Directives in office hour consultations: A corpus-informed investigation of learner and expert usage

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Abstract

This paper investigates spoken directive language use in office hour consultation contexts by international teaching assistants (ITAs) in training, individually and in comparison with practicing academic professionals. The purpose is to inform instruction in advanced spoken English for academic purposes, to contribute to intercultural pragmatics research, and to illustrate the strengths of a mixed corpus and discourse analytic approach for the investigation of learner language. The study employs corpus techniques to compare use by groups and individuals, and qualitative analysis supported by data from surveys and interviews to profile three learners. Interpreted using a social-functional politeness framework, the corpus results show that the ITA group makes fewer uses of both independence and inclusion appeals than the practicing academics, while the profiles provide insight into how learner histories, understandings, and developmental trajectories influence individual patterns of use.

1. Introduction

Many North American universities have grown dependent on the employment of international graduate students as teaching assistants, especially in engineering, mathematics, and the sciences. International teaching assistants (ITAs) perform a variety of roles, which include grading tests for large lectures, teaching break-out discussion sessions, and conducting office hours. In these office hours sessions, ITAs may tutor undergraduates on homework problems, prepare them for tests, and answer questions on behalf of a supervising professor. Beyond their own student experiences in sometimes very different educational cultures, however, many ITAs are unprepared for their roles in these sessions. In response, applied linguists at some universities have been charged with preparing international graduate students for the linguistic and teaching demands of being an ITA.

This project seeks insight into the nature of these demands by investigating a particular kind of language used in office hours contexts, directive language, as representative of ITA–student discourse in general. The purpose of the project is to inform instruction in advanced spoken English for academic purposes,
especially teacher and ITA training, to contribute to research on intercultural pragmatics and second language development, and to illustrate the strengths of a mixed corpus and qualitative approach to the analysis of learner language. The project uses this mixed approach (Flowerdew, 2008; Larsen-Freeman & Cameron, 2008; Lee, 2008) to examine directives use by ITAs in training and by practicing professionals in office hours contexts. Corpus analysis (Granger, 1998, 2002) compares directives use by learners, ITAs in training, with directives use by experts, practicing professional academics, both as groups and as individuals. Learner data are from ITAcorp, a learner corpus of classroom-based spoken English, and comparable expert data are from MICASE, the Michigan Corpus of Academic Spoken English (Simpson, Briggs, Ovens, & Swales, 2002; Simpson-Vlach & Leicher, 2006). To complement this comparative, quantitative approach, analysis of qualitative data from surveys and interviews is used to profile three learners. Results are interpreted using a social-functional politeness framework (Brown & Levinson, 1987) that presents independence (negative politeness) and inclusion (positive politeness) appeals (Scollon & Scollon, 1995) as complementary rather than oppositional. While the corpus analysis shows that the ITA group makes fewer uses of both independence and inclusion appeals than the practicing academics, the profiles provide insight into how learner histories, understandings, and developmental trajectories influence individual patterns of use.

2. Theoretical background

2.1. ITAs and directives

The language of ITA–student interaction has been the subject of applied linguistics research in North America starting with Kathleen Bailey’s dissertation (1982), which correlated high levels of ITA helpfulness and interactivity with positive evaluation of effective teaching by undergraduates. This work spurred a wave of research on ITAs in the late 1980s and early 1990s (reviewed by Briggs et al. (1997)) trending towards genre-specific analysis of functional language use in educational non-native/native speaker discourse settings, including advising sessions, writing center interactions, and classroom instruction. In these studies, the object of analysis, directive language, is most often understood in terms of pragmatic speech acts including suggestions, requests, and rejections (Bardovi-Harlig & Hartford, 1990, 1993; Williams, 2005). Some studies look more generally at modality (He, 1993; Iedema, 1996), while others look specifically at directives (Dalton-Puffer & Nikula, 2006; He, 2000; Hyland, 2002; Yates, 2005). A variety of analytical methods and approaches have been applied, primarily discourse analysis of speech acts (Bardovi-Harlig & Hartford, 1990, 1993; Dalton-Puffer & Nikula, 2006; Farr, 2003), sometimes with a major focus on frequency analysis (He, 1993; Williams, 2005; Yates, 2005). In addition, some studies have taken ethnographic approaches (Bardovi-Harlig & Hartford, 1996; Jenkins, 2000), experimental approaches (Garcia, 2004), or made extensive use of corpus analysis (Hyland, 2002; McEnery & Kifle, 2002), although corpus application to the study of pragmatics in general has been infrequent (McEnery, Xiao, & Tono, 2006). In sum, the research concludes that: (1) directives are pragmatic speech acts that express directive illocutionary force; (2) in educational discourse, directives may be a means of socialization, persuasion, and the exercise of academic power; (3) the grammatical form of a directive may vary widely, although it is usually centered on a verbal element that often contains a modal operator; and (4) a speaker may mitigate or strengthen the force of a directive by various lexico-grammatical means in the exercise of power.

2.2. Learner corpus analysis

Recent research has applied principles and techniques from corpus linguistics to the study of L2 learning and teaching in learner corpus analysis (see Nesselhauf (2004), for a survey). Researchers have combined comparative corpus techniques (Granger, 1998, 2002) with a variety of frameworks, including genre theory (Upton

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1 The research presented here is part of a larger project (Reinhardt, 2007) that includes several interrelated studies, including a genre analysis and a pedagogical intervention (see Thorne, Reinhardt, & Golombek, 2008), which for the sake of space are not reported here.
& Connor, 2001), cognitive linguistics (Waara, 2004), systemic-functional APPRAISAL theory (Flowerdew, 2003), and sociocultural theory (Belz, 2004). Some research has combined quantitative corpus-informed methods with qualitative discourse analytic methods (Belz, 2004, 2006; Belz & Vyatkina, 2005; Kinginger & Belz, 2005; Yates, 2005). Since many learner corpora are classroom or task-based, they are small and can be easily annotated with contextual and learner-specific data, which allows for “both the context of use and the linguistic context (to be) permanently available to the analyst” (Granger, 1998, p. 14). When the corpora are supplemented with ethnographic information, the “compiler-cum-analyst has access to valuable background information for interpretation of the data” (Flowerdew, 2008, p. 115). For example, Yates (2005) compared the use of mitigation in directives by 9 NS and 9 NNS (L1 Chinese) secondary teachers in Australia and interpreted the use in relation to construction of social identity. She found that a greater percentage of the NS directives were indirect or mitigated (69%) than the NNS directives (57%), but that individual use varied greatly, so much so that two individual NNS mitigated more than seven of the NS. Using a similar mixed approach, Belz (2004) (see also Belz & Vyatkina, 2005 and Belz, 2006) traced the microgenetic development of German da-compound use by advanced German learners in a telecollaboration course. She used ethnographic data to inform interpretation of learner corpus data, and implicated a variety of sociocultural and interpersonal influences on individual patterns of development, especially interaction with expert speakers.

3. Method

3.1. Quantitative corpus data: ITAcorp and MICASE

The quantitative data for the project originates in two corpora, ITAcorp, a learner corpus3 comprised of the transcribed classroom activities from advanced ESL and ITA preparation courses at a large northeastern American university (see Thorne et al., 2008), and MICASE, the Michigan Corpus of Academic Spoken English (Simpson et al., 2002). The ITA corpus and its participants are designated ‘learner’, on grounds that the ITAs were placed into the course based on their scores on a combined language and teaching assessment. Because language and teaching tasks in the course were integrated, the ITAs were considered learners of both English and pedagogy. While ITAcorp also includes spoken academic English activities like lecture presentations and discussion leadings, the current project utilized an ITAcorp subcorpus of office hours role plays (approximately 103,000 tokens), where students played the ITA and student roles, and a post-semester evaluation, where students played the ITA and an evaluator played the student.4 In each office hours role play, approximately 4 min long, the student would approach the ITA with a typical problem that would need to be negotiated, eliciting directive language from the ITA.

Used as baseline data for comparison with the ITA learner data, MICASE is comprised of the transcriptions of 152 academic speech events produced by practicing academic professionals, from a variety of text types, e.g. advising, colloquia, discussion sections, lectures, office hours, and tutorials, from a balance of university academic disciplines (Simpson-Vlach & Leicher, 2006). MICASE was chosen for the current project because of the genre compatibility of its office hours subcorpus (approximately 125,000 tokens) with the ITA office hours role play data. For the project, the MICASE office hours subcorpus was designated ‘expert’ as its participants were practicing academics with native or near-native English proficiency, as determined by MICASE designers. The MICASE office hours sessions were from a balance of speaker ages, gender, academic rank, and field of study.

2 Contrastive learner corpus analysis has been criticized for comparing production of non-native speakers with that of native speakers (see Block, 2003; Prodromou, 1996). Arguments in favor of the approach in this context are discussed in Reinhardt, 2007.

3 ITAcorp corpus data were transcribed using standards based on MICASE transcription standards, to maximize comparability. For more information on the design and development of the corpus, see Reinhardt, 2007.

4 While the use of role play data in interlanguage pragmatics research has been criticized because the effects of the tasks are inconsequential to the role players (Bardovi-Harlig & Hartford, 2005), I maintain that the data here are valid, because the consequences of the role play tasks are high stakes and relevant for the ITA participants, and so very authentic performances can be expected.
3.2. Directive construction: a pragmatic unit of analysis

It is difficult to quantify directives, since they are equivalent to pragmatic speech acts and exhibit illocutionary force, the textual boundaries of which are fuzzy. Corpus techniques based on lexico-grammatical analysis, where there is a clearer relationship between structure and meaning, may not be appropriate for analysis of pragmatic usage (cf. Hyland, 2002; see also McEnery et al., 2006). With this understanding, a semi-grounded reading was conducted on a random set of files from both the ITA and MICASE corpora—‘semi’-grounded (what Lee, 2008 terms a ‘corpus-supported’ approach) because the reading was informed by ITA research findings and primary source grammatical, pragmatic, and politeness theory (Blum-Kulka, House, & Kasper, 1989; Brown & Levinson, 1987; Halliday & Matthiessen, 2004; Palmer, 2001; Scollon & Scollon, 1995; Searle, 1976; for a complete review see Reinhardt (2007)). The analysis resulted in a list of units that were then grouped into conceptual categories. Based on these categories, directive language use was operationalized as ‘directive construction’, a social-functional pragmatic device comprised of one or more separate, lexico-grammatical units. Functionally, directive constructions index directive illocutionary force (Searle, 1976) and may correspond to speech acts. From a systemic-functional view, a directive construction may correspond to a mood element, which “carries the burden of the clause as an interactive element” (Halliday & Matthiessen, 2004, p. 120). Seen from a corpus or frequency perspective, directive constructions may correspond to formulaic sequences or lexical bundles (Biber, Conrad, & Cortes, 2004), except that they are based on pragmatic integrity rather than frequency.

For the current project, a directive construction was defined as containing at the minimum a core lexical item, which may be a modal (e.g. can, must, should) or periphrastic modal (e.g. have to, need to, want to), directive vocabulary (e.g. suggest, recommend), or imperative form. Each of these items indexes an appeal to independence or negative face to a varying degree; for example, must restricts choice more than should. Peripherally, a directive construction may also include the subject, usually a pronoun like you or we (Harwood, 2005), which indexes an inclusion or positive face appeal (Brown & Levinson, 1987; Scollon & Scollon, 1995) and often an adverbial adjunct (e.g. a mitigator or an intensifier), which again indexes an independence or negative face appeal. Directive construction use indexes a power relationship between the ‘director-speaker’ and the ‘directed-listener’, which in an office hours context reflects the role hierarchy inherent to educational discourse, where the more powerful teacher, in this case a professor or TA, is the director-speaker, and the less powerful student the directed-listener.

3.3. Comparative analysis of directives use in office hours

After establishment of the analytic unit, a comparative analysis of directive construction use in the two corpora was conducted. To determine the overuse or underuse ratio of construction use by the learners, a log likelihood analysis (log \( \frac{C_1}{C_0} \)) (Rayson & Garside, 2000) was run to compare their profile with that of the experts. Total tokens in each corpus are shown in Table 1, and comparative results are shown in Table 2.

4. Data

4.1. Modal and periphrastic modal constructions

The results in Table 2 are presented in two sections. The top section lists the most frequent constructions (MFCs), i.e., those constructions with frequencies over 1 per 10,000 tokens when the two corpora are combined, ordered by log-likelihood from most overused by the learners to most underused by the learners. The bottom section lists those constructions with combined frequencies not great enough to warrant a log \( \geq 1 \)

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5 The full analysis (Reinhardt, 2007) focused on all core lexical devices, including modals and periphrastic modals, imperatives, and directive vocabulary, and on peripheral adjunct devices. For the sake of space, only the results of the analyses with significant differences are presented here, namely the analyses of modal and periphrastic modal constructions and of directive vocabulary constructions.

6 Log-likelihood is a standard measure in comparative corpus analysis, as it determines whether the ratio of item occurrence in two corpora is significantly different. See Rayson and Garside (2000) for further explanation.
calculation, ordered by descending combined frequency. Since ‘you can’ is both dynamic (ability) and directive (permission), and the instances were too frequent to disambiguate manually, the totals were calculated both with and without ‘you can’.

The results show that in aggregate, the ITAs in training, when role playing office hours interactions, generally underuse modal and periphrastic modal constructions in comparison to the practicing professionals in MICASE \((\log - 1 = -28.58)\), unless ‘you can’ is included, in which case there is actually slight overuse \((\log - 1 = +10.37)\). In other words, in office hours contexts, the learners seem to prefer ‘you can’, ‘you had better’, and ‘you should’ where experts prefer ‘you could’, ‘you want to’, and the irrealis construction ‘I would’. It could be that the learners are using ‘can’ in an appeal towards student independence, since ‘can’ in its dynamic sense infers choice and possibility (Palmer, 2001). However, when spoken by someone in a position of authority relative to the listener, and depending on intonation, ‘you can’ may be interpreted as permission rather than possibility. In this case, possibility may be more clearly expressed with ‘you could’, which is perhaps not coincidentally underused by the learners. The use of ‘had better’ by the learners, where the experts did not use it at all, also serves to imply authority and promote dependence and restricted choice, as it implies undesirable consequences with non-compliance.

Of the other constructions, there is learner underuse of periphrastic modals, including ‘you need to’, ‘you have to’, and ‘you’ve got to’, while there is relative overuse of ‘you should’. The use of ‘you should’ generally implies that the speaker agrees morally with the source of the obligation, if she is not that source herself. In

### Table 1
Total tokens in learner and expert corpora.

<table>
<thead>
<tr>
<th></th>
<th>All learner office hours (ITAcorp)</th>
<th>All expert office hours (MICASE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Freq/10,000</td>
</tr>
<tr>
<td></td>
<td>102,806</td>
<td></td>
</tr>
</tbody>
</table>

### Table 2
Number and frequency per 10,000 of modal and periphrastic modal constructions in learner and expert corpora in comparison.

<table>
<thead>
<tr>
<th>Modal or periphrastic modal construction</th>
<th>All learners (ITAs)</th>
<th>All experts (MICASE)</th>
<th>log (-\log_{10}) ITAvMIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>You can (undiff.)</td>
<td>536</td>
<td>340</td>
<td>+91.67*</td>
</tr>
<tr>
<td>You had better</td>
<td>29</td>
<td>0</td>
<td>+46.24*</td>
</tr>
<tr>
<td>You should</td>
<td>103</td>
<td>46</td>
<td>+35.13*</td>
</tr>
<tr>
<td>I want you to</td>
<td>9</td>
<td>6</td>
<td>+1.35</td>
</tr>
<tr>
<td>You don’t need to</td>
<td>17</td>
<td>16</td>
<td>+0.14</td>
</tr>
<tr>
<td>You have to</td>
<td>55</td>
<td>87</td>
<td>-2.32</td>
</tr>
<tr>
<td>You need to</td>
<td>41</td>
<td>76</td>
<td>-4.84*</td>
</tr>
<tr>
<td>You could</td>
<td>9</td>
<td>59</td>
<td>-31.87*</td>
</tr>
<tr>
<td>I would</td>
<td>1</td>
<td>38</td>
<td>-45.52*</td>
</tr>
<tr>
<td>You want to (wanna)</td>
<td>12</td>
<td>173</td>
<td>-137.51*</td>
</tr>
<tr>
<td>You have got to (‘ve gotta)</td>
<td>0</td>
<td>12</td>
<td>0.957</td>
</tr>
<tr>
<td>You must</td>
<td>6</td>
<td>0</td>
<td>0.000</td>
</tr>
<tr>
<td>I don’t want you to</td>
<td>0</td>
<td>4</td>
<td>0.319</td>
</tr>
<tr>
<td>It is/would be better if you</td>
<td>4</td>
<td>1</td>
<td>0.080</td>
</tr>
<tr>
<td>You are better off</td>
<td>0</td>
<td>4</td>
<td>0.319</td>
</tr>
<tr>
<td>You don’t have to</td>
<td>3</td>
<td>0</td>
<td>0.000</td>
</tr>
<tr>
<td>You should not</td>
<td>2</td>
<td>0</td>
<td>0.000</td>
</tr>
<tr>
<td>You may</td>
<td>2</td>
<td>0</td>
<td>0.000</td>
</tr>
<tr>
<td>You may not</td>
<td>0</td>
<td>1</td>
<td>0.080</td>
</tr>
<tr>
<td>Total w/‘you can’</td>
<td>828</td>
<td>863</td>
<td>+10.37*</td>
</tr>
<tr>
<td>Total w/o ‘you can’</td>
<td>292</td>
<td>523</td>
<td>-28.58*</td>
</tr>
</tbody>
</table>

* A plus sign indicates learner overuse, while a minus sign indicates learner underuse, in comparison to experts. A log-likelihood greater than 3.84 indicates a p-value less than .05 (marked by an asterisk), and thus, a significant difference between learner and expert production of this construction. Statistical difference was not calculated for constructions whose combined expert + learner frequency was less than 1.0 per 10 K.
some grammars, periphrastic modals have the effect of objectivizing or distancing the speaker from the source of the directive (Palmer, 2001), and may be considered a type of grammatical metaphor (Iedema, 1996; Simon-Vandenbergen, Taverniers, & Ravelli, 2003). Using periphrastic modals instead of traditional modals may thus be a strategy to indirectly build solidarity and involvement (Brown & Levinson, 1987; Scollon & Scollon, 1995), as the director-speaker can oblige the directed-listener, but distance him or herself from the source and avoid appearing to make a moral judgment. In office hours consultations, the effect of the director-speaker (ITA) preferring ‘you should’ to periphrastic modal equivalents, then, could be that the directed-listener (student) would perceive the ITA as more authoritarian and judgmental than the ITA intends to be.

In a similar vein, the practicing experts use ‘you want to’ very frequently, while the learners use it very infrequently, perhaps because of transfer and avoidance, since in some cultures, assuming to know another’s desires is considered inappropriate. The experts may use ‘you want to’ so frequently, often mitigated with ‘might,’ to distance themselves from the source of the obligation while indirectly building solidarity and involvement, as well as projecting a measure of subjectivity onto the directed-listener. This ‘persuasive want to’ may be highly prevalent in office hours because of this projection quality. ‘I would’ is also very frequent in the expert corpus while not at all in the learner corpus. As an irrealis device, it may function to build solidarity and involvement through the implication of reciprocity (Brown & Levinson, 1987), since it indirectly implies that the directed-listener should do as the director-speaker would do.

### 4.2. Directive vocabulary constructions

Comparison of the use of directive vocabulary constructions by learners and experts in Table 3 shows that the learners use these constructions much more frequently than the experts (log – 1 = +67.29). Blum-Kulka et al. (1989) note that performatives like ‘I suggest’ or ‘I recommend’ are nearly as direct as bald imperatives. From a systemic-functional perspective (Halliday & Matthiessen, 2004), directive vocabulary used by an institutional authority with a third person subject would distance the listener from the power source of the directive (e.g. ‘it is required’ or ‘the administration suggests’), as a result of metaphorization (Simon-Vandenbergen et al., 2003). Using periphrastic modals instead of traditional modals may thus be a strategy to indirectly build solidarity and involvement (Brown & Levinson, 1987; Scollon & Scollon, 1995), as the director-speaker can oblige the directed-listener, but distance him or herself from the source and avoid appearing to make a moral judgment. In office hours consultations, the effect of the director-speaker (ITA) preferring ‘you should’ to periphrastic modal equivalents, then, could be that the directed-listener (student) would perceive the ITA as more authoritarian and judgmental than the ITA intends to be.

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### Table 3

<table>
<thead>
<tr>
<th>Construction</th>
<th>All learners (ITAs)</th>
<th>All experts (MICASE)</th>
<th>log – 1 ITA(\times)MIC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Freq/10 K</td>
<td>Total Freq/10 K</td>
<td></td>
</tr>
<tr>
<td>I suggest</td>
<td>19 1.848</td>
<td>3 0.239</td>
<td>+16.36*</td>
</tr>
<tr>
<td>I recommend</td>
<td>17 1.654</td>
<td>1 0.08</td>
<td>+20.58*</td>
</tr>
<tr>
<td>(s.o.) they suggest</td>
<td>0 0.000</td>
<td>3 0.239</td>
<td></td>
</tr>
<tr>
<td>My suggestion</td>
<td>9 0.875</td>
<td>0 0.000</td>
<td></td>
</tr>
<tr>
<td>(a/some/two) suggestion</td>
<td>7 0.681</td>
<td>0 0.000</td>
<td></td>
</tr>
<tr>
<td>(I/we) allow</td>
<td>5 0.486</td>
<td>0 0.000</td>
<td></td>
</tr>
<tr>
<td>(sthg) is required</td>
<td>4 0.389</td>
<td>0 0.000</td>
<td></td>
</tr>
<tr>
<td>You are not allowed</td>
<td>2 0.195</td>
<td>0 0.000</td>
<td></td>
</tr>
<tr>
<td>I encourage</td>
<td>2 0.195</td>
<td>0 0.000</td>
<td></td>
</tr>
<tr>
<td>It is not necessary</td>
<td>2 0.195</td>
<td>0 0.000</td>
<td></td>
</tr>
<tr>
<td>You are supposed to</td>
<td>2 0.195</td>
<td>2 0.16</td>
<td></td>
</tr>
<tr>
<td>I do not recommend</td>
<td>1 0.097</td>
<td>0 0.000</td>
<td></td>
</tr>
<tr>
<td>You are not supposed to</td>
<td>1 0.097</td>
<td>1 0.08</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>73 7.101</td>
<td>10 0.798</td>
<td>+67.29*</td>
</tr>
</tbody>
</table>

* A plus sign indicates learner overuse, while a minus sign indicates learner underuse, in comparison to experts. A log-likelihood greater than 3.84 indicates a p-value less than .05 (marked by an asterisk), and thus, a significant difference between learner and expert production of this construction. Statistical difference was not calculated for constructions whose combined expert + learner frequency was less than 1.0 per 10 K.

An analysis of adjunct types (Reinhardt, 2007), showed learner underuse of mitigators. Statistically the most frequent learner directive + adjunct construction was ‘I think you should’, while for the experts it was ‘you might want to’.
et al., 2003). Such directive vocabulary uses thus influence the objectivity level, while pronoun choice influences the directive on the level of involvement (Harwood, 2005).

In sum, the above comparative corpus analysis shows differences between the ITA learners and the practicing academic experts. As a group, the learners show a tendency towards more use of constructions that may restrict choice or promote dependence, and less use of those that promote inclusion. The learner underuse of constructions that may appeal towards inclusion like ‘you want to’ and ‘I would’, and overuse of constructions that restrict choice like ‘you had better’, ‘I recommend’, and ‘I suggest’ may be due to (lack of) instruction or exposure, or to the influence of individual L1s and backgrounds.

4.3. Individual variation in directive construction use

As a balance to the analysis of group directives use, a second quantitative analysis compares use by individuals. A comparative corpus analysis of eight MICASE professionals and eight systematically chosen learners is presented in Table 4. The purpose of this analysis is to explore individual variation quantitatively, and to lead into analysis of the directives use of three individual learners, supported by biographical, attitudinal, and assessment data.

Individual expert or professional (P) use exhibits much variability. While P175 produced ‘you want to’ at 3.4/10,000 (3.4 uses per 10,000 tokens), P115 used it at 26.71/10,000, over 8 times as frequently. P270 used ‘you have to’ at 18.24/10,000, nearly 14 times more frequently than P115. P575’s use of ‘you should’ is 7 times more frequent than P320 or P175’s use. Each individual professional has his/her own preferred MFCs, so that P300 prefers ‘you need to’, ‘you could’, and ‘I would’, while P270 prefers ‘you have to’, ‘you want to’, and ‘you could’. One explanation for the variety is the differences in disciplines, as the four most frequent users of ‘you have to’ are in computer science, economics, statistics, and heat and mass transfer. It may be that in the hard sciences, procedures and rules are more rigid than in the social sciences and humanities. Another explanation might be the similarity of session purpose. The two experts in the two exam reviews, for biology (175) and heat and mass transfer (195), are similar in that ‘you need to’ is the most preferred construction, although in spite of the similarities, the former next prefers ‘you could’ and ‘I would’, while the latter favours ‘you want to’ and ‘you have to’. This could reflect differing styles in presenting a sense of independence or choice to students. Most likely, individual use is influenced by both topic constraints and individual preferences.

The frequencies of expert use of MFCs range from 21.53/10,000 to 57.15/10,000, while for the learners, it ranges more widely, from 16.16/10,000 to 82.24/10,000. This may indicate that learners are unfamiliar with the interpersonal and genre expectations of office hours, and so are overusing and underusing directive constructions as they develop an individual style or preference, as learner use can be typified by unstable and non-linear patterns (van Geert, 2008). In addition, the experts use a greater variety of constructions than the learners, which would reflect a smaller learner lexical repertoire, as might be expected, although this could be due to insufficient amounts of data. The learners marked with an asterisk also participated in an experimental pedagogical intervention designed to develop awareness of directives use (see Thorne et al., 2008). While the instruction probably had some effect, the results do not show it, since diversity and frequency are distributed among learners who did and did not participate.

The learners show less variety in directive construction use than the experts. The eight representative learners here used on average 3.875 different constructions, while the experts used on average 7.25. Some of the ITAs seem to favor certain constructions, a phenomenon that Hasselgren (1994) and others call over-reliance on ‘lexical teddy bears’. For example, Meng Z used seven instances (38.38/10,000) of ‘you had better’, while his next MFC was four instances of ‘you should’ (21.93/10,000). Xin Z used eight instances (40.69/10,000) of ‘you should’, and only one each of three others. Over-reliance is apparent when these frequencies are

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8 The eight learners were chosen by first considering all 32 consenting participants from one semester of ITAcorp development. Participants who were absent for any of the data collection sessions were omitted. The remaining 24 were sorted according to frequency of MFCs, and an evenly distributed array of most-to-least frequent producers was chosen. Participants 6, 7, 10, 13, and, 19 were chosen because they participated in the survey and interviews, and the remainder, participants 1, 4, and 16, were chosen to evenly fill in the distribution, totaling eight. Participants were compensated for their participation in the interviews. All names are pseudonyms.

9 The 3-digit number following P is part of the corresponding MICASE file name. Readers may visit MICASE online to see the files.
Table 4
Use of most frequent constructions (MFCs) by eight MICASE professional (experts) and eight ITA course participants (learners) (freq. per 10,000 words).

<table>
<thead>
<tr>
<th>Expert or learner</th>
<th>Total tokens</th>
<th>Dir. freq. per 10 K</th>
<th>Total MFCs</th>
<th>You should</th>
<th>You have to</th>
<th>You need to</th>
<th>You don't need to</th>
<th>You want to</th>
<th>You could have better</th>
<th>I recommend</th>
<th>I suggest</th>
<th>I want you to</th>
<th>I would</th>
</tr>
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<tbody>
<tr>
<td>P320</td>
<td>9099</td>
<td>57.15</td>
<td>52</td>
<td>1.10</td>
<td>5.50</td>
<td>2.20</td>
<td>3.77</td>
<td>10.99</td>
<td>2.20</td>
<td>4.40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P115</td>
<td>30,328</td>
<td>51.77</td>
<td>157</td>
<td>4.62</td>
<td>1.32</td>
<td>8.90</td>
<td>1.65</td>
<td>26.71</td>
<td>4.29</td>
<td>0.33</td>
<td>0.66</td>
<td>1.32</td>
<td>1.98</td>
</tr>
<tr>
<td>P300</td>
<td>12,126</td>
<td>47.01</td>
<td>57</td>
<td>6.60</td>
<td>1.65</td>
<td>11.55</td>
<td>4.95</td>
<td>11.55</td>
<td>1.65</td>
<td>9.07</td>
<td>1.52</td>
<td>1.52</td>
<td></td>
</tr>
<tr>
<td>P575</td>
<td>11,221</td>
<td>46.34</td>
<td>52</td>
<td>8.02</td>
<td>10.69</td>
<td>7.13</td>
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<td>1.78</td>
<td>0.89</td>
<td>0.89</td>
<td>3.56</td>
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<td>P270</td>
<td>19,742</td>
<td>40.52</td>
<td>80</td>
<td>2.53</td>
<td>18.24</td>
<td>3.04</td>
<td>9.12</td>
<td>6.08</td>
<td>1.52</td>
<td></td>
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<tr>
<td>P195</td>
<td>20,299</td>
<td>37.44</td>
<td>76</td>
<td>2.96</td>
<td>7.39</td>
<td>9.85</td>
<td>4.93</td>
<td>9.36</td>
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<td>26.27</td>
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<td>1.46</td>
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<td>5.84</td>
<td>0.73</td>
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<td>2.92</td>
<td>1.46</td>
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<tr>
<td>P175</td>
<td>8826</td>
<td>21.53</td>
<td>19</td>
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<td>Meng Z*</td>
<td>1824</td>
<td>82.24</td>
<td>15</td>
<td>21.93</td>
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<td></td>
<td>16.45</td>
<td>38.38</td>
<td>5.48</td>
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<td>Xin Z</td>
<td>1966</td>
<td>55.95</td>
<td>11</td>
<td>40.69</td>
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<td>2066</td>
<td>48.40</td>
<td>10</td>
<td>29.04</td>
<td></td>
<td></td>
<td>4.84</td>
<td></td>
<td>14.52</td>
<td></td>
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<td>Bing C*</td>
<td>2584</td>
<td>30.96</td>
<td>8</td>
<td>3.87</td>
<td>11.61</td>
<td>3.87</td>
<td>3.87</td>
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<td>Taehoon J</td>
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<td>26.11</td>
<td>5</td>
<td>5.22</td>
<td></td>
<td>5.22</td>
<td></td>
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<td>10.44</td>
<td>5.22</td>
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<td>Phongsak T*</td>
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<td>25.42</td>
<td>5</td>
<td>5.08</td>
<td></td>
<td>5.08</td>
<td></td>
<td></td>
<td>20.34</td>
<td></td>
<td></td>
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<tr>
<td>Youngkyu C*</td>
<td>1650</td>
<td>18.18</td>
<td>3</td>
<td>6.06</td>
<td></td>
<td></td>
<td>6.06</td>
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<tr>
<td>Yong W*</td>
<td>2475</td>
<td>16.16</td>
<td>4</td>
<td>4.04</td>
<td></td>
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<td>4.04</td>
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<td></td>
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</tbody>
</table>

* Participated in experimental pedagogical treatment  o preferred MFC for this individual.
a Profiled below.
compared to those of other ITAs and professionals. Meng Z’s use of ‘you had better’ is 38/10,000 and Xin Z’s usage of ‘you should’ is 41/10,000, both of which are more frequent than any of the professionals. This over-reliance may be indicative of an individual’s learning history and may index transitional systems, insofar as they represent attractor states that are overused and thus unstable (van Geert, 2008).

4.4. Learner profiles of directives usage

To balance the quantitative findings on directives use by the two groups, individual learner profiles were drawn using qualitative and assessment data from several sources: (1) a post-course interview, (2) a written assessment of directives awareness, (3) a biographical survey, and (4) a survey on attitudes towards teaching authority.10 The three profiles presented here were chosen to illustrate the variety of individual use and the strengths of mixed methods approaches in interpretation.

4.4.1. Bing C

Bing C is the pseudonym of a 25-year-old female Chinese doctoral student in biology who was enrolled in, and passed, the ITA course. She used a wide variety of directive constructions in the three course role play interactions playing the teacher role, including ‘you can’ (9),11 ‘you have to’ (3), ‘you should’, ‘you want to’, ‘I want you to’, ‘you need to’, ‘you don’t need to’, and ‘don’t (+ imperative)’ (one each). A reading of her transcripts shows several directive constructions not captured in the corpus analysis, specifically three more imperative constructions and a ‘what is needed is for you to’ cleft construction.

Corpus analysis shows Bing used the most frequent directive constructions and ‘you can’ more frequently (182 per 10,000) than either the learners (79 per 10,000) or the experts (67 per 10,000). While this may demonstrate a directive-oriented stance towards interaction with students in office hours, it does not necessarily demonstrate an authoritarian stance. A closer look shows that of her nine uses of MFCs, she used adjuncts with six of them (66%), which is a higher percentage than either learners (55%) or experts (61%). Four of the six adjuncts are mitigators, including ‘I think’, ‘I guess’, ‘just’, and ‘may’ (one each). In addition, she used adjuncts with all nine uses of ‘you can’, and eight of those adjuncts are mitigators, including ‘I hope’ (3), ‘I think’ (1), and ‘just’ (4). This is evidence that Bing knows a variety of directive constructions and has a good understanding of the interpersonal need for independence appeals through the use of mitigators. In the post-instruction assessment, she offered, ‘I think it’s better to’ and ‘I think it would be good to’ as examples of directive constructions. She commented on the difference between ‘I would’ and ‘you should’ with: “(I would) is more suggestive … the TA let the students to choose. However, for (you should), the TA just ask the students to put the emphasis here” (survey). This demonstrates that she believes ‘I would’ allows more choice than ‘you should’, and that it appeals towards independence.

Bing’s interview responses are also congruent with a usage style that can be considered directive but polite. She explains “in China, teacher and TA have to (be given) authority, so students never challenge, however here you have to be prepared for any question” (interview). She thinks a professor should be “good at guidance, he never blame you, says you are the most hardworking, always encourage you, praise you, if you do something wrong, he just comfort you, never say no” (interview). She says she prefers a less authoritarian style of teaching, but feels it is important that students like the professor and like the class. The TA has to be firm and “let them know what they should do, you cannot be too kind” (interview). She says being a TA might be difficult for her because “if I was in China, I know the level, in what extent I should do, however here … I don’t know where I should be” (interview).

4.4.2. Phongsak T

Phongsak T is the pseudonym of a 27-year-old Thai student getting his PhD in Computer Science and Engineering. He had been in the US for 2-1/2 years getting his Master’s before enrolling in the ITA course, in

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10 See Reinhardt, 2007 for all data collection instruments.
11 For the learner profiles presented here, uses of ‘you can’ were disambiguated to include uses that indexed possibility and/or permission, and to exclude uses that clearly indexed ability with little or no directive force. Because of the work this disambiguation would have been for the entire corpus, however, ‘you can’ is not analyzed in the comparative analysis, and is therefore not considered an MFC.
contrast to both Bing C and Yong W, who had both been in the US for one semester before enrolling. In role playing, he used ‘you might want to’ four times, once in the first role play, twice in the second, and once in the final role-play, besides ‘you need to’ once and five directive uses of ‘you can’. In addition to constructions caught by the corpus analysis, a close reading of his transcripts show the use of several imperatives (‘turn them in’, ‘please finish’, ‘don’t hesitate’), several ‘if you’ phrases (e.g. ‘if you want more reference maybe I can give you …’), and a ‘it’s better if’ construction. Phongsak also demonstrates near-expert use of mitigators, as not only are all of his uses of ‘you want to’ hedged, but he also mitigates appropriately throughout the transcripts (using ’maybe’ eight times), for example, in the second role play he says “because it’s not too long from the due date maybe you can …”.

In his interview, Phongsak explained that although he has not taught, he will probably be a TA, depending on his department’s needs, and that upon completion of his degree he will return to his country and be a professor. He explained that Thai student–professor relationships are much more formal than those in the US, and that students there are more respectful. When asked the advantages and disadvantages of egalitarian and authoritarian teaching styles, he answered that egalitarian might be appropriate for courses that require a lot of discussion, or for grad-level courses, but that authoritarian styles might be appropriate for larger courses where the subject matter was less negotiable, for example mathematics. He said that in the future, his style will depend on the kind of course he teaches, though he thinks his personality fits better with discussion. In view of his usage and assessment, this final comment can be seen to summarize Phongsak’s directive usage, in that he seems to understand that contextual factors impact his linguistic choices.

4.4.3. Yong W

Yong W is the pseudonym of a 25-year-old male Chinese doctoral student in economics, who was enrolled in, but did not pass the ITA course. Unlike Bing and Phongsak, he did not participate in the pedagogical treatment, but did receive instruction on conducting office hours that was not based on directives usage. In the three course role play interactions, he used ‘you can’ (6), ‘I suggest’ (2), ‘you should’ (1), and ‘you don’t need to’ (1). This puts him at the low frequency end of directives usage in comparison with the other learners. A closer analysis of his transcripts, however, shows several directive-like constructions not captured in the corpus analysis, including a ‘why not’, a ‘it will be helpful for you’, a ‘students are required to’, and a ‘would you please’, all of which he listed as examples of directive language in the post-semester assessment.

Yong used an adjunct with two of his four MFCs, saying “I think you don’t need to worry” and “I mean you should you can think about this question”, a mix of forms that may index development. Besides these, his use of ‘it will be helpful’ is preceded by ‘I think’, but none of his six uses of ‘you can’ are clearly mitigated. In total he mitigates 50% of his MFCs, which is lower than both experts and learners, and when directive uses of ‘you can’ are considered, the percentage is even lower. Still, in the examples he provides on the post-assessment, he includes ‘please’, ‘strongly’, and ‘I think it may be’ in the example of directive language, which demonstrates at least declarative knowledge of these forms. In addition, analysis of his entire discourse shows that he does make use of some mitigators.

In the post-course survey, Yong does not list modal or p-modal forms as examples of directives; instead, he lists the phrases noted above and ‘I (strongly) suggest that’, ‘you are not allowed to’, and ‘this is prohibited’. When asked to provide a situation where he might use directives, he offers, “some students want to postpone homework. I may say ‘sorry, it is not allowed to do it except for valid excuses’” (survey). When asked the difference between ‘you could’ and ‘you can’, he first wrote that ‘could’ “may be more suitable because it is not so strong”, but then crossed it out. In its place he wrote that ‘can’ “is more suitable, because it is just an explanation of extra option, not some comments on student’s activity” (survey). This may be interpreted to mean that he believes a TA should be neutral, and that ‘could’ implies judgment while ‘can’ does not. In other words, it may be that Yong believes a TA should not give directives, but rather simply act as a mediator, not assessor. This interpretation would explain his relative lack of directives use in the role play activities, and his reporting of constructions that index permissive rather than obligative force in the survey.

Yong seems to refer often to the authority of the department and professor. In the first role play, he answers questions regarding the syllabus of the course he is teaching for an interested student, using the phrase ‘students are required’ rather than using ‘I require’ or ‘you are required’. In the second role play, he goes over a test score with a student, and explains that the student cannot have credit for an incorrect calculation because
of 'our policy' on test correction. In the final role play, he offers advice on how the student can get extra help, but explains that he must first check with departmental policies. In other words, he seems very aware of his mediating role as a TA, and reflects this awareness with language choices that make implicit the departmental source of authority (Iedema, 1996).

While other learners in the project also referred to departmental authority, they did not do it so frequently and in combination with low use of directives. In Yong’s case, it may be that he was operating with an idea of what happens in office hours based on his own experience. It turns out that Yong was actually a TA in his department when he was taking the ITA course, although he only held office hours and graded tests, and did not teach. He also explained in his post-semester interview that he had been a TA in China, where TAs were more like student supervisors, as compared to the US where TAs “are more equal to students” (interview). As an example, he explained how in the US, students can come to your office “and argue all kinds of things they want to argue; in China, not quite common” (interview), and that in China most students just accept what the TA says. He said that he didn’t have trouble with this difference, since he had learned in English class about cultural differences, so he was trying to get used to it. When asked if there were advantages to an authoritarian style of teacher–student relationships, he explained that in a more American style, students may have too much power and argue about their courses, when they do not know what is appropriate for them to study, but that if they have no power at all, the department would not know what they really need, and so there should be balance between both approaches.

In sum, it may be that Yong W felt that he could be less authoritative and build solidarity with his students by avoiding the use of directives himself and implicitly invoking departmental authority instead of his own. His language choices in role playing reflected his own experience as an actual TA, where the risky use of face-threatening directives can be avoided by invoking departmental authority and taking the safe, but disempowered, role of mediator.

5. Discussion

Phongsak’s abilities may be due to the fact he had been in the US much longer (2 years) than either Bing or Yong (1 semester each), and so had more opportunity to develop pragmatic awareness of the language ambient to the environments in which he found himself. Considering the frequency of ‘might want to’ in expert use, it could be that Phongsak had been noticing it all along, and just needed it to be confirmed. While some research shows that attitudinal orientation towards the host culture has a greater effect on the development of expert-like usage than sojourn length (Adolphs & Durow, 2004), it may be that sojourn length itself influences that orientation. In addition, that orientation is probably influenced by vocation, the reality of which for Yong had a greater impact on his usage than what he was being taught in his ESL course. As a graduate assistant who was already conducting office hours, Yong was gaining actual experience that was probably more meaningful than role playing in a course he only had to take as a formality. In contrast, Phongsak had a scholarship from his government and had never actually taught or conducted office hours, and so had no experience with which to compare. Gender issues may also be a consideration, as some studies have found that women tend to mitigate more than men (Yates, 2005). While this was not a focus of the analysis, it is notable that Yong mitigated less than average and Bing more than average. Regarding influence of instruction, Bing and Phongsak demonstrate positive effects of instruction based on corpus-informed language awareness principles (Thorne et al., 2008). However, Yong’s situation emphasizes the necessity for needs analysis and coordination with other departments on ITA preparation curriculum, which should clearly reflect what the students actually experience as ITAs.

Finally, it is interesting to consider how the learner profiles provide insight into the development of academic professional identity. If teachers teach only based on their own apprenticeships-of-observation (Lortie, in Johnson, 1999), ITAs would teach according to how they are taught, which for some would be more authoritarian than an informal American style. The corpus analysis found that ITAs may tend to teach this way, as they used fewer constructions that appealed to listener independence in comparison to practicing professionals in office hours contexts. At the same time, all three profiled learners said that they wanted to interact with students in a less authoritarian, more egalitarian style in the future. Furthermore, some learners like Yong may find a less directive, mediating style more useful as a TA, a possibility not always addressed in some
TA preparation courses. It is this misalignment of several factors that is perhaps the most important finding of the project: how ITAs have been socialized by their schooling, what they are taught in ITA preparation courses, what they actually do and experience in their departments, classrooms, and offices, and the kinds of academic teaching professionals they say they want to become.

6. Conclusion

This project used a mixed corpus and qualitative approach to examine directive language use by ITAs and by practicing professionals in academic contexts. The project findings are evidence for the strengths of a mixed methods approach to learner corpus analysis, which offers promise in understanding the variable quantities and developmental qualities of learner language, but is limited to small corpora by institutional constraints and the practical realities of data collection. For examining classroom interaction and language development, a corpus-informed mixed methods approach may be more feasible methodologically, and more revealing heuristically, than a corpus-driven, more quantitative approach that relies on larger corpora.

The findings contribute to research on intercultural pragmatics and second language development. The first, corpus-supported comparative analysis showed differences in group usage patterns between the ITA learners and the MICASE experts, in that the learners tended towards more use of constructions that may restrict choice, at the same time they made less use of those that promote inclusion. The result in actual ITA–student interactions may be that ITAs are perceived as detached rather than polite. This finding is congruent with other findings on ITA and NS-NNS discourse, for example NNS avoidance or violation of status-preserving strategies (Bardovi-Harlig & Hartford, 1993) and fewer uses of involvement strategies by NNS instructors (Yates, 2005). The second, corpus-based analysis of individual usage showed wide variation by both learners and experts, although the learners showed evidence of over-reliance on smaller repertoires, which is indicative of development. When usage patterns were interpreted with the support of qualitative data, it became apparent that a variety of contextual or socio-cultural factors were at play, including relevant experience, length of sojourn, vocation, instructional history, gender, and the development of identity as an academic professional.

Besides mastering graduate level material and academic language in a second language, international graduate students in North America and elsewhere are often required to act as ITAs, where they must advise, direct, and tutor undergraduates. This study shows that the interactional demands of spoken academic English discourse are complex, and implies that future academic professionals, both learners and expert speakers of English alike, may benefit from the awareness and discussion of the sociopragmatic features of instructor–student interaction.

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References


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