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*Published in:*  
Second Language Research

*DOI:*  
[10.1177/0267658312455822](https://doi.org/10.1177/0267658312455822)

2012

[Link to publication](#)

*Citation for published version (APA):*

Brown, A., & Gullberg, M. (2012). Multicompetence and native speaker variation in clausal packaging in Japanese. *Second Language Research*, 28(4), 415-442. <https://doi.org/10.1177/0267658312455822>

*Total number of authors:*  
2

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Multicompetence and native speaker variation in clausal packaging in Japanese

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**Abstract**

Native speakers show systematic variation in a range of linguistic domains as a function of a variety of sociolinguistic variables. This paper addresses native language variation in the context of multicompetence, i.e. knowledge of two languages in one mind (Cook, 1991). Descriptions of motion were elicited from functionally monolingual and non-monolingual speakers of Japanese, with analyses focusing on clausal packaging of Manner and Path. Results revealed that (1) acquisition of a second language (L2) appears to affect how speakers distribute information about motion in and across clauses in their first language (L1); (2) these effects can be seen with rather less knowledge of a second language than the advanced bilingual proficiency level typically studied; and (3) there appears to be little effect of L2 immersion in this domain since Japanese users of English as a second language (ESL) did not differ from Japanese users of English as a foreign

language (EFL). We discuss the findings with respect to characterizations of emerging multicompetent grammars, and to implications for the construct of ‘the native speaker’, for language pedagogy and language assessment.

**Keywords:** multicompetence, native language variation, Japanese, ESL, EFL, motion events, Manner, Path

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### **Acknowledgements**

Portions of this paper were presented and received feedback from audiences at the 2009 Second Language Research Forum at Michigan State University and the 2010 British Association for Applied Linguistics at the University of Aberdeen. Riko Yasunaga and Eriko Higashida provided assistance with transcriptions and coding. Three anonymous reviewers offered helpful comments and suggestions on a previous version of this article. All of these contributions are acknowledged with grateful thanks.

### **Funding**

This work was supported by the Max Planck Institute for Psycholinguistics and the Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO; MPI 56-384, The Dynamics of Multilingual Processing, awarded to M. Gullberg and P. Indefrey).

## **Multicompetence and native speaker variation in clausal packaging in Japanese**

### **I Introduction**

Native speakers have been observed to exhibit systematic variation in a range of linguistic domains as a function of a variety of sociolinguistic variables such as region (e.g. Labov et al., 2006), socio-economic status (e.g. Labov, 1966; Pakulak and Neville, 2010), ethnicity (e.g. Rickford, 1895), gender (e.g. Eckert, 1989), style and identity (e.g. Eckert, 2000) (for an overview, see Chambers et al., 2004). Recently, language variation in native speaker production has also been documented as a result of ‘multicompetence’ (Cook, 1991), that is, an individual’s knowledge of more than one language, as in the case of bilingualism or second language acquisition. Such research has shown that knowledge of a second language (L2) can affect performance in a first language (L1) in at least some linguistic domains (see papers in Cook, 2003, and e.g. Brown and Gullberg, 2010; Chen, 2006; Su, 2010). Although the number of studies in this area has recently increased, we are still far from complete characterizations of native speaker variation due to the presence of second language knowledge. There is much to resolve regarding the extent of the variation, its time course, and the specific linguistic domains involved, all of which have implications for the construct of ‘the native speaker’ (e.g. Davies, 2003) and for language pedagogy and assessment.

This paper addresses native language variation in the context of multicompetence. Descriptions of motion from functionally monolingual and non-monolingual speakers of

Japanese serve as the focus of analysis. We add clausal packaging of semantic information to the domains examined in previous research and ask whether acquisition of an L2 affects how speakers distribute information about motion in and across clauses in their L1. We address how much knowledge of a second language is necessary before changes in L1 performance can be seen by examining multicompetent individuals with rather less knowledge of an L2 than the advanced bilingual proficiency level typically studied. We also address different contexts of multicompetence by first assessing differences between Japanese users of English as a second language (ESL) in an immersion context versus Japanese users of English as a foreign language (EFL) in a non-immersion context.

## **II Background**

### **1 Multicompetence**

‘Multicompetence’ was originally proposed and defined by Cook (1991) as ‘the compound state of a mind with two grammars’ (Cook, 1991:112) and provided a term for ‘a complex mental state including the L1 and L2 interlanguage, but excluding the L2 (native speaker)’ (Cook, 2007a:17). Use of the word ‘grammar’ in this early definition was adjusted due to its narrow association with syntax, and multicompetence is typically defined now as ‘knowledge of two languages in one mind’ (Cook, 2007a:17). In line with Grosjean (1989), Cook (1992) argued that a multicompetent language user was not the equivalent of two monolingual language users, but a unique individual with a unique

combination of languages. He further claimed that the unique combination of linguistic systems within an individual mind does not necessarily represent a ‘final steady state of knowledge’ (581). Thus, multicompetence refers to the multiple language competencies in dynamic interaction exhibited by multilinguals, which differ from the single competencies exhibited by monolinguals.

Criticism of the construct of multicompetence has revolved partly around the implication that variation is not an inherent part of all language systems, just multilingual ones (Alptekin, 2010), specifically against the assumptions that monolingual systems represent ‘final steady states of knowledge’ and are qualitatively less dynamic than multilingual systems (Hall et al., 2006). Cook (2007b) later acknowledged that ‘SLA research and language teaching have paid little attention to native speaker variation whether within or across individuals’ (206) and ‘the classic triad of L1, L2, and interlanguage ignored the variation within the constructs of L1 and L2.’ (209). Perhaps because multicompetence has been applied to a broad range of areas, e.g. dynamic systems, multilingualism, lingua francas, heritage languages, and cross-linguistic influence, more recent iterations of the framework have recognized that ‘language is rarely if ever still’, that ‘final’ or ‘steady’ states of knowledge refer to a ‘relative’ rather than ‘frozen’ stasis (207), and that ‘[m]ulticompetence is a continually changing relationship between two or more language systems that are themselves constantly changing’ (209). Although this definition satisfies prior criticisms, it does raise important questions about the outer parameters and developmental trajectories of multicompetence,

including whether monocompetence, defined in its strictest terms as the complete absence of any second language knowledge, exists in today's multilingual and multicultural world, at what point languages users transition from mono- to multicompetence, and whether a transition from multi- to monocompetence is possible, for instance in the context of either L1 or L2 language loss.

Regardless of the complexity of the definition, support for a notion of multicompetence has been offered. In his early work, Cook (1992) illustrated the qualitative distinction between multilingual and monolingual systems by showing differences between the groups in L1 knowledge, L2 knowledge, metalinguistic awareness, and cognitive processes, and reviewed research suggesting the possibility of integrated versus separated L1 and L2 systems. In later work (Cook, 2007a), he focused on 'reverse transfer', or effects of the L2 on the L1, which is of most relevance to the current paper.

## **2 Multicompetence and Variation in Native Language Production**

The field of bilingualism has long acknowledged the distinctiveness of multicompetent systems. Indeed, the bi-directionality of interactions between the languages of a bilingual speaker, or 'those instances of deviation from the norms of either language which occur in the speech of bilinguals as a result of their familiarity with more than one language' (Weinreich, 1953:1), is well attested. The phenomenon of codeswitching is perhaps one of the most visible manifestations of online interaction



between multiple languages (see Muysken, 2000; Myers-Scotton and Lake, 2003: for discussions of constraints on codeswitching). Outside of codeswitching, however, unique and often convergent patterns in bilingual production have been found in domains such as the lexicon, e.g. naming patterns (Ameel et al., 2005; Ameel et al., 2009), the production of deverbal compounds (Nicoladis, 2003), and semantic categorization (Gathercole and Moawad, 2010); the sound system, e.g. vowel production (Bullock and Gerfen, 2004), voice onset time (Kehoe et al., 2004; Zampini and Green, 2001), and intonation (Colantoni and Gurlekian, 2004); and syntax and syntax-related interfaces, e.g. verb placement (Döpke, 1998), adjective-noun order (Nicoladis, 2003), tense and aspect (Sanchez, 2004), and argument omission (Montrul, 2004; Müller, 2007; Müller and Hulk, 2001; Serratrice et al., 2004; Toribio, 2004; Yip and Matthews, 2000).

Until very recently, the field of SLA had largely ignored the L1 side of multicompetence, holding a rather biased view of the relationship between the L1 and L2. This is illustrated by the enormous number of studies on ‘cross-linguistic influence’, focusing on influences from a learner’s L1, which yield both facilitative and inhibitory effects in the L2 (see overviews in Cenoz et al., 2001; DeAngelis, 2007; Gass and Selinker, 1992; Jarvis and Pavlenko, 2008; Kellerman and Sharwood Smith, 1986; Odlin, 1989; 2008; Ringbom, 2007). However, the concept of ‘cross-linguistic influence’, originally defined as ‘the interplay between earlier and later acquired languages’ (Kellerman and Sharwood Smith, 1986:1), included the possibility of a bi-directional relationship between the L1 and L2. In line with the multicompetence framework (Cook,

1991; 1992), a growing body of work has now begun to document native speaker variation in SLA, specifically differences between monolingual and non-monolingual L1 production traceable to features of the L2.

To date, research has found influences of the L2 on the L1 in a number of domains, e.g. lexical borrowing, semantic extension and narrowing (Pavlenko, 2003), collocations (Laufer, 2003), lexicalization patterns (Brown and Gullberg, 2010), voice onset time (Flege, 1987), intonation (Mennen, 2004), tense and aspect (Pavlenko, 2003), subcategorization frames (Jarvis, 2003), voice (Balcom, 2003), syntactic processing, (Su, 2001; Cook et al., 2003), requesting, (Cenoz, 2003; Su, 2010), back channeling (Heinz, 2003), reading (Yelland, 1993), writing (Kecskes and Papp, 2000; Chen, 2006), word recognition (Cunningham and Graham, 2000), co-speech gesture frequency (Pika et al., 2006), co-speech gesture viewpoint (Brown, 2008), information distribution across the modalities of speech and gesture (Brown and Gullberg, 2008), and non-linguistic categorization of number (Athanasopoulos, 2006), color (Athanasopoulos et al., 2004), and shape (Cook et al., 2006).

In the majority of studies that have found native speaker variation and argued that it is a result of knowledge of a second language, the multicompetent populations investigated were advanced bilinguals, i.e. those with very high proficiency in the second language. Such effects are perhaps less surprising given the evidence of bi-directional, cross-linguistic influences in the bilingualism literature. We have a much weaker

understanding of the extent to which lower levels of L2 proficiency can also contribute to changes in native speaker production, and the evidence we do have appears inconclusive.

A few studies have found effects of the L2 on the L1 at more ‘intermediate’ levels of L2 proficiency. Brown and Gullberg (2010; 2011) showed that multicompetent native Japanese speakers with intermediate knowledge of English used a combined L1-L2 system of lexicalization of Path of motion in their L1, Japanese, employing verbs, typical of monocompetent Japanese discourse, but also adverbials, more typical of monocompetent English discourse. In addition, the Japanese users of English displayed less semantic redundancy in L1 speech and gesture, encoding only Path of motion in gesture when both Manner and Path of motion were present in speech, in comparison to their monocompetent Japanese counterparts, whose gestures tended to mirror the semantic content of speech (Brown and Gullberg, 2008). Finally, the same multicompetent population used character viewpoint in gesture, where gestures depict events as they were experienced by protagonists, less frequently than monocompetent speakers of Japanese, favoring instead observer viewpoint, where gestures depict events as they were witnessed by the speaker, also employed by monocompetent English speakers (Brown, 2008). In work on other language pairings, Su (2010) found that Chinese users of English with intermediate as well as advanced L2 proficiency utilized the conventionalized indirect request strategy characteristic of their L2, English, in their L1, Chinese. Similarly, in a study of sentence processing in mixed language pairings, she demonstrated that Chinese users of English with intermediate as well as advanced L2

proficiency applied word order cues from the L2 to some extent when identifying the agents of actions in the L1 (Su, 2001). However, in this same study, only advanced but not intermediate level English users of Chinese showed L2 cue preferences for animacy in their L1 processing. In contrast, Chen's (2006) study of sentence combining revealed that only Chinese users of English at an intermediate but not an advanced level of L2 proficiency employed the sentence medial position of 'because' preferred in their L2, English, in their L1, Chinese.

These findings seemingly contrast with Athanasopoulos (2006) and Cook et al. (2006), who found no effects of the L2 on the L1 at their 'intermediate' levels of L2 proficiency. Athanasopoulos (2006) showed that intermediate level Japanese users of English patterned with monocompetent Japanese speakers in similarity judgments of collections of inanimate objects/substances, whereas advanced level L2 users shifted categorization patterns to those in line with monocompetent English speakers. Similarly, Cook et al. (2006) found that, after controlling for proficiency, only advanced Japanese users of English resident in England for more than three years categorized objects in a way resembling native English speakers, drawing on similarity of shape as opposed to material. Importantly, however, the studies described above supporting L2 influences on the L1 at an intermediate level employed purely linguistic tasks and made claims about language comprehension and production. Studies failing to find such proficiency effects involved non-linguistic tasks and made claims about cognition (although see Brown and

Gullberg, 2011, for a discussion of how L2 influences on L1 lexicalization patterns appear to privilege certain parts of an event in event conceptualization).

Highly problematic in all studies, regardless of focus, is the interpretation of labels such as ‘intermediate’, ‘advanced’ and even ‘monolingual’. While in some cases L2 proficiency was internally controlled through the use of standardized tests (Athanasopoulos, 2006; Brown, 2008; Brown and Gullberg, 2008; 2010; 2011; Chen, 2006; Su, 2010), several different tests were involved, and many other studies did not use such tests. Therefore, we typically have no clear sense of the extent to which ‘intermediate’ or ‘advanced’ learners are comparable across studies, or indeed of how to relate proficiency as measured by a standardized test to the domain under investigation, for example, lexicalization patterns, pragmatics, or color perception. Furthermore, monolingual controls are rarely if ever truly monocompetent such that they have never had exposure to a second language. Since the learners in many studies were users of the global language of English, which even ‘monolingual’ controls have generally had exposure to and often studied formally, the line between monolingual/monocompetent and non-monolingual/multicompetent becomes hard to draw. Finally, as noted by Athanasopoulos (2006), a limitation in many studies on second as opposed to foreign language learners (e.g. Chen, 2006; Cook et al., 2006) is the potential confound between formal L2 proficiency and residence in the L2 community, i.e. whether the effects of the L2 on the L1 are a function of language knowledge or a result of immersion experience. Indeed, a number of studies have found that after controlling for proficiency, only

extended residence in the L2 community was sufficient to engender changes in a speaker's L1 (e.g. Cook et al., 2006; Dussias and Sagarra, 2007; Laufer, 2003; although see Pavlenko & Jarvis, 2002, for lack of effects of length of residence, as well as Bylund, 2009, and Gathercole and Moawad, 2010, for effects of age of acquisition).

### **III The Current Study**

This paper investigates native language variation in the context of multicompetence. We contribute to a growing body of knowledge by adding clausal packaging of semantic information to the domains examined in previous research. We first contrast different contexts of multicompetence, specifically foreign language versus second language contexts, to assess any impact of immersion experience, before comparing multicompetent and monocompetent speakers. Importantly, the multicompetent individuals examined here have rather less knowledge of a second language than the advanced bilingual proficiency typically studied, and we attempt to relate the proficiency level of our participants to the 'intermediate' level learners in the handful of other studies that have included such individuals in order to obtain a clearer picture of the developmental trajectory of native language variation resulting from multicompetence.

The study focuses on construal of motion, where substantial cross-linguistic differences are known to exist (Slobin, 2004; Talmy, 1991). In contrast to our previous studies (Brown, 2008; Brown and Gullberg, 2008; 2010; 2011), we here examine the

combined expression of Manner and Path of motion at the level of syntax instead of isolating each component at the lexical level, specifically focusing on how speakers distribute information about Manner and Path within and across clauses. Our research questions, then, are as follows:

- (1) Is there an effect of immersion experience in the domain of clausal packaging of Manner and Path of motion in the L1 such that Japanese users of English as a foreign language differ from Japanese users of English as a second language?
- (2) Is there an effect of multicompetence such that functionally monolingual speakers of Japanese differ from native speakers of Japanese who have intermediate-level knowledge of English?

## **IV Method**

### **1 Test Domain**

Construal of motion has been found to vary robustly cross-linguistically with respect to the selection of semantic notions to be expressed and the precise ways in which these are mapped onto lexical items. Talmy (1985; 1991; 2000a; 2000b) has claimed that the expression of Manner of motion, i.e. the way in which a protagonist moves (e.g. *jump*, *roll*), depends on how Path of motion, i.e. the trajectory followed by a protagonist (e.g. *up*, *down*), is expressed. In satellite-framed languages like English, the core component of Path is normally lexicalized in a satellite (i.e. verb particle) or adposition outside the main verb; therefore, the main verb slot is free for lexicalization of Manner,

as seen in (1). Verb-framed languages like Japanese, on the other hand, typically reserve the main verb slot for Path, leaving Manner to be lexicalized in an adverbial (2) or subordinated verb (3). Of course, both types of languages have alternative options available. English speakers might also lexicalize Manner as an adverbial or subordinated verb as shown in the literal translations of (2) and (3).

- (1) The ball rolls down the hill.
- (2) Booru-ga saka-o korogatte iku  
 ball-NOM<sup>i</sup> hill-ACC roll.CON go  
 ‘The ball goes rolling on the hill.’
- (3) Mawari-nagara saka-o oriru  
 rotate-while hill-ACC descend  
 ‘(It) descends the hill while rotating.’

Such cross-linguistic differences at the lexical level frequently have consequences at the syntactic level in terms of the organization of information in the clause. The constructions employed by satellite-framed languages, e.g. Manner main verb + Path satellite, typically enable packaging of both Manner and Path in a single clause. In contrast, the constructions involving the use of multiple main verbs in verb-framed languages, e.g. Manner main verb + Path main verb, generally result in multiple clauses, one with Manner and one with Path (although see below for additional options in Japanese, for example compound verbs and complex motion predicates, which allow mono-clausal packaging). Empirical support for a cross-linguistic difference in clausal



packaging has been found, with preferences for combined Manner+Path clauses in English versus separate Manner-only and Path-only clauses in Japanese (Allen et al., 2007; Kita and Özyürek, 2003; see also Inagaki, 2002, for a discussion of constraints on packaging in Japanese).

## **2 Participants**

Forty adults aged 20-47 participated in the study: 15 monolingual speakers of Japanese resident in Japan (Japanese-only), 14 native Japanese speakers with knowledge of English resident in Japan (Japanese EFL), and 11 native Japanese speakers with knowledge of English resident in the U.S. (Japanese ESL). As stated previously, it is questionable whether individuals fitting a very narrow definition of monocompetence exist in today's multilingual world; therefore, for the purpose of this study, monocompetence was operationalized in relatively broad, functional terms as 'no current or recent study of English or any other L2, and no daily use of English or another L2'. The monocompetent speakers were subsequently recruited using these criteria. Multicompetence was also operationalized functionally as 'ongoing use of English as an L2', and the multicompetent speakers were recruited in the first instance on this basis, (though note controls for proficiency below.)

The contrast in residence among the multicompetent speakers was designed to examine any effects of immersion in the target language community. The domain under investigation, clausal packaging of Manner and Path, is essentially one of rhetorical style

as opposed to grammaticality, since a variety of options for lexicalization can yield equally grammatical single and multi-clause packaging types in both languages, as outlined below. Patterns seen only in the production of multicompetent participants living in the U.S., then, might be explained by the additive effects of immersion, assuming that such second language users may experience additional exposure to dominant patterns of rhetorical style. Similar patterns in both groups would render a simple effect of immersion less likely.

Although the data presented here are all L1, Japanese data, it was important to control for proficiency in the L2, English. Therefore, several measures of participants' knowledge of English were taken. In response to a detailed questionnaire (Gullberg & Indefrey, 2003), all participants, mono- and multicompetent, reported age and length of exposure and rated their own proficiency in speaking, listening, writing, reading, grammar, and pronunciation. Two further standardized tests of English proficiency were administered to the multicompetent speakers.<sup>ii</sup> First, oral proficiency was evaluated using the Cambridge ESOL oral testing criteria for the First Certificate in English (FCE), a mid-level exam in the Cambridge suite of exams. The criteria were applied to the narrative data elicited as part of the study, and two ex-Cambridge-certified examiners scored grammar and vocabulary, discourse management, pronunciation, and global achievement. Finally, multicompetent participants also completed the first grammar section (cloze test) of the Oxford Placement Test (Allan, 1992).<sup>iii</sup>

As expected, the ‘monocompetent’ speakers of Japanese were not truly monolingual. They all reported exposure to English, as study of English is mandatory from Junior High School on, and one also reported previous study of Spanish. However, in terms of active language use, no participant in the monocompetent group reported any daily second language study or use. Furthermore, they also reported that formal study of a second language had been completed between 11 and 25 years earlier. They were therefore considered ‘functionally monocompetent’, otherwise known as ‘minimally bilingual’ (Cook 2003) or ‘functionally monolingual’. In contrast, all the Japanese users of English actively employed their L2. The Japanese EFL (English as a foreign language) speakers reported that they had never lived in an English-speaking country, had acquired English primarily through formal study in Japan, and used English on a daily basis. Their counterparts, the Japanese ESL (English as a second language) speakers, had been residents in the U.S. for between one and two years at the time of testing, had acquired English through formal study in Japan and the U.S., and also reported daily use of the language. As would be expected in the case of immersion, the ESL group reported significantly greater daily use of English than the EFL group ( $t(23) = -2.932, p = .007$ ).<sup>iv</sup>

With respect to proficiency in English, the Japanese monocompetent and two groups of multicompetent speakers significantly differed in self-ratings, ( $\chi^2(2) = 20.912, p < .001$ ), with the monocompetent speakers rating themselves significantly lower in knowledge of English than both the EFL speakers ( $p < .001$ ) and the ESL speakers ( $p < .001$ ), who did not significantly differ from each other ( $p = .475$ ). The multicompetent

speakers' performance on the additional standardized tests of English proficiency showed that the Japanese EFL speakers did not significantly differ in proficiency from the Japanese ESL speakers as measured by the Cambridge FCE criteria ( $t(23) = 1.961, p = .062$ ) or the Oxford Placement Test ( $t(22) = .331, p = .744$ ). The EFL and ESL groups were therefore matched on formal proficiency in their L2, and were within intermediate range in their L2 according to the majority of L2 proficiency measures.<sup>v</sup> Table 1 summarizes participants' biographical information, as well as language background, usage, and proficiency data.

Table 1: *Summary of biographical and language data*

| Language background               | Japanese-only<br>(n = 15) | Japanese EFL<br>(n = 14)   | Japanese ESL<br>(n = 11)    |
|-----------------------------------|---------------------------|----------------------------|-----------------------------|
| Mean Age                          | 39<br>(range 34-44)       | 37<br>(range 20-47)        | 28<br>(range 21-36)         |
| Level of education <sup>a</sup>   | 15/15 - HS<br>12/15 - HE  | 14/14 - HS<br>12/14 - HE   | 11/11 - HS<br>11/11 - HE    |
| Mean AoE <sup>b</sup> : English   | 12<br>(range 7-14)        | 12<br>(range 9-13)         | 13<br>(range 12-14)         |
| Mean usage <sup>c</sup> : English | 0                         | 2.89 hrs<br>(range .5-8.5) | 7.21 hrs<br>(range 1-13.75) |

|                                 |               |                 |                 |
|---------------------------------|---------------|-----------------|-----------------|
| Mean self-rating <sup>d</sup> : | 1.38 / 5      | 3.04 / 5        | 3.24 / 5        |
| English                         | (range 1-2.5) | (range 2-4.2)   | (range 1.8-4.3) |
| Mean FCE <sup>e</sup> Score     | NA            | 4 / 5           | 3.69 / 5        |
|                                 |               | (range 2.5-4.7) | (range 2.5-4.8) |
| Mean Oxford <sup>f</sup> Score  | NA            | 78%             | 77%             |
|                                 |               | (range 60-90%)  | (range 58-85%)  |

<sup>a</sup> HS – High School, HE – Higher Education; <sup>b</sup> Age of exposure; <sup>c</sup> Hours of current usage per day; <sup>d</sup> A composite score of self ratings of individual skills (listening, speaking, reading, writing, grammar, and pronunciation); <sup>e</sup> A composite score of Cambridge First Certificate in English ratings (grammar and vocabulary, discourse management, pronunciation, and global impression); <sup>f</sup> Scores from the first half of the grammar portion of the Oxford Placement Test.

### 3 Stimuli

Like many studies of motion event construal (e.g. Berman & Slobin, 1994, inter al.), a semi-naturalistic, narrative task was employed. Oral descriptions of the Sylvester and Tweety cartoon ‘Canary Row’ (Freleng, 1950) were elicited from participants. Following McNeill (1992) and Kita and Özyürek (2003), the cartoon was broken down and shown in scenes, separated by a blank screen, in order to increase the likelihood of mention of individual motion events. Two different orders were constructed, which

maintained the first and last scenes in first and last position. Participants were shown one of the two orders to control for any order effects.

#### **4 Procedure**

All participants produced narratives in their L1, Japanese. Japanese EFL and ESL speakers also narrated in their L2, English, but we focus on the L1 data here. Note that L1 and L2 narratives were elicited in a counter-balanced fashion across participants. In order to control for the effects of ‘language mode’ (Grosjean, 1998), English was not used at all during the Japanese portion of the experiment, and participants interacted with a native Japanese-speaking confederate. The participant and experimenter first engaged in small talk in the target language in order to further promote a ‘monolingual (Japanese) mode’, which was particularly important in the ESL context. The experimenter subsequently asked participants to watch the series of animated scenes from Canary Row on a computer screen and describe each one immediately after viewing. Participants were free to describe the events in any way they liked, though the confederate was carefully trained to elicit as much detail as participants could remember, to appear fully engaged in participant narratives, but to avoid asking questions, and crucially to avoid supplying the target Manner or Path.

## 5 Clausal Segmentation and Coding

Narratives were transcribed from digital video by a native speaker of the relevant language. The framework developed by Berman and Slobin (1994) for the linear segmentation of spontaneous speech was adopted; therefore, descriptions were divided into ‘clauses’, defined as ‘any unit that contains a unified predicate ... (expressing) a single situation (activity, event, state)’ (Berman and Slobin, 1994: 660). Applying this system to Japanese was somewhat challenging due to the status of the connector morpheme, *-te*. This morpheme has been analyzed in several different ways, which might affect the placement of clausal boundaries (see Hasegawa, 1996; Nakatani, 2003; Kuno, 1973). Following Kuno (1973) and Nakatani (2003), *-te* was considered primarily a simple connector of temporal sequence in the current dataset. Thus, all verbs inflected with *-te* were segmented as individual clauses, with the important exception of those occurring in mono-clausal complex motion predicates, defined by Matsumoto (1991; 1996) as consisting of a motion verb, *-te* suffix, and a deictic verb.<sup>vi</sup>

A total of four motion events were selected for further examination as they contained different combinations of Manner and Path and were salient enough within the stimulus to be consistently described by most participants in one or more clauses. This yielded the following Manner-Path combinations: CLIMB + TROUGH, ROLL + DOWN, CLAMBER + UP, SWING + ACROSS. Since the study focuses on clausal packaging of Manner and Path of motion, only those target event descriptions that contained mention of both

elements were isolated for coding. Overall, a total of 85 event descriptions containing both Manner and Path from all participants were analyzed, which generated 166 clauses for coding ( $M= 4.18$ ;  $SD: 2.35$ ;  $Range: 1-10$ ).<sup>vii</sup> These clauses were coded for whether they contained mention of Manner only, Path only, or both Manner and Path. All elements encoding the protagonist’s translocational motion were included, including verbs and adverbials.

Examples of clausal segmentation and coding in descriptions of the SWING ACROSS event in Japanese appear in (4) and (5), with clause boundaries marked by brackets and Manner and Path expressions underlined.

(4) [*roopu-o kou yurashite*]  
 rope-ACC like swing.CON

[*tori-o tsukamaeni*]

bird-ACC in.order.to.catch

[*ikouto shitandesukeredomo*]

try.to.go.COMP did.but

‘(He) swung on a rope and tried to go in order to catch the bird’

(5) [*jibun-no ie kara tori-no tokoro ni tonde*]  
 own-GEN house from bird-GEN place to fly.CON

[*ikouto*]

try.to.go.COMP

‘(He) tried to go flying from his own house to the bird’s place’



Example (4) illustrates a total of three clauses produced consecutively by the same speaker. The first clause contains a Manner verb, *yurashite* ‘swing’, the second clause does not explicitly express motion, and the third clause contains a Path verb, *ikouto* ‘try to go’. In this case, two out of the three clauses were coded for expression of motion as one Manner-only clause and one Path-only clause. Example (5), on the other hand, illustrates a single clause containing a Manner participial adverbial embedded in a complex motion predicate with a deictic Path verb, *tonde ikouto* ‘try to go flying’, as well as two additional Path adverbials: *jibun-no ie kara* ‘from his own house’ and *tori-no tokoro ni* ‘to the bird’s place’. In this case, the description was coded as one Manner-Path combined clause.

To address the research questions, we conducted a qualitative analysis of the clausal packaging options displayed in the data. We then conducted quantitative analyses to ascertain the frequency with which speakers employed multiple versus single clause packaging types, looking specifically at Manner-only clauses, Path-only clauses, and Manner+Path combined clauses. In inferential tests, we first compared the EFL to the ESL group to determine any effects of immersion. In the event of no differences between them, we collapsed them to form a single group of multicompetent Japanese users of English to compare with monocompetent Japanese speakers.

## 6 Reliability of Coding

To establish inter-rater reliability, 15% of the entire data set was segmented and coded by a second coder. 95% agreement was reached on the selection of relevant clauses for coding, and of these, 100% agreement was reached on semantic coding. Disagreements were settled by accepting the judgment of the initial coder.

## V Results

### 1 Qualitative Analysis

All speakers exhibited some variety in clausal packaging of Manner and Path. Monocompetent Japanese speakers produced the packaging type predicted for verb-framed languages with Manner and Path in separate clauses, as illustrated in (6). In this single speaker's description of the ROLL DOWN event, the first clause is a Manner-only clause, expressing Manner in a main verb *suberu* 'slide'. The second clause is a Path-only clause, expressing Path in a postposition *ni* 'to' and a main verb *hairu* 'enter'.

- (6) [sonomama subette] [bousingujyou ni umaku hairimashita]  
in.that.way slide.CON bowling alley to perfectly entered  
'In that way, (he) slid and went perfectly into the bowling alley'

However, monocompetent Japanese speakers also produced the alternative packaging type, a Manner+Path combined clause, as shown in the following examples, which describe each of the four events: ROLL DOWN (7), SWING ACROSS (8), CLAMBER UP (9), CLIMB THROUGH (10).

- (7) [korogatte iku]  
 rolling.CON go  
 ‘(He) goes rolling’
- (8) [heya ni tobi-utsurouto]  
 room to fly-try.to.move.COMP  
 ‘(He) tries to fly to a room’
- (9) [sore-o kou yoji-nobotte]  
 that-ACC like clamber-climb.CON  
 ‘(He) climbs up that’
- (10) [soko kara neko-ga shita kara guu-tte shinnyuu-shiyouto]  
 there from cat-TOP bottom from squeezeMIMETIC-COMP enter-try.to.do.COMP  
 ‘The cat tries to squeeze in from the bottom there’

Examples (7)-(10) illustrate a syntactic pattern commonly associated with satellite-framed languages like English, that of Manner and Path packaged in single clauses. Monocompetent speakers of Japanese achieved this single clause packaging by means of various options for lexicalization: through the use of a mono-clausal, Manner-Path complex motion predicate, *korogatte iku* ‘go rolling’ in (7); the use of a Manner-Path compound verb, *tobi-utsuru* ‘fly-move’ and a Path postposition, *ni* ‘to’, in (8); the use of a Manner-Path compound verb, *yoji-noboru* ‘clamber-climb’, in (9); and the use of a combination of a Path verb construction, *shinnyuu-suru* ‘do enter’, a repeated Path postposition, *kara* ‘from’, and Manner mimetics, ‘words which imitate sound or shape,’

(Weingold, 1995:319), *guu* ‘squeeze,’ in (10).

Similarly, multicompetent Japanese EFL speakers in their L1, Japanese, also produced the packaging type predicted for verb-framed languages with Manner and Path expressed in separate clauses as illustrated in (11). This single speaker’s description of the ROLL DOWN event contains one Manner-only clause and one Path-only clause. In the first clause, Manner is expressed in a mimetic *korokoro* ‘roll’ and a main verb *korogaru* ‘roll’. In the second clause, Path is expressed in a postposition *ni* ‘to’ and a main verb *iku* ‘go’.

- (11) [*sonomama korokoro korogatte*] [*bouringujuyou ni itte*]  
in.that.way rollMIMETIC roll.CON bowling.alley to go.CON  
‘(He) rolls ROLL and goes to the bowling alley’

Like their monocompetent counterparts, Japanese EFL speakers also produced the single clause packaging type as shown in examples (12)-(16).

- (12) [*zuuu-tto hashitte itte*]  
all.the.way-COMP run.CON go.CON  
‘(He) goes running all the way.’

- (13) [*syuu-tto taazan mitai-ni itte*]  
swingMIMETIC-COMP Tarzan looks.like go.CON  
‘Like Tarzan, (he) goes whoosh’

- (14) [*biru kara biru e tobi-utsurouto*]  
building from building to fly-try.to.move.COMP

‘(He) tries to move flying from a building to a building’

(15) [*kou yoji-nobotte*]

like clamber-climb.CON

‘(He) clambers up’

Examples (12)-(15) illustrate Manner and Path packaged in single clauses, the pattern generally associated with satellite-framed languages. Speakers used lexical constructions such as the Manner and Path complex motion predicate, *hashitte iku* ‘go running’, in (12); the combination of Manner mimetics, *syuu* ‘swing’, a Manner adverbial, *taazan mitai-ni* ‘looks like Tarzan’, and a Path verb, *iku* ‘go’, in (13); a Manner-Path compound verb *tobi-utsuru* ‘fly-move’, with Path postpositions, *kara* ‘from’ and *e* ‘to’, in (14); and a single Manner-Path compound verb *yoji-noboru* ‘clamber-climb’, in (15).

Finally, multicompetent Japanese ESL speakers in their L1, Japanese, produced similar possibilities for clausal packaging of Manner and Path: the predicted separate Manner-only and Path-only clauses, as illustrated in (16), as well as the single Manner+Path clauses illustrated in (17)-(19).

(16) [*saka-o korogatte*] [*bouringujyou ni sonomama haitte iku*]

hill-ACC roll.CON bowling.alley to in.that.way enter.CON go

‘(He) rolls on the hill and goes into the bowling alley in that way’

(17) [*korogatte itte*]

rolling.CON go.CON

‘(He) goes rolling’

(18) [*yoji-noborouto*]

clamber-try.to.climb.COMP

‘(He) tries to climb up’

(19) [*taazan mitai-ni byuu-tto itte*]

Tarzan looks-like swingMIMETIC-COMP go.CON

‘Like Tarzan, (he) goes whoosh’

The multiple clause construction in (16) contains a Manner main verb, *korogaru* ‘roll’, in the first clause, followed by a Path postposition, *ni* ‘to’, and complex motion predicate, *haitte iku* ‘go entering’, in a second, separate clause. Examples (17)-(19) illustrate single Manner+Path clauses: a complex motion predicate, *korogatte iku* ‘go rolling’, in (17); a Manner-Path compound verb, *yoji-noboru* ‘clamber-climb’, in (18); and Manner mimetics, *byuu* ‘swing’, a Manner adverbial, *taazan mitai-ni* ‘looks like Tarzan’, and a Path verb, *iku* ‘go’, in (19).

As a verb-framed language, Japanese was predicted to lexicalize Manner and Path in simple main verbs and as a result to employ multiple clauses to express both components of a motion event, a prediction supported by previous research (Allen et al., 2007; Kita and Özyürek, 2003). However, the qualitative analysis above clearly illustrates that Japanese speakers have a considerable number of options for lexicalizing Manner and Path, e.g. compound verbs, complex motion predicates, Manner mimetics, and Path postpositions, all of which enable syntactic packaging in a single clause.

## 2 Quantitative Analyses

Table 2 illustrates the raw frequencies with which speakers employed multiple Manner-only and Path-only versus combined Manner+Path clause packaging types.

Table 2: *Raw frequencies of clausal packaging types*

| Language background          | Japanese-only<br>(n = 15) | Japanese EFL<br>(n = 14) | Japanese ESL<br>(n = 11) |
|------------------------------|---------------------------|--------------------------|--------------------------|
| Manner-only clauses          | 1                         | 8                        | 5                        |
| Path only clauses            | 17                        | 25                       | 22                       |
| Manner+Path combined clauses | 31                        | 32                       | 25                       |
| Total                        | 49                        | 65                       | 52                       |

From Table 2, it appears that the multicompetent EFL and ESL speakers produced more Manner-only-and more Path-only clauses, but also that they produced more clauses overall. However, observations of raw frequencies must be treated with caution particularly in a semi-naturalistic task, where speakers were free to say as much or as little as they wanted. Therefore, subsequent inferential subject analyses were undertaken using non-parametric Mann-Whitney U tests given the sample size and distribution of the data, and the following graphs and text report mean proportions.

The first analysis examined the frequency of clauses expressing Manner only. Initial comparisons between the multicompetent Japanese EFL versus ESL users revealed

no significant difference in the mean proportion of Manner-only clauses ( $M$  14%, 9%, respectively;  $z = -.634$ ,  $p = .526$ ); therefore, the groups were collapsed to form one multicompetent group. Figure 1 shows the mean proportion of Manner-only clauses in narratives which mentioned both Manner and Path from monocompetent Japanese speakers and multicompetent Japanese users of English in their L1, Japanese. The analysis revealed that Japanese users of English in their L1, Japanese, produced significantly more Manner-only clauses ( $M$  11%) than monocompetent Japanese speakers ( $M$  2%;  $z = -2.397$ ,  $p = .017$ ,  $r = .38$ ).

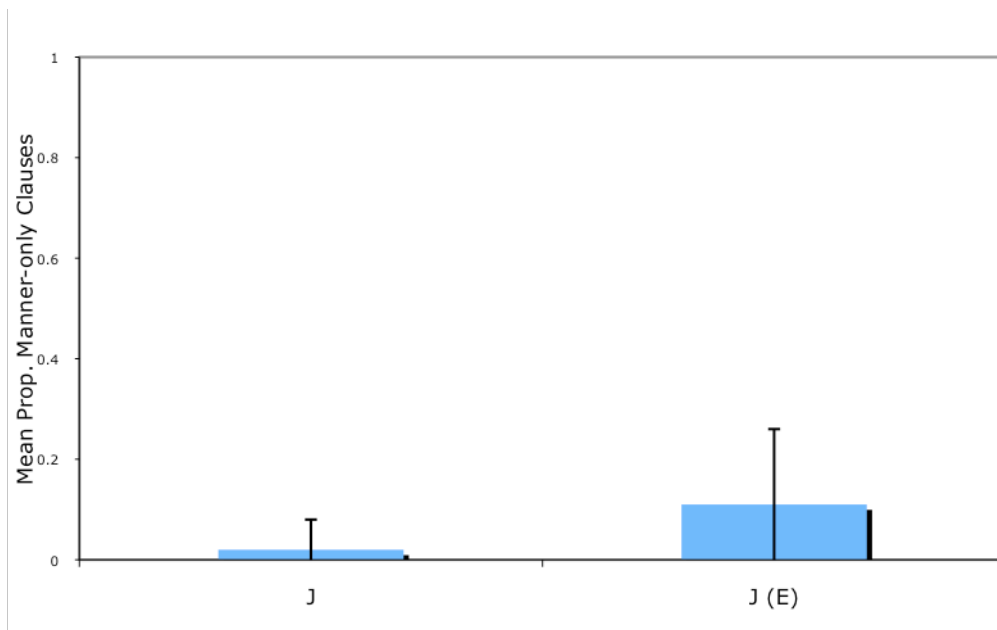


Figure 1: Mean proportion of Manner-only clauses from monocompetent Japanese speakers (J) and multicompetent Japanese users of English in L1, Japanese (J (E)).



The second analysis investigated the frequency of clauses expressing Path only. Again, as there was no significant difference in the mean proportion of Path-only clauses between the Japanese EFL versus ESL users ( $M$  34%, 36%, respectively;  $z = -.554$ ,  $p = .580$ ), the groups were collapsed to form one bilingual group. Figure 2 shows the mean proportion of Path-only clauses in narratives which mentioned both Manner and Path from monocompetent Japanese and multicompetent Japanese users of English in their L1, Japanese. The analysis revealed no significant difference between monocompetent Japanese speakers ( $M$  26%) and Japanese users of English in their L1, Japanese ( $M$  34%;  $z = -1.182$ ,  $p = .237$ ).

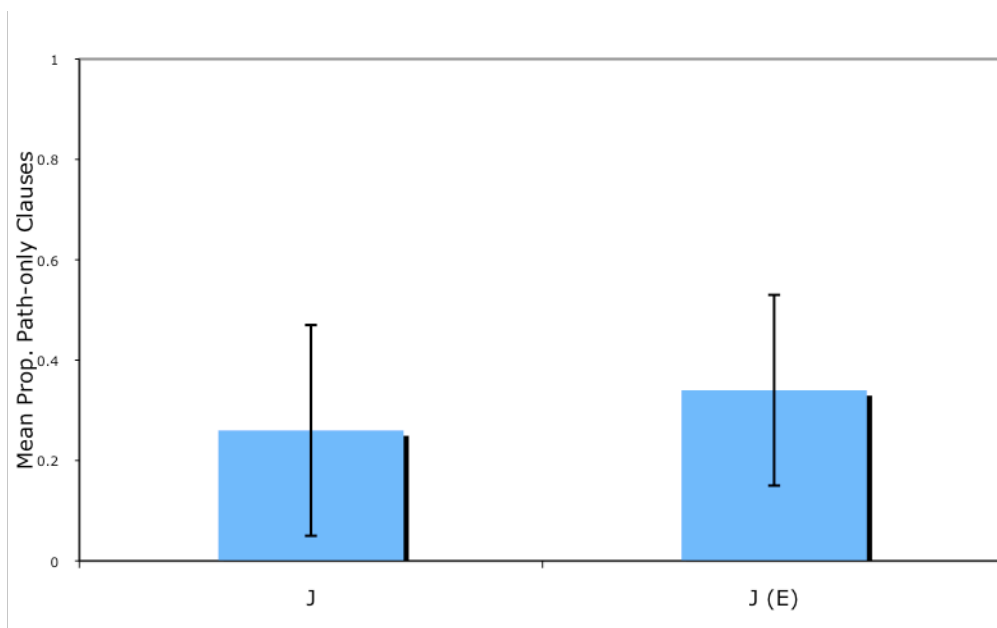


Figure 2: Mean proportion of Path-only clauses from monocompetent Japanese speakers (J) and multicompetent Japanese users of English in L1, Japanese (J (E)).

The third analysis examined the frequency of single clauses combining both Manner and Path. Once again, there was no significant difference in the mean proportion of Manner+Path clauses between the Japanese EFL versus ESL users ( $M$  53%, 56%, respectively;  $z = -.249$ ,  $p = .803$ ), and the groups were collapsed for comparison with the monolinguals. Figure 3 shows the mean proportion of Manner+Path clauses in narratives that mentioned both Manner and Path from monocompetent Japanese and multicompetent Japanese users of English in their L1, Japanese. The analysis revealed that monocompetent Japanese speakers produced significantly more Manner+Path clauses ( $M$  72%) than Japanese users of English in their L1, Japanese ( $M$  54%;  $z = -2.252$ ,  $p = .024$ ,  $r = .36$ ).

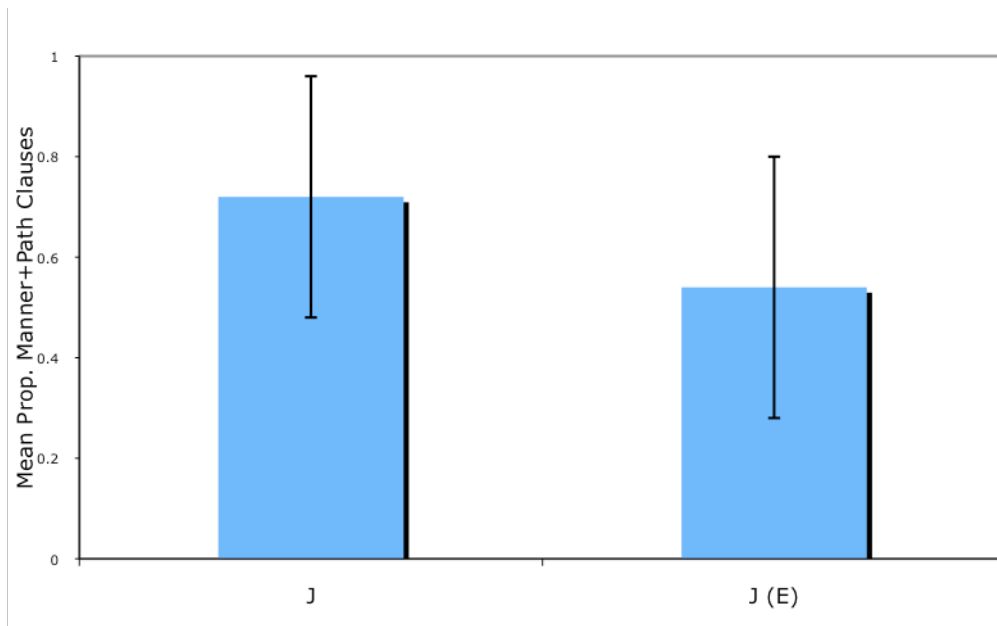


Figure 3: Mean proportion of Manner+Path clauses from monocompetent Japanese speakers (J) and multicompetent Japanese users of English in L1, Japanese (J (E)).

A post hoc analysis directly compared clause type preference (single Manner+Path versus multiple Manner-only + Path-only) within each group. The analysis revealed that monocompetent Japanese speakers produced single Manner+Path clauses ( $M$  72%) significantly more often than multiple Manner-only and Path-only clauses ( $M$  28%;  $z = -3.667, p < .001, r = .67$ ). The multicompetent Japanese users of English in their L1, Japanese, showed no such preference (single clause  $M$  54%, multiple clause  $M$  46%;  $z = -.813, p = .416$ ).

In sum, all Japanese speakers produced both clause types: Manner and Path packaged in separate clauses as well as combined in single clauses. There were no statistical differences between Japanese users of EFL versus Japanese users of ESL. However, several statistical differences were observed between monocompetent and the combined group of multicompetent Japanese speakers. Monocompetent Japanese speakers employed significantly more single Manner+Path clauses and significantly fewer Manner-only clauses than multicompetent Japanese speakers did, with moderate effect sizes ( $r > .3$ , Cohen, 1988). Furthermore, monocompetent Japanese speakers displayed a preference for single Manner+Path clauses versus multiple Manner-only and Path-only clauses with a large effect size ( $r > .6$ , Cohen, 1988), whereas multicompetent Japanese speakers used single clauses roughly as often as separate clauses.

## **VI Discussion**

This study investigated whether L1 performance varies in the context of multicompetence at an intermediate level of L2 proficiency and in an L2 immersion and non-immersion context, examining clausal packaging of Manner and Path in narrative descriptions of motion. Multicompetent speakers with knowledge of two typologically different languages, Japanese and English, were observed in order to see whether typological differences in clausal packaging of Manner and Path between the L1 and the L2 affected their performance in the L1, Japanese, in comparison to monocompetent speakers of Japanese. On the basis of previous empirical studies of Japanese (Allen et al., 2007; Kita and Özyürek, 2003), monocompetent speakers of Japanese were predicted to distribute Manner and Path across separate clauses. With knowledge of a satellite-framed language, English, which has been shown to package Manner and Path into single clauses (Allen et al., 2007; Kita and Özyürek, 2003), multicompetent Japanese users of English were expected to shift their L1, Japanese, preferences for clausal packaging towards a more English-like rhetorical style, at least to some degree. It was also possible that Japanese users of ESL might differ from Japanese users of EFL due to immersion in an L2 environment (cf. Cook et al., 2006; Dussias and Sagarra, 2007).

The results showed patterns essentially the opposite of the ones expected. All speakers produced the multi-clause packaging of Manner and Path predicted by

typological lexicalization patterns, but they also produced single-clause packaging, made possible through the use of lexical constructions such as Manner-Path compound verbs, Manner-Path complex predicates, and Manner adverbials with Path verbs. Indeed, the single clause Manner-Path package was found to be more frequent than the multi-clause package in monocompetent Japanese discourse. There may be methodological reasons for the apparent discrepancy between this and earlier studies. First, as mentioned previously, this study classified complex motion predicates as mono-clausal (e.g. *korogatte iku* ‘rolling go’) in line with Matsumoto (1991; 1996). However, if other studies had split such predicates into two clauses, this could affect patterns of clausal packaging. Second, it is possible that the Japanese-speaking participants observed in earlier studies were more bilingual than the ‘monocompetent’ participants observed here, particularly as such studies were not conducted from the perspective of SLA or bilingualism and therefore did not explicitly consider L2 knowledge. Hence, the previously described typological patterns for clausal packaging in Japanese may be more accurate for multicompetent native speakers. We return to this point below in considering the implications of this study.

The main finding of this paper, however, is that, given the systematic application of the same coding system to production from both mono- and multicompetent native speakers of Japanese, the groups seemed to differ in their preferences for clausal packaging. Monocompetent speakers strongly preferred single over multi-clause packaging, as indicated by a large effect size in post-hoc analyses. In contrast,

multicompetent speakers no longer seemed to have such a preference, but were equally likely to produce single and multiple clauses packaging Manner and Path, with no apparent effects of immersion in the L2 community. Multicompetent Japanese speakers thus seemed to have relaxed their preference for a dominant rhetorical pattern of clausal packaging in the L1, possibly due to the active presence of L2 English.

The obvious next question is whether and why knowledge of English would prompt native speakers of Japanese to change their preferences for clausal packaging of Manner and Path in their L1. There are two basic possibilities: a language-specific explanation based on an interaction between Japanese and English, and a language-neutral explanation arising from the simple fact of bilingualism. Under a language-specific L2 to L1, 'reverse' transfer account at the level of the clause, one would predict that the single Manner-Path clause type purportedly preferred in English would surface in production by multicompetent as opposed to monocompetent speakers of Japanese. However, the multicompetent Japanese pattern observed here does not resemble the pattern previously described for English. It is conceivable that previous descriptions of English are not entirely accurate, perhaps even based on multicompetent English production. Indeed, in today's globalized world, it is becoming increasingly difficult to locate even a genuinely monolingual speaker of English. And, as we have seen from the Japanese speakers in this study, knowledge of other languages may make a difference. Among the language-neutral explanations, multicompetent speakers in general might differentiate semantic components in syntax more than monocompetent speakers, as has

been proposed for children acquiring their L1 (cf. Bowerman, 1982). Alternatively, although the educational level of the participants was roughly comparable (see Table 1), it is possible that second language instruction itself provides additional experience of descriptive tasks, such as the one employed here, and that L2 users, particularly those with recent classroom experience, routinely include more information in their narratives, which is then distributed across multiple clauses (see Table 2). Without crucial data from multicompetent speakers of languages other than Japanese and English as well as an extensive analysis of narrative structure, we cannot rule out such general effects of bilingualism.

Leaving the precise source of native speaker variation aside, the main finding of this study supports the argument that multicompetence entails knowledge, or at least use, of the L1 that varies from monocompetent knowledge or use of the L1 (Cook, 1992). The variation observed is of two kinds. There is inter-group variation in that multicompetent speakers appear to vary from monocompetent speakers by not exhibiting the same preference for single Manner-Path clauses. However, there is also intra-group variability in that multicompetent speakers appear to show no preference for either clause type and employ both multiple Manner-only and Path-only clauses as well as single Manner-Path clauses to a roughly equal degree. In addition, this study supports other studies claiming that L1 variation can be observed with intermediate levels of L2 proficiency, even without extensive immersion in the L2 community. In particular, the three-year residence threshold for L1 effects of multicompetence observed in some research (e.g. Cook et al.

2006) may not be necessary for multicompetent effects on L1 clausal packaging of Manner and Path. It is important to acknowledge, however, that the label ‘intermediate’ is rather broad and may refer to different levels of L2 proficiency across studies. As no single measure of proficiency was employed in all previous studies, it becomes difficult to trace the developmental trajectory of native speaker variation in the context of multicompetence with any degree of accuracy.<sup>viii</sup>

One way to make the findings of the current and previous research more comparable, at least indirectly, is to use standard-setting, comparison equivalencies, where they exist, between the various English proficiency tests employed in each study and the rapidly spreading Common European Framework of Reference for Languages (CEFR). This framework was developed by the Council of Europe and is divided into six levels with associated descriptor competencies.<sup>ix</sup> The learners participating in this and earlier studies (Brown, 2008; Brown and Gullberg, 2008; 2010; 2011) were at Cambridge First Certificate in English (FCE) level. According to its creators, the FCE exam is a mid-level exam, preceded by two lower level exams and followed by two higher level exams, which aligns with level B2 of the CEFR. Level B2 is also a (high) mid-level of ability, preceded by levels A1, A2 and B1 and followed by levels C2 and C1. Hence, the current study participants may be described as ‘independent users’, as classified by the CEFR, ‘mid level’, or ‘intermediate’. Other research has employed the paper-based TOEFL exam as a proficiency measure. According to the standard-setting, comparison equivalencies provided by the Educational Testing Service (ETS), the intermediate



participants in Su (2010) were roughly at the A2, ‘basic user’ level of the CEFR and advanced participants at the C1, ‘proficient user’ level, while in Chen (2006), the intermediate learners were at level B2, ‘independent user’, and the advanced learners at approximately C1 ‘proficient user’.<sup>x</sup>

With reference to linguistic domain and developmental trajectory of variation, one may generalize the following from such equivalencies. At a B2, Independent User level of L2 English proficiency, L1 Japanese patterns of clausal packaging of Manner and Path of motion, distribution of information about Manner and Path across modalities, use of gesture perspective, lexicalization of Path, and construal of Goal of motion may all be altered, showing variation from monolingual Japanese patterns. Moreover, such L1 effects may be seen with knowledge of EFL or ESL, i.e. regardless of learning environment. Furthermore, at both A2, basic user, and C1, proficient user, levels of L2 EFL, L1 Chinese patterns of pragmatics, specifically requesting behavior, may be altered. However, L1 Chinese patterns of information structure in writing, specifically clause ordering, may be altered by second language knowledge of English at the B2 but not the C1 level, suggesting a potentially U-shaped trajectory in this domain. These results are necessarily language specific, given the differences in previous findings across language pairings (e.g. Su, 2001). However, they support the more general claim that domains such as the lexicon, pragmatics and interfaces between these and syntax are vulnerable to cross-linguistic influence (e.g. Hulk and Müller, 2000; Ionin and Zubizarreta, 2010; Köpke, 2002).

These are, of course, rudimentary generalizations. However, as stated previously, we are very far from full characterizations of multicompetent grammars, particularly with respect to the L1. There are numerous areas where further research is needed. We have not been able to include in the generalizations above the findings of studies where proficiency was not formally measured (e.g. Su, 2001), as no equivalences with the CEFR can be constructed. We have also not attempted here to connect or extend the generalizations on L1 variation in second language acquisition to the literature discussed previously on L1 variation in individual bilingualism, or indeed related literature on contact-induced variation in societal bilingualism (e.g. Treffers-Daller and Mougeon, 2005). Such a discussion with due consideration of factors such as length of residence in an L2 community, general sociolinguistic factors, and type of L1 variation, e.g. attrition reflected in grammatical errors versus other effects reflected in changes in distributional preferences, warrants an entire meta-analysis of its own.

In a related point, in order not to confound residence with proficiency (cf. Athanasopoulos, 2006), the Japanese ESL participants had only had one to two years of residence in the L2 community, which enabled a match between ESL and EFL speakers on formal proficiency and yielded no statistical differences in production between the two groups. However, even with the cautious non-parametric analyses applied to the modest sample sizes included here, null results themselves must be treated with caution, and it is possible that if one were able to hold proficiency constant with larger samples, ESL speakers with residence longer than three years might exhibit further L1 effects of

multicompetence than EFL speakers (cf. Cook et al. 2006). In addition, although the monocompetent Japanese speakers were not truly monolingual and possessed a minimal level of L2 proficiency, we have postponed a full developmental account of L1 variation as our own study did not include functionally multicompetent speakers of different L2 proficiency levels. Much more description is needed before a developmental model can be proposed (although see Chen, 2006, for an attempt). Furthermore, given that true monocompetence, at least among adults, is increasingly rare, the field should work towards a consensus on what levels of second language proficiency and use constitute functional monocompetence and how to measure such levels among self-proclaimed monolinguals in socioculturally appropriate ways. Moreover, we have only proposed possible factors underlying the main finding of the current paper. We have been careful to describe our study as an investigation into L1 variation *in the context of* multicompetence without drawing conclusions regarding causality, i.e. claims that patterns are due to language-specific influences from the L2, English, or to language-neutral, general influences of bilingualism. Teasing apart these factors would require L1 data from other L1-L2 pairings (see Jarvis, 2000; 2010, for discussions of the methodological rigor needed in studies of cross-linguistic influence). Finally, as verb-framed languages in general, and Japanese in particular, are known for omission of Manner information (e.g. Brown & Gullberg, 2008) and as this study of clausal packaging of Manner and Path required analyses of only those motion descriptions that mentioned both events, the resultant number of codable clauses from participants was

relatively small (cf. note vii). Therefore, in addition to replication with other language pairings, replication with more speakers describing more events would also be advisable.

Despite these limitations, the various statistically significant differences between the functionally mono- and multicompetent populations with associated moderate to large effect sizes reported here may be seen as a starting point, one that does have implications for a number of areas. With effects of multicompetence visible at even intermediate proficiency in an L2, we suggest that language background in general, and multilingualism in particular, be considered as a standard variable in all work on language use, even research not specifically in the fields of SLA or bilingualism such as typological work (cf. Gullberg, 2012). Furthermore, our results speak to growing reservations of the ‘native speaker’ construct (e.g. Davies, 2003). This issue has touched several areas of Applied Linguistics in recent years, for example, discussions of global languages such as English, where determining ownership of languages is hotly debated (e.g. Crystal, 2003), and discussions of multilingual communities, which are characterized by shifting language identities (e.g. Ansaldo, 2010). Problems with the construct of the native speaker clearly impact language teaching pedagogy, where input, for example in the form of classroom materials, is often based on a ‘native speaker standard’. The perception and use of such a ‘standard’ has been criticized, and at least some have argued for increased awareness, acknowledgment, and description of native speaker variation with corresponding applications to the language classroom (e.g. Firth and Wagner, 1997). One example of this has been the concept of the ‘pedagogical norm’

(cf. Valdman, 1989), which proposes that the selection and sequencing of constructions for language teaching should be based on authentic and therefore variable target language speech in addition to other factors such as learner and native speaker attitudes and perceptions of language use, processing, and learnability. Finally, there are implications for language assessment. Importantly, the constructions produced by the multicompetent native Japanese speakers in this study were in no way ungrammatical, but if such constructions had been produced by a second language learner of Japanese, how would they be viewed? The frequent omission of Manner in Japanese discourse notwithstanding, a functionally monolingual native speaker of Japanese might consider a Japanese L2 speaker's frequent use of a multiple clause construction somehow 'lacking', 'less natural', 'less efficient', or 'wordier', perhaps, than the single clause construction more frequent (at 72% of the time, with a large effect size) in monocompetent Japanese discourse, a hypothesis that would be interesting to test. The potential unfairness and invalidity of such assessments lie at the heart of Cook's multicompetence framework. As he argues, 'If interlanguage is indeed an independent language, scoring learner speech for obligatory native (monolingual) contexts is as absurd as scoring English for presence of Italian morphemes.' (Cook, 1997:40).

To conclude, variation in native language production has long been acknowledged as a result of sociolinguistic factors (Labov, 1963; 1972), but it may also be a result of the acquisition and ongoing use of a second language. Such variation can occur between groups, e.g. between functionally monocompetent and multicompetent native speakers,

but also within groups, e.g. through lack of clear linguistic preferences among multicompetent native speakers. Moreover, it might not take much exposure to the L2 or require L2 immersion before changes in the multicompetent L1 become visible. These changes do not necessarily signal attrition, and may remain, evolve, or disappear with increasing competence in the second language. L1 variation at any proficiency level in the L2 should therefore be acknowledged in descriptions of language use, in discussions of native speakerhood, in selection of input for language pedagogy, and in assessment of second language performance.

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## Notes

<sup>i</sup> Abbreviations used in examples are ACC = accusative case, GEN = genitive case, NOM = nominative case; CON = connector, TOP = topic marker.

<sup>ii</sup> Since the monolinguals reported no recent study or daily use of English, it was deemed pragmatically inappropriate to administer either of the standardized proficiency tests of English.

<sup>iii</sup> One participant did not take the Oxford Placement Test.

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<sup>iv</sup> Since the monocompetent group reported no daily use of English, they were not included in this statistical calculation. For the multicompetent group, it would have been desirable to contrast daily usage of English with daily usage of Japanese, particularly for the users of ESL; however, many participants interpreted questions about language use as referring only to their L2, rendering data on daily use of the L1 incomplete.

<sup>v</sup> Although a rather wide range of scores were obtained on the Oxford Placement Test, these scores cannot be classified according to the official proficiency descriptors for the standardized test as only the first portion of the grammar text was administered, essentially a quarter of the entire test, in order to keep the total experiment to a reasonable time length (about three hours for bilinguals). Moreover, as our research questions focused largely on rhetorical style and the data elicited for the study were in the form of oral narratives in the L1, we did not feel that a discrete test of written grammatical knowledge in the L2 was the most valid measure of L2 knowledge. We therefore prioritized self-ratings and assessments using the Cambridge FCE Scale, which both indicated an intermediate range of L2 proficiency.

<sup>vi</sup> The category of complex motion predicates was not described explicitly in previous distributional accounts of clausal packaging of Manner and Path in Japanese (e.g. Allen et al. 2007; Kita & Özyürek, 2003), and could have been coded as multi-clausal constructions in contrast to the mono-clausal code they received here.

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<sup>vii</sup> As participants were free to describe the stimulus in any way they wanted, ten target events out of a possible 160 were not mentioned by participants, leaving a total of 150 potential event descriptions. Furthermore, we could only analyze the event descriptions in which both Manner and Path were mentioned. Talmy's (1991) original framework predicted that verb-framed language speakers may omit Manner from motion descriptions, and this has been found in empirical work on languages such as Spanish (e.g. Slobin 2006) and specifically Japanese (Brown & Gullberg 2008). The analyses of clausal packaging of Manner and Path were necessarily based on a subset of narratives in which both Manner and Path were mentioned naturally and without prompting by speakers of a language that is known to omit Manner, yielding the total of 85 event descriptions containing both Manner and Path (27 from the monolingual Japanese, 32 event descriptions from the Japanese EFL, and 26 from the Japanese ESL groups). All but four participants (three from the monolingual Japanese group, and one from the Japanese ESL group) produced more than one codable clause, yielding a total of 166 codable clauses (49 clauses from the monolingual Japanese, 65 from the Japanese EFL, and 52 from the Japanese ESL).

<sup>viii</sup> This is particularly true of studies involving L2 English, which, due to its global status as defined by the enormous number of L2 users, can be measured by a plethora of proficiency tests.

<sup>ix</sup> See <<http://www.coe.int>> for more information.



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<sup>x</sup> There may be some conflict between the standard-setting equivalencies calculated by Cambridge ESOL versus ETS. Although Cambridge ESOL do not equate their suite of exams with any of the ETS English language exams (e.g. TOEFL or TOEIC), they offer the following guide, ‘(M)ost UK universities which accept the Certificate in Advanced English (CAE), the Certificate of Proficiency in English (CPE) (...) for admission purposes often request a (paper) TOEFL score of approximately 550.’ Taking their CEFR equivalences together with this guideline, the implication is that the CAE, which aligns with level C1 on the CEFR, may also align with 550 on the paper-based TOEFL. This contrasts with ETS’s own calculations, which maintain that a score of 637 on the paper-based TOEFL aligns with level C1 of the CEFR. Although the use of the CEFR is expanding rapidly, the framework is relatively new and estimates of its relationships to other proficiency measures may be regarded as in their infancy. In addition, the CEFR for English, published by Cambridge University Press, contains extensive level descriptors for oral proficiency, and the Cambridge ESOL suite of exams also measure oral proficiency. These parallels in publication location as well as target skill perhaps facilitate equivalences between the FCE and the CEFR. The TOEFL was developed in North America, and, in contrast to the iBT, the traditional paper-based TOEFL did not measure oral proficiency, both of which possibly make equivalences between it and the CEFR more challenging.

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