

Guided Research Seminar: Redundancy, repetition and redundancy

Instructor: Hannah Rohde (hannah.rohde@ed.ac.uk)

Office hours: email for appointment

UG course admin: Susan Hermiston, Susan.Hermiston@ed.ac.uk

PG course admin: Sasha Wood, swood310@ed.ac.uk

What's this course all about?

“Rational speakers should not be redundant. This is a view on language use that is both widely held and intuitively compelling. It is also wrong.” (Crone, 2017). This seminar explores why speakers may seek to avoid redundancy (and the extent to which they succeed) and why they may be drawn to redundancy (for cooperative communication). We will discuss how speakers make decisions about how much information to include when they formulate an utterance and how hearers draw inferences from what has been said or not said. We will approach these questions from Gricean and information theoretic perspectives, considering a range of phenomena such as implicature, contrastive inference, discourse coherence, and the generation of referring expressions.

Readings

All readings are available on Learn in our ‘Redundancy, repetition and redundancy’ folder.

Prerequisites

The course is open to UG students who have passed LEL2A and to all PG students.

Seminar arrangements

1. Keep up with class. You're encouraged to participate actively. Readings should be completed prior to the meeting for which they are intended.
2. Contribute as co-presenter for three sessions. We'll divide up the weekly readings so that every week there are two student co-presenters. Everyone will be part of the discussion, but the co-presenters prepare a short handout on the reading (typically with a planning meeting ahead of time).
3. Working together is fine/encouraged but final write-ups must be your own. You may discuss assignment plans with other students, but you must hand in separate writeups.

Course meetings

We will meet Thursdays 14:10-15:00 in 24 Buccleuch Place, room 1.04.

Assessment

Course Component	% of Final Mark
UG assignments:	
assignment #1: article summary + future work (1500 words)	30%
assignment #2: experiment proposal (2500 words)	70%
PG assignments for 10credit course:	
assignment #1: article summary + future work (1500 words)	30%
assignment #2: experiment proposal (2500 words)	70%
PG assignments for 20credit course:	
assignment #1: article summary + future work (1500 words)	20%
assignment #2: experiment proposal (4000 words)	80%

INTRODUCTION

Week 2 [23 January]: Welcome and overview

AVOIDING REDUNDANCY

Week 3 [30 January]: Control of rate of information

READINGS: Jaeger 2010 (p.23 through Table 2 on p.32 + p.46); Mahowald 2013

HANDOUT: Hannah Rohde

Week 4 [6 February]: Optionality

READINGS: Asr & Demberg 2012; Lemke, Schafer, Drenhaus & Reich 2021

HANDOUT: [Georgina and Roshan and Theresia](#)

ASSESSMENT INFO: Assignment #1 instructions released

Week 5 [13 February]: No class, no readings

Flexible Learning Week, 20 February: Drop-in session DSB 2.06 to discuss course materials or Assignment #1, no readings

EMBRACING REDUNDANCY

Week 6 [27 February]: Rational redundancy

READINGS: Rubio-Fernandez 2016; Degen et al. 2020

HANDOUT: [Georgina and Theresia](#)

Week 7 [6 March]: Learner-directed speech

READINGS: Tal et al. 2023; Bergey et al. 2020

HANDOUT: [Ariadne and Isabella](#)

Week 8 [13 March]: Learner-produced speech

READINGS: Ryan 2015

HANDOUT: [Ariadne and Isabella](#)

Assignment #1 due Monday 17 March

REASONING WITH REDUNDANCY

Week 9 [20 March]: Modification & hesitation

READINGS: Sedivy 2003; Arnold et al. 2004

HANDOUT: [Georgina and Roshan](#)

Week 10 [27 March]: Inferences about typicality

READINGS: Kravtchenko & Demberg 2022

HANDOUT: [Isabella and Theresia](#)

ASSESSMENT INFO: Assignment #2 instructions released

Week 11 [3 April]: Broader impact

READINGS: Anderson et al. 2024; Hao et al. 2024

HANDOUT: [Ariadne and Roshan](#)

Assignment #2 due Thursday 24 April

Full bibliography

Essential readings are in bold; all others are optional but will give you choices for what to read and summarize for assignment #1.

Week 3 [30 January]: Control of rate of information

Jaeger, T.F. (2010). Redundancy and Reduction: Speakers Manage Information Density. *Cognitive Psychology*, 61, 23–62.

Mahowald, K., Fedorenko, E., Piantadosi, S. T., & Gibson, E. (2013). Info/information theory: Speakers choose shorter words in predictive contexts. *Cognition*, 126, 313-318.

Frank, A., & Jaeger, T. F. (2008). Speaking rationally: Uniform information density as an optimal strategy for language production. In Proceedings of the 30th Annual Conference of the Cognitive Science Society, 939–944.

Pluymaekers, M, Ernestus, M., & Baayen, H. (2005). Lexical frequency and acoustic reduction in spoken Dutch. *Journal of the Acoustical Society of America*, 118, 2561–2569.

Börstell, C., Schembri, A., & Crasborn, O. (2024). Sign duration and signing rate in British Sign Language, Dutch Sign Language and Swedish Sign Language. *Glossa Psycholinguistics*, 3, 1-15.

Week 4 [6 February]: Optionality

Asr, F. T. & Demberg, V. (2012). Implicitness of discourse relations. In Proceedings of COLING, 2669-2684.

Lemke, Robin, Lisa Schäfer, Heiner Drenhaus & Ingo Reich (2021). Predictable Words Are More Likely to Be Omitted in Fragments—Evidence From Production Data. *Frontiers in Psychology*, 12:662125, 1-15.

Kravtchenko, E. (2014). Predictability and syntactic production: Evidence from subject omission in Russian. In Proceedings of the 36th Annual Conference of the Cognitive Science Society, 785–790.

Kurumada, C., Jaeger, T.F. (2013). Communicatively efficient language production and case-marker omission in Japanese. In Proceedings of 35th Annual Conference of the Cognitive Science Society, 858-863.

Dethlefs, N., Hastie, H., Cuayahuitl, H., Yu, Y., Rieser, V., & Lemon, O. (2016). Information density and overlap in spoken dialogue. *Computer Speech and Language*, 37, 82-97.

Week 5 [13 February]: No class, no readings

Flexible Learning Week, 20 February: Drop-in session DSB 2.06 to discuss course materials or Assignment #1, no new readings

Week 6 [27 February]: Rational redundancy

Rubio-Fernández, P. (2016). How redundant are redundant color adjectives? An efficiency-based analysis of color overspecification. *Frontiers in Psychology*, 7, 1-15.

Degen, J., Hawkins, R., Graf, C., Kreiss, E., & Goodman, N. (2020). When redundancy is rational: A Bayesian approach to ‘overinformative’ referring ex-

pressions. *Psychological Review*, 127, 591–621.

Clarke, A., Elsner, M. & Rohde, H. (2013). Where's Wally: the influence of visual salience on referring expression generation. *Frontiers in Perception Science, Special issue on Scene Understanding*, 4, 1-10.

Isaacs, E. A. & Clark, H. H. (1987). References in conversation between experts and novices. *Journal of Experimental Psychology: General*, 116, 26-37.

Heller, D., Gorman, K. S., & Tanenhaus, K. (2012). To name or to describe: shared knowledge affects referential form. *Topics in Cognitive Science*, 4, 290–305.

Rosa, E. C., Finch, K. H., Bergeson, M., & Arnold, J. E. (2015). The effects of addressee attention on prosodic prominence. *Language, Cognition and Neuroscience*, 30, 48–56.

Week 7 [6 March]: Learner-directed speech

Tal, S., Grossman, E., Rohde, H., & Arnon, I. (2023). Speakers use more redundant references with language learners: Evidence for communicatively-efficient referential choice. *Journal of Memory and Language*, 128, 104378, 1-11.

C. Bergey, B. C. Morris & D. Yurovsky (2020). Children hear more about what is atypical than what is typical. In Proceedings of the 42nd Annual Conference of the Cognitive Science Society, 501-507.

Tippenhauer, N., Fourakis, E. R., Watson, D. G., & Lew-Williams, C. (2020). The scope of audience design in child-directed speech: parents' tailoring of word lengths for adult versus child listeners. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 46(11), 2163–2178.

Uther, M., Knoll, M. A., & Burnham, D. (2007). Do you speak E-NG-L-I-SH? A comparison of foreigner- and infant-directed speech. *Speech Communication*, 49, 2–7.

Week 8 [13 March]: Learner-produced speech/signing

Ryan, J. (2015) Overexplicit referent tracking in L2 English: Strategy, avoidance, or myth? Overexplicit referent tracking in L2 English. *Language Learning* 65: 824–59.

Pashkova, T. & Allen, S. E. M. (2025). Explicitness of referring expressions in heritage speakers' majority English, *Lingua*, 314, 103854, 1-26.

Serratrice, L. (2007). Referential cohesion in the narratives of bilingual English-Italian children and monolingual peers. *Journal of Pragmatics*, 39(6), 1058–1087.

Frederiksen, A. T. & R. I. Mayberry (2019). Reference tracking in early stages of different modality L2 acquisition: Limited over- explicitness in novice ASL signers' referring expressions. *Second Language Research*, 35, 253–283.

Week 9 [20 March]: Modification & hesitation

Sedivy, J. C. (2003). Pragmatic versus form-based accounts of referential contrast: Evidence for effects of informativity expectations. *Journal of Psycholinguistic Research*, 32, 3-23.

Arnold, J.E., Tanenhaus, M.K., Altmann, R., & Fagnano, M. (2004). The old

and thee, uh, new. *Psychological Science*, 15, 578-582.

Corley, M., MacGregor, L.J., & Donaldson, D.I. (2007). It's the way that you, er, say it: Hesitations in speech affect language comprehension. *Cognition*, 105, 658-668.

Week 10 [27 March]: Inferences about typicality

Kravtchenko, E. & Demberg, V. (2022). Informationally redundant utterances elicit pragmatic inferences. *Cognition*, 225:105-159.

Ryzhova, M. & Demberg, V. (2023). Processing cost effects of atypicality inferences in a dual-task setup. *Journal of Pragmatics*, 211, 47-80.

Ryzhova, M., Mayn, A., & Demberg, V. (2023). What inferences do people actually make upon encountering informationally redundant utterances? An individual differences study. In Proceedings of the Annual Conference of the Cognitive Science Society, 2631-2638.

Rees, A. & Rohde, H. (2023). Availability and Timing of Informativity Inferences. In Proceedings of the 45th Annual Conference of the Cognitive Science Society, 1198-1205.

Week 11 [3 April]: Broader impact

Anderson, R.A., Nichols, S. and Pizarro, D.A. (2024) Praise is for actions that are neither expected nor required. *Personality and Social Psychology Bulletin*, 1-15.

Hao, H., He, M., & Fuchs, Z. (2024). Greta is a female director: When gender stereotypes interact with informativity expectations. In Proceedings of the 46th Annual Conference of the Cognitive Science Society.

J. Amemiya & M.-T. Wang. (2018) Why effort praise can backfire in adolescence. *Child Development Perspectives*, 12, 199-203.

Morris, B., & Shaw, A. (2024). "Oh! Um. . . Sure": Children and adults use other's linguistic surprisal to reason about expectations and learn stereotypes. In Proceedings of the 46th Annual Conference of the Cognitive Science Society.