before verbs in an SOV sentence, and morphological inflection, that is, both take up Tamil case-markers).

The single-word English prepositions in Hong Kong Cantonese appear more consistent with the MLF Model (Myers-Scotton 1993, etc.) which suggests that lexical borrowing and single-word code-switches cannot be clearly distinguished; however, the Model does not fully account for the data here either. In the MLF Model, a single word originating from another language, whether a borrowed word or a code-switch, is inserted into a sentence framed by the ML. Accordingly, it does not predict the possibility that the English prepositions may introduce an English syntactic structure into the sentence. Neither does the MLF Model predict the frequency of *for* in Hong Kong Cantonese. Being a more contentful preposition (compared to *of*, for example), *for* is a content morpheme (Myers-Scotton 1993, etc.) which would be easily transferred in language contact situations, but it is the same for many other English prepositions which have been used in Hong Kong Cantonese (e.g. *under*, *from*, *before*, etc., indeed all the prepositions listed in Table 1 except *of*). The reason why *for* is more frequent than the other prepositions which are also content morphemes remains an unanswered question. On the account offered above, the frequency of *for* is due to its semantic and syntactic versatility. In this connection, Borrowing Hierarchies (Thomason and Kaufman 1988), which predict the relative ease or difficulty in which different word classes are transferred to another language, suffers from the same limitation. More specifically, prepositions, as a word class, are predicted to be less frequent than nouns and verbs but more so than other grammatical categories (such as conjunctions) in language contact. The higher frequency of *for* within the class of English prepositions in Hong Kong Cantonese thus seems not explained either.

Beyond Poplack (2018) and Myers-Scotton (1992, 1993), a more general or complex conception of the distinction between lexical borrowing and code-switching may better capture the case of English prepositions in Hong Kong Cantonese. Matras (2009) proposes that lexical borrowing and code-switching can be identified on multiple continua although both are fuzzy categories and there are always forms of language contact which straddle the two. For instance, according to *structural integration*, forms structurally integrated into the recipient language are more like borrowing while those not integrated are more like code-switching. The single-word English prepositions in Hong Kong Cantonese would then fall between code-switching and borrowing on the continuum since in some constructions they are unintegrated (i.e. Section 3.2 – more precisely, they bring along English syntactic structure) but in others, they are (i.e. Section 3.3). Among these prepositions, *for* does appear more toward the end of borrowing on the continuum of *operationality* in being an economical form which covers a wide range of meanings and saves processing cost (i.e. Section 4). *Regularity* also applies here; the higher frequency of *for* in available data and its appearance in more contexts with its different senses (see Section 4) suggest that the preposition is closer to the borrowing end. At any rate, it is important to note that Matras' (2009) framework is not intended to provide criteria which distinguish borrowing and code-switching in a clear-cut fashion, and it acknowledges a lot of fuzzy forms which fall between the two on different continua. The single-

word English prepositions in Hong Kong Cantonese examined in this article serve to highlight the fuzziness between the two categories of lexical borrowing and single-word code-switches.

5.2 The distinction between lexical borrowing and single-word code-switching as legacy of structuralist linguistics

The above discussion leads us to a more fundamental question, namely, why lexical borrowing should be clearly distinct from single-word code-switches. The major reason seems to be that borrowed words have widely been assumed to be incorporated into the lexicon of speakers' native language/L1, whereas code-switches are drawn from the lexicon of another language, namely, the speakers' second language/L2. While acknowledging the fuzziness between single-word code-switches and lexical borrowing, Myers-Scotton (1993) somehow feels obliged to separate the two because borrowed words are supposed to be incorporated into the speaker's L1 or ML lexicon. As she said, "there seems to be little motivation to distinguish sharply between single-lexeme CS and B forms in terms of the production processes they undergo," but soon after the statement she added, "[w]hile a B form is part of that lexicon (i.e. *the ML lexicon*), an EL morpheme realized as a singly occurring CS is not" (Myers-Scotton, 1993, 192). The distinction between languages (i.e. donor/source language vs borrowing/recipient language) is apparently rooted in Weinreich (1953, 13) who suggested that lexical borrowing "can be considered, from the descriptive viewpoint, to have become a part of LANGUAGE X," and it is perpetuated in current views towards borrowing and code-switching (Treffers-Daller 2023). Nonetheless, if 'languages' are not discrete entities but more of social/cultural/ideological constructs, as has been argued rigorously in recent scholarship on sociolinguistics and translanguaging (Li 2018, Otheguy et al. 2015, 2019), there is in fact no theoretical need to assume a clear-cut distinction between lexical borrowing and single-word code-switches. In this light, 'borrowing' or 'code-switching', alongside the very notion of 'language' which is pivotal in differentiating the two (i.e. borrowed terms are drawn from a bilingual speaker's native language or ML – as in the MLF Model; code-switches are drawn from his/her second language or EL), could have been influenced and essentialized by the structuralist conception of language as a discrete and sharply demarcated system (Makoni and Pennycook 2007). Having said this, this article does not intend to – and it cannot – delve into the huge literature concerning the current debates over translanguaging and code-switching (but see Auer 2022, MacSwan 2022, Treffers-Daller 2025). Neither does this article imply that code-switching be replaced by translanguaging – or the latter be disposed of – in analysing language mixing phenomena. There are simply many complex issues involved, a decent discussion of which would go too far beyond the scope of this article. For one thing, many scholars whose work still subscribes to 'code-switching' do see languages as fuzzy and overlapping entities, and a 'code' is not to be equated to a 'language' (refer to Auer 2022 for a survey). Most lately, Pennycook (2024) suggests that 'code-switching' and 'translanguaging' reflect two different understandings of the nature of language – what he calls language ontologies – but they may not refer to very different linguistic phenomena or practices.

In the psycholinguistic literature, it has been suggested that words from different languages are stored in a vast network, although they are connected with each other in different strengths, an idea that has been called the 'Subset Hypothesis' (De Bot 1992, Levelt 1989). Words from different languages are always co-activated (Kroll and Ma 2017) but bilingual speakers may exercise different controls and inhibit some of them at a later stage of speech production, resulting in monolingual speech or different patterns of code-switching (Green and Wei 2014). All these conceptions of bilingual processing seem compatible with the 'Subset Hypothesis' rather than a 'Dual System Hypothesis' according to which words and rules of different languages are strictly separated.

5.3 Morphosyntactic integration as a function of word class in single-word transfer

From the viewpoint of the quantitative paradigm, such as the one having been pursued by Poplack (2018), one objection to the present study is that single-word prepositions are apparently much less frequently borrowed

than single nouns, which are largely morphologically and/or syntactically integrated with the recipient language in ways parallel to nouns in the native/recipient language.[9] Whereas this appears to be generally the case cross-linguistically, other word classes, including verbs, adjectives, and prepositions, may be more or less frequent in different corpora or language-pairs (e.g. Melissaropoulou and Rallis (2018) on borrowed prepositions in different varieties of modern Greek). Indeed, a number of recent studies have discussed borrowed prepositions in different contact varieties, indicating that they are not exactly a peripheral or accidental phenomenon in language contact (Corum 2015, Deibel 2019, Simango, 2019).

Verbs and prepositions appear to show a lesser degree of morphosyntactic integration when they are transferred (i.e. borrowed or code-switched). If we are less pre-occupied with the distinction between lexical borrowing and single-word code-switching, a general picture is emerging in which nouns are most easily transferred because they are least strongly associated with the morphosyntactic patterns of their language, and they are stored, activated, and processed very much like nouns in the native/recipient language. Verbs seem more tightly associated with the morphosyntactic patterns of their respective languages and hence verbs in different languages may be stored and processed more separately or independently. This may explain why in many contact settings borrowed verbs are prevented from being inflected in ways that verbs in the native/recipient language are, and a dummy auxiliary verb from the native/recipient is often inserted to take up the inflection, such as the English verbs in Welsh (Deuchar and Stammers 2016 – see Section 1). Whereas Deuchar and Stammers (2016) describe these instances as the 'periphrastic construction', they are otherwise known as 'bilingual compound verbs' or 'mixed compound verbs' which have often been attested in many other contact settings (Chan 2009). Of course, in some bilingual communities, borrowed verbs from English parallel closely with native verbs in terms of morphological inflection and syntactic distribution, for instance, in Igbo (Eze, 1998) or in Hong Kong Cantonese (Chan 1992, 1998). Language typology may well have a role to play since the 'bilingual compound verbs' seem to be more common when a singly-occurring verb from a VO language (e.g. English) is transferred into an OV language (e.g. Japanese, Hindi, Turkish, etc. – see Chan 2008, 2009). Yet, bilingual compound verbs are also attested in a VO language (e.g. Spanish) in which a verb is transferred from another VO language (e.g. English – see Balam 2016). As for the case of prepositions, this study suggests that they are even more strongly associated with syntactic patterns of their respective languages, and when they are transferred, they may bring along a whole syntactic construction, such as a single-word English preposition introducing the NP COP P NP sequence to Hong Kong Cantonese. This, however, does not exclude the possibility of morphosyntactic integration, as an English preposition may be reanalysed as a verb taking up Cantonese verbal suffixes, but it is likely to have happened as a later development with the appropriate semantic motivation (e.g. the English preposition encodes a dynamic process – Chan 2018). In this light, the degree of morphosyntactic integration in single-word transfer is, among other factors, a function of the word class of the transferred word instead of the word being *a priori* an instance of lexical borrowing or single-word code-switching, a distinction that has been essentialized. In this light, nouns are most often transferred (borrowed or code-switched) in language contact not so much because of their meaning (i.e. nouns prototypically refer to concrete entities such as persons or objects) but because of their syntactic property. In the words of Myers-Scotton (2006, 229), there is the least 'syntactic baggage' associated with nouns.

6 Conclusions

The differential behaviours of single-word English prepositions in Hong Kong Cantonese make it impossible to pin them down as lexical borrowing (established or nonce) or single-word code-switches solely based on morphosyntactic integration with Cantonese, the recipient language, as espoused in the Nonce Borrowing Hypothesis (Poplack 2018, Poplack and Dion 2012, Sankoff et al. 1990). On the other hand, the fact that these

9 Poplack and Cacoullos (2016) cast doubt on the possible contributions of the 'portmanteau constructions' (Section 3.2) to our general understanding of code-switching on ground of their rarity.

English prepositions may bring along an English grammatical structure to a Cantonese-English code-switched sentence defies the MLF Model (Myers-Scotton 1993, 2002, etc.) in which a code-switched construction follows the grammar of the ML (i.e. Cantonese in our case) rather than that of EL (i.e. English in our case). Whereas the defiance of prepositions may well be due to their being function words, the single-word English prepositions examined in this study (except *of*) are treated as content morphemes in the MLF Model which partake the same morphosyntactic process or procedure as those of nouns or verbs in being inserted into a code-switched sentence. An alternative picture emerges if we take frequency as the criterion in characterizing these single-word English prepositions as lexical borrowing or single-word code-switches. While most of these prepositions are relatively rare (even though examples of them do appear in different datasets over time), *for* has become much more repetitive, and hence, it is possible to treat it as an instance of borrowing. One problem of this analysis is that *for* does take part in code-switched sentences whose structure is more likely to be drawn from English (mostly the NP COP PP structure), contradicting the assumption that lexical borrowing does not alter the grammar of the recipient/ML.

Instead of providing a straightforward answer to whether single-word English prepositions in Hong Kong Cantonese are lexical borrowing or single-word code-switches, this article argues that borrowing and code-switching are overlapping categories. Different criteria may be applied to characterize single-word transfer/replication as more towards borrowing or code-switching (Matras 2009), but there are always indeterminate cases, as illustrated by the single-word English prepositions in Hong Kong Cantonese. The fuzziness is partly because 'languages' are not rigidly separate from one other in the mind of bilinguals or multilinguals, a notion that has permeated into conceptions of 'borrowing' and 'code-switching' (Myers-Scotton 1992, 1993, Poplack 2018, etc.). Freed from a pre-occupation with distinguishing lexical borrowing and single-word code-switching, a general picture emerges in which morphosyntactic integration and overall frequency in single-word transfer/replication correlate with the word class of the transferred/replicated material (i.e. nouns are most integrated and frequent; verbs are less so and prepositions are even less integrated and frequent). While this looks like a restatement of the Borrowing Hierarchy (Thomason and Kaufman 1988), the generalization may well be due to two factors; first, the varying strengths in which different word classes are associated with morphosyntactic patterns in respective languages, and second, different ways in which they are stored and (co-)activated in the mental lexicon (Chan 2015b). Additionally, as indicated in our exploration of different frequencies of *for* and other English prepositions in Hong Kong Cantonese, there can be variations within the same word-class in different language contact settings (e.g. prepositions in Hong Kong Cantonese).

Abbreviations

1	first-person pronoun
2	second-person pronoun
3	third-person pronoun
ASP	aspect marker
BENEF	beneficiary
CL	classifier
COP	copula verb
COV	coverb
DEM	demonstrative
EXIST	existential marker
FOC	focus marker
LNK	linking particle
LOC	locative marker
MOD	modal verb
N	noun
NEG	negation marker

NOM	nominalizer
P	preposition/postposition
PERM	permissive
PL	plural marker
PP	prepositional phrase/postpositional phrase
PRT	verbal particle
QUAN	quantifier
SFP	sentence-final particle
V	verb

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