Enabling interaction: A study of examiner behaviour in an interactive speaking test

A mixed methods study of the Trinity GESE Interactive Task

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The Future of English Language
Teaching Conference online

## Graded Examinations in Spoken English

 (GESE)- One examiner, one candidate
- GESE Grades 7 and 8 - CEFR B2
- Three tasks
- Topic Discussion
- Interactive Task
- Conversation
- Interactive task generates candidate-led interaction


## Purpose of the study

- To investigate what strategies are used by examiners in the GESE Interactive Task
- To investigate whether the strategies found have an effect on objective measures of candidate performance


## Corpus transcripts



## Trinity Lancaster Corpus

- Complete transcriptions of Interactive Tasks extracted from the corpus
- Examined linguistic and paralinguistic behaviour of both examiners and candidates
- 54 transcripts
- 37 Interactive Prompts
- 10 nationalities


## Methodology

- Examiners
- Grounded theory developed a taxonomy of strategies that examiners use to allow candidates to take the lead in interaction
- Identified 8 strategies
- Candidates
- Quantitative analysis of the candidates' responses to the different strategies
- Fluency
- Lexis
- Grammar


## Examiner strategies

- ACCEPTING
- HOLDING
- INAUTHENTICITY
- PARSIMONY
- REFORMULATING
- REJECTING
- RESOLVING
- STEERING


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- ACCEPTING
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- INAUTHENTICITY
- PARSIMONY
- REFORMULATING
- REJECTING
- RESOLVING
- StEEDINIG
- Behaviour such as
- Clarifying
- Confirming
- Repeating
- Restating the original dilemma


## Example - REFORMULATING

My nephew wants to work in the music business when he leaves school, but his parents think he should go to university. I'm not sure I agree with them.
<S> and er if he er can find a good job to to go to live to live to have a good life why not? </u>
<E> but he </u>
<S> do you agree? </u>
<E> he doesn't want to go to university he wants to leave school at sixteen </u>

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- HOLDING
- INAUTHENTICITY
- PARSIMONY
- RECORMMUATING
- REJECTING
- RESOIVING
- STEERING
- A neutral response that maintains the dialogue but doesn't appear to make demands upon its direction
- May include information intended to add grist to the mill of the candidate's questioning


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- ACCEPTING
- HOIDING
- INAUTHENTICITY
- PARSIMONY
- DCEODMMIIATING
- REJECTING
- RESOLVING
- STEERING
- Overtly asking for solutions
- Overtly or more subtly steering a candidate towards an outcome apparently preferred by the examiner
- Proffering own solutions
- Raising the stakes
- Pseudo-passivity


## Example - HOLDING

My teenage nephew has decided that he wants to take up boxing as a way to get fit. I'm not sure it's such a great idea.
<E> I I don't know really I think erm perhaps he's got some new friends who are older than him and and they are really into boxing </u>
<S> mm </u>
<E> and so maybe it's because of his friends you know </u>
<S> mm </u>
<E> and they're they're not nice boys they're bad boys you know </u>

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## Example - STEERING

My teenage nephew has decided that he wants to take up boxing as a way to get fit. I'm not sure it's such a great idea.
<E> I I don't know really I think erm perhaps he's got some new
friends who are older than him and and they are really into boxing
</u>
<S> mm </u>
<E> and so maybe it's because of his friends you know </u>
<S> mm </u>
<E> and they're they're not nice boys they're bad boys you know </u>

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- hOIDING
- INAUTHENTICITY
- PARSIMONY
- REFORMULATING
- REJECTING
- DECOIVING
- STEERING
- Giving limited information in response to a request (in an apparently unforthcoming way)
- Giving a minimal response to prompt the candidate to contribute / question more


## Example - PARSIMONY

My nephew used to dress very well, but now he's totally changed his appearance and I'm not sure now what to think about it.
<S> yes so er nowa= he has just changed or want to change </u>
<E> no he has changed </u>
<S> has changed </u>
<E> totally changed </u>
<S> totally changed </u>
<E> yeah his appearance yes </u>
<S> okay well it's a pity </u>
<E> mm </u>
<S> no </u>
<E> mm </u>

## What follows the strategy? Performance

- Extracted all candidate responses that followed the strategies
- Across 8 strategies, 886 examples of performance
- Created three responses
- Original response (backchannels removed)
- Response with pauses removed
- Pruned response (after Iwashita, Brown, McNamara \& O'Hagan, 2008)


## What follows the strategy? Performance

- Fluency
- Length of response
- Reformulation ratio
- Pause ratio
- Lexis
- TTR
- COCA Range
- COCA Frequency
- Grammar
- Grammar errors
- Complex t-unit ratio
- Complex nominals per t-unit (after Iwashita et al., 2008)

https://www.linguisticanalysistools.org/tools.html

Reformulation Ratio


Complex Nominals per T-Unit


## Omnibus Kruskal-Wallis H Tests

|  | $\chi^{2}$ | d.f. | $n$ | $p$-value | Signific | t Pairwis | Compar | ons |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Length | 34.458 | 5 | 508 | 0.000 (sig.) |  | REF-HOL | REF-STE | REF-REJ | REF-ACC |  |  |
| Reform Ratio | 26.465 | 5 | 508 | 0.000 (sig.) | PAR-REF | HOL-REF |  |  |  |  |  |
| Pause Ratio | 18.784 | 5 | 508 | 0.002 (sig.) | PAR-REF |  | STE-REF |  |  |  |  |
| TTR | 28.591 | 5 | 508 | 0.000 (sig.) |  |  |  | REJ-REF | ACC-REF |  |  |
| COCA Range | 7.239 | 5 | 508 | 0.203 (n.s.) |  |  |  |  |  |  |  |
| COCA Freq | 8.763 | 5 | 508 | 0.119 (n.s.) |  |  |  |  |  |  |  |
| Error | 11.295 | 5 | 508 | 0.046 (sig.) |  |  |  |  |  |  |  |
| Complex T | 34.101 | 5 | 508 | 0.000 (sig.) |  |  | REF-STE | REF-REJ | REF-ACC | HOL-ACC | PAR-ACC |
| Complex Nom | 23.693 | 5 | 508 | 0.000 (sig.) |  |  | REF-STE | REF-REJ | REF-ACC |  | PAR-ACC |

## Significant Pairwise Comparisons



# Post-hoc Mann-Whitney U Tests with mean ranks and effect sizes 

| Measure | Strategy 1 | Mean rank | Strategy 2 | Mean rank | Z | $n$ | $p$ | $r$ | $R^{2}$ | Effect size <br> (Cohen, 1988) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Length | REF | 102.88 | HOL | 78.12 | -3.199 | 180 | 0.001 | 0.24 | 0.06 | small |
| Length | REF | 79.53 | STE | 101.47 | -2.842 | 180 | 0.004 | 0.21 | 0.04 | small |
| Length | REF | 72.58 | REJ | 108.42 | -4.631 | 180 | 0.000 | 0.35 | 0.12 | medium |
| Length | REF | 70.32 | ACC | 110.68 | -5.213 | 180 | 0.000 | 0.39 | 0.15 | medium |
| Reform Ratio | PAR | 57.78 | REF | 85.27 | -3.990 | 148 | 0.000 | 0.33 | 0.11 | medium |
| Reform Ratio | HOL | 75.73 | REF | 105.27 | -3.950 | 180 | 0.000 | 0.29 | 0.09 | small |
| Pause Ratio | PAR | 59.46 | REF | 84.19 | -3.654 | 148 | 0.000 | 0.30 | 0.09 | medium |
| Pause Ratio | STE | 78.98 | REF | 102.02 | -3.165 | 180 | 0.002 | 0.24 | 0.06 | small |
| TTR | REJ | 75.41 | REF | 105.59 | -4.608 | 180 | 0.000 | 0.34 | 0.12 | medium |
| TTR | ACC | 76.28 | REF | 104.72 | -4.343 | 180 | 0.000 | 0.32 | 0.10 | medium |
| Complex T | REF | 80.12 | STE | 100.88 | -3.400 | 180 | 0.001 | 0.25 | 0.06 | small |
| Complex T | REF | 77.79 | REJ | 103.21 | -4.028 | 180 | 0.000 | 0.30 | 0.09 | medium |
| Complex T | REF | 74.48 | ACC | 106.52 | -4.925 | 180 | 0.000 | 0.37 | 0.13 | medium |
| Complex T | HOL | 77.87 | ACC | 103.13 | -3.767 | 180 | 0.000 | 0.28 | 0.08 | small |
| Complex T | PAR | 63.85 | ACC | 81.36 | -2.743 | 148 | 0.006 | 0.23 | 0.05 | small |
| Complex Nom | REF | 80.29 | STE | 100.71 | -2.968 | 180 | 0.003 | 0.22 | 0.05 | small |
| Complex Nom | REF | 79.21 | REJ | 101.79 | -3.241 | 180 | 0.001 | 0.24 | 0.06 | small |
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## Discussion

- HOLDING, PARSIMONY and STEERING elicit less fluent responses than REFORMULATING.
$>$ The goal of reformulating is to remove uncertainty
$>$ Holding increases cognitive load
$>$ Parsimony introduces uncertainty in an interactional context
$>$ Steering may introduce tension


## Discussion

- ACCEPTING, REJECTING and STEERING elicit responses of greater grammatical complexity than REFORMULATING and PARSIMONY (as measured by complex nominals per t-unit).
>Accepting, rejecting and steering generate the need for justification, questioning, or elaboration on the part of the candidate.
$>$ Parsimony is intended to leave space for candidates' contributions.
$>$ Space is not what is expected in an interactional context.


## Summary

- Grounded theory to explore spoken interaction
- Empirical quantitative analysis of candidate performance
- Examiner behaviour has an effect on candidate performance
- Improved understanding of the scope of the effect in an interactional context
- "The world cannot be understood without numbers, and it cannot be understood with numbers alone. Love numbers for what they tell you about real lives." - Hans Rosling


## References

Brown, A. (2003). Interviewer variation and the co-construction of speaking proficiency. Language Testing, 20(1), 1-25.
Bosker, H. R., Quené, H., Sanders, T., \& de Jong, N. H. (2014). Native 'um's elicit prediction of low-frequency referents, but non-native 'um's do not. Journal of Memory and Language, 75, 104-116.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, N.J.: L. Erlbaum Associates.
Crossley, S. A., Bustamante, A., \& Bradfield, F. (2018). GAMET: A tool for automatically assessing grammar and mechanic errors in learner corpora. In 14th American Association for Corpus Linguistics (AACL) Conference.

Davies, M. (2008). The corpus of contemporary American English (COCA): 400+ million words, 1990-present.
Gablasova, D., Brezina, V., \& McEnery, A. (2009). The Trinity Lancaster Corpus: Development, Description and Application. International Journal of Learner Corpus Research, 5(2), 126-160.

Glaser, B., \& Strauss, A. L. (1973). The discovery of grounded theory strategies for qualitative research (1st pbk. ed., Observations (Chicago, Ill.)). Chicago: Aldine Pub.
Iwashita, N., Brown, A., McNamara, T., \& O’Hagan, S. (2008). Assessed levels of second language speaking proficiency: How distinct? Applied Linguistics, 29(1), 24-49. https://doi.org/10.1093/applin/amm017

Kyle, K. (2016). Measuring syntactic development in L2 writing: Fine grained indices of syntactic complexity and usage-based indices of syntactic sophistication. Retrieved from http://scholarworks.gsu.edu/alesl_diss/35

Kyle, K., \& Crossley, S. A. (2015). Automatically assessing lexical sophistication: Indices, tools, findings, and application. TESOL Quarterly, 49(4), 757-786.
Kyle, Kristopher, Crossley, S., \& Berger, C. (2018). The tool for the automatic analysis of lexical sophistication (TAALES): version 2.0. Behavior Research Methods, 50(3), 1030-1046.

Trinity College London. (2018). Exam Information : Graded Examinations in Spoken English ( GESE ). Trinity College London. Retrieved from www.trinitycollege.com Wessa, P. (2017). Notched Boxplots (v1.0.10) in Free Statistics Software (v1.2.1), Office for Research Development and Education. Retrieved July 22, 2019, from http://www.wessa.net/rwasp_notchedbox1.wasp/

## Questions?

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