

Helping Students Pass the Turing Test

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Spoken language consists of more than just correctly formed propositional utterances placed one after another. Rather, speakers orient towards an interactional role and construct turns that are delicately shaped by the previous speaker's turn and designed to move the interaction forward. In this paper I describe some of the ways in which students can orient away from an institutional identity towards a more interactional, natural way of speaking. I refer to video data of student conversations to show some of the characteristics of Japanese students' speaking and discuss the content and methodology of lessons designed to promote a more interactional kind of talk. I conclude by suggesting that a focus on such interactional skills as backchanneling and use of discourse markers set within a framework of autonomy in speaking can help students to create an interactional identity in English.

会話はただ正確な発話から成り立つだけとは限らない。それどころか話し相手との繊細な対話によってやり取りは進んでいく。本論は、自然な会話をするには、学生的な(決まりきったやり取りをする)アイデンティティーから離れて、もっと双方向で自然な言葉のやりとりをする方法をいくつか示す。生徒のビデオデータを基に日本人生徒の特有の話し方を引用し、授業でのより双方向な言葉のやり取りなど推進した内容と方法を論じる。最後に、本論は、会話のやり取りの知識として、自立性のある会話の枠組みの中での相づちや談話標識(つなぎ言葉)などに焦点を合わせることが、生徒が独自の英語のやり取りを作る上で役立つと提案する。

IN THIS paper I outline a view of language based on an analogy with the Turing Test. It is suggested that language use is based on interactivity and co-construction of dialogue between participants—machine and human in the case of the Turing Test, and learner and learner in the language classroom. I then go on to suggest that the institutional nature of language classrooms often precludes the emergence of this kind of interactive language in learners. A method for diminishing the institutional nature of the language classroom and creating a venue for conversation is proposed and the paper concludes by outlining some results of the reorientation away from an institutional view of L2 learning and towards an interactive co-constructed model of language in use.

Language as Interaction: The Turing Test Analogy

Alan Turing was a British scientist who pioneered early computing and machine intelligence. The Turing Test generally refers to Turing's influential paper (Turing, 1950) which addressed



the question as to whether a machine can think, invoking a nuanced imitation game involving a machine and human interactants, with the machine attempting to imitate human responses. For the purposes of this paper, the crux of the test is that the machine can pass the test by modifying its own output in response to the output of the human. If the machine gives nothing but anodyne and stock *safe* responses, applied with simple algorithms, it will quickly give the game away. The machine must be an interactant, not a merely a reactant, to pass the test.

Nobody doubts that students learning English are human, but in the context of English language education in Japan, I am suggesting that the Turing test may be a useful way to think about the goals of language learning. In simple terms, this means that learners must orient themselves away from the institutional goal of passive memorization and production-on-demand that characterizes much of what goes on in language classrooms. Instead, they must reorient themselves to the goal of taking part in unrehearsed, spontaneous spoken interactions in English. To pass this version of the Turing test, learners must demonstrate to their partner not that they have memorized a certain amount of vocabulary and grammar and are able to produce it correctly on demand, but that they are active partners in the interaction, using language to pursue interactive goals in real-time.

Institutional Orientation

The L2 classroom is an institutional setting. The teacher is expected to, and usually does, fulfill the role(s) of teacher, and likewise the learners are expected to, and usually do, fulfill the role(s) of learners. Consequently the language used in the classroom reflects the ways in which the speakers orient to an institutional identity and talk those identities into being. One way classroom talk is structured is the three-part sequence described by Sinclair and Coulthard (1975). In this pattern the teacher initiates the interaction, the learner provides a response and

the teacher then gives feedback on that response. This pattern, referred to as IRF, is untypical of most other kinds of spoken interaction. Another pattern, familiar to many English teachers in Japan, is a tendency for students to “talk around the circle” (see Carroll, 2005). In speaking activities that the teacher has imagined as communicative, students speak in strict order—A followed by B, then by C, and then back to A. Again, this kind of speaking is not found in normal, spontaneous conversation.

If English mainly exists for learners within an institutional setting and for the purposes of fulfilling institutional roles, then it seems likely that the kind of English that learners are habituated to producing will be at variance with the kind of English that is produced for normal (i.e., noninstitutional) interactions. Other manifestations of classroom talk are, for example, students being unable to nominate turns (self or other) with any kind of ease, creating extensive pauses. Once a student has accepted speakership, they may structure their turn as the response turn of an IRF cycle, responding with a single proposition without any expansion. Learners may also engage in extensive self-correction as they attempt to form grammatically correct utterances. In their institutional roles, students have no right to introduce their own topics and no right to evaluate or contradict the speech of others, especially the teacher. Learners have no power to nominate self or others to speakership, no right to reject tasks or refuse to answer a question on the grounds that the teacher already knows the answer, and so on. In short, their orientation to their institutional roles precludes them from utilizing normal interactional strategies to manage the speaking they are engaged in. Bueno and Ceaser (2003) described ways in which learners (and teachers) in EFL classrooms in Japan orient to the expected institutional identities. The underlying narrative is the great difficulty that many Japanese learners have in orienting away from the institutional identities expected of them, so strong is the socialization process in Japanese education. (See McVeigh, 2003, for an account of the importance of roles in Japanese society.)

Communication and the L2 Classroom

Seedhouse (2004) raised the question as to whether genuine communication can ever take place within the institutional setting of an SLA classroom. By genuine communication Seedhouse meant the kind of daily conversation as described by Nunan (1987):

Genuine conversation is characterized by the uneven distribution of information, the negotiation of meaning (through for example, clarification requests and confirmation checks), topic nomination and negotiation by more than one speaker, and the right of interlocutors to decide whether to contribute to an interaction or not. In other words, in genuine communication, decisions about who says what to whom and when are up for grabs. (p. 137)

After discussion of the relativity of the term *genuine* from a conversation analysis (CA) perspective, Seedhouse (2004) went on to state; “I will now argue that it is, in theory, not possible for L2 teachers to replicate conversation (in its CA sense) in the L2 classroom as part of a lesson” (p. 69). Seedhouse’s argument is based upon his premise that “the stated purpose of L2 institutions is to teach the L2 to foreigners” (p. 70) and that once this purpose is invoked, whatever language use that does take place cannot be conversation as defined in CA terms. The underlying assumptions of the communicative approach are seen to be in contradiction, in that learners are assumed to learn best by engaging in genuine conversation, but cannot engage in genuine conversation where the institutional setting of a lesson precludes the very behavior that it is supposed to bring about. However, I will suggest that this apparent contradiction is not irresolvable.

Creating a Venue for Conversation

Widdowson (1987) described some of the familiar scenes of the social activity called a lesson.

The teacher comes into the room. There is a lull in the hub-bub, a transitional phase of settling down. Then: ‘Right. Quiet please. Sit down.’ The tumult and the shouting dies. The scene is set. The classroom is constituted as a setting and the lesson starts. (p. 83)

The scene is familiar. Teachers and learners alike know the script and act accordingly. What follows will be a lesson in which knowledge will be transferred from the mind of the teacher to the mind of the learners. The flow of information is unidirectional, the learners are empty vessels, and the transfer process is complete once the teacher has *sent* all of the information he or she planned to. Although some students can and do acquire L2 knowledge in this manner, many do not, and remain basically unable to engage in interaction in the L2 even after several years of instruction.

I have sought to address this issue by reconfiguring the classroom from an institutional space to one that can be termed a *venue for conversation*. The creation of this conversational venue takes place as follows. After checking attendance and making any necessary announcements, the students initiate speaking with each other, without any direction from me. There is no explicit verbal or gestural signal that the students should start speaking. Nor do I allocate group membership, set speaking topics or time limits, or the like. The learners act in a way that is found in contexts outside the classroom; once they find themselves without pressing tasks to accomplish, and lacking any direction from me as to what to do next, they self-organize into conversation groups, initiate topics, and fill silence with talk. This phase of a lesson is called *student talk time* (STT).

The rationale for this approach must be explained explicitly to learners from the very outset. The teacher must remain committed to the creation of this venue for conversation and seek to negotiate with the students about such issues as use of the L1, the role of the teacher during the ongoing conversations, and so on. Also, the teacher must be realistic about what will happen over the course of study with this approach. Breen and Mann (1997) described a three-phase process in creating student autonomy, moving from an autocratic start with high levels of teacher control to a second stage characterized by relative anarchy and uncertainty of purpose. The end phase is the emergence of a collaborative and negotiated learner community. Breen and Mann cautioned that there is no guarantee that this final phase will be stable: "It is entirely plausible that a class will continue to fluctuate between phases and the maintenance of autonomous learning entails a continual and explicit struggle with such fluctuations" (p. 144).

In unpublished research, I kept a teaching diary in which I recorded the duration and nature of this STT phase of a lesson over the course of an academic year. The class consisted of 18 second-year university English major students meeting three times a week in a mandatory English Communication class. In reviewing the diary entries, I found that the length of time that students could sustain conversation in English steadily increased over the year. Initially students conversed for approximately 5 minutes, before falling silent or lapsing into L1. But by the end of the academic year it was not uncommon for conversations to last for 40 or 50 minutes and be conducted almost entirely in English. The analysis of data from the teaching diary also revealed that there were spikes in conversation duration coinciding with non-normal lessons, that is, lessons held on national holidays or on Saturdays or such. This suggests that if circumstances allowed the lesson to be categorized by learners as in some way non-normal, then the institutional concerns were overridden to some extent, and learners could orient to noninstitutional ways of communicating with greater ease.

The occurrence is initially self-conscious, brief, episodic, and carried out in accordance with the teacher's agenda. But by habituation and repetition it gradually takes on an unconscious, internally generated nature, allowing the students to orient themselves to the role of interactant rather than reactant. This activity is perceived as much a part of the lesson as any grammar explication or lexical work, but this perception recedes during the unfolding of the conversations. The students who took part in these STT lessons also gave very positive feedback, specifically on the STT phase of lessons, in institutionally administered surveys.

Institutional Speaking and Conversation

I maintain that the institutional orientation that is talked into being in traditional L2 classrooms (by teachers and learners) leads to a kind of talk that is different in form and intent from normal, noninstitutional talk. However, I argue that the institutional nature of the L2 classroom is not monolithic but can be diminished, and that learners can gradually reorient themselves to more social and interactive ways of speaking. In the initial stages it will inevitably be a self-conscious exercise, but habituation can lead to students being able to do in the L2 what they do naturally and continually in their L1, namely, fill silence with talk, accomplishing a variety of phatic, interactional goals.

However, the STT phase of the lessons is not a stand-alone period, unconnected to any kind of language learning episodes in other phases of a lesson. The students need to be helped to develop interactional skills that are appropriate to the L2. In order for this to take place it is necessary to look at what kind of speaking students engage in when they are oriented to an institutional identity, to assess what kind of speaking is going on and how this may be at variance with norms of spoken interaction. The next section examines some concrete examples of student speaking which, in my view, are typical of Japanese

students' speaking when oriented to an institutional rather than social, interactive role.

Short Turns

Although Cook (1989, p. 51) asserted that short turns are a defining characteristic of conversation, and Murphey (1994) used the term *mentions* to refer to very brief responses made during a conversation, it is also true that a participant who contributes only minimalistic utterances to a conversation and makes no attempt to expand will be regarded as somehow disengaged from the interaction. Schegloff (2007) discussed the ways that interactants orient towards one another in conversation. In topic proffering sequences "the key issue is whether the recipient displays a stance which encourages or discourages [emphasis in original] the proffered topic" (p. 175). Schegloff went on to note that responders may orient away from the proffered topic by constructing minimal turns, that is, turns constructed of a single turn construction unit (TCU) or a series of repetitive or redundant TCUs. Short turns are acceptable if the discourse is conceived in turns of three-part classroom discourse (Sinclair & Coulthard, 1975), but have a very different meaning in talk in interaction; namely, they show repeated rejection of topic proffers by other participants. Consider the following transcript of student talk. The data is derived from videotaped recordings of students speaking during the early weeks of an elective English class.

Extract 1

(Parentheses indicate short pauses, question marks indicate rising intonation.)

A: What (.) did (.) you do(.) weekend this weekend
(.) last weekend weekend?

B: Part time job

A: Oh eh what whato what job?

B: Konbini (.)ence store

A: Oh (.)where? where?

B: Near my home

A: My home? my(.) near

B: Near

A: Near eh? Seven Eleven?

B: No circle K

A: Circle K Circle Circle (.) ah ah ah

Across the five turns speaker B gives minimal TCU responses to speaker A's topic proffering questions. It seems reasonable to infer that speaker B is orienting to an institutional (IRF) manner of discourse and is probably unaware that, for interactional purposes, the signal being sent is one of repeated topical rejection, with no attempt to proffer any counter topic. It seems reasonable to say that there comes a point outside the classroom where this may be interpreted as a signal of disinterest and disengagement from the interaction as a whole.

Smallwords

Hasselgreen (2004) highlighted the importance of *smallwords* in contributing to spoken fluency. These smallwords are defined as:

Small words and phrases, occurring with high frequency in the spoken language, that help to keep our speech flowing, yet do not contribute essentially to the message itself. (p. 162)

Typical examples of these words in English are *well*, *you know*, and *I mean*. In the videos of student speaking, these words were almost entirely absent. In addition to the lack of these words, in

many cases I observed that learners use Japanese equivalents during their English spoken interaction, such as *etoh*, and *ano*. Although the propositional content of the speaking way be well formed in English, use of Japanese discourse markers perhaps reveals that the learner is not fully oriented to English speaking as an interactive system, and may be primarily orientated towards institutional goals of display and accuracy, with scant attention paid to turn design or interactional concerns.

Backchannels and Aizuchi

During any conversation, the listeners do not typically sit silently waiting for the current speaker to finish. Rather, they contribute with words and short expressions that show understanding, agreement, interest, and so on. Such utterances are commonly referred to as *backchanneling* (see Yngve, 1970) or sometimes receipt tokens. In Japanese they are called *aizuchi*. There exists an extensive literature on *aizuchi*, (see, e.g., LoCastro, 1987; Hayashi & Yoon, 2009.) In the video data I found that backchanneling in English was largely absent, and that several learners resorted to Japanese utterances, such as *ah*, *un*, *hai*, and *so*, typically with sharply raised intonation. The habitual resort to Japanese style listener contributions may stem from a lack of knowledge of English backchanneling systems. But it also reveals that the learners may not be fully oriented to the co-constructed nature of spoken interaction. In a sense, it could be said that even though the speaker is speaking in English, their partner is listening in Japanese. It is interesting to note that even after explicit teaching, many students still habitually resort to *aizuchi*-style listener contributions, or mix English and Japanese styles.

Minimized turn constructions, omission of English small-words and inclusion of Japanese equivalents, failure to back-channel, or resort to *aizuchi* are some of the areas which can be addressed in helping students to pass the SLA version of

the Turing test. Other areas for attention include repetition as a receipt token (Greer, Bussinguer, Butterfield, & Mischinger, 2006), topic proffering sequences (Schegloff, 2007), and repair strategies (Fox, Hayashi, & Jaspersen, 1996). Although some sort of basic lexical and grammatical knowledge must be in place before conversation takes place, it is not necessarily the case that learners with a wide vocabulary and grammatical knowledge of the L2 will be able to orient themselves to the role of equal participant in unfolding spoken interaction in the L2. As Brouwer and Wagner (2004) suggested, "Learning a second language, then, may be described in terms of increasing interactional complexity in language encounters rather than as the acquisition of formal elements" (p. 44).

Development of Interactional Skills: Some Results

The following data is taken from videotaped sessions of students in another class where I introduced STT. The class consisted of 12 second- and third-year non-English major university students, meeting twice a week in an elective course. The videos are of pairs or trios of students engaging in unrehearsed conversation in the classroom during the STT phase of a lesson. The videos were recorded in April and the following January. The conversations were 5-minute segments of ongoing conversations. I transcribed the videos and then analyzed the transcriptions by both close reading and processing with the Compleat Lexical Tutor web-based concordance software (Cobb, 2010). The students were free to self-select speaking partners so the group membership was not the same in April and in January. The results below illustrate some of the changes that take place when learners are encouraged to orient themselves to interactional classroom activities and identities and given explicit instruction in interactional language norms.

Volume of Talk

The total words spoken by all participants in each 5-minute segment of ongoing conversation were counted and are shown in Table 1. The transcriptions of the conversations were stripped of notations and the bare transcripts were fed into the Compleat Lexical Tutor User Text Concordancer (Cobb, 2010) to obtain total word counts. The results are shown in ascending order. The results clearly show that the participants spoke more during the January conversations (a range of 404 to 555 words) compared with the April conversations (a range of 197 to 398 words.)

Volume of Talk per Speaker

The results show that all individual participants spoke more in the January conversations. The weaker students especially spoke much more in the January conversations (see Table 2). The imbalance between speakers' contributions seemed to be somewhat redressed.

Type Count

The number of different words used by each participant, that is, the active vocabulary of the participants, was also counted (see Table 3). The totals are not lemmatized, that is, the different forms of a word are not grouped together under one word type. Consequently, several occurrences of the word *go* count as one type and several occurrences of the word *went* count as another type. Again, the results show that the weaker speakers increased their vocabulary-in-use range substantially (e.g., Speaker 1 increased from 19 to 74 types). However the stronger speakers showed less increase, while two speakers (S10 and S12) showed a slight decrease. Again, the overall range was somewhat narrowed from 19 to 123 types per students in the April conversations to 74 to 118 types in the January conversations.

Turn Length

An average of the five longest turns (in words) of each participant was calculated (see Table 4). The longest five turns were selected so as to avoid interference from a large number of back-

Table 1. Word Count per Group in 5-Minute Segment of One Conversation

Session	Group A	Group B	Group C	Group D	Group E	Group F	Average
April	197	246	261	289	301	398	282
January	404	415	450	521	550	555	483

Note. Student groups were not the same in April and in January.

Table 2. Word Count per Speaker in 5-Minute Segment of One Conversation

Session	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12
April	24	54	69	87	101	108	120	123	169	174	223	250
January	170	189	267	229	169	234	251	288	270	186	381	261

channel-type turns comprising just one or two words. The turns as counted here have an element of subjectivity about them in that I decided on a case-by-case basis whether a turn seemed to be complete as oriented to by the speaker, hesitations, pauses, interruptions, and backchannel insertions notwithstanding. However, it was clear that all speakers were capable of creating longer turns. Once again, the weaker students made the most change and the imbalances between the stronger and weaker students was somewhat redressed, with the April conversations showing a range from 3.8 to 20 words and the January conversations showing a range of 11.8 to 32.6 words as an average of the longest five turns. The speakers seemed to be conducting more balanced conversations in terms of the turn lengths of the participants in relation to each other.

Smallwords

One feature of the April conversations was the almost complete lack of usage of common smallwords. As Table 5 shows, in the

January conversations there was a great deal more use of some of the more common smallwords. What the table cannot show is the prosodic features of these usages. The smallwords were uttered as single chunks, slightly faster and slightly quieter than the surrounding discourse, as is typical of native speaker usage.

Table 5. Use of Smallwords by All Speakers in 5-Minute Segment of One Conversation

Session	<i>Well</i>	<i>You know</i>	<i>I mean</i>	<i>Actually</i>
April	1	1	0	0
January	22	11	21	9

Other features

Other results were highly individualized and not readily presentable in table form. One student made extensive use of the Japanese marker *etoh* in the April conversation (12 occurrences)

Table 3. Type Count per Speaker in 5-Minute Segment of One Conversation

Session	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12
April	19	32	43	52	64	43	71	67	103	89	104	123
January	74	85	95	80	77	103	100	99	111	84	107	118

Note. Total different words used. Results are not lemmatized.

Table 4. Turn Length per Speaker

Session	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12
April	3.8	7.8	9.6	9.2	6.0	11.2	10.6	13.0	15.4	8.6	20.0	15.6
January	16.4	23.4	21.2	17.4	11.8	21.6	32.4	23.2	38.4	15.6	25.5	32.6

Note. Counts represent the average of the five longest utterances by each speaker.

but completely avoided using it in the post conversation. Another student contributed a large number of Japanese style aizuchi (prolonged or sharply rising *ah*, *un*, or *oh*) in the April conversation, but in the January conversation used entirely recognizable English backchannel devices (*I see*, *yeah*, *uh-huh*). One group had a complete multiturn reversion to Japanese in the April conversation, but apart from a hasty, quiet, and rapidly self-corrected *jya*, completely avoided Japanese language utterances in the January conversation.

Conclusion

From the data it can be seen that definite change occurred in the students spoken output. A note of caution must be introduced in looking at the results of transcribed materials. Not every word was audible, and the speakers engaged in many hesitations and restarts, which hampered the transcription process, leading to a certain fuzziness of the data. Other transcribers may come up with slightly different data. Nonetheless, the results do seem to show that the students spoke more and produced longer turns, used a wider vocabulary, paused less, used less Japanese, used smallwords more, backchanneled in a largely English manner, and largely avoided IRF style sequences in their speaking. It is suggested here that all of these factors help to create an impression of fluency and the feeling that the students were talking into being an interactional identity as opposed to adopting an institutional identity. That is, they succeeded in creating an impression that they were using the English and interactional resources available to them to engage in and manage interaction as it unfolds in real time, rather than just displaying memorized forms in well-rehearsed settings in order to fulfill the demands of the teacher.

Bio Data

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