Semantics before Syntax: L2 Knowledge of *anyone* by Korean Speaking Learners

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1. Introduction[1]

One of the key issues in second language acquisition in recent years concerns how learners integrate knowledge from different components of the interlanguage grammar. This has brought about new developments such as the interface hypothesis (Sorace & Filiaci (2006); Tsimpli & Sorace (2006), among others) and new debates such as which component of the grammar (if any) is more susceptible to failure in achieving native like knowledge (e.g., Slabakova (2006); Lardiere (2000)). Related to this issue, our paper is a report of a pilot study which investigated how L2 knowledge of syntax and semantics is integrated. Specifically, we tested Korean speaking learners of English on their knowledge of the syntactic and semantic properties of polarity item *anyone*.[2]

Anyone is a notoriously complex item in terms of its syntactic and semantic properties, governing its distribution and interpretation, respectively. Briefly, *anyone* can occur only in a restricted set of environments, and it has differing interpretations depending on the environment in which it occurs. Korean, on the other hand, does not have a direct equivalent of *anyone*. Instead, Korean utilizes wh-words as indefinites and they, or their combination with different particles serve as quantifiers including *any*. Their distribution is not restricted and their interpretation is not context-dependent. To obtain the different interpretations conveyed by *anyone* different forms of wh-indefinites are used.

The present study aims to tease apart certain syntactic and semantic properties of *any*, and to investigate whether Korean-speaking learners of English can acquire them, given their contrasting L1 with respect to this quantifier. Our experiment tests hypotheses based on Sprouse's (2006) Lexical Transfer model of L2 acquisition to investigate, firstly, whether or not Korean-speaking learners can overcome the differences between Korean and English 'any' and achieve nativelike intuitions about *any* in English, and secondly, if they do, whether this is the result of the successful integration of syntactic and semantic knowledge of *anyone*.

This paper is organised as follows. Section 2 gives details of syntactic and semantic properties of the polarity item *anyone* in English, and its counterparts in Korean. Section 3 sets out the acquisition problem facing Korean-speaking learners with respect to attaining knowledge of *anyone* in English. Section 4 outlines our L2 acquisition experiment and the findings. Section 5 discusses the findings in the context of the Lexical Transfer model of L2 acquisition. Section 6 concludes by addressing the implications of the present findings for the integration of L2 syntactic and semantic knowledge.

2. 'Any' in English and Korean

English *any* is a polarity item whose distribution is restricted to non-veridical environments, such as those illustrated in (1-a)–(1-c):

[2]Polarity item *any* includes different lexical items such as *anything*, *anywhere* and also *any DPs* such as *any books*. We refer to *anyone* as a prototypical example of polarity item *any* because *anyone* is what we used as a target item in our experiment.

(1)   a.   Mary smiles at *anyone*. (Habitual [or Generic])
      b.   Is *anyone* playing the piano? (Interrogative)
      c.   If *anyone* crosses the finish line, raise the flag. (Conditional)

The habitual, interrogative and conditional environments in (1-a)–(1-c) are all nonveridical, in that they do not correspond to specific events that actually happened or are in the process of happening. In a veridical environment, such as the present progressive, as in (2-a), or episodics, as in (2-b)–(2-c), *any* is ungrammatical.

(2)   a.   *Anyone* is playing the piano.
      b.   *Anyone* went to the party.
      c.   *John greeted *anyone* at the party.

Korean expresses 'any' in a substantially different way. In this language, so-called 'wh-indefinites' are used. These are wh-words either standing alone, or used in conjunction with the disjunctive particle *-na*. Thus the meaning 'anyone' is expressed either by *nwu(kwu)* 'who' (3-b)–(3-c), or by *nwukwu-na* 'who-DISJ' (3-a).[3]

(3)   a.   Mary-nun *nwukwu*-ekey-*na* miso cisnunta
           Mary-TOP who-DAT-DISJ   smile build
           'Mary smiles at anyone' (Habitual [or Generic])
      b.   *Nwu*-ka   cha-lul   masiko iss-nayo?
           who-NOM tea-ACC drink   PROG-Q
           'Is anyone drinking tea?' (Interrogative)
      c.   *Nwu*-ka   sen-ul   nemu-myen, kispal-ul tul-era
           who-NOM line-ACC cross-COND flag-ACC raise-IMPER
           'If anyone crosses the line, raise the flag' (Conditional)

The distribution of Korean wh-indefinites is not restricted to nonveridical contexts. They can occur in veridical environments too, including present progressives (4-a) and episodics (4-b)–(4-c).

(4)   a.   *Nwukwu-na* piano-lul   yencwu hako-issta
           who-DISJ   piano-ACC play   do-PROG
           'Everyone is playing the piano.'
      b.   *Nwukwu-na* pati-ey   kass-ta
           who-DISJ   party-to went-DE
           'Everyone (*anyone) went to the party'
      c.   John-un   pati-ese *nwukwu*-hantey insa ha-yss-ta
           John-TOP party-at who-DAT   greet do-PST-DE
           'John greeted someone (*anyone) at the party.'

Thus, 'any' in English has a restricted distribution, whereas its counterparts in Korean do not. A second difference between Korean and English 'any' concerns interpretation. In English, the interpretation of *any* varies according to the environment. In a habitual environment (1-a), *any* receives a universal interpretation (i.e., 'Mary smiles at everyone'), whereas in an interrogative or conditional, *any* receives an existential interpretation. Thus, (1-b) means 'Is there at least one person who is drinking tea?' and (1-c) means 'If at least one person crosses the line, raise the flag'. By contrast, the interpretation of wh-indefinites is fixed, and does not change according to the environment. Thus *nwu(kwu)* without the disjunctive *-na* always has an existential interpretation, whereas *nwukwu-na* always has a universal interpretation.

In short, there are clear differences between English *anyone* and Korean *nwukwu(-na)* in terms of both distribution and interpretation. These differences can be argued to arise from differing licensing

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[3]The base form for 'who' in Korean is *nwukwu*. When this is attached to the nominative case marker *ka*, the form is reduced to *nwu*, hence the form *nwu-ka* (who-NOM) in (3-b) and (3-c). Note that when Korean *wh*-words occur on their own their is potential ambiguity between a wh-question and wh-indefinite reading. Thus, for example, (3-b) is ambiguous between the readings 'Who is drinking tea?' and 'Is anyone drinking tea?'. Differentation between the two meanings is made by the intonational pattern.

processes for 'any' in the two languages. English *any* may be licensed as a 'nonveridical item' (NVI) along the lines of Zwarts (1995) and Giannakidou (1997). NVIs are licensed only in nonveridical contexts (generics, interrogatives, conditionals, etc.) which contain a non-veridical operator. The type of non-veridical operator determines the interpretation. When licensed by a generic operator, *any* receives a universal interpretation; when licensed by an interrogative operator, it receives an existential interpretation. If no nonveridical operator is present, *any* is ungrammatical, as in the present progressive and episodic sentences.

Turning to Korean, we follow the proposal by Gill et al. (2007) and Gill & Tsoulas (2008), whereby licensing of wh-indefinites takes place by feature agreement. *Nwukwu* ('who') introduces a variable φ, and the disjunction *na* contains an uninterpretable distributive feature [*u*Dist]. The feature [*u*Dist] is licensed by feature agreement with DistP, a functional projection available in the clausal spine (following Beghelli & Stowell (1997)). Since DistP is (potentially) always available, there is no environment in which *nwukwuna* cannot potentially check its [*u*Dist] feature. This feature checking process is illustrated in (5).

(5)
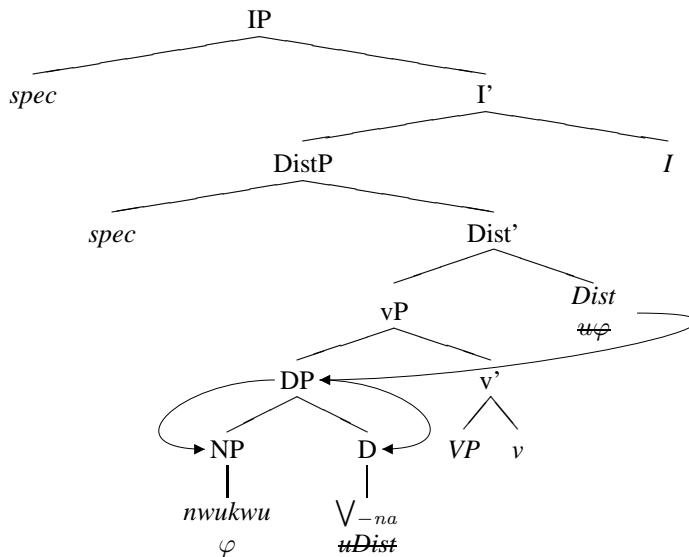
(Gill et al., 2007: ex. 50, p. 34)

The differences between Korean and English outlined in this section form the basis of our hypotheses about the L2 acquisition of *any* by Korean-speaking learners, as the following section explains.

3. The L2 acquisition problem

The L2 acquisition research question that arises from the data in the previous section is as follows: can Korean-speaking learners of English acquire the interpretation and distribution properties of *anyone*, given that the closest equivalents in Korean, wh-indefinites, behave differently? We investigate this question within the context of the lexical transfer model of L2 acquisition proposed by Sprouse (2006), which builds on the Full Transfer/Full Access model by Schwartz & Sprouse (1996). 'Full Transfer' proposes that, at the start of L2 acquisition, the L1 grammar in its entirety transfers to the interlanguage. Sprouse (2006) specifies that this transfer takes place at the level of the lexicon. Sprouse assumes, in line with Minimalism (Chomsky (1995)), that all morpho-syntactic and semantic features, are located in the lexicon. Therefore, lexical-level transfer entails transfer of all lexical features to the initial-state interlanguage lexicon. L2 acquisition proceeds by means of learners associating target language phonetic forms with relevant slots in the interlanguage lexicon. When there is a mismatch between the properties of any given resulting interlanguage lexical item and what the input shows about the properties of the assumed target language equivalent, then the features of the interlanguage lexical item can be modified accordingly.

If Sprouse's model is correct, then Korean-speaking learners of English are expected to map English *anyone* to a wh-indefinite in the lexicon transferred from L1 Korean. The previous section showed that there is more than one candidate in Korean, to which *anyone* could map, namely *nwukwuna* 'anyone/everyone' (with a universal interpretation) and *nwu(kwu)* 'anyone/who' (with an existential interpretation). As a point of departure, we will assume that *anyone* maps to a slot in the interlanguage lexicon based on Korean *nwukwuna*. This assumption can be justified by the fact that native speakers of Korean tend to offer examples of *nwukwuna* in a generic context when asked to illustrate the use of this word (Gill et al. (2007)). Thus, intuitively, Korean-speakers associate *nwukwuna* with a meaning corresponding to *anyone* (in a generic context). In addition, classroom-instructed learners of English are likely to associate the Korean word *nwu(kwu)* with English *who*, since this correspondence is explicitly taught in the English language classroom and it will be reinforced by the relatively frequent occurrence of *who* in the target language input. This could conceivably mean that learners are less likely to allow *anyone* to associate with an interlanguage lexical entry based on *nwu(kwu)*, because *who* will already be associated with that slot.

We return in Section 5 to the question of what *anyone* maps to in the L1-based interlanguage lexicon. Adhering for the present to the assumption of an *anyone–nwukwuna* mapping, experimental hypotheses can be stated as follows.

(6)   HYPOTHESIS 1: INTERPRETATION
         Korean-speaking learners of English will reject a target-like existential interpretation of *anyone* in questions like *Is anyone playing the piano?* (1-b) and conditionals like *If anyone crosses the finish line ...* (1-c).

(7)   HYPOTHESIS 2: DISTRIBUTION
         Korean-speaking learners of English will allow ungrammatical use of *anyone* in a progressive declarative sentence like *Anyone is playing the piano* (2-a).

Following Sprouse's logic, the above hypotheses should clearly refer to learners whose lexical representation of *anyone* is still at the initial state and consequently, under our assumption, has the features of *nwukwuna*. In our experiment, detailed in the following section, we investigate learners who are already considerably beyond the earliest stages of L2 English acquisition. Nonetheless, we expect that their L1 knowledge of *nwukwuna* may still influence their interlanguage representation of *anyone* for the following reasons. First, each occurrence of *anyone* in the L2 input will provide evidence of only a subset of the full range of properties of this word. Therefore considerable exposure to instances of *anyone* may well be required before any restructuring takes place. Second, the distribution properties of *anyone* appear to yield a poverty of the stimulus problem for Korean-speaking learners. Specifically, the fact that *anyone* is ungrammatical in a progressive declarative (2-a) is not taught in Korean L2 English classrooms, it cannot be acquired via L1 transfer, and the non-occurence of such ungrammatical forms in the input cannot logically lead to ruling out such forms altogether. Thus it is not unreasonable to predict that even learners whose interlanguage grammar is beyond the initial state may still have an initial-state representation of *anyone*.

4. The experiment

The hypotheses in (6)–(7) were investigated by means of a paced acceptability judgement task, following a design developed in previous research on quantifier interpretation (Marsden (2008), Marsden (2009)). Details of the participants, the task design, and the results are outlined in this section.

4.1. Participants

Three participant groups took part in the study: an L2 English group, a native English control group and a native Korean control group. The L2 English group comprised 22 Korean-speaking learners of English who were all resident in the UK. Most were enrolled in UK university programmes at the time of testing. The group's mean L2 English proficiency level was 'upper intermediate' according to the learners' scores on the Oxford Quick Placement Test (group mean: 45.7/60 range: 33–59). The native English control group consisted of 20 native English speakers who were all university students and were

resident in the UK. The native Korean control group consisted of 24 native Korean speakers who were all university students and were resident in Korea. The L2 English and the native English groups completed the English version of the task described in the following section; the native Korean group completed the Korean version.

4.2. Task design

Participants were asked to judge the acceptability of *anyone*, or *nwukwuna* in the Korean version of the task, in three different environments: interrogative, conditional, and progressive declarative. There were two judgement tasks: the 'question task' in which interrogative test tokens were mixed with interrogative distractor items; and the 'sentence task', in which conditional and progressive declarative test tokens were mixed with conditional and progressive declarative distractor items. In both tasks, each token was judged in the context of a picture. Examples of the three test types in English and Korean are given in (8) (interrogative, 'Type Q'), (9) (conditional, 'Type C') and (10) (progressive 'Type P'). (In the actual test, the test items in the Korean version were presented in Korean script. Here, they are presented in romanised form with a gloss and translation, for the reader's convenience.)

(8)   Question Task example: Type Q

   Anyone/nwukwuna in an interrogative environment, with an existential interpretation:
     (Good in English, bad in Korean)
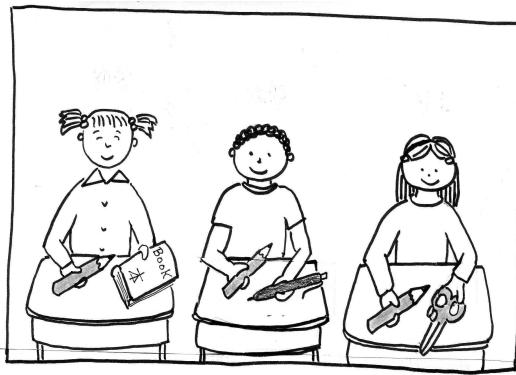
English	Korean
Is anyone holding a pair of scissors? Yes	Nwukwuna kawi-lul tulko issnayo? nwukwuna scissors-ACC hold PROG.Q? 'Is *nwukwuna* holding a pair of scissors?' Ney 'yes'

(9)   Sentence Task example I: Type C

   Anyone/nwukwuna in a conditional environment, with an existential interpretation:
     (Good in English, bad in Korean)

English	If anyone is touching their nose, blow the whistle.
Korean	Nwukwuna ko-lul manciko issu-myen, horuraki-lul pulera. nwukwuna nose-ACC touch PROG.COND whistle-ACC blow.IMP 'If nwukwuna is touching their nose, blow the whistle.'

(10)   Sentence Task example II: Type P

   Anyone/nwukwuna in a progressive declarative, with a universal interpretation:
     (Bad in English, good in Korean)
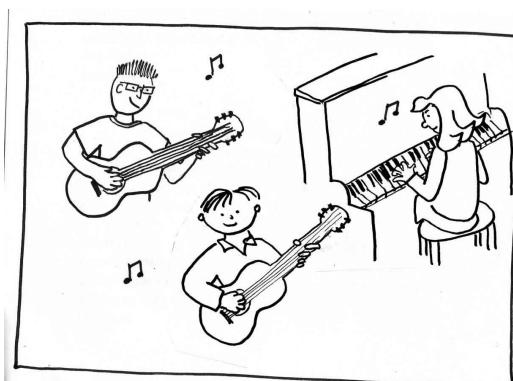
English	*Anyone is playing a musical instrument.
Korean	Nwukwuna akki-lul chi-ko isseyo. nwukwuna instrument-ACC play is.PROG Nwukwuna is playing a musical instrument.

There were 10 tokens each of Types Q and P, and four of Type C. The 10 tokens of Type Q were divided between two lists and mixed with 21 other question-answer ('Q/A') test items (distractors) to create two versions of the Question Task. The 10 tokens of Type P and four of Type C were divided between two lists and mixed with 19 distractor sentences to create two versions of the Sentence Task. Half the participants judged List 1 of each task, half judged List 2.

     The protocols for administering both the English and Korean versions of the experiment were identical, as follows. Each picture was presented on a screen at the front of the test room for a few seconds without the corresponding Q/A or sentence. The Q/A or sentence was then revealed and viewed together with the picture for a further 15 seconds. An audio-recording of the test item was played at the same time as the sentence or Q/A appeared on the screen. Judgements about each test item were made by

circling a number on a rating scale. In the Question Task, participants were asked to judge whether the answer to the question was acceptable in the context of the picture and the question, and to indicate their judgement on a scale where –2 indicated that the answer was very strange or impossible, –1 indicated that the answer was a bit strange, +1 indicated that the answer was fairly good, and +2 indicated that the answer was perfectly good and perfectly possible. A 'Can't decide' option was also available. The rating scale for the Question Task is illustrated in (11).

(11)   Answer sheet for Question Task
         (Is the answer good, or strange, in the context of the picture and the question?)

Very Strange. Impossible	A bit strange. Not really possible.	Fairly good. Per-fectly possible.	Perfectly good. Perfectly possible		Can't decide
–2	–1	+1	+2		X

In the Sentence Task participants judged the acceptability of the sentence in the context of the picture, by selecting –2 'bad' –1 'not really good', +1 'more or less good', or +2 'perfectly good'. Only the rating scale, and not the pictures and text, appeared on the answer sheet. This was to avoid participants going back and changing previous answers, and thereby reducing the spontaneity of their responses. Note that in the Korean version of the task, the answer sheet and rating scale were presented in Korean.

Pre-test training was given, on how to use the judgement scale, for both the Question Task and the Sentence Task. The Korean-speaking learners of English completed the Oxford Quick Placement Test after completing both experimental tasks.

4.3. Results

The participants' responses were analysed in terms of whether they accepted a particular test item–context pairing, or whether they rejected it. Selection of +2 and +1 on the rating scale was taken to indicate acceptance, and selection of –2 and –1 was taken to indicate rejection. Mean rates of acceptance for each test type were calculated for each group. 'Can't decide'responses accounted for less than 0.4% of the total, and were excluded from the analysis. The responses to Lists 1 and 2 were combined, on the grounds that a repeated measures ANOVA, Test Type x List, showed that there was no significant effect of List ($F(1, 64) = 3.24$, $p = .08$) or of List x Type ($F(2, 128) = 2.39$, $p = .095$).

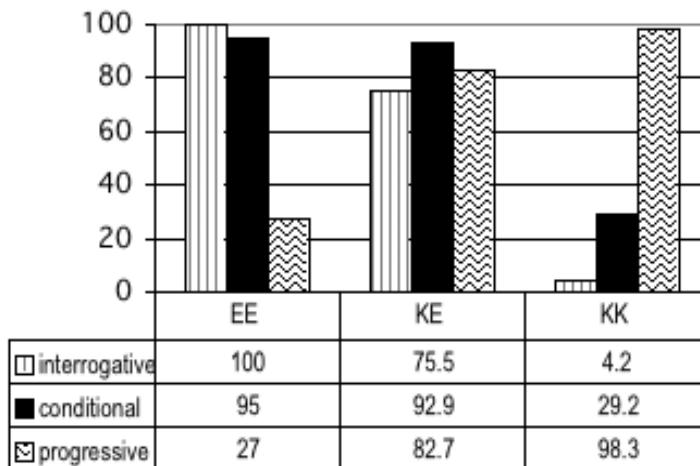Mean rates of acceptance of each answer type are presented in Figure 1.

	EE	KE	KK
☐ interrogative	100	75.5	4.2
■ conditional	95	92.9	29.2
⧖ progressive	27	82.7	98.3

Figure 1: *Rates (%) acceptance of interrogative, conditional and progressive test types, by group ('EE' = English controls, 'KE' = Korean learners of English, 'KK' = Korean controls)*

For the native English and native Korean control groups, the data in Figure 1 are in accordance with the descriptions of *anyone* and *nwukwuna* given in Section 2. The native English speakers show robust

acceptance of *anyone* in interrogative and conditional environments (>94% acceptance) but demonstrate low acceptance (27% acceptance) of *anyone* in a progressive declarative.[4] The native Korean controls show the opposite pattern: existential *nwukwuna* is unacceptable (4.2% acceptance in interrogative, 19.4% in conditional), but universal *nwukwuna* in a progressive is highly acceptable (98.3%). In clear contrast to the two control groups, the learner group demonstrates acceptance of *anyone* in all three environments (>75% acceptance).

Statistical tests confirm the significance of the clear differences evident in Figure 1. A repeated measures ANOVA (Test Type x Group) shows that the main effect of Group and the interaction of Test Type and Group are both significant (F(2, 63) = 39.21, p < .001; F(4, 126) = 52.5, p <.001). A follow-up repeated measures ANOVA comparing the acceptance of each of the three Test Types within each group reveals a significant main effect of Test Type in both the native English and native Korean groups (F(2,38) = 46.67, p < .001 and F(2,46) = 67.61, p < .001, respectively) but no significant effect of Test Type in the L2 group (F(2,42) = 1.41, p = .26). Within-subjects contrasts show statistically significant differentiation between *anyone/nwukwuna* in the progressive condition and *anyone/nwukwuna* in the interrogative or conditional condition by both the native English and native Korean groups (Native English, Type Q v. Type P: (F(1, 19) = 59.88, p < .001), Type C v. Type P: (F(1, 19) = 46.34, p < .001); Native Korean Type Q v. Type P: (F(1,23) = 944.33, p < .001), Type C v. Type P: (F(1, 23) = 47.17, p < .001)). By contrast, the learner group does not differentiate significantly between the progressive condition and the other two conditions (Type Q v. Type P: (F(1, 21) = .46, p = .51); Type Q v. Type P: (F(1, 21) = .93, p = .35). Moreover, post hoc Games Howell tests show that the learner group's mean acceptance ratings for Types Q and C differ significantly from the native Korean group's ratings (p < .001), but the rating for Type P does not (p = .08).

The learner acceptance rates on all three test types are similar: 75.5%–87.9%. This could indicate that the learners exhibited some kind of 'yes-bias', which led them to select only acceptance ratings. However, responses to some of the distractors in the task show this was not the case. Specifically, there were 10 items like Type Q in (8) but with a 'no' answer instead of a 'yes' answer. The learners strongly rejected these items: their acceptance rating was only 10.9%. Therefore, the learners' result cannot be explained in terms of a general tendency to always accept all test items. Exploration of the source of the learners' comparable rates of acceptance of *anyone* in interrogative, conditional and progressive declarative environments is a topic of the next section.

5. Discussion
5.1. Hypotheses

The experimental hypotheses made predictions about Korean-speaking learners' knowledge of the interpretation and distribution of *anyone* under the assumptions that (i) *anyone* in the input would map to an interlanguage lexical entry with the properties of Korean *nwukwuna* ('anyone' [in the universal sense]); and (ii) the learners' interlanguage lexicon would still be at the initial-state with respect to the representation of *anyone*. Hypothesis 1 (6) predicted that learners would demonstrate non-targetlike rejection of an existential interpretation of *anyone* due to the absence of such an interpretation for *nwukwuna*. Hypothesis 2 (7) predicted that learners would demonstrate non-targetlike acceptance of *anyone* in progressive declaratives because Korean *nwukwuna* can occur in this environment. The results thus clearly do not support Hypothesis 1, since the learners accepted the existential interpretation of *anyone* in interrogative and conditional sentences. However, the results do support Hypothesis 2: the learners accepted *anyone* in progressive declaratives even though this is ungrammatical in English. In

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[4]It might be objected that the native English 27% rate of acceptance of *anyone* in progressive declaratives is higher than just 'noise', if these sentences are truly ungrammatical. Although we do not yet have a conclusive account of this response rate, we would point out that the 27% acceptance comes almost exclusively from ratings of '+1', and not from ratings of '+2'. This is in marked to contrast to one of the distractor sentence types, which had *everyone* as the subject of progressive declaratives (e.g., *Everyone is playing a musical instrument*). The native English control group strongly accepted these distractor sentences and there was not one participant who rated the Type P sentences equally acceptable as, or more acceptable than, these distractor items. Therefore, although an acceptance rate of 27% cannot be ignored, it is nonetheless clear that the Type P sentences were strikingly less acceptable than distractor items with *everyone* as the subject, at both the group level and the individual level.

other words, their behaviour was targetlike with respect to the semantics of *anyone*, but non-targetlike with respect to knowledge of the syntax of *anyone*. Although this is not what our hypotheses predicted, we argue that this is nonetheless compatible with a Lexical Transfer account of L2 knowledge.

5.2. A lexical transfer account

To explore the present findings in the context of the Lexical Transfer model, it is necessary to consider the lexical representations of *anyone* and *nwukwuna* in native English and native Korean. We assume representations along the following lines:

(12)   a.   ANYONE: b   NWUKWUNA:

$$\begin{bmatrix} /\varepsilon\text{niw\ni n}/ \\ \dots \\ \varphi \\ u\text{NVI} \end{bmatrix} \qquad \begin{bmatrix} /\text{'nu:kuna}/ \\ \dots \\ \varphi \\ u\text{Dist} \end{bmatrix}$$

The representation for English *anyone* in (12a) includes an uninterpretable non-veridical item feature, [uNVI], drawing on the argument by Zwarts (1995) and Giannakidou (1997) that polarity item *any* is licensed in non-veridical contexts (as already mentioned in Section 2). We assume that such a feature will be checked and deleted by the operator with the matching interpretable NVI feature in the CP domain.[5] This will ensure that the occurrence of *anyone* is restricted to non-veridical environments, thereby excluding veridical contexts such as progressives as a licensing environment for *anyone* due to their lack of an NVI feature. The representation for Korean *nwukwuna* in (12b) differs minimally, but crucially, in that it includes an uninterpretable distributive feature, [uDist], but no [uNVI] feature. Consequently (following Gill & Tsoulas (2008)) *nwukwuna* is bound to receive a universal interpretation. As the matching interpretable [Dist] feature is a part of the functional projections on the clausal spine and thus can always be available, *nwukwuna* is exempt from any restriction on distribution

If, under the Lexical Transfer account, Korean-speaking learners of English map the phonetic form of *anyone* to a slot based on their L1 *nwukwuna*, then the resulting initial-state lexical entry should be as shown in (13).

(13)   ANYONE: $\begin{bmatrix} /\varepsilon\text{niw\ni n}/ \\ \dots \\ \varphi \\ u\text{Dist} \end{bmatrix}$

However, it is not unlikely that the learners will encounter evidence in the input that *anyone* is not always interpreted universally, for example via instances of *anyone* in interrogatives and conditionals. Such evidence would contradict a lexical representation such as (13), thereby motivating modification of the representation in order to accommodate the input. The most obvious modification would be the deletion of the [uDist] feature as this is what contributes to the universal interpretation. The resulting representation would be as shown in (14).

(14)   ANYONE: $\begin{bmatrix} /\varepsilon\text{niw\ni n}/ \\ \dots \\ \varphi \end{bmatrix}$

The representation in (14) now only includes the phonetic form and the variable φ. In our experiment, we tested L2 learners' interpretation of *anyone* in interrogative and conditional sentences. The results show that the learners correctly accept the existential interpretation of *anyone*. The interlanguage representation of *anyone* as it is in (14) would in fact result in acceptance of an existential interpretation for *anyone*, even though (14) does not correspond to the native English representation given in (12). The deletion of the [uDist] feature, leaving just a variable, means that the variable can be bound by

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[5]Note that (non-)veridicality is a propositional operator.

the relevant propositional operator in any given environment. For instance, in a generic environment, the generic operator binds the variable and this yields a universal interpretation. In the same way, the interrogative operator in interrogative sentences binds the variable and this results in an existential interpretation. This seems to lead to a variable interpretation of *anyone* which, though it is not based on a nativelike representation of *anyone*, matches the evidence in the input that the learners encounter. This accounts for our findings relating to interpretation: Korean-speaking learners of English correctly interpreted *anyone*.

Turning to the results relating to the distribution of *anyone*, the learners' non-nativelike acceptance of *anyone* in progressive declaratives is precisely what would be predicted if they have an interlanguage lexical entry for *anyone* as in (14). *Anyone* in (14) has no feature that would impose any kind of distributional restriction. Moreover, since, as argued in Section 3, there is no direct evidence in the input about the ungrammaticality of *anyone* in a present progressive context, then the [*u*NVI] feature that in English restricts the distribution of *anyone* is not added to the lexical representation. The distribution of *anyone* in the Korean-English interlanguage thus remains unrestricted.

In short, this proposal suggests that L2 knowledge of *anyone* develops as follows in Korean-English interlanguage. Initially, learners map *anyone* to a lexical slot with the transferred features of *nwukwuna*. Subsequently, evidence in the input motivates deletion of the feature [*u*Dist] responsible for the universal interpretation of *nwukwuna*. The resulting representation of *anyone*, which is unlike native English due to the absence of a [*u*NVI] feature is maintained because the input does not provide evidence of the ungrammaticality of *anyone* in veridical contexts. This leads to precisely the behaviour of the learners in our study: targetlike interpretation of *anyone* but non-targetlike unrestricted acceptance of *anyone* in veridical contexts.

5.3. Challenges for the lexical transfer account

So far, we have seen that the result of our experiment is compatible with Sprouse's Lexical Transfer account. However, Lexical Transfer offers the most straightforward account if we can assume that languages have lexical items that are equivalent on a one-to-one basis cross-linguistically. Such an assumption is obviously contrary to fact, with the example in the present study of *anyone* having no direct equivalent in Korean and more than one partial equivalent being just one instance of this absence of direct L1-to-L2 lexical correspondences. In cases like this, it is not clear how the lexical transfer takes place. In the present study, it is the fact that different interpretations of *anyone* can be achieved by different wh-indefinite expressions in Korean that poses a problem for our analysis.

As we indicated in Section 1, Korean uses different forms of wh-indefinites as quantifiers, each with a fixed interpretation that may correspond to *anyone* in a particular context. All of the wh-indefinites in (15) share some sense of the meaning of English *anyone*.

(15) a. nwukwu   b. nwukwu-na   c. nwukwu-to   d. nwukwu-inka
       who   who-DISJ   who-CONJ   who-Q
       'any/someone'   'any/everyone'   'any/everyone'   'any/someone'

Nwukwu and *nwukwuna* in (15) have already been discussed in Sections 2 and 3; *nwukwuto* is a negative concord item that broadly corresponds to *anyone* under negation; and *nwukwuinka* is a specific 'someone' (i.e., 'not just anyone'). Given this range of wh-indefinites in Korean, learners could potentially map *anyone* to an interlanguage slot with any of the above items. This raises the question of how lexical transfer takes place in such a scenario. Will learners try out all the possible mappings? If so, Korean-speaking learners of English could potentially have four different L1-based representations of *anyone*, each motivated by the occurrence of *anyone* in different environments in the input.

Putting this question into the context of our experiment, our account involves mapping of English *anyone* in the input to an interlanguage lexical slot with the features of Korean *nwukwuna*. However, a problem with this account is that the present experimental data do not provide evidence for the proposed initial state, when *anyone* should have had a [*u*Dist] feature, prior to that feature being deleted. One solution to this problem would be to suggest that since positive evidence for the fact that *anyone* can be interpreted existentially is available in the input, then learners quickly delete the Korean-derived [*u*Dist] feature and hence the relatively advanced learners in the present study do not show evidence of the

hypothesised initial state.

However examination of the proposed restructured lexical slot (14) suggests an alternative account. Referring back to the representation of the DP *nwukwuna* given in (5), [*u*Dist] is assumed to be a feature of D which is hosted by the disjunctive marker *na*. If *na*, and consequently the feature that it hosts, is not there, then the resulting form is Korean *nwukwu*. Although we presented speculative arguments against an initial-state mapping of *anyone* to *nwukwu*, our findings, and our account of our findings, cannot rule out such a mapping. If, after all, *anyone* is associated with an interlanguage slot based on *nwukwu* (WHO 'someone') from the outset, then the present findings, which provide no evidence of interlanguage *anyone* ever having a [*u*Dist] feature, become unsurprising.

Clearly, further research is required in order to discover what *anyone* initially maps to, and to shed further light on the Lexical Transfer model. Investigation of Korean-speaking learners of English with a lower level of L2 English proficiency than those in the present study may be revealing with regard to whether there is an initial representation of *anyone* that is incompatible with an existential interpretation. In addition, investigation of *anyone* in contexts specific to each of the wh-indefinites in (15) should prove informative.

5.4. Exceptions: two individuals who overcame L2 poverty of the stimulus

A further unresolved issue in the present study arises on examination of the learners' individual results. In group terms, the learners accepted *anyone* in progressive declaratives. However, looking at each L2 learner individually, two of the 22 learners actually consistently rejected the progressive declarative tokens containing *anyone*. (Consistent rejection is defined as rejection of at least 4 of the 5 progressive declarative tokens in the List judged by that participant.) Thus, these two learners appear to have somehow overcome the poverty-of-the-stimulus problem of acquiring an [*u*NVI] feature on *anyone*.

The biodata of these two learners shows that both had above average—but not the highest—scores on the proficiency task (48 and 53 out of 60 compared with the group average of 45.7). Perhaps more interestingly, these two individuals had the longest lengths of residence in an English-speaking country at 10 years and 6 years. (Other L2 participants in the study had 5 or 4 years' residence, while the majority had just 1 year's residence.) This suggests—albeit with evidence from only two individuals—that whatever the evidence may be that indirectly leads to restructuring of the lexical entry for *anyone*, it must occur only rarely in the input, with the result that most learners of upper intermediate level do not encounter it. Investigation of what exactly the relevant evidence may be is the topic of a future paper, and concerns L1 acquisition of *any* as well as L2.

6. Conclusion: Implications for the syntax-semantics interface

The findings described in this paper are compatible with a Lexical Transfer account of the process of L2 acquisition, while at the same time providing considerable food for thought with regard to further investigation into how this model might work. With regard to the L2 syntax-semantics interface, the results suggest some discrepancy between syntax and semantics in the development of L2 knowledge of *anyone*. The learners showed clear understanding of the existential interpretation of *anyone* but (in general) failed to acquire its distributional patterns. We have shown that acquisition of the distribution of *anyone* is a poverty of the stimulus problem for Korean-speaking learners, whereas acquisition of the interpretive properties is not. Therefore, the fact that interpretive properties are acquired first may not be surprising at first glance. However, we conclude by contending that this discrepancy between semantics and syntax, with the former being acquired first, bears further investigation beyond a poverty-of-the-stimulus account. This is because, although the input contains evidence that *anyone* can occur with an existential interpretation, it also contains evidence that *anyone* can occur with a universal interpretation. Since the learners (apart from the two individuals discussed in Section 5.4) failed to engage with the syntactic component of *anyone*, namely the [*u*NVI] feature, and since the correct interpretation of *anyone* in native English arises via the properties of the nonveridical operator in CP (i.e., a generic operator, or an interrogative operator, etc.) with the interpretable [NVI] feature that checks [*u*NVI], then it seems remarkable that—without the involvement of an [*u*NVI] feature—the learners should have been able to judge with such certainty that *anyone* in a conditional or an interrogative should receive an existential interpretation. It is all the more remarkable given that L1 transfer cannot provide evidence

about which interpretation *anyone* might receive in a given context. In short, our findings suggest an ability in L2 acquisition to engage with subtle semantic properties of the target language (*anyone* in the present study) without being able to simultaneously engage with subtle syntactic properties of the same target phenomenon.

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