Working Papers in Educational Linguistics (WPEL)

Volume 21
Number 1 *Fall 2005*

Article 3

Fall 2005

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Sean McGrew
University of Pennsylvania

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McGrew, S. (2005). Student Questions in an Intermediate Modern Hebrew Classroom. *21* (1), Retrieved from https://repository.upenn.edu/wpel/vol21/iss1/3

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Student Questions in an Intermediate Modern Hebrew Classroom

Sean McGrew

University of Pennsylvania

This study examines the questions students asked over several months of a low-intermediate level (third semester, college) Modern Hebrew class. The analysis describes the discourse patterns the questions exhibit, addresses who asks questions of whom, categorizes the kinds of information the questions seek, indicates the languages in which the questions are encoded, and notes whether or not the questions were successful in eliciting the information the asker wanted to know. The results suggest that students' questions demonstrate engagement at the language-learning task, and that they may show differences based on perceptions of relative proficiency.

Question-and-answer interactions have characterized pedagogy since the most ancient of teachers: Socrates famously posed questions to lead students in self-discovery, and Buddha reputedly described his own pedagogical technique for four questioning interactions, the first of which anticipated the Socratic method. Most of Buddha's techniques, however, dealt not with teacher questions but student questions. "In the second, a direct reply is given to an enquirer without entering into a discussion with him; in the third, answers are given separately to the different aspects of the question; and in the fourth, it is pointed out that as the question is untenable, no reply will be given." (Gard 1964: 50).

Like Buddha's latter three techniques, this paper focuses on questions posed by students. Unlike Buddha, however, this work looks at questions in a language classroom. First the literature on classroom questions is briefly reviewed to establish its pedagogical and theoretical importance for language learning. Then some attention is given to prior work on the discourse patterns and the taxonomy of classroom questions, which leads to the framework for the analysis presented here. The present data consists of student questions captured over several months in a college intermediate-level foreign language classroom. The goal of this paper is to describe the discourse patterns and develop a taxonomy for the questions according to the kind of information the asker seeks. The results of the analysis are then used to examine different behaviors of student subgroups.

Why Study Questions?

Student questions in a language classroom are important for a number of reasons. First, the way those questions are handled plays a leading role in setting the tone of classroom discourse—the kinds of questions students ask over the course of a semester are largely shaped by the kinds of responses teachers give to those questions (Boyd & Rubin 2002; Skilton & Meyer 1993). A teacher that does not welcome genuine questions is unlikely to receive many after the first few weeks of class. The kind of questions students ask, in turn, is a key predictor of the kind of talk which will happen in the classroom—classrooms marked by frequent student-initiated, authentic and referential questions tend to be rich in pedagogical dialogue and complex student talk (Nystrand, Wu, Gamoran, Zeiser & Long 2003), both of which are thought to promote learning in general and language-learning in particular (Boyd & Rubin 2002; Ellis 1984). Finally, since teachers set lesson plans and run lessons, most students rarely get opportunities to put their own agenda on the table (Sinclair & Coulthard 1975; Mehan 1979; Johnson 1995). In some language classrooms, questions may be the most acceptable way for students to initiate topics. In such classrooms, student questions will be the main source of genuine, unsolicited student utterances.

Those questions are thus a rich source of information to teachers—both the form and the content of the question can be windows into the students' learning processes. For example, Skilton and Meyer (1993) found that the types of student questions vary with proficiency level, and Spada and Lightbown (1999) found that students' control of question structures in a second language develops in predictable stages. They also highlight work by several language-learning theorists arguing for the importance of level-appropriate input. Although they don't explicitly make the connection, their findings imply that teachers could (and perhaps do) use students' questions to gauge students' level of skill, and modify their teaching accordingly, if the teachers are sufficiently metalinguistically aware (Andrews 1999).

Nystrand et al. (2003) found that the more referential questions students ask, the more likely a classroom will be to show dialogic discourse as opposed to teacher monologue. Ellis (1984; see also Brock 1986) argues that message-oriented discourse (discourse about something people are actually interested in) provides much richer language input than medium-oriented discourse (discourse about the language), and suggests that a lesson in which students hijack the lesson plan to pursue their discussion is probably a good thing for language learning, especially with adult post-beginners.

Despite their importance, responses to student questions, and the success of questions in eliciting information, have not been much studied. White, Spada, Lightbown, and Randa (1991) looked at students' L2 ques-

tion formation as part of a study of whether input enhancement could improve question formation. Pica, Evans, Jo, and Washburn (2002) looked mainly at the phenomenon of teachers correcting students' questions, interactions which take the form: student questions, teacher corrects, student rephrases question, teacher responds. These kinds of studies focus on the form of questions, not the content of the information-exchange.

None of Lightbown's (2000) 10 generalizations about Second Language Acquisition (SLA) research and classroom language teaching concern responding to student questions, though of course any teacher could confirm that responding to questions is a significant part of her job. And while we properly distinguish between theoretical research and classroom application, Lightbown argues that SLA research does inform teachers and affect curriculum-making. Insights on how student questions lead to information-conduction would no doubt be welcome to language teachers.

The existing literature on classroom questions mainly focuses on teachers' questions. This teacher-centered focus springs naturally from the teacher-fronted nature of most classroom discourse. In most classrooms, nearly all the questions are posed by the teacher (Sunderland 1998; Boyd & Rubin 2002; Markee 1995; Skilton & Meyer 1993; White & Lightbown 1984). However, student-initiated interactions, both with teachers and other students, constitute important learning opportunities (Johnson 1995).

Discourse Pattern of Classroom Questions

The most commonly observed classroom discourse pattern involves a teacher posing a question or giving a direction which elicits an answer or behavior from one or more students, whereupon the teacher gives some kind of evaluation. This exchange typically goes under the acronyms IRE or IRF. Sinclair and Coulthard (1975) introduced the labels Initiation (I), Response (R), and Feedback (F) for discourse moves in the classroom; Mehan's (1979) framework used the terms Initiation (I), Reply (R), Evaluation (E). Though the resulting acronyms are confusingly similar, the underlying approaches were somewhat different.

Mehan (1979) describes almost all classroom interaction as a series of linked IRE exchanges, with the IRE as an inseparable cluster. Sinclair and Coulthard see the I, R, and F as components which can recombine in a number of different orders to comprise different interactions. It was one of their findings that the IRF pattern (with teachers taking the I and F turns) dominates classrooms, but not at all their intention to fit all classroom interaction into that pattern. For example, they claim that pupil-initiated interactions generally take the forms IR, which they call "pupil elicit" or IF, "pupil inform." They go so far as to give the pattern for a teacher who elicits a wrong answer and moves to the next student:

I R F (Ib) R F.

Thus although in ensuing work IRE and IRF have been used interchangeably (Ellis 1984; Sunderland 1988) and in fact sometimes conflated (Cazden 2001; Boyd & Rubin 2002, Nystrand et al. 2003), this paper builds on the more extensible Sinclair and Coulthard (1975) framework underlying the description of that pattern. Here's an example of the typical IRF interchange, taken from Johnson (1995: 94):

Teacher (I): Therefore, "clearance" sale will mean what?
Student (R): To clear up.
Teacher (F): To clear up, that's right.

This pattern is often analyzed as the way in which the teacher expresses or even asserts dominance. Mehan (1979) pointed out that allocation of turns is a critical tool in organizing lessons and maintaining order in the classroom. Markee (1995), using his own terminology—Q (Question) A (Answer) C (Comment)—for the IRF interchange, argues that rules of turn-taking work in such a way that the initial questioner retains control of the flow of discourse. In his view, a teacher who simply responds to a student question would be yielding control of the next turn—and the floor—to the student who asked the question. He thus explained teachers' tendency to counter-question as a move to re-establish their rights to the final turn.

Markee's work in some ways echoes much earlier work by Mishler, in which he examined how a series of questions and responses is constructed in discourse. Mishler found that the chances of one question coming after another depended only on the identity of the speaker—the higher-position speaker being more likely to ask follow-up questions (Mishler 1975b). He also saw three different patterns of linking questions in a series, which he called chaining, arching, and embedding (Mishler 1975a). For student-teacher interactions, the main contrast is between chaining and arching. In chaining, one person asks a series of questions, and the other person answers them, as in an interview. In arching, the responder inserts his or her own questions. Mishler found that when adults initiated the question series with children, the ensuing dialogue displayed chaining, but when children initiated questions with adults, the adults started arching. Like Markee, he thought this pattern evidenced adults reasserting their authority position.

Kinds of Questions

What kinds of questions get asked in classrooms? The single most-used distinction has been the one elaborated by White and Lightbown (1984). They distinguished display questions, where the teacher knows and is trying to elicit the right answer, from referential questions, where the teacher doesn't have a 'right' answer in mind. They found that teach-

ers overwhelmingly ask display questions, which is probably detrimental to language-learning: Ellis' (1984) point that classrooms dominated by teacher display questions may deprive L2 learners of crucial input remains unchallenged.

Brock (1986) stipulated that display questions were much more common than referential, but focused on the effect of teachers' referential questions on classroom discourse. She found that referential questions elicit more frequent and complex student responses. In her view this fosters better language learning, both by giving students more practice and by making the language of classroom discourse more like the language of real-world discourse.

Students, of course, rarely ask display questions (Markee 1995). There have been several attempts to create a taxonomy specifically for the questions students do ask. For example, Labov (1988) found that students primarily asked comprehension, confirmation, and clarification-checking questions. However, in that study, her section on student questions was much shorter than her treatment of teacher questions, and she did not note whether questions were successful in eliciting the desired information.

When Skilton and Meyer (1993) reviewed the literature, they found almost no existing studies focusing on student questions. Their own study examined several hundred student questions and found that most were referential, confirmation, and clarification questions—a finding similar to Labov's. Boyd and Rubin (2002) found that students ask "procedural" questions—questions about the flow of the lesson, homework, and so on—much more than they are "substantivally" engaged. Boyd and Rubin feel that substantival engagement creates more opportunities for students to initiate topics and question each other.

Thus there are three main reasons to study student questions in a language classroom in more detail. First, such study contributes to our knowledge of learners' language use by focusing on precisely those moments when students are genuinely seeking information.

The second reason to study questions is that the content of the questions is at least as important as their form. In terms of providing diagnostic information, questions often demonstrate precisely what a student is wrestling with at the moment. Also, since classrooms are social spaces, the interaction patterns, such as who asks what of whom, are potentially rich sources of information about the relationships between the teacher and the students, and among the students themselves. In particular, it seems worthwhile to examine whether groups of students can be distinguished based on either the discourse pattern of their questions or the kinds of information they seek.

The third, and perhaps most compelling, reason to study student questions is that they matter to students. Students ask questions to get the information they think they need to meet their learning goals, and most

teachers want to help students achieve those goals. As discussed above, teachers' handling of students' questions matters not just in the moment, but influences the whole classroom interaction.

The present study attempts to contribute some additional empirical findings about both the discourse structure of student-initiated questioning interactions, building on the framework of Sinclair and Coulthard (1975), Mishler (1975a; 1975b), Mehan (1979), and Markee (1995), and the kinds of information student questions seek, following in the tradition of Labov (1988), Skilton and Meyer (1993), and Boyd and Rubin (2002). Additionally, the present study looks in closer detail at who asks questions of whom, the language in which the questions are asked, and the success of student questions in eliciting the desired information. The goal is not to make general claims, but simply to explore how questions unfold in one particular classroom, with the hope that the patterns seen there might spark insights for other students, teachers and researchers.

Methods

The question-sequences presented here are a subset of data collected during a study which included interviews and participant observation over two months of a 3rd-semester Modern Hebrew class at a university in the Mid-Atlantic region of the United States. The interviews were focused more on the subject of Hebrew study as an element of American Jewish identity than on language learning directly, but included discussion of the classroom social dynamics. The data presented here come from the classroom observation.

Participants

I was a student in the class, and had known about half the other students for a year, as we had taken the 1st and 2nd semesters together; they were all sophomores. The other students were freshmen who had placed into the class via a test. There were fourteen students altogether: four freshmen women, three freshmen men, five 'sophomore' men (including me), and two sophomore women. The primary language of all of the students was English.

For each question interaction, I recorded in my field notes the exact participants using abbreviated codes for their names. This was relatively simple to do, since I knew everyone in the class personally. For analytical purposes, I divided the students into two groups based on a distinction which had emerged both from my observations of the class and the interviews (McGrew 2004). There was good consensus among all the students I interviewed, as well as the teacher, that there was a salient difference between the sophomores and the freshmen in the class. The sophomores had taken their first two semesters of Hebrew at the same university in

the previous year, whereas the freshmen had placed into third-semester Hebrew on arrival.

More salient to us than the actual academic-year distinction were the underlying differences in exposure to Hebrew—the placed-in freshman tended to have grown up in private Jewish day schools, studying Hebrew since kindergarten in various combinations of school, synagogue, and camp classes. The sophomores were more homogenous, having all started with very little Hebrew and having all studied at the same time with the same texts the previous year. They knew each other, and they knew which words they were supposed to know, and so on. Naturally, the categories have ragged edges. I was an old graduate student, but I classify myself here as one of the 'sophomores', since I went through the same progression of Hebrew classes with the same cohort and did not grow up in Jewish day school either. Two of the freshmen, by their own accounts, didn't feel that they quite fit with the rest—one had learned her Hebrew in elective courses at a public high school, and one informally from his Israeli father. Nevertheless I include them with the other freshmen, based on my observations of the social dynamics in the classroom as well as comments made by the teacher and other students in the interviews.

One key thing to remember about this distinction is that, as everyone including the teacher acknowledged, the freshmen were generally more proficient than the sophomores, though less homogenous as a group. In both my interviews and in-class observations, I frequently observed frustrated sophomores complaining that the freshmen who placed in knew far more Hebrew than they (we, in a sense) did. Freshmen, on the other hand, were more likely to speak apologetically about their lower-than-expected placement test results, acknowledging in some cases that they had studied Hebrew since kindergarten.

My role as a regular student in the class, without a tape recorder and constrained by the need to participate, clearly limited the amount of data I could collect. On the other hand, as an authentic member of the class, I was able to make my research minimally disruptive, as it never visibly interfered with class.[1] An additional advantage is that my insider role allows me to venture a few insights based on introspection.

Data Collection

The class met every weekday afternoon for 50 minutes; during the two months I took extensive field notes 23 times, for a total of about 19 hours of class time. Starting on the third observation session, I narrowed my focus to students' information-seeking questions and tried to capture at least the gist of every such utterance. The classes were not recorded electronically, so on occasion I had to paraphrase, and I missed some questions entirely. My own Hebrew proficiency was, by my own estima-

[1]Except, of course, for the day on which I explained the project and asked everyone for permission to carry it out.

tion, slightly below the class average, so interchanges between advanced students and the teacher were occasionally beyond my ability to understand, much less transcribe. Naturally, there was also a perpetual conflict of interest between my duties as student and transcriptionist—I had to keep up, be ready to answer questions myself, write down the homework assignment, etc.

Partly for those reasons, I was unable to record the answers as consistently as I did the questions. The following analysis includes some attention to how successful the questions were, but for about a third of the questions I was unable to capture the full response. On the other hand, though I have no doubt that I missed some questions, I doubt that I missed very many. "I have a question," *Yesh Li Sh'elah*, a phrase most of us learned well before we could parse its constituents, was not only a request to ask a question but, it seemed to me, the sole legitimate student-initiated claim to the floor. If, but only if, we had a question, we could interrupt nearly anything the teacher was doing without sanction.

Analysis

To analyze the data, I coded each question for several characteristics. First, I classified the discourse pattern following the framework in Sinclair and Coulthard (1975), which I extended somewhat to meet my needs. I also looked in detail at who asked the questions of whom, what kinds of questions were asked, the language in which the questions were phrased, and the success of the questions in eliciting information.

I used Sinclair and Coulthard's (1975) shorthand to code each interaction which began with a student question. I, R, and F stand for Initiation, Response, and Feedback, respectively. Additionally, a lowercase "b" indicates a repetition of the same move, as in the example given earlier where a teacher moves on to another student: I R F (Ib) R F. Here I ran up against a limitation of the Sinclair and Coulthard's coding system, which is that it does not elegantly describe conversation patterns between more than a dyad. Their shorthand captures that the question is a duplicate, but it does not capture that the responder is a different person, which was important for my purposes. For this analysis, I found it useful to extend the shorthand with subscripts; the same example would thus be: IT RS1 FT (IbT) RS2 FT, where T indicates the teacher and S1 and S2 indicate different students. I also sometimes found it helpful to include in the subscript the direction of the question or response. $I_{S1->S2}$ indicates a question directed by one student to another.

Because I was interested in a finer-grained distinction than had been made in earlier studies, particularly with reference to using questions as indicators of the precise language issues students were seeking information about, I did not employ one of the earlier breakdowns of question types. Instead, I created an emergent taxonomy for the questions as fol-

lows: I went through the set of questions one at a time and for each question either took it as a new type or as an instance of a type I had already created. I ended up with eleven groups, which I then clustered into four main categories, leaving out two questions which I could not figure out how to classify. My original groups thus became sub-categories.

Lexical is the category which groups questions about the meaning, spelling, or pronunciation of words. The sub-categories which emerged were *English to Hebrew*, where a student sought help translating an English word into Hebrew, and *Hebrew to English*, where the student needed an English gloss for a Hebrew word. *Hebrew nuance* describes a question where the student seeks clarification of a term's meaning without recourse to English, typically by comparison or contrast with other Hebrew words, or with an extended definition or examples given in Hebrew. *Spelling* and *Pronunciation* questions are just that.

Grammatical groups questions about syntax. The sub-categories parallel those in the lexical category, except that only *Hebrew to English* and *Hebrew nuance* were necessary.

Meta-pedagogical questions include questions seeking to *Clarify instructions*, which typically arise when a student does not understand a task or an assignment, *Locate in lesson* questions, where a student asks where the group is in a reading passage, book or worksheet, and *Learning plan* questions, which seek information about overall learning strategy, e.g. when the class will cover a particular grammatical structure.

Substantival is really a direct mapping of one of my sub-categories, *Real-world questions*, up to the main category level. As will be discussed in more detail below, I use the 'substantival' description reservedly, in an attempt to make connections with earlier work. Real word questions are simply those which are not directly connected to the Hebrew-learning agenda of the class. Questions about the weather, about friends and family, and so on all count as real-world questions. Actual samples of each type are presented in Appendix A.

I also coded each question for its language: Hebrew, English, or code-switching. Though many of the questions necessarily involved at least a word or two in both languages, I classed a question according to what we might call its matrix language. For example, *"Ech omrim 'bird'?"* (How do you say 'bird'?) would count as a Hebrew question, since it is asking in Hebrew for the gloss of an English lexical item. I only used the code-switching category for a case when the matrix language changed during the question.

Finally, I coded each question for success simply based on whether or not the question elicited the information the asker wanted. A response of "I don't know," or a response which obviously misunderstood the question, or was otherwise unsatisfactory, made that question unsuccessful.

Results

As noted above, I did not capture every question, but do not feel that I missed a substantial number. The first interesting finding is that most of us did not ask questions with much frequency: I only recorded 81 student-initiated information-seeking questions in 19 hours of class.[2]

Discourse Pattern

Almost every interaction (68 out of 81) was IR: a simple initiation and response. Sinclair and Coulthard called this a "pupil elicit" interaction when the student takes the "I" and the teacher takes the "R" turn, and observed that most student-initiated interactions do take either this form or IF, which they called pupil inform. Here the interactions were limited to genuine student questions, so it's natural that the teacher's move is usually a response rather than feedback. While the present data fits well with Sinclair and Coulthard's descriptive findings, it does not interact with the more explanatory theories, like Markee's (1995) or Mishler's (1975a; 1975b). In this study, the person who answers the question almost always simply answers the question; there was not a single instance of counter-questioning or arching by the teacher. Note, though, that teacher-initiated questions, which are where we would most expect to see chaining à la Mishler, are excluded from this analysis.

The thirteen exceptions were in quite similar patterns. Several of these demonstrate strategies for reconciling a failure to elicit information in the simple IR discourse, strategies I call *retry* and *relay*. A retry involves a redirection of the question to another person when the first is unable to provide the desired information. A relay happens when one or more people pass along either a question or an answer.[3]

$I_{S1->S2}R_{S2->S1}Ib_{S1->S3}R_{S3->S1}$: This describes a retry, where a student asks a neighbor where they are in the book; the neighbor doesn't know, so the student tries the same question on a different person, who does.

$I_{S1->S2}I_{S2}R_{T}$: This relay happens when a student asks another student a question without bidding for the floor, and that student relays the question up to the teacher (thus taking the main floor) instead of answering it semi-privately. The teacher gives an answer.

$I_{S1->S2}R_{S2->S1}Ib_{S1->S3}R_{S3->S1}Rb_{S1->S2}$: This demonstrates both retry and another kind of relay. One student asks a classmate a question; the classmate doesn't know the answer, so the first student asks another student the same question. She does know, so the questioner relays the correct information to the first person he tried asking. All this takes place

[2] I excluded utterances which were grammatical questions but not informatio seekers. For example, when the teacher asked about the gates of Jerusalem, one student said, "There are eight, right?" Which on reflection seemed to me less a request for information than a softening of his information presentation. I also excluded requests for permission along the lines of "Can I go to the bathroom?"

[3] I observed what I think was more relaying than just these examples, but since it typically happens quietly, I could only capture what was near me in the classroom.

without ever taking the main floor of the classroom.

There was one instance of the classic IRF, even though it was student-initiated:

> **Student**: Does that mean, 'the door is closed' or 'the door was closed'?
> **Teacher**: Either.
> **Student**: So it's like the present tense.

The other exceptions to IR were simple extensions of the pattern to IRIR: Occasionally, a chain of questions would develop, following the same topic and directed at the same person. Sometimes this would be the same student stringing questions together—$I_{S1}R\ I_{S1}R$ (like Mishler's chaining), but sometimes it would be different students linking in—$I_{S1}R\ I_{S2}R$. In only one case, the pattern was driven by an initial question's failure to elicit the desired information from the teacher.

Who Asks Whom?

The first observation to make is that though there were 14 people in the class, for two—a freshman man and a sophomore woman—I did not record a single question. At the other end, one freshman accounted for 24 of the questions (30%) on her own. In the 7-10 range (8-12%) were four sophomore men and one freshman woman. I asked four questions, and the other five people asked between one and three. Thus five people in the class (35%) accounted for 67 of the questions (83%).

Grouping by class, there is no apparent pattern: The questions are balanced pretty equally between freshmen and sophomores (39 and 42) and men and women (37 and 44).[4] As will be seen below, however, some distinctions do emerge when the class and the discourse patterns are examined together.

Language of Questions

There were 41 questions posed in English, and 39 in Hebrew, with no notable difference between the freshmen and sophomores. There was only one true code-switching question, asked by a sophomore: *"chi ani lomed b'angliah, ani lomed mehutz l'aretz,* or does that just mean abroad relative to Israel?" (If I study in England, am I 'studying abroad', or does that just mean abroad relative to Israel?)

[4] This may, however, mask an interaction between class and gender—The five sophomore men asked 40 questions, an average of 8 apiece, while sophomore women asked a total of 2, an average of 1 (actually both were asked by the same woman; the other asked none.) On the other hand, the four freshman women asked 35 questions, an average of almost 9 each, while the 3 freshman men put up a combined total of 4 questions, barely breaking an average of 1. While this is in fact a significant difference ($p < .001$, $c2 = 11.1$, $df = 1$), it is beyond the scope of this paper to examine gender-related questioning behavior.

Table 1
Frequency of Questions by Category

Category	N	Percent
Lexical (n=28, 35%)		
English to Hebrew	6	7.4
Hebrew to English	15	18.5
Hebrew nuance	4	4.9
Spelling	1	1.2
Pronunciation	2	2.5
Grammatical (n=22, 27%)		
Hebrew to English	6	7.4
Hebrew nuance	16	19.8
Meta-pedagogical (n=19, 23%)		
Clarify instructions	8	9.9
Locate in lesson	4	4.9
Learning plan	7	8.6
'Substantival' (n=10, 12%)		
Real world	10	12.3
Unclassifiable (n=2, 3%)	2	2.5

Kinds of Questions

A breakdown of the frequency of questions by category and sub-category is presented in Table 1. Most of the questions were about learning Hebrew. The biggest set concerned the meaning and form of words; the next biggest set concerned grammar. The "Hebrew nuance" categories I used to capture questions which did not seek parallels to English, but rather clarifications of meaning or structure that the students were trying to understand within Hebrew. Note that for vocabulary items, students were most likely to request an English gloss, but for grammatical sense, they were more likely to query for Hebrew nuance. Speaking for myself, at least, this ranking of the questions closely matches the needs I felt in class. I wanted to know what words meant and how they fit together. And occasionally I got a little lost, which leads to the next category.

Learning-plan questions like, "Will we learn this next semester?" are rather different from locate-in-lesson questions like, "What page are we on?" The latter demonstrates immediate confusion, whereas the former manifests an interest and a hypothesis regarding the course of instruction. Nevertheless both are genuine information-seeking questions focused on the flow of the class. The first three categories all demonstrate students engaged in conscious, intentional language-learning, and they account for 85% of all the questions asked.

Only the 10 questions I initially categorized as "real-world" questions would properly count as substantival in Boyd and Rubin's (2002) frame-

work. On the other hand, even the questions I have labeled meta-pedagogical, which are mostly exemplars of what Boyd and Rubin would call procedural questions, seem to exhibit real engagement with meaning: it's just procedure, but it's procedure that is meaningful to these people. When Boyd and Rubin say "substantivally engaged," what they really mean is substantivally engaged in something other than language-learning. In the present data, students spent much of the time substantivally engaged *in trying to learn the language*. Similarly, going back to Ellis' (1984) distinction between message-oriented and medium-oriented discourse, it seems clear that much of this discourse was both: it was medium oriented, because it was about Hebrew, but the message was no less a message for its medium orientation. To say that students were not often "substantivally engaged" suggests that they were mindlessly drilling, which was not the case in any of these questions.[5]

My intuition here is that students believe that to learn Hebrew, they need to practice, so they comply with the "speak Hebrew" norm of the class, which is enforced by the teacher explicitly and often. But it is precisely when they are the most substantivally engaged—and here I am co-opting the term to mean when they really want to know something, whether it is language-related or social—that they are strongly tempted to query for it in the most efficient way they can. The single code-switching example in this set of data, which was given above, is not much in the way of evidence, but it is at least a nice illustration of the process I am describing—a student gamely trying to get out the Hebrew, but getting impatient or tired and subverting his desire to speak Hebrew to his desire to form a question whose answer he earnestly wants to know.

Question-Types by Student Class

Table 2 shows the main categories of questions by the sophomore/freshman distinction. The freshmen showed a slight tendency to ask more substantival questions. The sophomores asked more meta-pedagogical questions, but the differences were not striking and certainly not statistically significant: c2 (3, N = 79) = 2.9, p = .40. (N is 79 instead of 81 because the unclassifiable questions were excluded.)

Freshmen never asked any language-learning focused questions of the sophomores. The number of questions students asked each other was fairly small, so this is not a finding to stress heavily, but it seemed quite consistent with my intuitive feel for the class—the freshmen knew that we sophomores were on the low side of the curve; when they needed help, they asked up. The four questions freshmen asked sophomores were all substantival questions, and three of the four were actually asked in English, e.g. "Was your sister a bridesmaid?"

[5] This is by definition: as noted above, only genuine information-seeking questions were included in this analysis.

Table 2
Categories by Class

Category	Sophomores	Freshmen
Lexical (n=28, 35%)	15	13
Grammatical (n=22, 27%)	11	11
Meta-pedagogical (n=19, 23%)	12	7
'Substantival' (n=10, 12%)	3	7

We sophomores did ask each other language-learning questions, but it seems not to have served us very well. Of the six sophomore to sophomore questions, one was substantival and in Hebrew. The others were all in English: two were lexical, and three were meta-pedagogical. All three of the meta-pedagogical questions failed to elicit the desired information. (e.g. "Where are we?"; "I don't know.") Once the failure was resolved by a simple redirection of the question ($I_{S1->S2}R_{S2->S1}Ib_{S1->S3}R_{S3->S1}$), and once the redirection was followed by a courteous relay of the necessary information back to the unhelpful primary target of the question. This is the $I_{S1->S2}R_{S2->S1}Ib_{S1->S3}R_{S3->S1}Rb_{S1->S2}$ pattern described above. Notably, the second, more helpful target of the question (S3) was a freshman.

When sophomores asked questions of the freshmen, we were more successful. Again, we usually (5 times out of 6) asked in English. Two of the questions were substantival (one of those was the Hebrew one), one was lexical, and two were meta-pedagogical. In the single case where the freshman did not have an answer, she relayed the question to the teacher ($I_{S1->S2}Ib_{S2}RT$), for an ultimately successful result.

This motivates a closer look at those meta-pedagogical questions. The clarifying-instructions questions were asked by freshmen and sophomores in equal numbers (4 each), but with two interesting differences. Sophomores twice asked other students, in English, for clarification. Both times they asked the teacher, the freshmen cast their questions in Hebrew. Freshmen, on the other hand, always went straight to the teacher, to whom they put two questions in English and two in Hebrew. The four locate-in-lesson questions were all asked by lost sophomores. Again, when they asked other students (three times), they asked in English. Once a sophomore directly asked a freshman and got a helpful answer. Twice a sophomore asked another sophomore who was unable to help—of those, one is the example discussed earlier, where the sophomore rephrased the question to a freshman, who did know the answer. On the one occasion a student asked the teacher a locate-in-lesson question, he asked in Hebrew.

What consistently emerges here is a picture of a classroom with distinct strata. The lower-level students, in this case the sophomores, were both more likely to be lost, and less likely to admit it to the teacher. They

seemed to feel more pressure to address the teacher in Hebrew than the freshmen, though generating questions in Hebrew was demonstrably harder for the sophomores than for the freshmen. Though in general the freshmen and sophomores did not ask noticeably different numbers of questions in class, the strata are marked by the inter-student interactions.

Students tended to ask language-learning questions laterally or upward, not downward. Questions asked of lower-level students in a class were more likely to result in either a failure and a retry or a relay to a higher-level student. Questions asked of higher-level students tended to be either immediately successful or result in a relay to the teacher. As a lower-level student myself working from introspection, I suggest that this pattern comes about because lower-level students don't want to slow down the flow of the class to resolve an information gap that might affect only themselves. Higher-level students, on the other hand, perhaps realize that if they lack the information, much of the class probably does as well.

Conclusion

This study did not provide information about how questions and the teacher's question-handling affected either learning or classroom dialogue over the course of the semester, but did provide a window into the students' learning process. The findings did show patterns that might have some implications for foreign-language pedagogy if they are corroborated elsewhere.

The most conclusive finding in this study is that the great majority of the students' questions were aimed at informing their conscious language learning: they asked first about lexicon, second about grammar, and third about what was going on in the classroom. They were in the classroom to learn Hebrew, and they were trying to do so. Teachers may note that a good portion of classroom chatter, at least insofar as these questions represent it, is on-topic and consists of students helping each other engage the task at hand.

The discourse pattern in which those questions occurred was quite regular, and did not involve any sophisticated turn-control moves by the teacher. Questions seem to arise when students think the lack of some information is an obstacle to what they are trying to do. The teacher in this class cooperated fully with students' attempts to manage their own learning by providing them exactly the information they sought and leaving the floor open for follow-up questions.

Questions among students, though less common, showed some interesting patterns which would be worth further study. I observed two strategies for reconciling a failure to elicit the desired information—retries and relays. Though the number was too small to confidently generalize from, there were differences between the higher-level and

lower-level students in terms of between-student interactions. This suggests that teachers could use the "who-asks-who" patterns as indicators of students' perceptions of the relative ability of class members.

Teachers may also note that inter-student questions were frequently on-task, so student chatter should not always be shushed. However, the inter-student questions here were primarily in English. The tendency of students to revert to English as a tool for getting desired information is at once a positive and a negative sign. On the one hand, it demonstrates that students are interested and engaged: there would be no need to switch to English if students didn't care what they were asking or what the answers were. On the other, it illustrates an often-observed challenge of foreign-language classrooms: communicating in their primary language is so much easier for the students that during those message-oriented, substantively-engaged moments where there are rich opportunities for second-language use, they often revert to their first.

The cost of strictly enforcing an L2-only policy might be that some students would remain lost or confused for long portions of class because of a small hang-up on a missing piece of information. This calls for creative solutions on the part of teachers and learners to collaborate in their mutual task of communicating requests and information about language while at the same time using the language as much as possible. That challenge is nothing new, but hopefully the empirical findings here will help spark some fresh ideas.

Sean McGrew is a Ph.D. candidate in Educational Linguistics at the Graduate School of Education, University of Pennsylvania. His interests are in teaching, learning, and assessment in multilingual classrooms.

Email: mcgrew@dolphin.upenn.edu

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