CORPUS-BASED ANALYSIS OF ORAL TEST TRANSCRIPTS: A CASE STUDY OF CONDITIONAL CONSTRUCTIONS

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Prof. Geoffrey Leech
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Diana Mazgutova
Margarita Calderon
General aims of the research

- Explore the use of spoken second language learner corpora for the purposes of second language acquisition and language testing research
What insights can cross-sectional learner corpora provide?

- Frequency of particular linguistic features in learner language – comparisons with native speaker data
- Emergence of particular syntactic constructions in spoken language use
- Development in accuracy and complexity of learners’ language use
- Form-function mappings in L2 learner language
- Conversational alignment
Research questions

1. What kind of semantic and pragmatic meaning do L2 learners and examiners express with the help of conditional constructions?

2. How does L2 learners’ use of conditional constructions differ at various levels of proficiency?

3. How does L2 learners’ use of conditional constructions align with that of the examiners?
Benefits of a corpus of spoken L2 use

Very few existing L2 corpora of spoken English:

- The Louvain International Database of Spoken English Interlanguage (LINDSEI) (Gilquin, De Cock & Granger, 2010)
  - Informal interviews (not in a testing context). One million words.

- NICT JLE corpus:
  - Recordings during the ACTFL-ALC Standard Speaking Test. Japanese learners only.

- The Cambridge Spoken Learner Corpus
  - No publicly available information
How could our study contribute to exam development and validation?

- Information can be gained on whether students are tested on a grammatical construction when they are developmentally ready for it. – VALIDATION AND EXAM SYLLABUS REVISION

- Ascertain that the targeted grammatical construction with the specified communicative function is elicited at the intended level, and that it is elicited frequently enough to be assessed reliably. – VALIDATION

- Information on how examiners elicit the targeted grammatical constructions. – RATER TRAINING

- Information on how tasks and examiner prompts elicit targeted grammatical constructions. – VALIDATION AND TASK DESIGN
CONDITIONALS: CLASSIFICATIONS
PEDAGOGICAL (ELT/TESOL) CORPUS-BASED
<table>
<thead>
<tr>
<th>Verb Forms: tense-aspect, mood, modals (but not modality!)</th>
<th>Time Reference</th>
<th>Meaning: attitude to likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protasis</td>
<td>Apodosis</td>
<td></td>
</tr>
</tbody>
</table>
# Zero conditional

<table>
<thead>
<tr>
<th>Present Simple</th>
<th>Present Simple</th>
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<th>Present Simple</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present Perfect</td>
<td>Imperative</td>
<td>Modal</td>
<td>Modal</td>
</tr>
</tbody>
</table>

- **Present Simple**: Expresses real situations.
- **Imperative**: Describes rules and situations where one event always follows the other.
- **Modal**: Used to talk about common states/events.
- **Present Simple**: True in the present.
- **Eternal/General Truths**: Expresses eternal/general truths.
- **We use it to say**: What always happens.
- **Always True/Case**: Always true/the case.
# First conditional

<table>
<thead>
<tr>
<th>Present Simple</th>
<th>Present Perfect</th>
<th>Present Progressive</th>
<th>Present or future</th>
<th>Possible</th>
<th>Probable</th>
<th>Based on fact in real time</th>
<th>Expresses real / very probable situations</th>
<th>Possible future events that depend on other future events</th>
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</tr>
</tbody>
</table>
## Second conditional

<table>
<thead>
<tr>
<th>Past Simple</th>
<th>Past Progressive</th>
<th>would, could, might, should + infinitive</th>
<th>present or future</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Less probable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Less definite</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• (Very/highly) unlikely</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Improbable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Impossible</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Not true</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Unreal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Contrary to reality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Imaginary</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Third conditional

<table>
<thead>
<tr>
<th>Past Perfect</th>
<th>Past Perfect Progressive</th>
<th>Modal + Perfect Inf.</th>
<th>past</th>
<th>(Highly) unlikely</th>
<th>Unreal</th>
<th>Impossible</th>
<th>Imaginary</th>
<th>Contrary to past facts</th>
<th>Hypothetical past situation</th>
<th>No longer possible</th>
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<td>• Past Perfect</td>
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<td>• Modal + Perfect Inf.</td>
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</tr>
</tbody>
</table>

- **Past Perfect**: This form indicates that something could have happened in the past but did not.
- **Past Perfect Progressive**: Indicates that an action was in progress at some point in the past but did not continue.
- **Modal + Perfect Inf.**: This form is used to express a hypothetical situation or a situation that is contrary to past facts.
## Mixed conditionals

<table>
<thead>
<tr>
<th>Past Perfect</th>
<th>Present</th>
<th>Past Simple</th>
<th>Present</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>would</em>, <em>could</em>, <em>might</em>, <em>should</em> + infinitive</td>
<td>Links past and present</td>
<td><em>would</em>, <em>could</em>, <em>might</em>, <em>should</em> + <em>have</em> + past participle</td>
<td>Change in present situation would affect past situation</td>
</tr>
</tbody>
</table>

- Modal

- Change in past situation would affect present situation
‘Special’ cases

- Modals in the protasis
  - *will* (= insistence, willingness)
  - *would* (= request)
  - *should* (= politeness)
  - *could*
  - *be to*

- Modal markers other than central or marginal modals (e.g. possible/likely that).

- ‘*If* + Past tense’ with past time reference.
## Zero and First: two sides of the same coin

<table>
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<tr>
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<th>Specific / Future</th>
</tr>
</thead>
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<tr>
<td><strong>Zero</strong></td>
<td>The argument obviously generalises to show that, if there is a non-negative solution of (9.8) with $&lt;\text{gap desc=formula}&gt;$, then any new tableau obtained by pivoting in column $j$ is efficient. [CA4 738]</td>
<td>If Bridges is right, this still does not avoid possible legal argument over the “reasonableness” of the contract between purchaser and provider, nor over how well contracts are complied with. [CR5 693]</td>
</tr>
<tr>
<td><strong>First</strong></td>
<td>If a Troll suffers harm his flesh will almost instantly re-grow. [CMC 250]</td>
<td>“If they charge the wrong man, it’ll make a difference to him!” said Melissa dryly. [HNJ 1807]</td>
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<td>If they charge the wrong man, it’ll make a difference to him!” said Melissa dryly.</td>
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</table>
Two complimentary classification criteria:

1. The nature of the link between the protasis and the apodosis (P-A link).

2. The semantic (i.e. modal) function of the construction (as expressed in the apodosis).

(Gabrielatos, 2010: 230-265. Criterion 1 adapted from Quirk et al., 1985: 1088-1097)
Corpus-based Typology
Dimension 1: P-A Link

**Direct conditionals (DIR)**

- The realisation of the content of A depends on the realisation, actuality or factuality of the content of P.
  - Earlier, he said on East German television that it would be "far from good, even dangerous" if European borders were put into question. [AAK 223]

**Indirect conditionals (DIR)**

- What is contingent on P is not the content of A, but either the relevance of its very uttering, or the wording/clarity of its content.
  - He's not a bad sort, for a brother if you know what I mean [AN7 3257]
  - If antibiotics are likely to clear up the infection, why are we having this long discussion? [CH1 5292]
Corpus-based Typology  
Dimension 2: Semantic (modal) function  

<table>
<thead>
<tr>
<th>Attitude to Likelihood</th>
<th>Attitude to Propensity</th>
<th>Attitude to Desirability (non-directed)</th>
<th>Attitude to Desirability (directed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrinsic</td>
<td>Intrinsic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extrinsic (Logical)</td>
<td>Intrinsic (Personal)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epistemic</td>
<td>Dynamic</td>
<td>Deontic</td>
<td></td>
</tr>
<tr>
<td>Epistemic</td>
<td>Root</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epistemic</td>
<td>Agent/Speaker-oriented</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modalization</td>
<td>Modulation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Gabrielatos, 2010: 134-142)
Corpus-based Typology
Interaction of Dimensions

<table>
<thead>
<tr>
<th>DIR</th>
<th>LK</th>
<th>PP</th>
<th>DD</th>
<th>DN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

(Gabrielatos 2010: 230-265)
Syntactic alignment

- L1 users tend to repeat syntactic, lexical, morphological and even phonological structures they previously heard, read or they themselves produced (see Pickering & Ferreira, 2008)
- Syntactic priming was shown to exist in laboratory studies, scripted dialogues and naturally elicited corpus data (Gries, 2005)
- Syntactic priming is explained by psycholinguistic research with reference to raising activation levels of target items which are then easier to recall when needed for further processing
Syntactic priming in L2

L2 learners were primed to produce more target-like wh-questions in laboratory settings using a so-called confederate scripting technique (McDonough & Kim, 2009; McDonough & Mackey, 2008)

L2 learners could also be primed to produce the targeted wh-question constructions in classroom contexts (McDonough, 2011; McDonough & Chaikitmongkol, 2010) and priming facilitated the acquisition of these structures.

No priming effects for double-object dative constructions were obtained by McDonough (2006) – she explained lack of priming with students’ low level of knowledge of this syntactic structure.
THE CORPUS
## Corpus

- Face to face oral interview transcripts conducted with a native speaker examiner
- 12 Grades, grouped into 4 Stages:

<table>
<thead>
<tr>
<th>Stage</th>
<th>CEFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial (Grades 1–3)</td>
<td>Basic User (A1-A2)</td>
</tr>
<tr>
<td>Elementary (Grades 4–6)</td>
<td>Basic to Independent User (A2-B1)</td>
</tr>
<tr>
<td>Intermediate (Grades 7–9)</td>
<td>Independent User (B1-B2)</td>
</tr>
<tr>
<td>Advanced (Grades 10-12)</td>
<td>Proficient User (C1-C2)</td>
</tr>
</tbody>
</table>
## Test tasks

<table>
<thead>
<tr>
<th></th>
<th>Initial</th>
<th>Elementary</th>
<th>Intermediate</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades</td>
<td>Grades 1-3 (5-7 minutes)</td>
<td>Grades 4-6 (10 minutes)</td>
<td>Grades 7-9 (15 minutes)</td>
<td>Grades 10-12 (25 minutes)</td>
</tr>
<tr>
<td></td>
<td>Conversation</td>
<td>Topic discussion</td>
<td>Candidate-led discussion of topic</td>
<td>Topic presentation</td>
</tr>
<tr>
<td></td>
<td>Conversation</td>
<td>Conversation</td>
<td>Interactive task</td>
<td>Topic discussion</td>
</tr>
<tr>
<td></td>
<td>Conversation</td>
<td>Conversation</td>
<td>Listening task</td>
<td>Interactive task</td>
</tr>
<tr>
<td></td>
<td>Conversation</td>
<td>Conversation</td>
<td>Conversation</td>
<td>Conversation</td>
</tr>
</tbody>
</table>
Demographic characteristics of corpus participants (1)

The distribution of candidates across the grades of the exam

The bar chart shows the number of candidates distributed across different grades. The grades are represented from 1 to 11, with the highest number of candidates in grade 5, followed by grade 6, grade 4, grade 3, grade 9, grade 8, grade 7, grade 2, grade 1, grade 10, and grade 11, respectively.
Demographic characteristics of corpus participants (2)

- **Mean age:** 12 years and 6 months
  - Range: 8-56 (SD=4.98)
  - Majority of the candidates aged between 9 and 12

- **Gender of participants:**
  - Unknown in 44% of the cases
  - Available data suggests 48% female, 52% male

- **Results**
  - All but two participants passed.
  - Distinction: 21%; Merit: 27.5%; Pass: 51%

- **L1:** 62% Spanish, 38% Russian

- **3 examiners (2 male, one female)**
Considerations in choosing the linguistic focus of the study

Targeted linguistic features should …

- represent both syntactic and lexical constructions
- appear at a wide range of exam stages
- have associated meanings and communicative functions specified in the exam syllabus
- be frequent to allow drawing statistical inferences
- be relatively easy to identify using (semi-)automated techniques (queries and manual cleaning)
What kind of semantic and pragmatic meaning do learners and examiners express with the help of conditional constructions?
If-conditionals: Frequency of ELT types

- Only 56.9% of correct use by students and 69.1% by examiners conform to the ELT typology of conditionals, …

- … however, this is not a problem with the use of learners or examiners, but with the ELT typology.

- The ELT typology accounts rather poorly for if-conditionals
  - in L2 learner data
  - in native speaker data (BNC) (Gabrielatos, 2003, 2006)
Semantic (Modal) Functions
Proportion (%) of use by students and examiners

- DD
- DN
- LK
- PP
Semantic (Modal) Functions
Proportion (%) of use by students and examiners

if you were the headmaster the principal of this college are there any new rules that you would bring in

so if you go on a cruise ship where would you like to go to
if you like it and you have the money you can buy it but if not well you can go for an imitation of the clothes

if it’s gonna help that people of course we can er- we can share the land
## Pragmatic (communicative) functions

<table>
<thead>
<tr>
<th>Providing</th>
<th>Eliciting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Giving information: providing factual information.</td>
<td>Asking for information: requesting factual information</td>
</tr>
<tr>
<td>Giving opinion: providing personal views about a fact, theme or topic (usu. marked by “I think”)</td>
<td>Asking for opinion: inviting the conversational partner to express personal views</td>
</tr>
<tr>
<td>Giving suggestions: offering advice and recommendation</td>
<td>Asking for suggestion: requesting advice and recommendation</td>
</tr>
<tr>
<td>Making an inference</td>
<td>Asking for an inference</td>
</tr>
<tr>
<td>Making a prediction</td>
<td>Asking for a prediction</td>
</tr>
<tr>
<td>Expressing an intention</td>
<td>Asking for an intention</td>
</tr>
<tr>
<td>Stating a preference</td>
<td>Asking for a preference</td>
</tr>
</tbody>
</table>
## Pragmatic (communicative) functions

<table>
<thead>
<tr>
<th>Providing</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Apologising</td>
<td>--</td>
</tr>
<tr>
<td>--</td>
<td>Asking for permission</td>
</tr>
<tr>
<td>Making an offer</td>
<td>--</td>
</tr>
<tr>
<td>Making a promise</td>
<td>--</td>
</tr>
<tr>
<td>Making a request</td>
<td>--</td>
</tr>
<tr>
<td>Expressing a wish</td>
<td>--</td>
</tr>
</tbody>
</table>
If-conditionals: Pragmatic Functions

Proportion (%) of use by students and examiners

[Graph showing the proportion (%) of use by students and examiners for different pragmatic functions such as APOLOGY, INFERENCE, INFO, INTENTION, OFFER, OPINION, PERMISSION, PREDICTION, PREFERENCE, PROMISE, REQUEST, SUGGESTION, and WISH.]
Proportion (%) of elicitation functions by students and examiners.
Students predominantly used *if*-conditionals to provide information and opinion — and to a lesser extent to express suggestions and predictions (87%).

Students’ use of elicitation functions was a mere 2.3% (information, intention, opinion and preferences).

Examiners show a balanced use of functions: they provide information and opinion, and elicit information, opinion, intentions and predictions.

55.9% of the examiners’ *if*-conditionals were used to elicit student language.
The imbalance in the use of the elicitation function by students and examiners can be explained with the unequal power relations in oral proficiency exams, where examiners are mostly responsible for introducing topics, asking questions and managing turns and the interaction in general (see Kormos, (1999) and Okada (2010) for a more recent discussion).
How does L2 learners’ use of conditional constructions differ at various levels of proficiency?
Frequency of conditionals (all types) across grades

[Bar chart showing frequency across different grades for various categories: Zero, First, Second, 0-1, 1-0]
Accuracy rates for the conditional constructions across grades
1. **Stage: Zero conditionals:** relatively high accuracy rate from its first occurrence, a plateau at B1/B2 level of competence (Grades 5, 6 and 7) and a backslide in accuracy occurred at C1 level

2. **Stage: First, 0-1 and 0-1 conditionals:**
   - 0-1 and 0-1 accurately used at very early stages of development.
   - First conditionals develop gradually with a decrease in accuracy at Grade 9 (approx C1 level).
   - 1-0 conditionals showed consistently high accuracy
   - 0-1 conditionals: a drop in accuracy occurred at C1 level.

3. **Stage: Second conditionals:** only after students had acquired first, 0-1 and 1-0 conditionals, a steep rise in the accuracy of use between the first presence of the construction and the following stage.
The phased nature of development

- Zero-conditionals are contingent on the acquisition of present tenses (Celce-Murcia & Larsen-Freeman, 1999)
- For the correct use of first conditionals students additionally need to acquire modal marking (applies to all types).
- For the second conditional the cognitively complex form-function mapping of counterfactuality and remote likelihood (Berent, 1985; Chou, 2000).
Discussion of developmental patterns

2.

- Thewissen (2013): modal auxiliaries showed only slight development in accuracy between B1 and C2 level and the accuracy of tenses did not significantly improve.

- Tense and modality are important components of the use of conditionals.
  - The persistence of errors in these areas might account for the fluctuations in the accuracy of conditional constructions at B2-C1 levels.
  - ELT coursebooks tend to introduce conditionals before modality/modals (Gabrielatos, 2006).

- Development of grammar is often non-gradual, dynamic, and complexly interrelated with other aspects of second language competence (Byrnes, Maxim & Norris, 2007; Larsen-Freeman, 2006).
Conversational alignment
Alignment in the case of zero conditionals

Frequency of use by students and examiners across Grades
Alignment in the case of first conditionals

Frequency of use by **students** and **examiners** across Grades

![Graph showing frequency of use by students and examiners across Grades.](image)
Alignment in the case of second conditionals

Frequency of use by students and examiners across Grades
E: uhu okay mm tell me if you were the headmaster are there any new rules you know <<if>> you were the headmaster the principal of this college are there any new rules that you would b- b- bring in
S: master
E: if you were the principal of the college the director
S: ah the director
E: of this college of this school are there any new rules that you would bring in
S: erm no I think er er the director’s rules are very good but students don’t like these rules different
E: yeah okay yeah now if you erm <<if>> you won the lottery what would you do do you think
S: no if my mother has won the lottery she’ll give all money to the er ch=
E: church
S: no ch=
E: charity
S: yes
Alignment: Discussion

- Priming was effective for zero and first conditionals, but less so for second conditionals
- Second conditionals:
  - Lower level of knowledge of this construction (see also McDonough, 2006)
  - Several possible form-function mappings.
  - Students might have their own agendas in task-performance (Coughlan & Duff, 1994; Mori, 2002)
  - Avoidance
CONCLUSIONS AND IMPLICATIONS
Currently the corpus contains …

- 200 hours of speech
- 600,000 words
- 588 learners
- mostly up to Grade 6
- mostly below the age of 13
- only Spanish and Russian speakers
- only 3 examiners
Corpus: ideal characteristics

For fine distinctions (e.g. cross-tabulations) the corpus needs to contain:
- the speech of approx. 6000 students
- about 5 million words
- about 1700 hours of recordings

Better representation of:
- higher proficiency levels
- older students
- different L1s
- different examiners
Implications

Syllabus specifications based on the ELT typology could be usefully revised, if not abandoned.

- If current focus on likelihood is retained …
  - Open vs. Hypothetical
  - Past tense marking with past time reference in protases

- Overall, syllabus specifications in terms of meaning, not form:
  - Direct vs. Indirect
  - In Direct, modal notion in apodosis
Implications
Syllabus specifications and rater training

**Exam Syllabus**

- Grammatical context: optional vs. obligatory
  - Difficulty of eliciting grammatical constructions in contexts where a particular function can be expressed equally appropriately through multiple constructions.

**Examiner training**

- Amount of prompting
- Explicitness of prompting / implicit modelling
- If prompting required by exam, examiners need to conform to target construction


