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**Light verb semantics in the International Corpus of English:
Onomasiological variation, identity evidence, and degrees of lightness**

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Abstract

This study employs corpus semantic techniques to examine the semantics of light verbs and light verb constructions (LVCs) in Singapore English, Hong Kong English, and British English via their respective components in the International Corpus of English (ICE; Greenbaum 1996). The study investigates onomasiological variation (cf. Geeraerts *et al.* 1994) by identifying selection preferences in natural use between light verb constructions and their related verb alternates. In addition, *identity evidence* is forwarded as a valuable corpus semantic tool, in which instances of naturally occurring language data resemble classic identity tests for polysemy. Via a close reading and manual semantic analysis of thousands of instances of light *make*, *take*, *give*, and their semantic alternates, this study finds remarkable consistency across the three varieties of World Englishes (WEs) in onomasiological preferences, even in extremely nuanced features of LVCs. Onomasiological evidence and identity evidence also suggest the new finding that the three light verbs and their constructions exhibit *degrees of lightness*, and that these degrees of lightness are extremely consistent across regional varieties.

1 INTRODUCTION

English light verbs have been an object of linguistic study for nearly a century, and have often been defined in primarily semantic terms. Poutsma (1926: 394-400) employed the term *group verbs* for transitive verbs in which the entire construction is semantically equivalent to a verb that is related to the Direct Object (DO). His examples include *give an answer* and *make an answer*, both semantically equivalent to *answer* (v.). Jespersen (1954: 117) coined the term *light verb* for verbs in such constructions, referring to similar criteria. As with Poutsma and Jespersen, one defining feature of light verbs continues to be the existence of a verb that is semantically equivalent to the DO (Huddleston and Pullum 2002: 290-4, Ronan and Schneider 2015; see also OED3 *make*, v., sub-sense 45 and *take*, v., sense VIII).

In addition to Jespersen's (1954) term *light verb, light verb construction* (LVC) has become a common term for particular pairings of light verbs and DOs (Karimi 2013). *LVC* is a useful term insofar as it accommodates perspectives of construction grammar: the semantic characteristics of an LVC can be seen to arise at the level of the construction, including both the light verb and its DO, rather than solely at the level of the light verb's lexical semantics. Some researchers restrict the definition of LVCs beyond strictly semantic characteristics, such that the DO must have perfect identity of form with the related verb (cf. Wierzbicka 1982, Dixon 1991, Hoffmann *et al.* 2011). For example, *have a swim* is equivalent to *swim* (v.), and the DO *swim* (n.) is isomorphic with the verb *swim*. Other researchers allow LVCs whose related verbs are related derivationally (Algeo 1995), such that *take action* is equivalent to *act* (v.), and *act* (v.) is related derivationally to *action*. Dixon (2005) notes that *make* tends to be used in LVCs with derived DOs (e.g. *make a decision*),

while *take* and *give* tend to be used with DOs identical in form to their related verbs (e.g. *take a look*, *give a kiss*), while Allerton (2002: 114-15) groups derived related verbs by suffix, identifying unique semantics for each suffix. Some debate has addressed whether DOs in LVCs should be analysed as verbs themselves (cf. Wierzbicka 1982, Dixon 1991) or as nouns (cf. Newman 1996). Hoffmann *et al.* (2011), following Dixon (2005) restrict LVCs in terms of internal modification of the DO: if a DO in an LVC is modified by an adjective, there must be an adverb derived from the adjective that can modify the related verb, as for example, *take quick action* is equivalent to *act quickly*. Finally, there is literature on acceptable grammatical transformations for various English LVCs (cf. Algeo 1995), and broader pragmatic equivalencies such as complex intransitive alternates with related adjectives or nouns as Predicative Complements (e.g. *criticise*, *make criticisms*, *be critical*, *be a critic*; Allerton 2002: 18).

In addition to LVCs in English, there is a considerable body of work on LVCs across languages (cf. Karimi 2013, Butt and Lahiri 2013, Family 2011, Butt 2010, Wichmann and Wohlgemuth 2008). For example, Butt (2010) focuses on Urdu, but underlines the issues that arise in defining LVCs in a way that applies to all languages. Family (2011; see also section 2) examines LVCs with *xordæn* ('eat') in Persian, asserting that the extremely high productivity of light verbs in Persian renders Persian a useful system for studying LVCs in general, alongside fundamental linguistic properties such as productivity, compositionality, and polysemy.

It has been posited that LVCs might be expected to vary across regional varieties, with studies comparing LVCs in British and American English (cf. Algeo 1995, Leech *et al.* 2009) or in other varieties worldwide (cf. Smith 2009, Hoffmann *et al.* 2011, Werner and Mukherjee 2012, Ronan and Schneider 2015). Such work tends

to involve quantitative comparisons of light verbs against each other, noting for example that LVCs with *have* are more common than LVCs with *take* in New Zealand, Australian, and British English (Smith 2009). Hoffmann *et al.* (2011) examine LVCs in large web-based collections of English newspapers from India, Pakistan, Bangladesh, and Sri Lanka, to identify the possible spread of regional norms, and the influence of Indian English on the region. They observe a few LVCs that occur more frequently in South Asian data than in British data, including *give boost* and *have a glimpse* (ibid: 273-4). Ronan and Schneider (2015) employ computational methods to identify LVCs in ICE-GB and ICE-Ireland. They find that British English displays a narrower range of high-frequency light verbs, while Irish English displays a more diverse array of low-frequency light verbs. These quantitative corpus studies examine some usage trends in LVCs, but do not generally involve close semantic analysis. Werner and Mukherjee (2012) conduct a semasiological study by identifying all senses of *give* and *take*, including light uses, and manually categorising individual instances in ICE-India, ICE-Sri Lanka, and ICE-GB. They find that semasiological proportions are not consistent between the corpora: for example, the three data sets exhibit different proportions of light verbs to concrete senses of the same verbs.

The approach adopted here differs from foundational semantic work on light verbs (cf. Wierzbicka 1982, Newman 1996, Brugman 2001) insofar as I investigate natural use via corpus data. The present work also differs from recent corpus studies of LVCs (cf. Smith 2009, Hoffmann *et al.* 2011, Werner and Mukherjee 2012, Ronan and Schneider 2015) insofar as I adopt an onomasiological approach for detailed manual semantic analysis of specific alternation patterns for individual LVCs, rather than broad descriptions of large quantities of light verbs and their collocation patterns.

This close manual semantic analysis of individual LVCs, and indeed of individual examples of each LVC, facilitates observation of delicate gradations of meaning. An onomasiological approach is well established, but has not previously been applied systematically to light verbs. In addition to the onomasiological analysis, I also employ an important new corpus semantic method, *identity evidence*, for identifying polysemy in use. In this case, I test how discrete light uses of verbs like *give* are from their non-light uses: for example, is the meaning of *give* in *give someone a kiss* distinct from the meaning of *give* in *give someone a book*? In addressing such questions, there is a useful intersection between classic polysemy tests and naturally occurring linguistic data in corpora: it is possible for natural language evidence to resemble the ‘identity test’, used in semantic studies for decades (Mehl 2013; cf. Zwicky and Arnold 1975; Kempson 1977: 130; Palmer 1981: 106; Cruse 1986: 62; Cruse 2004: 104). For example, if natural language evidence includes instances of constructions such as *give a kiss and a book*, then it may be that *give* is not polysemous, with a light sense and a concrete sense. Such evidence can support arguments for or against polysemy in specific words, based on usage patterns rather than on speaker intuition, and can indicate characteristics of LVCs at the level of the construction. Identity evidence is discussed in detail in section 3.2. Combined with onomasiological analysis, the two methods constitute a valuable approach to corpus semantics, illustrating how speakers and writers use LVCs to communicate.

In this study, I employ corpus semantic techniques to examine LVCs with *make*, *take*, and *give*,¹ and their related verb alternates in the International Corpus of English (ICE), representing Singapore, Hong Kong, and Great Britain.² Specifically, I ask the following research questions:

- i. What unique LVCs can be observed in ICE-Singapore (ICE-SIN), ICE-Hong Kong (ICE-HK), and ICE-Great Britain (ICE-GB)?
- ii. Do the three data sets differ in their onomasiological selection preferences for LVCs with *make*, *take*, and *give*, and their related verb alternates?
- iii. Do the three light verbs, *make*, *take*, and *give*, differ semantically in terms of their polysemy in use, as shown by identity evidence?

¹ Huddleston and Pullum (2002) identify the ‘main’ light verbs as *give*, *make*, *have*, *take*, and *do*; Werner and Mukherjee (2012) investigate LVCs with *give* and *take*; Hoffmann *et al.* (2011) investigate *give*, *take*, and *have*; Smith (2009) investigates *make*, *take*, *give*, and *have*; and Ronan and Schneider (2015) use *give* LVCs to create a gold standard for automatically identifying light verbs including *make*, *take*, and others. All the verbs cited above could be investigated using the methods here; the investigation of *make*, *take*, and *give* here is a reasonable starting point. In future work, the methods here could be applied to other light verbs.

² The data in this study represents a portion of a larger research project related to semantic variation in World Englishes. The ICE components have been selected to address broader research questions in relation to the theoretical frameworks of Kachru (1985) and Schneider (2007).

Based on onomasiological analysis and identity evidence, I propose that not all light verbs and LVCs are light in the same way, and that this seems to be the case in similar ways across all three regions. Indeed, the semantics of light verbs and LVCs are remarkably consistent across the three regions.

2 LIGHT VERB SEMANTICS

There is a limited body of systematic semantic research on English LVCs. It is generally accepted that the semantic contribution of the light verb is different from the semantic contribution the same verb would make in other constructions (Karimi 2013: 2). ‘Bleaching’ has been forwarded as the diachronic semantic mechanism by which these verbs take on light uses (Traugott and Dasher 2003). Indeed, bleaching seems to accord with Jespersen’s (1954) original assertion that these verbs are semantically ‘light’. Butt and Lahiri (2003) argue explicitly against bleaching, stating that there is a ‘tight bond’ between a verb in LVC usage and its non-LVC senses. Butt and Lahiri (2013) examine LVCs in Indo-Aryan languages to argue that light verbs are not the result of semantic bleaching. Forwarding a similar but not identical argument, Wierzbicka (1982) asserts that *have* in LVCs conveys important meaning related to *have* in non-light senses, and that clear semantic restrictions can be established on permissible DOs for light *have*, based on the other senses of *have*. Newman (1996) likewise argues that LVCs with *give* retain important semantic characteristics of *give* in non-LVC senses. Adopting a different perspective, Brugman (2001) asks whether the verb in LVCs actually exhibits semantic ‘underdetermination’ or ‘vagueness’ with its non-LVC form, and concludes that light verbs are not underdetermined, but instead

exhibit distinct meanings that can be clearly identified and defined, separate from the verb's other senses.

Given that Algeo (1995: 213) describes LVCs as being 'at the boundary between grammar and lexis, partaking of some of the characteristics of each', it is not surprising that Construction Grammar approaches have been applied effectively to LVCs. Construction Grammar posits that there is no non-arbitrary division between lexis and grammar (Goldberg 1995: 7), and that 'particular semantic structures together with their associated formal expression must be recognised as constructions independent of the lexical items which instantiate them' (ibid: 1). Family (2011: 9), discussing Persian, asserts that meanings 'embedded' in a light verb are 'triggered' by properties inherent in their complements, and these meanings arise at the level of the construction, rather than at the level of the lexical semantics of the verb. Family argues that specific light verbs combine with specific types of complements to give rise to categories of constructions with shared semantic and pragmatic characteristics (ibid: 10). I discuss such a construction grammar perspective in relation to the present findings in section 6.

Poutsma (1926: 394) seems not to have assumed universal semantic features of light verbs, positing that:

It is but natural that the vagueness of the verb entering in these group-verbs is not equally pronounced in all of them. Nor is it possible to tell to what degree a verb should have weakened semantic significance to justify its being called a mere connective.

Poutsma's claim here is ambiguous: it is not clear whether he is arguing that various instances of a single light verb may be more or less vague or bleached depending on the construction (including the DO) or the broader context; or whether he is arguing that a given light verb or LVC may be more or less vague or bleached than other light verbs or LVCs; or, perhaps, both. In later semantic work on LVCs, there has sometimes been an implicit leap from observations about a small number of light verbs (or even a single light verb) to conclusions about light verbs in general: for example, Wierzbicka (1982) examines evidence for light *have*, and argues that *have* conveys discernible meanings even in LVCs; she then proposes that this is true of light verbs more generally. Brugman (2001) argues that a given light verb may be more or less vague depending on the DO it takes, but that all light verbs carry some meaning distinct from their other senses. One new observation in the present study (see 5.3 and 6, below) is that *make*, *take*, and *give* and their LVCs do not appear to be light in the same way: they are not equally light, but instead demonstrate varying degrees of lightness.³

3 METHODS

3.1 Corpus Onomasiology

A corpus onomasiological approach begins with a question like the following: What is the observed probability that a language user employs *make a decision* instead of its onomasiological alternate *decide*? Parallel questions can be posed for each LVC with *make*, *take*, and *give* and each related verb alternate: for example, *take action* and *act*

³ For a thorough discussion of gradience in linguistics, see Aarts (2007), who also presents early reflections on gradience in corpus linguistics by Firth (1964 [1930]: 97-98) and Halliday (2002 [1961]: 248-9).

(v.); *give support* and *support* (v.). The basic alternation pattern between the LVC and the related verb is built upon the longstanding definition of light verbs and LVCs as semantically equivalent to a related verb (cf. Poutsma 1926, Jespersen 1954, Huddleston and Pullum 2002).

An onomasiological approach can be traced to 20th century research on regional lexical semantic variation (cf. Hempl 1902; Kurath *et al.* 1939, 1949) through contemporary corpus studies of WEs (cf. Haase 1994, Schneider 1994, Balasubramanian 1990). There are two strong theoretical reasons for an onomasiological approach in semantics. First, the approach reflects psycholinguistic reality: language is a tool for communication, and language users can employ each of an array of available options for communicating a given general concept; *make a decision* and *decide* communicate a common general concept, and the occurrences of each can be identified and quantified across populations (cf. Geeraerts *et al.* 1994, Geeraerts 1997). Second, onomasiology represents a statistically sound starting point, given its focus on real, measurable probabilities, with a baseline of actual alternates (cf. Wallis 2012). According to Wallis (*ibid.*: 11), onomasiology ‘minimises invariant Type C terms’, i.e. non-alternates that should not be part of a baseline of a statistical model. Wallis can be seen as reinterpreting Geeraerts *et al.*’s (1994) psycholinguistic argument for an onomasiological approach in terms of statistical soundness.

An onomasiological approach maps neatly onto Glynn’s (2014: 14) definition of corpus semantics as the study of the ‘relative frequency of association of form and meaning’. Once we have identified hypothetical alternations, such as the alternation that defines LVCs, we can use corpora to ask how often, and in which contexts, each alternate is observed. These observations constitute relative frequencies of association, in use, between multiple forms and a given meaning.

3.2 Identity Evidence for Polysemy

The classic identity test for polysemy is meant to distinguish *polysemy* from *vagueness* (cf. Geeraerts 2006 [1993], Cruse 2004: 104, Cruse 1986: 62, Palmer 1981: 106, Kempson 1977: 128, Zwicky and Arnold 1975). Traditionally, a word is polysemous if it has multiple, discrete meanings that can be invoked independently and distinguished from each other; a word is vague in relation to any element of meaning that is not specified by the word. So, *crane* is polysemous insofar as it presents two distinct meanings: ‘bird’ and ‘construction tool’. The first sense of *crane* does not specify between ‘male bird’ and ‘female bird’, but accommodates both meanings, so *crane* is not polysemous with the two meanings ‘male bird’ and ‘female bird’, but is instead vague in relation to those two meanings. Polysemy tests determine whether multiple meanings are discrete polysemous senses or vague, non-specified elements of meaning accommodated within a single sense.

In Cognitive Linguistics, it is generally argued that there is no non-arbitrary division between polysemy and vagueness (cf. Langacker 1987, Geeraerts 2006 [1993]). Instead of identifying polysemy or vagueness in any absolute way, it is possible to observe the relative frequencies, via identity evidence, of polysemous or vague instances of given words. We can then identify degrees of polysemy or vagueness in natural use.

The identity test can employ anaphora or coordination, and it is coordination, in the form of coordinated DOs, that occurs in the data examined here. Example (1) is invented to neatly demonstrate the identity test for a transitive verb, *pass*.

(1) He passed the exam and the pencils.

The identity test demonstrates whether separate meanings can be invoked in relation to each element of the coordinated DO. In example (1), the coordinated Noun Phrase *the exam and the pencils* might be seen in relation to two possible meanings of the verb *pass*: ‘hand over’ or ‘not fail’. It is possible that he ‘handed over the papers of the exam and also handed over the pencils’, but many English users may find it difficult to accept an interpretation in which he ‘did not fail the exam’ and also ‘handed over the pencils’. The intuited semantic dissonance, awkwardness, or humour that arises when invoking both senses simultaneously is sometimes called *zeugma*. If it is indeed difficult to accept such an interpretation, this can be seen as evidence that the two senses of *pass* cannot be (or are not generally) invoked simultaneously, and are discretely polysemous. On the other hand, many English users might accept an interpretation in which he ‘handed over the papers of the exam and also handed over the pencils’, but did so in two different ways, such as sliding the papers across the table towards a recipient and dropping the pencils into the recipient’s pencil bag. In this case, the manner of ‘handing over’ is an unspecified, vague element of the meaning.

In this traditional polysemy test, the semantic characteristics of the verb are indicated by elements of the construction (LVC). In traditional use, these tests would be seen to indicate the lexical semantics of the verb, but in construction grammar frameworks, this meaning can be seen to arise at the level of the construction instead.

This construction grammar perspective proves useful in interpreting the present findings (see section 6).⁴

Constructions such as example (1) can occur in natural language data in corpora. I refer to such occurrences as *identity evidence*, because they relate to the classic *identity test* for polysemy and they indicate polysemy via natural use. As far as I am aware, this phenomenon as a natural occurrence in corpus data has not been discussed in the literature, nor has it been observed or quantified via corpora. In this study, I have found that it is possible for some light verbs to take DOs that are coordinated Noun Phrases, in which one of the coordinated items represents an LVC, and the other a non-LVC. For example, phrases resembling the construction *give him a kiss and a gift* do appear in the corpora, while examples such as *make decisions and furniture* do not (see examples (17) through (22) and the discussion of them in 5.3). These phenomena can be interpreted as evidence that light *give* is not entirely discrete from other senses of *give*, while light *make* is discrete from other senses of *make*. Alternatively, from a construction grammar perspective, the evidence indicates that *give* LVCs are a different category of construction from *make* LVCs. Identity evidence supports my proposal of degrees of lightness: for *make* and *take*, the light use and the LVC seem to be discrete from the non-light use and LVC, whereas for *give*, this does not seem to be the case.

⁴ In contrast, Quine's (1960) traditional polysemy test does not rely on other elements of the construction to indicate polysemy. Enfield (2002) finds Quine's test particularly useful for that reason. However, examples resembling Quine's test occur only very rarely, if ever, in natural use.

4 DATA

4.1 Data collection

All instances of all forms of all three verbs were identified using one of two corpus interface software packages: AntConc (Anthony 2014) for ICE-SIN and ICE-HK, and the bespoke ICECUP (Nelson *et al.* 2002) software that is packaged with ICE-GB. The ICE components investigated here are sampled to represent spoken and written English native to Singapore, Hong Kong, and Great Britain (Greenbaum 1996). Each corpus includes five hundred texts of around 2,000 words each, totaling approximately one million words per region, at a balance of 60% spoken, 40% written. The corpora are further controlled and balanced via an array of precise text types and sub-types. Language users in the corpora are at least 18 years of age and have completed school, primary through secondary, entirely in English, in the region; public personae who did not attend English language schools are also permitted (*ibid.*).⁵

Each LVC with *make*, *take*, or *give* in all three corpora was manually analysed. LVCs were identified first as those constructions in which the DO has a related verb, whether isomorphic or derived (see section 1, above, and section 6, below). Examples of potential LVCs identified in this way were then sorted further via close manual semantic analysis of each example; particular issues are discussed in the next section. The following data was recorded for all examples:

⁵ The spoken portion of ICE-HK includes interlocutors who do not fit any of the criteria required by the ICE corpora. The speech of such interlocutors is tagged as non-corpus text, and has been excluded from the present analysis.

- a. corpus, text number, and line number for each occurrence
- b. light verb employed (*make, take, or give*)
- c. complete utterance context (words to left and right of *make, take, or give*, within the utterance)
- d. DO (as a lemma)
- e. coordination of DO (if present)
- f. IO (if present)
- g. modifiers of the DO (if present)
- h. passivisation (if present)
- i. other complementation including Preposition Phrases (if present)

In particular, identifying the occurrence of coordinated DOs facilitates the observation of identity evidence in the corpora.

LVCs that occur at least 3 times were identified, and the alternate related verbs of those constructions were manually identified. Data for each alternate related verb was recorded as above. Finally, as will be apparent in what follows, close reading and rigorous semantic deliberation, particularly in relation to identity evidence, is absolutely necessary for the present study. Indeed, it is close manual semantic analysis that distinguishes the present work from previous corpus studies of LVCs, and that reveals degrees of lightness.

4.2 Identifying LVCs

Examples of common LVCs with each verb are shown below:

- (2) The exercise enables your body to **make** better use of the calcium you eat [...] [ICE-GB W2B-022 #45]⁶
- (3) They pass me some guidebooks to **take** a look [ICE-SIN S1A-026 #281]
- (4) [...] it will help us to **give** you more accurate information. [ICE-HK W1B-024 #31]

In example (2), *make use* is equivalent to the isomorphic related verb *use* (v.); in example (3), *take a look* is equivalent to the isomorphic related verb *look* (v.); and in example (4), *give information* is equivalent to the non-isomorphic related verb *inform*.

In the following example, the LVC includes internal grammatical modification.

- (5) Make the most of these years to **take** plenty of regular vigorous exercise. [ICE-GB W2B-022 #63]

In example (5), *take exercise* is equivalent to *exercise* (v.), but the equivalency may be less intuitive due to the other elements within the complete Verb Phrase *take plenty of vigorous exercise*. Hoffmann *et al.* (2011) allow for adjectival but not nominal modification of the DO within LVCs; they require that LVCs only include adjectival modification in which a related adverb is allowed to modify the related verb. They would likely accept a parallel between *take regular exercise* and *exercise* (v.)

⁶ In the ICE corpora, text types are indicated via a code like W2B or S1A: W indicates written language, and S indicates spoken language, and the proceeding number and letter indicate a specific text type (Greenbaum 1996). The citation then includes a dash followed by the text number, and a hash followed by the line number.

regularly. However, due to the additional elements *plenty of*, it is likely that this construction would not qualify as an LVC in Hoffmann *et al.*'s study. Hoffmann *et al.*'s approach may be seen as erring on the side of false negatives. I take a different approach. First, unlike Hoffmann *et al.*, I do not assume regional allowability of related adverbs as modifiers; it may be, for example, that *plenty* is used as an adverb in some English varieties. I accept that internal modification does not disqualify examples from being LVCs, and example (5), in the present study, represents an LVC. In a sense, my approach, in comparison with Hoffmann *et al.*'s, might be seen as erring on the side of false positives. My approach can also be seen as a minimal theoretical commitment given the lack of knowledge regarding full allowability of all adverb-adjective alternation in all varieties.

The following example represents a passivized LVC.

- (6) Friedman (1984), for example, appears to suggest that the evolution of different contract strategies are fundamentally modifications **made** in the marketing direction to suit the clients' requirements. [ICE-SIN W2A-003 #21]

In example (6), *made* occurs in a bare passive clause (cf. Huddleston and Pullum 2002). *Modifications [were] made* is parallel to *make modifications*, which is parallel to a related verb *modify*. This parallel may be less intuitive than more canonical cases because the LVC is passive. Passivised constructions are nonetheless catalogued as LVCs in the present study. As with modification in example (5), this decision can be seen as erring on the side of false positives rather than false negatives, and making minimal theoretical commitment given the lack of evidence regarding full

allowability of the breadth of pragmatic alternates for a given example, in each region.

Example (7) includes both modification and passivisation.

(7) It stressed that firm action will be **taken** against those who behave in a disorderly manner [...] [ICE-SIN S2B-001 #37]

Here, *firm action will be taken* is parallel to *take (firm) action*, which is equivalent to *act* (v.). All such examples are considered LVCs in the present study.

Additional questions arise due to the grammatical equivalency of complementation patterns.

(8) When Harunobu Inukai is a guest chef, he insists on making everything, unlike Vittorio Lucariello who **takes** a more laid-back approach. [ICE-HK W2D-011 #75]

In example (8), *take an approach* is equivalent to *approach* (v.). However, this related verb, *approach* (v.), in Standard British English is generally said to require a DO that is not expressed in the LVC, though it easily could have been. For example, the attested example could have been *take a more laid-back approach to his work*, which would be neatly parallel to the related verb phrase *approach his work*. There are numerous pragmatically equivalent information packaging techniques that might be used in this case, such as *he... approaches his work in a more laid-back way*. Hoffmann *et al.* (2011: 266) consider as LVCs only those constructions whose equivalent forms include ‘minimal changes (like a different preposition or no

preposition at all)'. Dixon (2005), on the other hand, required that any peripheral constituents be preserved from the LVC to its equivalent. These restrictions raise multiple issues. First, the range of possible pragmatic equivalencies is extremely broad, and seems to include a spectrum from, on one end, the preservation of all peripheral constituents, to, on the other end, no preservation of peripheral constituents whatsoever. The full range of pragmatic equivalence is far beyond the scope of the present study, and has not been discussed in LVC research (with the possible exception of Allerton, 2002). Second, as with internal modification, discussed above, complementation patterns are not consistent across varieties of English, such that Singapore English, for example, is known to allow elision of DOs in Verb Phrases where elision would be non-standard in British English (e.g. 'oh yah then you can make', in reference to making ribbon, ICE-SIN S1A-047 #197, among other examples). As a result, it would be unjustifiable to assume that Standard British English complementation patterns for related verbs such as *approach* are valid in Singapore or Hong Kong English. For these reasons, examples with uncertain grammatical equivalency in their complementation patterns, such as example (8), are identified as LVCs here, based on the fundamental definitional principle of semantic equivalency between the DO in the LVC (*approach* in example 8) and the related verb (*approach* (v.)). Future grammatical research could investigate these particular grammatical phenomena, and the full range of pragmatic equivalencies, further.

One additional issue is that of possibly obsolete related verbs.

- (9) The superficial trabeculectomy scleral Qap was dissected and the partial thickness cataract incision was **made**. [ICE-SIN W2A-026#101]

(10) The second missile attack on Israel came after a night of false alarms during which the population had donned gas masks and **taken** refuge in sealed rooms three times [ICE-GB S2B-015 #101]

(11) Uh <,> before I make any comment I want to **make** a disclaimer as a professional uh <,> attitude [...] [ICE-HK S2A-021 #34]

In example (9), *make an incision* is equivalent to *incise*; in example (10), *take refuge* is equivalent to *refuge* (v.); and in example (11), *make a disclaimer* is equivalent to *disclaim*. These are the only three instances in the corpora of possible LVCs built on potentially obsolete verbs: all three verbs are described as obsolete in the OED. While the third edition of the OED does describe variation in WE lexis, the OED is not a reliable descriptor of all varieties of English. Moreover, because the ICE corpora are relatively small, the absence of *incise*, *refuge* (v.), or *disclaim* would not be surprising even if those lexemes were still in use in the variety represented by the corpus. The BYU interface for the Global Corpus of Web-Based English (Davies 2013) indicates that *incise* and *disclaim* are in fact used in online writing in Singapore, Hong Kong, and UK web domains, while *refuge* (v.) appears only once, in passive voice, and only in a UK web domain. *Take refuge* is therefore counted as an LVC in ICE-GB (the only corpus in which it occurs), and the other two LVCs are counted in all varieties.

It is noteworthy that some V-DO pairs might appear, superficially, to be LVCs, but can be discounted upon close reading: *make complaints* appears below.

(12) It has been noticed that the standard of the water supply of the above building is found to be unacceptable for a long period and it **made** a lot of complaints from our occupants. [ICE-HK W1B-019 #181]

In example (12), *make complaints* is in no way equivalent to *complain*, though in some other examples of *make complaints*, such equivalence certainly holds. Instead, this instance can only be interpreted as ‘produce/ result in a complaint’. The necessity of close reading is apparent here, as is the creative flexibility in the language.

In addition, many related verb forms are themselves highly polysemous. For example, *act* often conveys the adoption of a position or role (e.g. ‘act as an receptionist’ [sic], ICE-HK S1A-003 #336). This sense of *act* clearly does not alternate with *take action*. Again, close manual semantic analysis of every individual example of every instance of a potential related verb has been absolutely crucial for the present research. In practice, most instances are straightforward through manual analysis; for example, *act* is never ambiguous between the senses ‘perform actions’ and ‘adopt a position or role’, due in part to the different syntactic complementation patterns for the two senses.

5 DATA ANALYSIS

5.1 Unique LVCs

There is no evidence of innovative LVCs which are unique to a single variety. The absence of innovative forms of LVCs seems to accord with Hoffmann *et al.*'s (2011: 262-3) findings of only two innovative forms in a very large data set of web-based Indian English: *give a chase* (which is unique only insofar as it includes a determiner before the DO) and *take an inbreathe*. Despite the possibility of intense creative innovation with LVCs, such innovation seems not to occur widely in practice.

5.2 Onomasiological Alternation

LVCs that occur at least 3 times in each corpus have been identified and catalogued.

Related verbs that also occur at least 3 times in each corpus are then analysed as well.

Pairs that occur at least 3 times in each corpus appear in Table 1.

LVC	ICE- SIN	ICE- HK	ICE- GB	Related Verb	ICE- SIN	ICE- HK	ICE- GB
<i>make use</i>	47	35	11	<i>use</i>	1250	1259	1185
<i>make a decision</i>	33	69	59	<i>decide</i>	252	273	262
<i>make a change</i>	16	13	20	<i>change</i>	107	103	91
<i>make a contribution</i>	13	17	19	<i>contribute</i>	88	88	48
<i>take a decision</i>	4	8	21	<i>decide</i>	252	273	262
<i>take a look</i>	41	34	6	<i>look</i>	388	416	344
<i>take action</i>	24	45	34	<i>act</i>	24	30	21
<i>give/provide support</i>	17/12	15/14	11/5	<i>support</i>	79	98	133
<i>give/provide information</i>	17/13	31/26	16/23	<i>inform</i>	74	58	44

Table 1: LVCs occurring at least 3 times in each corpus (ICE-SIN, ICE-HK, and ICE-GB), with their semantically equivalent related verbs

After each instance of each alternate was manually identified and carefully read, two observations emerged. First, *make a decision*, *take a decision*, and *decide* constitute a three-way alternation. With native speaker informants, it might be possible to distinguish subtle semantic or pragmatic distinction between *make a decision* and *take a decision*, but with the corpus data available, the constructions appear to be

onomasiological alternates. These alternates are therefore analysed as a trio. Second, it was observed that LVCs with *give* actually alternate not only with their related verbs, but also with another LVC with light verb *provide*.

(13) First of all, it **provides** you with the basic information, okay... [ICE-HK S1B-010 #20]

(14) But I like the book to **give** me all the information. [ICE-GB S1A-016 #116]

(15) ...the Chinese administration uh apparently said that uhm she did not **provide** enough support... [ICE-HK S1B-037#33]

(16) Support is **given** to all investors. [ICE-SIN S1B-042 #43]

In examples (13) and (14), both *provide information* and *give information* alternate with *inform*, and in examples (15) and (16), *provide support* and *give support* both alternate with *support* (v.). These constructions are analysed as alternating trios. The implications of these observations are discussed further in section 6.

Preferences for each light verb or its related verb alternate have been statistically analysed using a Newcombe-Wilson test with continuity correction ($p < 0.05$, cf. Wallis 2009).^{7 8} The null hypothesis for this test is that the underlying

⁷ Results of a Newcombe-Wilson test with continuity correction will differ only rarely from a comparable $r \times c$ chi-square test (Wallis 2009). One advantage of the Newcombe-Wilson test with continuity correction is that it does not allow confidence intervals to extend below 0 or above 1, which would be a logical impossibility. While other statistical tests could be legitimately applied, the present analysis is a strong choice, and it is not standard procedure to compare various tests against each other unless the tests themselves are the object of scrutiny.

populations represented by the samples are not different. As with other forms of hypothesis testing, a significant result, refuting the null hypothesis, relates to both the quantity of data and the size of the difference between the measurements. For the following LVCs, the null hypothesis cannot be rejected; the three corpora represent varieties that are not different in their preferences for LVCs or their alternates.

LVC	Related Verb
<i>make use</i>	<i>use</i>
<i>make a decision</i>	<i>decide</i>
<i>make a change</i>	<i>change</i>
<i>make a contribution</i>	<i>contribute</i>
<i>take a decision</i>	<i>decide</i>
<i>take a look</i>	<i>look</i>
<i>give / provide support</i>	<i>support</i>

Table 2: LVCs exhibiting similar selection preferences across the three corpora (ICE-SIN, ICE-HK, ICE-GB)

The three corpora show strongly similar preferences regarding each of the above alternates, in both speech and writing. This finding relates to both the quantity of data and the size of the difference. In all cases, the related verb constitutes around 70% to 90% of instances, a relatively large difference. Thus, in the majority of LVC

⁸ A Newcombe-Wilson test calculates confidence intervals as Wilson intervals (cf. Wallis 2009), rather than calculating *p*-values in a traditional way; Wilson intervals are displayed in figures 1 through 4 as error bars, whereas *p*-values are not reported.

alternation pairs and trios, all varieties consistently show a strong preference for the related verb over its alternate.

For the remaining two LVCs, the null hypothesis must be rejected: the three corpora represent varieties that are essentially different in their preferences for these LVCs and their alternates. These LVCs are listed below, with their frequencies in speech and writing in each corpus.

LVC	ICE-SIN	ICE-HK	ICE-GB		Related Verb	ICE-SIN	ICE-HK	ICE-GB
<i>take action</i>	16	20	12		<i>act</i>	17	20	9
<i>give / provide information</i>	13/4	15/20	9/3		<i>inform</i>	74	36	24

Table 3: LVCs exhibiting significantly different selection preferences across the three corpora in writing (ICE-SIN, ICE-HK, ICE-GB). Numbers represent frequency of occurrence of each LVC and its alternate(s) in the written portion of each corpus.

LVC	ICE-SIN	ICE-HK	ICE-GB		Related Verb	ICE-SIN	ICE-HK	ICE-GB
<i>take action</i>	8	25	21		<i>act</i>	7	10	12
<i>give / provide information</i>	4/9	16/6	7/20		<i>inform</i>	20	22	20

Table 4: LVCs exhibiting significantly different selection preferences across the three corpora in speech (ICE-SIN, ICE-HK, ICE-GB). Numbers represent frequency of occurrence of each LVC and its alternate(s) in the spoken portion of each corpus.

The rejection of the null hypothesis here relates to both the quantity of data and the size of the difference between the observed measurements. It is noteworthy, then, that the null hypothesis here is rejected and a significant difference is observable even given the relatively low quantity of data for *take action* and *act* (v.), which are the least frequently occurring pair in the corpora. *Give / provide information* and *inform*, too, are among the less common pairs in the corpora, but a significant difference is nonetheless observable. For these two LVCs, preferences vary across the corpora in different and complex ways. The following figures convey these preferences. In writing, all three corpora exhibit an equal preference for the LVC *take action* and its related verb *act* (v.).⁹ The LVC and its alternate occur at an approximately equal rate. This observation is indicated in Figure 1: overlapping error bars for each variety show that differences all fall within the margin of error.

⁹ As noted in 4.2, *act* (v.) is polysemous. Via manual semantic analysis of every instance of *act* (v.), only those instances with the sense ‘perform actions’ were counted in this study.

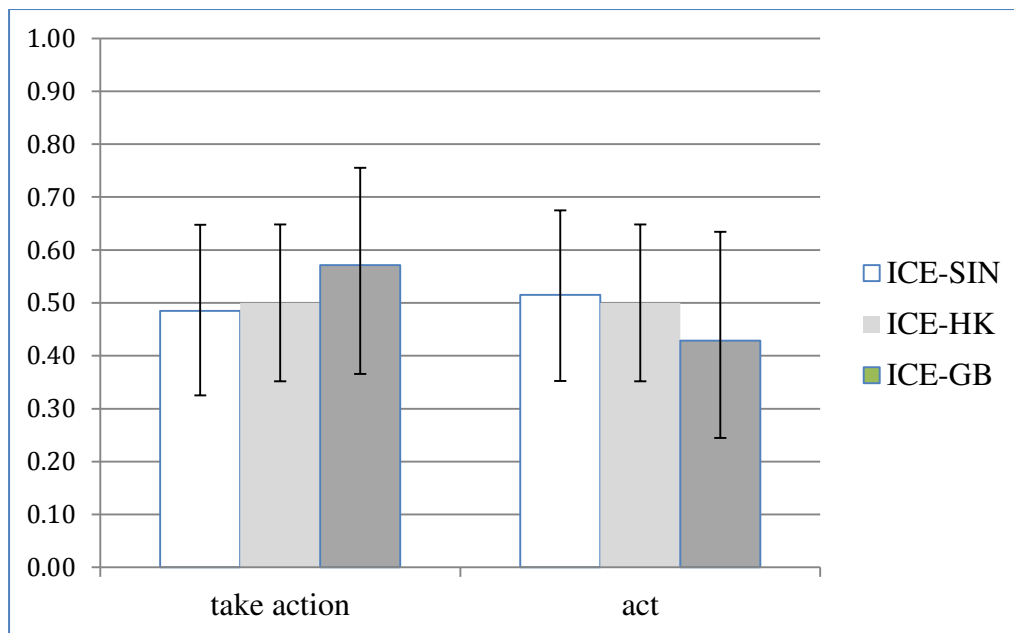


Figure 1: Instances of *take action* and *act* (v.) in the written portions of ICE-SIN, ICE-HK, and ICE-GB. The y-axis represents probabilities for each term in each corpus, and error bars represent Wilson intervals.

However, as shown in Figure 2, preferences for *take action* in speech differ across the corpora. In this case, ICE-SIN and ICE-GB exhibit no significant preference for either alternate, as exhibited by the overlapping error bars in the graph. That is, in ICE-SIN and ICE-GB, the difference in observed probability between *take action* and *act* (v.) is within the margin of error. Uniquely, ICE-HK exhibits a strong preference for the

LVC over its related verb; close reading of all examples in all texts indicates that this finding is not the result of any outlier files.¹⁰

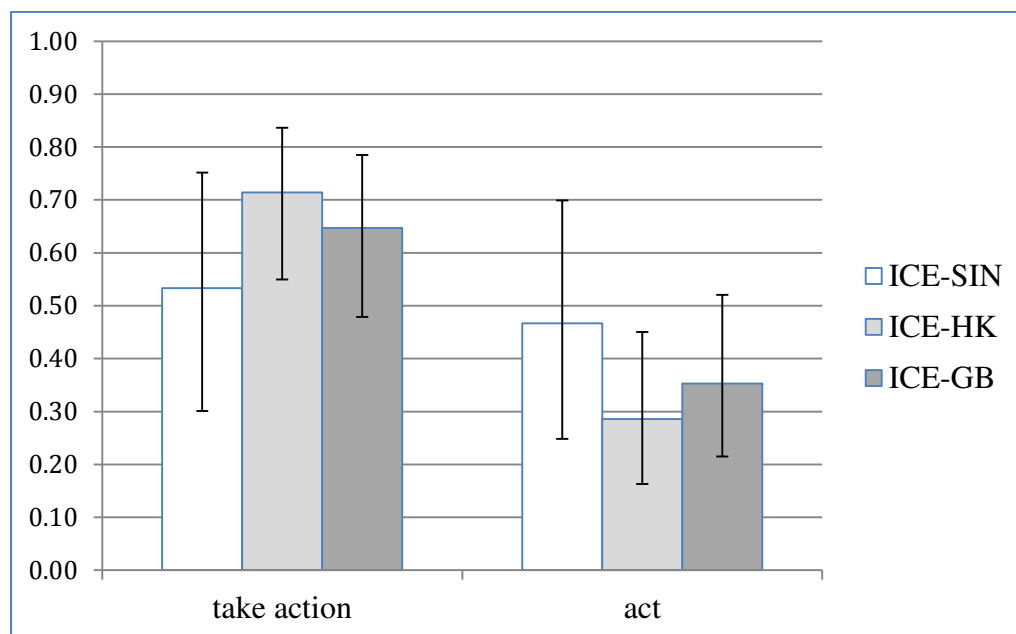


Figure 2: Instances of *take action* and *act* (v.) in the spoken portions of ICE-SIN, ICE-HK, and ICE-GB. The y-axis represents probabilities for each term in each corpus, and error bars represent Wilson intervals.

For the trio of the LVC *give information*, the LVC *provide information*, and the related verb *inform*, the data is far more complex.

¹⁰ As a counterpoint to this finding, it was observed separately that ICE-HK seemed to exhibit a unique preference for *seize* in relation to *take* with a concrete DO. This observation is, however, attributable to a large number of reports of *seizing* various drugs in the reportage section of ICE-HK; the reportage sections of the other corpora do not contain such reports in such high quantities. This only underlines the necessity of close reading and manual semantic analysis of each example of each verb.

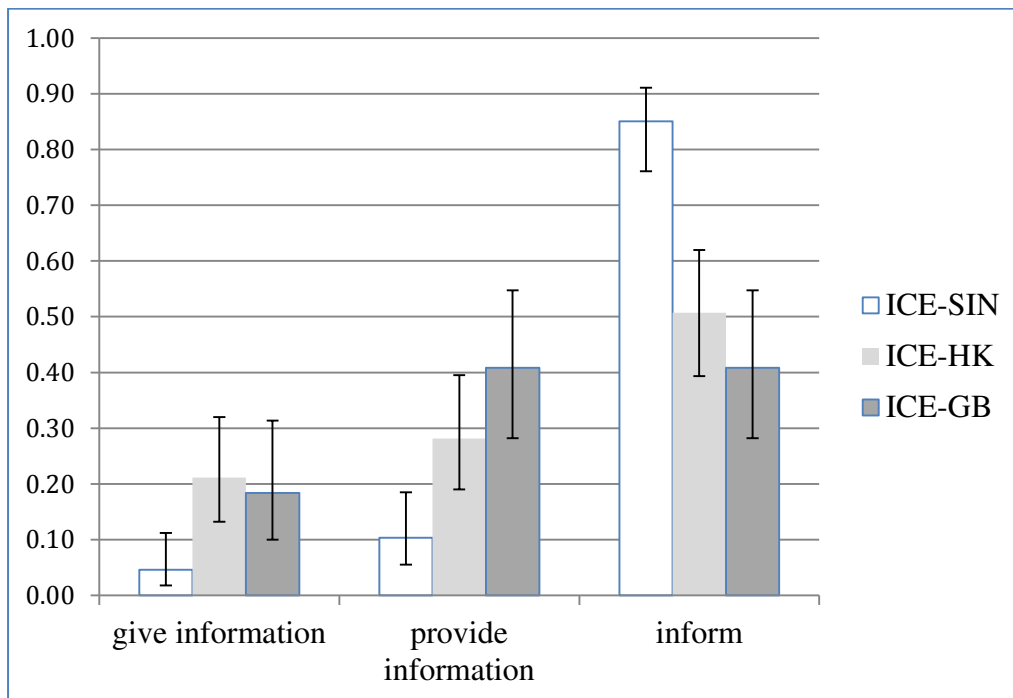


Figure 3: Instances of *give information*, *provide information*, and *inform* in the written portions of ICE-SIN, ICE-HK, and ICE-GB. The y-axis represents probabilities for each term in each corpus, and error bars represent Wilson intervals.

Figure 3 shows that, in writing, ICE-SIN and ICE-HK significantly prefer *inform* over both LVCs, and the two LVCs are equally preferred. ICE-GB, however, prefers *provide information* and *inform* equally, with a significantly lower preference for *give information*.

Figure 4 indicates that, in speech, ICE-SIN and ICE-HK prefer *inform* and *give information* statistically equally, and *give information* and *provide information* statistically equally, with a significant difference between *provide information* on the low end and *inform* on the high end. ICE-GB, however, prefers *inform* significantly more than both *give information* and *provide information*, which are preferred equally. For *give information*, *provide information*, and *inform*, the picture is

extremely complex and subtly varied, but it seems that ICE-SIN and ICE-HK are generally more similar to each other than to ICE-GB.

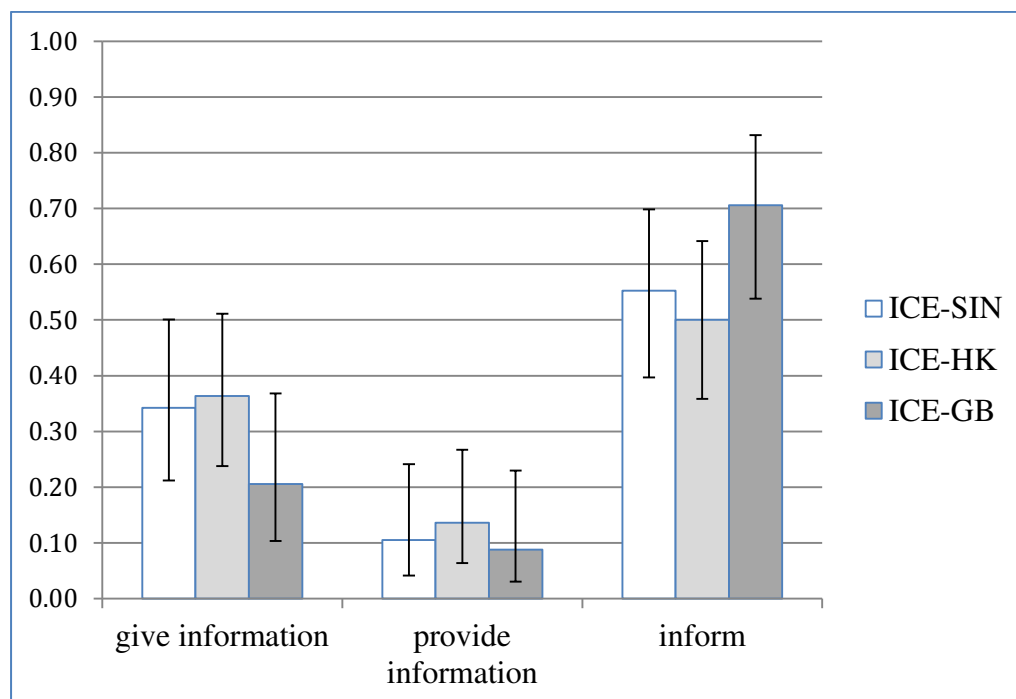


Figure 4: Instances of *give information*, *provide information*, and *inform* in the spoken portions of ICE-SIN, ICE-HK, and ICE-GB. The y-axis represents probabilities for each term in each corpus, and error bars represent Wilson intervals.

5.3 Identity evidence for *light make*, *take*, and *give*

As discussed in 3.2, identity evidence here involves coordinated DOs, and provides some insight into the semantics of these three light verbs and their LVCs. In the three corpora, there are 20 instances of natural language evidence that resemble the classic polysemy test known as the identity test, which relate light *give* to non-light *give*. These instances all include coordinated Noun Phrases as DOs of *give*. Six selected examples are presented below.

(17) He **gave** the young couple his blessing and a rather elegant house to live in.

[ICE-GB W2F-011 #052]

(18) [...] you mainly **give** us our technical support and informations, uh,

information brochure or some kinds of service support <> [ICE-HK S2A-059 #16]

(19) Uh what they really need is to be **given** the uh uh technical uh assistance and

guideline to get a good <> certified gauges to do good maintenance programme [ICE-HK S1B-047 #90]

(20) Are there any preparatory courses or some supports um **given** to foreign

students who may not know the French language very well [ICE-SIN S1B-049 #80]

(21) [...] I would appreciate it if you can **give** us your comments and any ideas to

ensure the joint promotion is effective and beneficial for both hotels in terms of revenue. [ICE-SIN W1B-016 #105]

In example (17), *give a blessing* is equivalent to *bless*, and is an LVC, while *give a house* is a concrete use of *give*. The fact that *give blessings and a house* appears to be acceptable, and certainly occurs in written use, is evidence that the LVC use of *give* is not entirely discrete from the concrete sense of *give*. Put differently, it appears that light *give* may not be so ‘light’ after all, but may overlap with non-light uses of *give* such as the concrete sense here. Alternatively, from a construction grammar perspective, *give* LVCs may constitute a category that is separate from other LVCs. Each subsequent example provides similar evidence for this non-lightness of light *give*, and for some kind of overlap between light and non-light uses. Example (18) is spoken and may include some kind of correction. However, it is clear that *give*

support is equivalent to *support* (v.) in both instances of *support*, while *give brochures* is a concrete use of *give*. In example (19), *give assistance* is equivalent to *assist*, while *give guidelines* is not equivalent to **guideline* (v.), as there is no such verb. Instead, *give guidelines* appears to be an abstract use of *give* that is not an LVC. In example (20), the passivized *support given* is parallel to the active counterpart *give support*, which is equivalent to *support* (v.), and is an LVC, while *give a course* is a non-LVC use. Finally, in example (21), *give comments* is equivalent to *comment* (v.), while *give ideas* is a non-LVC use of *give*.

The examples above provide novel evidence for light *give* and its LVCs in relation to non-light *give*. Such evidence for *make* is far more rare – only one possible instance occurs in each corpus, but each is extremely dubious.

(22) We have **made** a pact. A new start. [ICE-GB W2F-008 #17]

(23) The aim of creating twelve-tone series is **making** a coherent or unity in the form of composition with the twelve pitches in scale. [ICE-HK W1A-015 #19]

(24) Sometimes, these Red Guards would also **make** minor ambushes and small-scale battles on the Nationalists. [ICE-SIN W1A-020 #114]

In example (22), *make a start* is equivalent to *start* (v.) and is an LVC, while *make a pact* is not an LVC. The full stop after *pact* is a written stylistic choice that separates *a new start* in a way that may render it more acceptable than the alternative [?]*We have made a pact and a new start*. In example (23), it might be that *make (a) unity* is equivalent to *unite*. *Make a coherent* is likely not equivalent to *cohere*, and may seem instead to indicate ‘create coherence’, but this example, too, is dubious. Finally, *make ambushes or battles* may be equivalent to *ambush* (v.) and *battle* (v.), such that this

example is actually a coordinated LVC, but the non-standard and unusual nature of the LVCs renders the sentence debatable.

Take is unique among the three verbs. There are no examples, even debatable ones, of coordinated DOs in which one element represents an LVC and the other a non-LVC. This is true across all three corpora.

Coordinated DOs in which both elements of the coordination can be interpreted as LVCs are quite common in the corpora for *give*, not terribly common for *make*, and non-existent for *take*. Examples (25) through (29) all show LVCs with coordinated Noun Phrase DOs.

(25) And we would help to facilitate to **make** an assessment and evaluation of the building [...] [ICE-SIN S1B-041#10]

(26) We should bear in mind that all decisions and actions should be **made** with the animal welfare as the first priority [...] [ICE-HK W2B-027#131]

(27) I think in the future when government **makes** big statements announcements you should do what ministers do in the UK [ICE-HK S2A-033#115]

(28) [...] **giving** out blessings and absolutions to all sinners [ICE-GB S2B-027#67]

(29) [...] I would like to thank to say thank you to all who **give** help and support to this function [...] [ICE-HK S2A-034#4]

The tables below indicate how often coordinated Noun Phrases occur as DOs in LVCs for each verb, including how often they represent two LVCs, and how often they represent one LVC and one non-LVC. Examples (22) through (24), above, are indicated with question marks in Table 6.

	ICE-SIN	ICE-HK	ICE-GB
Coordinated DO: 2 LVCs	5	11	8
Coordinated DO: 1 LVC, 1 non-LVC	5	13	4

Table 5: Number of instances of coordinated Noun Phrases as DOs of light *give*

	ICE-SIN	ICE-HK	ICE-GB
Coordinated DO: 2 LVCs	3(+1?)	3 (+1?)	2 (+1?)
Coordinated DO: 1 LVC, 1 non-LVC	1(?)	1(?)	1(?)

Table 6: Number of instances of coordinated Noun Phrases as DOs of light *make*

	ICE-SIN	ICE-HK	ICE-GB
Coordinated DO: 2 LVCs	0	0	0
Coordinated DO: 1 LVC, 1 non-LVC	0	0	0

Table 7: Number of instances of coordinated Noun Phrases as DOs of light *take*

The theoretical implications of these observations are discussed further in the next section.

6 DISCUSSION

The three varieties are quite consistent in both the absence of innovative or unique LVCs and the trends in onomasiological alternation preferences. There are no strong cases for unique regional norms that allow unique LVCs. For the three verbs examined here, *make*, *take*, and *give*, all varieties exhibit a strong onomasiological preference against the LVC and in favour of the alternate verb in most cases. In two cases, *take action* and *give/provide information*, the three varieties differ from each other: with these two cases, the picture is relatively complex, and it is difficult to reach tidy generalised conclusions. Nonetheless, the onomasiological consistency across the varieties is impressive; future research could affirm or refute whether this might relate to a common core of semantic preferences for related verbs over high-frequency LVCs in English worldwide. Whereas we might have observed an array of novel or unique LVCs in a single variety, or unique onomasiological selection preferences in a single variety, we instead see worldwide consistency in both features.

The most striking finding here relates to identity evidence and LVCs. In section 3.2 above, I introduced the notion of identity evidence. Here, identity evidence has proven extremely useful. This evidence differs from applications of the identity test to introspectively-derived examples, insofar as it relates to Glynn's (2014) definition of corpus semantics: the mapping of the relative frequencies, in natural use, of form-meaning relations. Here, identity evidence indicates that light *give* is not terribly discrete from non-light *give*. As shown in the examples in section 6.3, light and non-light *give* can be evoked simultaneously via coordinated DOs in which one DO element would constitute an LVC, and the other would not. On the other hand, light *make* and *take* appear to be more discrete from non-light *make* and

take. For *take*, light and non-light uses are never evoked simultaneously in a coordinated DO, and for *make*, light and concrete senses are evoked simultaneously only very rarely, if ever. This distinction is in line with Poutsma's (1926: 394) admittedly ambiguous suggestion of variation in light verb usage. I call this phenomenon *degrees of lightness*, and it applies across and between light verbs and LVCs: *take* and *make* seem to be used by speakers and writers with a discrete light use; *give* seems to have a less-discrete light use. Thus, we might say that light *take* and *make* (and their LVCs) are more light than light *give*. This element of meaning might be seen as constructional, rather than purely compositional or lexical semantic: these degrees of lightness can be seen to arise not at the level of the individual words, but at the level of the constructions, which can allow or disallow the evocation of lightness and non-lightness simultaneously.

Onomasiological evidence reinforces the argument that *give* is less light than *make* or *take*: light *give* alternates with light *provide* in LVCs, an alternation pattern that has no parallel for *make* or *take*. *Give* also alternates with *provide* in concrete and abstract uses in the corpora. It is therefore plausible that *give* and *provide* both share some meaning in their light and non-light uses, and constitute a shared category of "less-light" constructions. This renders Newman's (1996) findings on *give* all the more interesting: Newman concluded that *give* was not terribly light in its LVC uses. The present findings corroborate Newman's assertions, but show that this is not a universal trend in light verbs.¹¹

¹¹ Similarly, Wierzbicka (1982) may be right that light *have* is not actually very light, but she may have been incorrect in her broader conclusion that light verbs in general are not actually very light.

If *take* and *make* are the more discretely light of the verbs studied here, it is worth noting one additional example, in which *take* and *make* are coordinated with a single DO.¹²

(30) The staff member shall not: 1) **Take** or permit to be **made** any alterations in the internal construction or arrangements or in the external appearance or in the present scheme of decoration of the premises. [ICE-SIN W2D-003#130-1]

In addition, it is noteworthy that *take a decision* and *make a decision* seem to alternate as well. This seems to be further evidence that *make* and *take* constitute one category of construction, while *give* differs.

Further anecdotal evidence also might be interpreted to suggest that *take* resists coordinated DOs that would invoke light *take* alongside some other sense.

(31) Not only do most women in Britain from the age of about 50 onwards **take** far too little calcium, they also tend to **take** far too little exercise. [ICE-GB W2B-022#22]

(32) But this does not justify the United States and Britain **taking** the law into their own hands and **taking** military action to topple him because the leaders of these two countries do not like him. [ICE-HK W2E-002#53]

¹² I am grateful to an anonymous reviewer for pointing out that this may be an erroneous use, as it is followed in the corpus by the parallel constructions ‘do or permit to be done’ and ‘keep or permit to be kept’, suggesting that the intended phrasing was perhaps ‘make or permit to be made’. In addition, it may be that ‘take any alterations’ could be deemed an innovative LVC.

While this evidence is far from conclusive, it might be interpreted that *take* in example (31) is repeated so as to avoid the coordinated construction *take calcium and exercise*, in which *take calcium* is a non-LVC and *take exercise* is an LVC with the related verb *exercise* (v.). Similarly, *take* in example (32) may be repeated so as to avoid the coordinated construction *taking the law into their own hands and military action*, in which *take action* is an LVC and *take the law into their own hands* is a non-LVC. While purely anecdotal, this may complement the strong evidence that *take* never occurs with a coordinated Noun Phrase DO in which one element would constitute an LVC and the other would not.

There is one caveat to the identity evidence presented here. While *take* seems to strongly resist coordinated DOs in which one element would constitute an LVC and the other would not, *take* seems also to strongly resist any coordination whatsoever in its DO in LVC usage. It is conceivable that light *take*, or *take* more generally, simply resists coordinated DOs, and that this tendency is independent from its resistance to coordinating LVC and non-LVC elements. I would argue, nonetheless, that the lack of identity evidence for *take* is a powerful finding. It is possible that future work such as collocation analyses (cf. Stefanowitsch and Gries 2003) could pinpoint the influence here of *take*'s broader preferences for or against coordinated DOs, if such preferences exist.

Moreover, a construction grammar approach allows the hypothesis that *make* and *take* might be members of a category of “very light” verbs that combine with a category of verb-related nouns to form LVCs that cannot combine with non-LVC uses. In that case, *give* and *provide* might be members of a different category of “less light” verbs, which can combine with verb-related nouns and other nouns

simultaneously, to form a separate class of constructions, “less light” LVCs. This second category may relate to semantics of transferral to a recipient, for example, expressed grammatically as an Indirect Object (or dative alternation), a constructional characteristic that occurs in 49-62% of instances of light *give* (depending on the corpus) but which tends to be missing from light *make* and *take*.¹³ Future construction grammar research might aim to corroborate the existence of such categories of constructions, and to establish additional specific characteristics of each category.

¹³ There are no instances of light *take* with a recipient; there is one instance of light *make* with a recipient in the form of an IO.

- i. As wholesalers of contemporary pop art cards and wrappings, we feel sure that we can make you a very favourable offer. [ICE-SIN W1B-016#168]

However, there are four instances of light *give* (out of 20) combining a light DO with a non-light DO, in which no recipient is expressed, as in example ii.

- ii. An important area of this work is to build the Character Mode for the World Wide Web, giving directions and guidelines to ensure that the internationalisation features of the various W3C specifications fit together. [ICE-HK W2B-036 #81]

In example ii, *giving directions* is an LVC equivalent to *direct*, whereas *giving guidelines* cannot be an LVC; there is no explicit recipient. This would indicate that there is no strict constructional rule that these examples of identity evidence with light *give* must include a recipient.

These features of light *make*, *take*, and *give* and their LVCs do not vary across the regions represented by the corpora. The consistency of these degrees of lightness across the corpora is noteworthy, particularly given the fine-grained features of meaning reflected in such usage, and the fact that these features have not been explicitly discussed before. In all three corpora, light *take* and *make* appear more light than light *give*, or appear to constitute a different category of construction. This might not have been the case: for example, we might have imagined the possibility, in a given variety, that *give* would never occur with coordinated DOs in which one element constituted an LVC while the other element was concrete – or, put differently, that *give* would represent the same kind of construction as *make* and *take*. Crucially, we might also have observed examples of *make* or *take* with coordinated DOs along the lines of **make decisions and furniture*, or **take action and the book*. However, we simply do not see such examples in the data, even though such examples are parallel to commonly observed examples of *give* with coordinated DOs such as *give a blessing and a house*. Again, this raises the possibility of a common core to light verb semantics or construction categories in World Englishes.

In fact, there is one interesting piece of identity evidence, via coordinated complementation pattern, for a possible different sort of nuance in Hong Kong English, involving *make*, but not in an LVC. This serves as an illustration for the type of coordinated DOs that might have been possible with LVCs.

- (33) Medicine in this aspect may be really helpful because the effect of the medication has **made** the hyperkinetic child dull and feel drowsy. [ICE-HK W1A-012#72]

In this example, two senses of *make* are at stake. First, *make the child dull* is a use in which *make* can be glossed as ‘render’, requiring a DO and a Predicative Complement of the DO (cf. Huddleston and Pullum 2002). Second, in *make the child feel drowsy*, the gloss for *make* might be something like ‘cause to’, and *make* requires a DO and a Clausal Complement. The coordination of *make* with a single DO, *child*, and two different types of complements, would seem to suggest that these two senses of *make* may not be discretely polysemous for this particular writer in Hong Kong. This example is drawn from a student essay, as opposed to an edited newspaper, and it may be that this is an error rather than indication of useful regional evidence. It is nonetheless an interesting illustration of the type of phenomenon that could certainly have emerged with coordinated DOs in LVCs. Example (33) is an interesting counterpoint to the clear consistency in identity evidence for LVCs above.

Hoffmann *et al.* (2011: 263) propose that LVCs are restricted largely by collocational norms, and that those norms might readily vary from region to region. The identity evidence here requires the examination of rare, even unique creative forms such as coordinated DOs, and moves beyond the question of collocational norms. Findings here suggest that the three varieties are remarkably similar even in their creativity, via rare constructions.

7 CONCLUSION

The present study has broken important new ground. Methodologically, the study has shown the importance of identity evidence, in which naturally occurring language data resembles the classic identity test for polysemy. This is a valuable new method which can be employed effectively not only to measure polysemy in natural use, but

also to indicate separate categories of constructions from a construction grammar perspective. It is primarily via identity evidence that I have argued for degrees of lightness, or different categories of constructions for apparent light verbs, and shown that three varieties of World Englishes are similar in this regard.

In relation to the research questions posed in Section 1, I have concluded that there is no evidence for unique or innovative LVCs in the three corpora, in line with Hoffmann *et al.*'s (2011: 262-3) findings. In onomasiological selection preferences, there is remarkable similarity across the three corpora as well: all varieties, in most cases, prefer the related verb over the LVC in both speech and writing.

Finally, identity evidence suggests that light *make*, *take*, and *give* exhibit degrees of lightness, such that light *give* and its LVCs are less light than light *take* and *make* and their LVCs. As with onomasiological selection preferences, there is remarkable similarity across the three corpora in the degree of lightness of these three light verbs. These preferences relate to very fine gradations of meaning that have not been previously reported, so their consistency across regional varieties is remarkable evidence for a common semantic core for these light verbs and LVCs worldwide. There is important future research to be conducted using identity evidence to test degrees of lightness for other light verbs and LVCs as well. Such research can establish the nature of the spectrum of degrees of lightness, or the nature of the categories of these constructions, in use.

There is also valuable future research to be done in onomasiological variation in World Englishes. By isolating the variable of onomasiological alternation first, semantic research can lay a solid foundation for future scientific inquiry into additional intersections and relationships with additional variables such as grammatical modification. It will also be important for future studies to attempt to

corroborate or refute the degrees of lightness observed here, for *make*, *take*, and *give*, and to expand such investigation to other light verbs. Identity evidence as presented here is likely to be a valuable tool for such research.

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