LOUIS R. MILLER (State Bar No. 54141)
smiller@millerbarondess.com
AMNON Z. SIEGEL (State Bar No. 234981)
asiegel@millerbarondess.com
COLIN H. ROLFS (State Bar No. 280654)
crolfs@millerbarondess.com
JUSTIN P. MCCARTHY (State Bar No. 317169)
jmccarthy@millerbarondess.com
MILLER BARONDESS, LLP
1999 Avenue of the Stars, Suite 1000
Los Angeles, California 90067
Telephone: (310) 552-4400
Facsimile: (310) 552-8400

Attorneys for Plaintiff Herring Networks, Inc.

MILLER BARONDESS, LLP
ATTORNEYS AT LAW
1999 AVENUE OF THE STARS, SUITE 1000 LOS ANGELES, CALIFORNIA 90067
TEL: (310) 552-4400 FAX: (310) 552-8400

UNITED STATES DISTRICT COURT

SOUTHERN DISTRICT OF CALIFORNIA

HERRING NETWORKS, INC.,

Plaintiff,

v.

RACHEL MADDOW; COMCAST CORPORATION; NBC UNIVERSAL MEDIA, LLC; AND MSNBC CABLE LLC.

Defendants.

CASE NO. 3:19-cv-01713-BAS-BGS

Assigned for All Purposes to:
Hon. Cynthia Bashant

DECLARATION OF PROFESSOR STEFAN TH. GRIES IN SUPPORT OF HERRING NETWORK INC'S OPPOSITION TO DEFENDANTS' MOTION TO STRIKE

[Filed Concurrently with Opposition; Declaration of Charles Herring; and Declaration of Amnon Z. Siegel]

Action Filed: September 9, 2019
Hearing Date: December 16, 2019
Trial Date: None

MILLER BARONDESS, LLP
ATTORNEYS AT LAW
1999 AVENUE OF THE STARS, SUITE 1000 LOS ANGELES, CALIFORNIA 90067
TEL: (310) 552-4400 FAX: (310) 552-8400

DECLARATION OF PROFESSOR STEFAN TH. GRIES

I, Professor Stefan Th. Gries, declare as follows:

1. I have been retained by Plaintiff Herring Networks, Inc. ("Plaintiff") to provide an expert opinion. If called as a witness, I could and would competently testify to the matters stated herein.

2. I am a tenured Professor of Linguistics at the University of California, Santa Barbara. I am also Chair of English Linguistics at Justus-Liebig-Universität Giessen (the University of Giessen), a large public research university in Germany.

3. I have authored more than 200 publications and other written contributions in the area of corpus linguistics (which is the study of language samples of real world text) and statistical methods in linguistics in many of the leading journals of my field. I am the general editor and co-founder of the journal *Corpus Linguistics and Linguistic Theory*. I am also the co-editor of the *Journal of Research Design and Statistics in Linguistics and Communication*.

4. I am the second most widely-cited cognitive linguist and sixth most widely-cited living corpus linguist. The field of cognitive linguistics draws from both linguistics and psychology and studies how language interacts with cognition.

5. A true and correct copy of my Curriculum Vitae is attached hereto as **Exhibit A**.

6. I have reviewed the July 22, 2019 segment of The Rachel Maddow Show concerning One America News Network, as well as certain other segments of The Rachel Maddow Show and the Complaint and Motion to Strike filed in this matter.

7. Based upon my review, I have prepared a report containing my analysis and conclusions, which is attached hereto as **Exhibit B**.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on this _1_ day of December, 2019, at Los Angeles, California.

Professor Stefan Th. Gries

MILLER BARONDESS, LLP
ATTORNEYS AT LAW
1999 AVENUE OF THE STARS, SUITE 1000 LOS ANGELES, CALIFORNIA 90067
TEL: (310) 552-4400 FAX: (310) 552-8400

EXHIBIT A

Curriculum Vitae

Stefan Th. Gries, Ph.D.

Home:	973 Miramonte Drive #2 Santa Barbara, CA 93109 U.S.A.
University:	Department of Linguistics University of California, Santa Barbara Santa Barbara, CA 93109-3100 U.S.A.
Email / www	stgries@gmail.com http://www.stgries.info

Work history (current: highlighted in bold)

April 2018 -	**25% appointment as a salaried (Full/W3) Chair of English Linguistics (Corpus Linguistics with a focus on quantitative methods)** **Dept of English, Justus-Liebig-Universität Giessen**
March 2012 -	Affiliated faculty Dept of Spanish and Portuguese, UC Santa Barbara
July 2010 -	**(Full) Professor of Linguistics (tenured, currently VII O/S, third highest level of 20 levels in the UC system although I have been there only 14 years)** **Dept of Linguistics, UC Santa Barbara**
July 2007 - June 2010	Associate Professor of Linguistics (tenured) Dept of Linguistics, UC, Santa Barbara
Nov 2005 - June 2007	Assistant Professor of Linguistics Dept of Linguistics, UC Santa Barbara
Feb 2005 - Oct 2005	Visiting researcher with scholarship Dept of Developmental and Comparative Psychology Max Planck Institute for Evolutionary Anthropology
May 2002 - July 2005	Associate Professor of English (tenured) Institute of Business Communication and Information Science University of Southern Denmark at Sønderborg
Apr 1999 - Apr 2002	Assistant Professor of English Institute of Business Communication and Information Science University of Southern Denmark at Sønderborg

Honorary titles and temporary affiliations

June/July 2019	Visiting Professor at the Linguistic Soc. of America Institute University of California, Davis
April - September 2017	Honorary Leibniz Professor Research Academy, University of Leipzig, Germany
Sept 2011 -	Honorary Liebig Professor Justus Liebig University Giessen, Germany
July 2015	Visiting Professor at the Linguistic Soc. of America Institute University of Chicago
June/July 2013	Visiting Professor at the Linguistic Soc. of America Institute University of Michigan, Ann Arbor
July 2011	Visiting Professor at the Linguistic Soc. of America Institute University of Colorado, Boulder
July 2007	Visiting Professor at the Linguistic Soc. of America Institute Stanford University

Relevant legal scholarship and consulting

Amicus curiae to James Heilpern & Gene C. Schaerr's 2018 amicus brief with the U.S. Supreme Court in the case Lucia & Lucia Companies, Inc. v. Securities and Exchange Commission (On Writ of Certiorari to the United States Court of Appeals for the D.C. Circuit.)

Amicus curiae to James Heilpern & Gene C. Schaerr's 2018 amicus brief with the U.S. Supreme Court in the case Rimini Street, Inc. & Seth Ravin v. Oracle USA, Inc, Oracle America, Inc., & Oracle International Corporation (On Writ of Certiorari to the United States Court of Appeals for the 9th Circuit.)

Baron, Dennis E. Alison L. LaCroix, Stefan Th. Gries, & Jason Merchant. 2019. Amicus brief with the U.S. Supreme Court in the case New York State Rifle & Pistol Association Inc., Rommolo Colantone, Efrain Alvarez, & Jose Anthony Irizarry v. The City of New York and the NYPD License Division (On Writ of Certiorari to the United States Court of Appeals for the 2nd Circuit.)

Gries, Stefan Th. & Brian G. Slocum. 2017. Ordinary meaning and corpus linguistics. *Brigham Young University Law Review* 6. 1417-1472.

Slocum, Brian G., Stefan Th. Gries, & Lawrence Solan. 2019. Amicus brief with the U.S. Supreme Court in the case Gerald Lynn Bostock v. Clayton County, GA (On Writs of Certiorari to the United States Courts of Appeals for the 11th, 2nd, and 6th Circuits.)

Fall 2019 Advising the law practice of Anthony T. Schneider (Newport Beach, CA)

	regarding an authorship attribution case; testimony was scheduled for 12 Nov but then not admitted by the judge
Oct 2019	Preliminary data analysis for the law firm Simpson Thatcher and the Southern Poverty Law Center with regard to their lawsuit challenging Mississippi's criminal disenfranchising scheme (in particular with regard to interpreting Section 2 of the 14th Amendment of the U.S. Constitution); ultimately, we declined to write an amicus brief for lack of empirical evidence
April 2012	Advising the law practice Andrea Hurd (Santa Barbara, CA) regarding the interpretation of the phrase "four or fewer" in the Harbors and Navigations Code, Section 6565.2; case was settled before trial

Research and relevant experience: overview

- more than 200 publications and other written contributions in the area of quantitative corpus linguistics and statistical methods in linguistics in many of the leading journals of my fields (including 20 published or to appear books and edited volumes; selection: see below)
- general editor and co-founder of the journal *Corpus Linguistics and Linguistic Theory*
- co-editor of the *Journal of Research Design and Statistics in Linguistics and Communication*
- member of the board of all major corpus linguistics and cognitive linguistics journals and others (>10 journals and 5 book series)
- more than 370 talks and invited workshops, (plenary/keynote) lectures; I am regularly teaching invited paid week-long bootcamps on statistical methods in linguistics and corpus linguistics all over four continents; part of what I teach in these bootcamps are corpus-linguistic methods of the type used here in testimony
- 6th most widely-cited living corpus linguist (according to Google Scholar, most ahead of me are retired and/or 15-20 years older)
- 2nd most widely-cited cognitive linguist (according to Google Scholar, the most widely-cited person is counted wrong because of publications of other authors with the same name, as can be seen when one checks the initials of the listed publications)
- only corpus linguist having published introductions to corpus linguistics (2 editions) and to statistical methods in linguistics (2 editions)
- reviewer and editor for at least 500 journal, book, grant proposal, and other submissions in the last 10-12 years

Teaching experience relevant to the current case: overview

On the theoretical side of things, I have been the main instructor of undergraduate and graduate semantics in my department over the last 14 years. On the methodological side of things, I have been teaching quantitative corpus linguistics and statistical methods in linguistics – both relevant to studies of authorship attribution – for the last 15 years at dozens of universities in Northern America (USA and Canada), Europe, Asia, and South America.

Scientific presentations and workshops: over 350 since 2000
(see http://www.stgries.info/research/overview-research.html for a complete list)

Scientific publications (last five years only)
(see http://www.stgries.info/research/overview-research.html for a complete list)

to appear

Deshors, Sandra C. & Stefan Th. Gries. Comparing learner corpora. In Nicole Tracy-Ventura & Magali Paquot (eds.), Routledge Handbook of SLA and Corpora. New York & London: Routledge.

Deshors, Sandra C. & Stefan Th. Gries. Mandative subjunctive vs. should in world Englishes: A new take on an old alternation. Corpora 15(2).

Gries, Stefan Th. Priming of syntactic alternations by learners of English: an analysis of sentence-completion and collostructional results. In Jesse A. Egbert & Paul Baker (eds.), Using corpus methods to triangulate linguistic analysis, 219-238. New York & London: Routledge.

Gries, Stefan Th. Analyzing dispersion. In Magali Paquot & Stefan Th. Gries (eds.). Practical handbook of corpus linguistics. Berlin & New York: Springer.

Gries, Stefan Th. R scripts for L. Anthony's chapter 'Programming for Corpus Linguistics'. In Magali Paquot & Stefan Th. Gries (eds.). Practical handbook of corpus linguistics. Berlin & New York: Springer.

Gries, Stefan Th. Polysemy. In Ewa Dąbrowska & Dagmar S. Divjak (eds.), Handbook of Cognitive Linguistics, 472-490. Berlin & Boston: De Gruyter Mouton. [reprint of 2015e]

Gries, Stefan Th. Ten lectures on corpus-linguistic approaches in cognitive linguistics: Applications for usage-based and psycholinguistic research. Leiden & Boston: Brill. [cover]

Gries, Stefan Th. Corpus linguistics: quantitative methods. In Carol A. Chapelle (ed.), The concise encyclopedia of applied linguistics. Oxford: Wiley-Blackwell.

Gries, Stefan Th. On, or against?, (just) frequency. In Hans C. Boas (ed.), Applications of cognitive linguistics. Boston & Berlin: De Gruyter Mouton.

Gries, Stefan Th. The discriminatory power of lexical context for alternations: an information-theoretic exploration. Journal of Research Design and Statistics in Linguistics and Communication Science.

Gries, Stefan Th. Managing synchronic corpus data with the British National Corpus (BNC). In Andrea L. Berez-Kroeker, Brad McDonnell, Eve Koller, & Lauren Collister (eds.), MIT Open Handbook of Linguistic Data Management. Cambridge, MA: The MIT Press.

Gries, Stefan Th. Corpus approaches to ordinary meaning in legal interpretation. In Malcolm Coulthard, Alison May, & Rui Sousa-Silva (eds.), The Routledge Handbook of Forensic Linguistics. 2nd ed. New York & London: Routledge.

Gries, Stefan Th. & Sandra C. Deshors. Statistical analyses of learner corpus data. In Nicole Tracy-Ventura & Magali Paquot (eds.), Routledge Handbook of SLA and Corpora. New York & London: Routledge.

Gries, Stefan Th. & Sandra C. Deshors. There's more to alternations than the main diagonal of a 2×2 confusion matrix: improvements of MuPDAR and other classificatory alternation

studies. ICAME Journal 44.
Gries, Stefan Th. & Philip Durrant. Analyzing co-occurrence data. In Magali Paquot & Stefan Th. Gries (eds.). Practical handbook of corpus linguistics. Berlin & New York: Springer.
Gries, Stefan Th., Benedikt Heller, & Nina Sophie Funke. The role of gender in postcolonial syntactic choice-making: evidence from the genitive alternation in British and Sri Lankan English. In Tobias J. Bernaisch (ed.), Gender in World Englishes. Cambridge: Cambridge University Press.
Gries, Stefan Th., Marlies Jansegers, & Viola G. Miglio. Quantitative methods for corpus-based contrastive linguistics. In Renata Enghels, Bart Defrancq, & Marlies Jansegers (eds.), New approaches to contrastive linguistics: empirical and methodological challenges. Berlin & Boston: De Gruyter.
Gries, Stefan Th. & Magali Paquot. Writing up a corpus-linguistic paper. In Magali Paquot & Stefan Th. Gries (eds.). Practical handbook of corpus linguistics. Berlin & New York: Springer.
Jansegers, Marlies & Stefan Th. Gries. Towards a dynamic behavioral profile: a diachronic study of polysemous sentir in Spanish. Corpus Linguistics and Linguistic Theory.
Miglio, Viola G. & Stefan Th. Gries. Construcciones verbales con verbos de emoción en español: cohesión interna de la clase semántica de los predicados con sujeto experimentador.
Paquot, Magali & Stefan Th. Gries (eds.). Practical handbook of corpus linguistics. Berlin & New York: Springer.
Paquot, Magali, Hubert Naets, & Stefan Th. Gries. Using syntactic co-occurrences to trace phraseological development in learner writing: verb + object structures in LONGDALE. In Bert Le Bruyn & Magali Paquot (eds.), Learner corpora and second language acquisition research. Cambridge: Cambridge University Press.
Rühlemann, Christoph & Stefan Th. Gries. How do speakers and hearers disambiguate the pragmatic and syntactic functions of words? The case of well. Functions of Language.
Wahl, Alexander & Stefan Th. Gries. Computational extraction of formulaic sequences from corpora: Two case studies of a new extraction algorithm. In Gloria Corpas Pastor & Jean-Pierre Colson (eds.), Computational and corpus-based phraseology. Amsterdam & Philadelphia: John Benjamins.
Wulff, Stefanie & Stefan Th. Gries. Explaining individual variation in learner corpus research: some methodological suggestions. In Bert Le Bruyn & Magali Paquot (eds.), Learner corpora and second language acquisition research. Cambridge: Cambridge University Press.

2019

Baron, Dennis E. Alison L. LaCroix, Stefan Th. Gries, & Jason Merchant. Amicus brief with the U.S. Supreme Court in the case New York State Rifle & Pistol Association Inc., Rommolo Colantone, Efrain Alvarez, & Jose Anthony Irizarry v. The City of New York and the NYPD License Division (On Writ of Certiorari to the United States Court of Appeals for the 2nd Circuit.)
Carrasco Ortíz, Elia Haydee, Mark Amengual, & Stefan Th. Gries. Cross-language effects of phonological and orthographic similarity in cognate word recognition: the role of language dominance. Linguistic Approaches to Bilingualism.
Gries, Stefan Th. Estatística com R para a linguística: uma introdução prática. (a Portuguese translation of 2013c, translated by Heliana R. Mello, Crysttian Arantes Paixão, Andre L.

Souza, & Jûlia Zara). Belo Horizonte, Brasil: Editora FALE-UFMG.
Gries, Stefan Th. 15 years of collostructions: some long overdue additions/corrections (to/of actually all sorts of corpus-linguistics measures). International Journal of Corpus Linguistics 24(3). 385-412.
Gries, Stefan Th. On classification trees and random forests in corpus linguistics: some words of caution and suggestions for improvement. Corpus Linguistics and Linguistic Theory.
Slocum, Brian G., Stefan Th. Gries, & Lawrence Solan. Amicus brief with the U.S. Supreme Court in the case Gerald Lynn Bostock v. Clayton County, GA (On Writs of Certiorari to the United States Courts of Appeals for the 11th, 2nd, and 6th Circuits.)
Wulff, Stefanie & Stefan Th. Gries. Particle placement in learner English: Measuring effects of context, first language, and individual variation. Language Learning 69(4). 873-910.
Wulff, Stefanie & Stefan Th. Gries. Improving on observational blends research: regression modeling in the study of experimentally-elicited blends. Lexis 14.

2018

Adamou, Evangelia, Matthew Gordon, & Stefan Th. Gries. Prosodic and morphological focus marking in Ixcatec (Otomanguean). In Evangelia Adamou, Katharina Haude, & Martine Vanhove (eds.), Information structure in lesser-described languages: Studies in prosody and syntax, 51-83. Amsterdam & Philadelphia: John Benjamins.
Gries, Stefan Th. Operationalizations of domain-general mechanisms cognitive linguists often rely on: a perspective from quantitative corpus linguistics. In Stefan Engelberg, Henning Lobin, Kathrin Steyer, & Sascha Wolfer (eds.), Wortschätze: Dynamik, Muster, Komplexität, 75-90. Berlin & Boston: De Gruyter.
Gries, Stefan Th. Syntactic alternation research: taking stock and some suggestions for the future. Belgian Journal of Linguistics 31(1). 8-29
Gries, Stefan Th. Korpuslinguistik und ihr Potential für die (amerikanische) Rechtssprechung. In Marc Kupietz & Thomas Schmidt (eds.), Korpuslinguistik (Germanistische Sprachwissenschaft um 2020, Volume 5), 81-94. Berlin & Boston: De Gruyter.
Gries, Stefan Th. Zur Identifikation von Mehrwortausdrücken: ein Algorithmus, seine Validierung und weiterführende Überlegungen. In Angelika Wöllstein, Peter Gallmann, Mechthild Habermann, & Manfred Krifka (eds.), Grammatiktheorie und Empirie in der germanistischen Linguistik (Germanistische Sprachwissenschaft um 2020, Volume 1), 225-239. Boston & Berlin: De Gruyter.
Gries, Stefan Th. On over- and underuse in learner corpus research and multifactoriality in corpus linguistics more generally. Journal of Second Language Studies 1(2). 276-308.
Gries, Stefan Th. 语言研究中的统计学：R 软件应用入门. Chinese translation of Statistics for linguistics with R (2nd rev. and ext. ed.). Beijing: Commercial Press.
Gries, Stefan Th. Mechanistic formal approaches to language acquisition: yes, but at the right level(s) of resolution. A response to Yang. Linguistic Approaches to Bilingualism. 8(6). 733-737
Gries, Stefan Th., Tobias J. Bernaisch, & Benedikt Heller. A corpus-linguistic account of the history of the genitive alternation in Singapore English. In Sandra C. Deshors (ed.), Modeling World Englishes: Assessing the interplay of emancipation and globalization of ESL varieties, 245-279. Amsterdam & Philadelphia: John Benjamins.
Hampe, Beate & Stefan Th. Gries. Syntax from and for discourse II: More on complex-sentences as meso-constructions. In Beate Hampe & Susanne Flach (eds.), Yearbook of the German Cognitive Linguistics Association (Special Issue: Corpora. Constructions. Cognition),

115-142. Boston & Berlin: De Gruyter.
Wahl, Alexander & Stefan Th. Gries. Multi-word expressions: A novel computational approach to their bottom-up statistical extraction. In Pascual Cantos-Gómez & Moisés Almela-Sánchez (eds.), Lexical collocation analysis: advances and applications, 85-109. Berlin & New York: Springer.
Wulff, Stefanie, Stefan Th. Gries, & Nicholas A. Lester. Optional that in complementation by German and Spanish learners. In Andrea Tyler, Lihong Huan, & Hana Jan (eds.), What is Applied Cognitive Linguistics? Answers from current SLA research, 99-120. Berlin & Boston: De Gruyter Mouton.

2017

Gries, Stefan Th. Ten lectures on quantitative approaches in cognitive linguistics: Corpus-linguistic, experimental, and statistical applications. Leiden & Boston: Brill, pp. 211. [internationally republished version of 2016e; cover and supplementary materials (audio and slides) here or here]
Gries, Stefan Th. Corpus approaches. In Barbara Dancygier (eds.), Cambridge Handbook of Cognitive Linguistics, 590-606. Cambridge: Cambridge University Press.
Gries, Stefan Th. & Andrea L. Berez. Linguistic annotation in/for corpus linguistics. In Nancy Ide & James Pustejovsky (eds.), Handbook of Linguistic Annotation, 379-409. Berlin & New York: Springer.
Gries, Stefan Th. & Gerrit Jan Kootstra. Structural priming within and across languages: a corpus-based perspective. Bilingualism: Language and Cognition 20(2). 235-250.
Heller, Benedikt, Tobias Bernaisch, & Stefan Th. Gries. Empirical perspectives on two potential epicenters: The genitive alternation in Asian Englishes. ICAME Journal 41. 111-144.
Lester, Nicholas A., John W. Du Bois, Stefan Th. Gries, & Fermín Moscoso del Prado Martín. Considering experimental and observational evidence of priming together, syntax doesn't look so autonomous. Behavioral and Brain Sciences 40. 33-34.
Miglio, Viola G. & Stefan Th. Gries. Readers' reaction to tense switching in Hrafnkels saga freysgoða: combining corpus-linguistic and experimental methods. International Journal of Literary Linguistics 6(1). 1-26.

2016

Deshors, Sandra C. & Stefan Th. Gries. Profiling verb complementation constructions across New Englishes: A two-step random forests analysis to ing vs. to complements. International Journal of Corpus Linguistics 21(2). 192-218.
Gries, Stefan Th. Variationist analysis: variability due to random effects and autocorrelation. In Paul Baker & Jesse A. Egbert (eds.), Triangulating methodological approaches in corpus linguistic research, 108-123. New York: Routledge, Taylor and Francis.
Gries, Stefan Th. Towards a corpus-based identification of prototypical instances of constructions. In Masa-aki Yamanashi (ed.), Cognitive Linguistics, Vol. 3 Cognitive grammar and syntax. London & Thousand Oaks, CA: Sage Publications. [reprint of 2003d]
Gries, Stefan Th. Quantitative corpus linguistics with R. 2nd rev. & ext. ed. London & New York: Routledge, Taylor & Francis Group, pp. 274. [cover with endorsements and a review in Digital Scholarship in the Humanities]
Gries, Stefan Th. Ten lectures on quantitative approaches in cognitive linguistics: Corpus-

linguistic, experimental, and statistical applications. Beijing: Foreign Language Teaching and Research Press.
Gries, Stefan Th. & Tobias J. Bernaisch. Exploring epicenters empirically: Focus on South Asian Englishes. English World-Wide 37(1). 1-25.
Hilpert, Martin & Stefan Th. Gries. Quantitative approaches to diachronic corpus linguistics. In Merja Kytö & Päivi Pahta (eds.), The Cambridge Handbook of English Historical Linguistics, 36-53. Cambridge: Cambridge University Press.
Stefanowitsch, Anatol & Stefan Th. Gries. Collostructions: investigating the interaction between words and constructions. In Masa-aki Yamanashi (ed.), Cognitive Linguistics, Vol. 3 Cognitive grammar and syntax. London & Thousand Oaks, CA: Sage Publications. [reprint of 2003e]
Yoon, Jiyoung & Stefan Th. Gries (eds.), Corpus-based approaches to Construction Grammar. Amsterdam & Philadelphia: John Benjamins, pp. 268.
Yoon, Jiyoung & Stefan Th. Gries. Introduction. In Jiyoung Yoon & Stefan Th. Gries (eds.), Corpus-based approaches to Construction Grammar. Amsterdam & Philadelphia: John Benjamins.

2015

Gries, Stefan Th. Some current quantitative problems in corpus linguistics and a sketch of some solutions. Language and Linguistics 16(1). 93-117. [official link]
Gries, Stefan Th. Структурный прайминг: корпусное исследование и узуальные/экземплярные подходы/'Structural priming: a perspective from observational data and usage-/exemplar-based approaches'. In Andrej A. Kibrik, Alexey D. Koshelev, Aexander V. Kravchenko, Julia V. Mazurova, & Olga V. Fedorova (eds.), Язык и мысль: Современная когнитивная лингвистика/'Language and thought: Contemporary cognitive linguistics', 721-754. Moscow: Languages of Slavic Culture.
Gries, Stefan Th. The most underused statistical method in corpus linguistics: Multi-level (and mixed-effects) models. Corpora 10(1). 95-125.
Gries, Stefan Th. Quantitative linguistics. In James D. Wright (ed.), International Encyclopedia of the Social and Behavioral Sciences. 2nd ed., Vol. 19, 725-732. Amsterdam: Elsevier.
Gries, Stefan Th. Polysemy. In Ewa Dąbrowska & Dagmar S. Divjak (eds.), Handbook of Cognitive Linguistics, 472-490. Berlin & Boston: De Gruyter Mouton.
Gries, Stefan Th. 50-something years of work on collocations: what is or should be next … In Sebastian Hoffmann, Bettina Fischer-Starcke, & Andrea Sand (eds.), Current issues in phraseology, 135-164. Amsterdam & Philadelphia: John Benjamins. [reprint of 2013d]
Gries, Stefan Th. Quantitative designs and statistical techniques. In Douglas Biber & Randi Reppen (eds.), The Cambridge Handbook of English Corpus Linguistics, 50-71. Cambridge: Cambridge University Press.
Gries, Stefan Th. More (old and new) misunderstandings of collostructional analysis: on Schmid & Küchenhoff (2013). Cognitive Linguistics 26(3). 505-536.
Gries, Stefan Th. Statistical methods in learner corpus research. In Gaëtanelle Gilquin, Sylviane Granger, & Fanny Meunier (eds.), The Cambridge Handbook of Learner Corpus Research, 159-181. Cambridge: Cambridge University Press.
Gries, Stefan Th. The role of quantitative methods in Cognitive Linguistics: corpus and experimental data on (relative) frequency and contingency of words and constructions. In Jocelyne Daems, Eline Zenner, Kris Heylen, Dirk Speelman, & Hubert Cuyckens (eds.), Change of paradigms - new paradoxes: recontextualizing language and linguistics, 311-

325. Berlin & New York: De Gruyter Mouton.
Gries, Stefan Th. & Sandra C. Deshors. EFL and/vs. ESL? A multi-level regression modeling perspective on bridging the paradigm gap. International Journal of Learner Corpus Research 1(1). 130-159.
Gries, Stefan Th. & Nick C. Ellis. Statistical measures for usage-based linguistics. Language Learning 65 (Supplement 1). 1-28.
Harris, Michael J., Stefan Th. Gries, & Viola G. Miglio. Prosody and its application to forensic linguistics. Linguistic Evidence in Security, Law and Intelligence 2(2). 11-29.
Harris, Michael J. Viola G. Miglio, & Stefan Th. Gries. Mexican & Chicano Spanish prosody: Differences related to information structure. In John Levis, Rania Mohamed, Manman Qian, & Ziwei Zhou (eds.), Proceedings of the 6th Pronunciation in Second Language Learning and Teaching Conference, 38-48. Ames, IA: Iowa State University.
Miglio, Viola G. & Stefan Th. Gries. Heritage speakers' Spanish in California: How unbalanced bilingualism affects reverse constructions of the gustar-type. In Sandro Sessarego & Melvin González-Rivera (eds.), New Perspectives on Hispanic Contact Linguistics in the Americas, 405-435. Frankfurt & Madrid: Iberoamericana/Vervuert.
Rühlemann, Christoph & Stefan Th. Gries. Turn order and turn distribution in multi-party storytelling. Journal of Pragmatics 87(10). 171-191.
Wulff, Stefanie & Stefan Th. Gries. Prenominal adjective order preferences in Chinese and German L2 English: a multifactorial corpus study. Linguistic Approaches to Bilingualism 5(1). 122-150.

2014

Bernaisch, Tobias, Stefan Th. Gries, & Joybrato Mukherjee. The dative alternation in South Asian English(es): Modelling predictors and predicting prototypes. English World-Wide 35(1). 7-31.
Deshors, Sandra C. & Stefan Th. Gries. A case for the multifactorial assessment of learner language: the uses of may and can in French-English interlanguage. In Dylan Glynn & Justyna Robinson (eds.), Corpus methods for semantics: quantitative studies in polysemy and synonymy, 179-204. Amsterdam & Philadelphia: John Benjamins.
Doğruöz, A. Seza & Stefan Th. Gries. Spread of on-going changes in an immigrant language: Turkish in the Netherlands. In Martin Pütz, Justyna Robinson, & Monika Reif (eds.), Cognitive sociolinguistics: social and cultural variation on cognition and language use, 161-185. Amsterdam & Philadelphia: John Benjamins. [reprint of 2012b]
Gries, Stefan Th. Corpus and quantitative methods. In John Taylor & Jeanette Littlemore (eds.), The Bloomsbury Companion to Cognitive Linguistics, 279-300. London & New York: Bloomsbury.
Gries, Stefan Th. Don't let anybody learn one color but give the whole set of colors together. Interview in The English Teachers' Magazine, July 2014, p. 48-49.
Gries, Stefan Th. Frequencies, probabilities, association measures in usage-/exemplar-based linguistics: some necessary clarifications. In Nikolas Gisborne & Willem Hollmann (eds.), Theory and data in cognitive linguistics, 15-48. Amsterdam & Philadelphia: John Benjamins. [reprint of 2012g]
Gries, Stefan Th. Frequency tables, effect sizes, and explorations. In Dylan Glynn & Justyna Robinson (eds.), Corpus methods for semantics: quantitative studies in polysemy and synonymy, 365-389. Amsterdam & Philadelphia: John Benjamins.
Gries, Stefan Th. Quantitative corpus approaches to linguistic analysis: seven or eight levels of

resolution and the lessons they teach us. In Irma Taavitsainen, Merja Kytö, Claudia Claridge, & Jeremy Smith (eds.), Developments in English: expanding electronic evidence, 29-47. Cambridge: Cambridge University Press.

Gries, Stefan Th. Coll.analysis 3.5. A script for R to compute perform collostructional analyses (major update to handle larger corpora/frequencies).

Gries, Stefan Th. & Allison S. Adelman. Subject realization in Japanese conversation by native and non-native speakers: exemplifying a new paradigm for learner corpus research. In Jesús Romero-Trillo (ed.), Yearbook of Corpus Linguistics and Pragmatics 2014: New empirical and theoretical paradigms, 35-54. Cham: Springer.

Gries, Stefan Th. & Sandra C. Deshors. Using regressions to explore deviations between corpus data and a standard/target: two suggestions. Corpora 9(1). 109-136.

Gries, Stefan Th. & Viola G. Miglio. New information in naturalistic data is also signaled by pitch movement: an analysis from monolingual English/Spanish and bilingual Spanish speakers. Complutense Journal of English Studies 22. 11-33.

EXHIBIT B

Report on the interpretation of a sentence
in the 22 July 2019 installment of The Rachel Maddow Show

Prof. Stefan Th. Gries
University of California, Santa Barbara & Justus Liebig University Giessen

0. Introduction and overview

This report is concerned with the following sentence/utterance (in its context) produced by Rachel Maddow (henceforth Maddow) in her 22 July 2019 show:

> *In this case, the most obsequiously pro-Trump right wing news outlet in America really literally is paid Russian propaganda.*
>
> [sentence 20 in the opening segment, see Table 1 in the appendix for a sentence-by-sentence breakdown]

I focus exclusively on **the linguistic question of whether an average or reasonable/ordinary viewer/hearer of the sentence would regard the above sentence as a statement of opinion** or as statement of fact. This report does not address whether the facts are accurate; it also does not address whether the statement in question is a "protected opinion" in the legal sense (as defined by courts in previous cases).[1] This report is structured as follows:

Section 1: On the basis of a variety of contextual (broad and specific) and linguistic characteristics, I conclude that it is very **unlikely** that an average or reasonable/ordinary viewer would consider the sentence in question to be a statement of opinion.

1.1 General introduction
1.2 Broad/overall context of the sentence/utterance in question
1.3 Linguistic characteristics of the sentence/utterance in question
1.3.1 Exploring the factual-information vs. opinion contrast in a top-down fashion
1.3.2 Exploring the factual-information vs. opinion contrast in a bottom-up fashion
1.3.3 The immediate context and Maddow's own sign-posting of linguistic function

[1] In what follows, I am employing the following notational conventions: Italics are used to quote/mention, but not use, words, as in this sentence: "This statement is largely about the word *fewer*." Single quotes are used to represent meanings as in *kill* means 'cause to die.' Bold type and/or underlining is used for highlighting/emphasis. Parenthesized numbers such as (1) or (12) refer to the numbered sentences provided and discussed in this brief.

Section 2: On the basis of the use of *literally* in reference works, linguistic research, and empirical data, I conclude that Maddow's use of *really literally* in fact strongly commits her to the truth of the rest of the sentence.

2.1 General introduction
2.2 The meaning and use of *literally* in general
2.2.1 The meaning and use of *literally* in reference works
2.2.2 The meaning and use of *literally* in linguistic research
2.2.3 The meaning and use of *really literally* in contemporary American English talk shows
2.3 The use of *literally* in the show and problems of AW's/TB's defense
2.3.1 Which sense of *literally* did Maddow use?
2.3.2 How is *literally* actually used and what does this imply?
2.3.3 What did Maddow actually say?

Section 3 I summarize and conclude.

Appendix and references

1 Is Rachel Maddow's statement's likely to be understood as a statement of opinion rather than a statement of fact?

1.1 General introduction

It is necessary to begin with the variety of sources of information that linguists know language comprehenders rely on – consciously, but mostly unconsciously – to decide what to consider facts and what to consider opinions. The study of such matters in linguistics belongs to, broadly speaking, the fields of semantics and pragmatics, and, within semantics, in particular the research areas of epistemicity and evidentiality.

The area of **epistemicity** "involves [a] speaker's or writer's evaluation, judgment and degree of commitment attached to the truth-value of a piece of information" (González et al. 2017:68) whereas the area of **evidentiality** "involves the speaker's or writer's assertion of the source and kind of evidence at their disposal" (González et al. 2017:68). As comprehenders encounter, process, and hopefully comprehend linguistic input, they can also process it in terms of the speaker's epistemic stance (how much is the speaker committed to the truth of what he just said?) and the speaker's evidential stance (how does the speaker know what he just said?). These determinations utilize various sources of information that involve the broad/overall utterance context, but also more specifically many different levels of linguistic analysis.

As for the first kind of criterion, **broad/overall context**, factors that comprehenders rely on include, among others, the following: Is the speaker introduced as, or otherwise perceived to be, an expert on the subject matter? What are circumstances of production of the utterance (e.g., informal chit-chat commits speakers less to the objective veracity of what they are saying than does an academic lecture than does a statement in court under oath)? Who is the speaker, who

are the addressees, and what is their relation to each other?

As for the second kind of criterion, **specific linguistic characteristics of the utterance**, relevant factors include the following:

> **lexical choices bearing on epistemicity**: does a speaker use modal verbs (e.g., *could*, *may*, *might*, *must*, *would* …) that indicate he is committing less than 100% to the truthfulness of the proposition he uttered? Does a speaker qualify his statements with, for instance, adverbs (e.g., *conceivably*, *maybe*, *possibly*, …) that indicate he is committing less than 100% to the truthfulness of the proposition he uttered or is he using expressions that do the opposite, i.e. express a strong commitment to the truthfulness of that proposition (e.g., *clearly*, *definitely*, *obviously*, *really*, …)?
>
> **lexical choices bearing on evidentiality**: does a speaker use expressions (e.g., *allegedly*, *I hear*, *it is said*, *reportedly*, …) that indicate that the proposition he uttered is based on (possibly uncertain) hearsay or that that proposition is his own inference (e.g., *I conclude*, *I figure*, *I guess*, *I think*, *it appears (to me)*, *it seems (to me)*, …)?
>
> **grammatical choices** such as modal verbs and the grammatical constructions they require (see above, but also note the difference between *It's going to rain* (less certainty) and *It will rain* (more certainty)), grammatical mood (something that English does not really have), …;
>
> **intonational contours**: does a speaker use a declarative-sentence/assertion kind of intonation contour or an intonation contour that represents a lack of commitment or uncertainty regarding the proposition they produced or even an intonation contour that marks that the speaker actually means the opposite of what was literally said (i.e. irony/sarcasm)?
>
> **lexical context**: do the speaker's or other people's utterances around the utterance in question provide clues as to the epistemicity and/or evidentiality of the utterance in question (e.g., did an interlocutor just say *Please tell me only the facts!* or *But this is only your impression, right?*)?

The following section will discuss Maddow's relevant utterance from these perspectives; I will begin with the first criterion, the broad/overall context, before I turn to the other, linguistic features.

1.2 Broad/overall context of the sentence/utterance in question

There is recent compelling evidence that ordinary Americans are generally not particularly good at distinguishing between fact and opinion in news reporting.

For instance, in 2018, the Pew Research Center conducted a study with 5035 participants (Mitchell et al. 2018) to explore "whether members of the public can recognize **news as factual** – something that's capable of being proved or disproved by objective evidence – or as an

opinion that reflects the beliefs and values of whoever expressed it". This study was not concerned with testing accurate knowledge of news but "intended to explore whether the public sees distinctions between news that is based upon objective evidence and news that is not," a distinction relevant to the question at hand. The results revealed that:

i. on the whole, while "a majority of Americans correctly identified at least three of the five statements that in each set […], this result is only a little better than random guesses" (p. 4);

ii. "members of each political party were more likely to label both factual and opinion statements as factual when they appealed more to their political side" (p. 4);

iii. finally, "[w]hen Americans see a news statement as factual, they overwhelmingly also believe it to be accurate" (p. 10).

In other words, even in a laboratory setting, in which subjects are presented with written statements which they know can be facts or opinions and are asked to categorize them as news facts or opinions, the results indicated "that even this basic task presents a challenge" (p. 3). Critically, whether a subject's political persuasions align with the speaker's influences the understanding of a sentence as factual or opinion.

1.3 Linguistic characteristics of the sentence/utterance in question

1.3.1 Exploring the factual-information vs. opinion contrast in a top-down fashion

In order to determine whether a statement would qualify as one of fact or one of opinion for an average comprehender, a linguistic analysis needs to take into consideration the above-mentioned linguistic characteristics of the sentence in question, but also those of the immediate context (both preceding and subsequent).

The relevant part of the show/transcript begins at sentence 10 (again, see Table 1 in the appendix for the complete transcript), listed below as (1) with annotation added to highlight the beginnings and ends of the main functional parts of this sentence: a suspense-raising introductory statement, a mention of the source of the info to be mentioned, an aside, whose rhetorical function is most likely evaluative, and, the actual factual information at the end (as is typical in English):

(1) **[intro:beg]** But I have to tell you, perhaps the single most perfectly formed story of the day, the single most like sparkly story of the entire day is this scoop **[intro:end] [source:beg]** from reporter Kevin Paulson [sic] at "The Daily Beast" **[source:end] [aside:beg]** who has sussed out that Trump's favorite more Trumpier than Fox TV network, the one that the president has been promoting and telling everyone they should watch and is better than Fox **[aside:end]**, turns out [**factualinfo:beg] that network has a full time on air reporter who covers U.S. politics who is simultaneously on the payroll of the Kremlin** [**factualinfo:end]**.

The part annotated above as factual information is also characterized as such in the

defendants' memorandum and meets the Pew Research Center's operationalization of factual statements, namely it is a statement about "something that's capable of being proved or disproved by objective evidence" (Mitchell et al. 2018:3), but, importantly, "regardless of whether it was accurate or inaccurate" (Mitchell et al. 2018:6): Provided that the required information is accessible, any person can verify or falsify that claim.

While this is not the main sentence on which the complaint is focusing, it is instructive to examine it because it contains the highlighted factual-information part, which the defendants' memorandum also characterizes as factual. This sentence therefore provides a useful point or comparison for inspection of the sentence at issue, 20. As I explain more fully later, sentence (1) (which is uncontroversially factual) shares many linguistic characteristics with the sentence at issue, 20, which evidences that sentence 20 would also be understood as factual.

Sentence (1) as a whole contains evidentiality information ("scoop from reporter Kevin Paulson [sic] at 'The Daily Beast'") but it does not contain any epistemic information whose function would be to indicate a less-than-100% commitment to the truth value of the reported proposition ('OAN has a full time on air reporter who covers U.S. politics who is simultaneously on the payroll of the Kremlin'): The reported proposition:

> is not offered with any particular lexical choices (such as modal verbs or adverbs) indicating the speaker's lack of full commitment to it;
>
> is not expressed using grammatical choices indicating the speaker's lack of full commitment to it;
>
> is not produced with an intonation contour that communicates lack of commitment to it.

To determine its intonation contour, following standard linguistic research practice, (i) I converted the video segment into audio (using the open-source software SoundConverter, <https://soundconverter.org/>), (ii) extracted the part of the audio file that represents that sentence (using the open-source software FFmpeg, <https://www.ffmpeg.org/>), and then used the sound-processing tool Praat (<http://www.fon.hum.uva.nl/praat/>), which is the most widely-used software for these purposes in linguistics, to plot Maddow's pitch against time and zoom into *on the payroll of the Kremlin*.

The analysis reveals that Maddow's pitch is falling over the 2.2 seconds as shown on the right of the bottom panel of Figure 1; this would not be expected for an utterance that was supposed to intonationally mark epistemic uncertainty and is more characteristic of a declarative sentence with the illocutionary/communicative force of an assertion.

I now turn to the sentences that follow and lead up to the sentence at issue. These sentences show Maddow using linguistic indicators to switch between factual information and evaluative sentences. Sentence 11 of the transcript is a one-word utterance, used as an incredulity marker to prepare and invite the hearer to experience incredulity at the upcoming material as well:

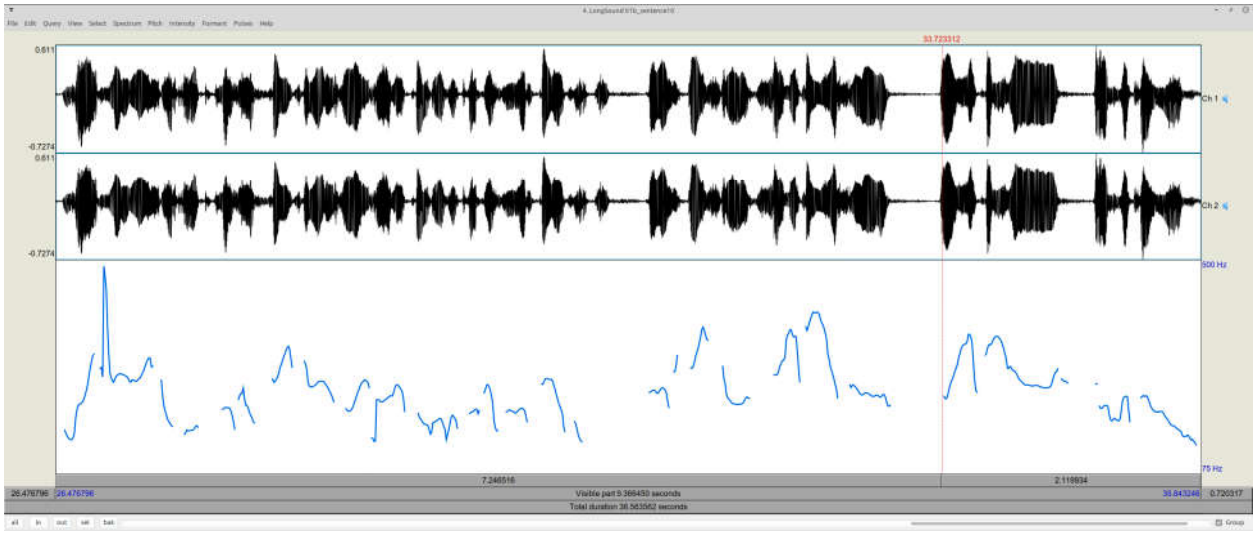


Figure 1: Plotting pitch (blue line on lower *y*-axis) against time (*x*-axis); relevant part is to the right of the red vertical line

(2) *What?*

Sentences 12 (see (3) below), 13 (see (4) below), 14 (see (5) below), 15 (see (6) below), and 16 (see (7) below) mostly repeat aspects of the factual information presented in sentence 10 (in (1) above) or provide additional information. More precisely, sentences 12 to 14 (see (3) to (5) below) focus on verifiable/falsifiable factual information; sentences; sentence 15 (see (6) below) resets the narration for rhetorical emphasis and enriches it with expressions communicating an evaluative and ironic stance, but – crucially – also provides an epistemic and evidential assessment (*actual news*) of the main proposition, one that again serves to commit Maddow to the truth of that proposition, which is then stated in sentence 16 (see (7) below) and essentially amounts to a recap of sentence 10 (in (1) above).

(3) **[factualinfo:beg]** Because at the same time he works for Trump's favorite One America News team, he is also being paid by the Russian government to produce government-funded pro-Putin propaganda for a Russian government funded propaganda outfit called Sputnik.

(4) Sputnik, of course, had a key role in the Russian government's intervention in the 2016 election to help Trump, according to the intelligence committee's assessment of that attack.

(5) Sputnik has also formally registered with the U.S. Justice Department as an agent of a foreign power. **[factualinfo:end]**

(6) **[intro/trans:beg] I mean**, there is a lot of news today, but among the giblets the news gods dropped off their plates for us to eat off the floor today is the **actual news** that this super right wing news outlet that the president has repeatedly endorsed as a preferable alternative to Fox News, because he thinks Fox is insufficiently pro-Trump, so now he likes this is other outlet better **[intro/trans:end]**

(7) **[factualinfo:beg]** We **literally** learned today that that outlet the president is promoting shares staff with the Kremlin. **[factualinfo:end]**

Sentences 17 (see (8) below), 18 (see (9) below), and 19 (see (10) below) serve an audience-engaging, or interacting/bonding-with-audience function: Just like sentence 11 (*What?*), they do not communicate factual (verifiable/falsifiable) information, but have a (negative) evaluative stance based on, in the language of the Pew Research Center, "the values and beliefs of the journalist" (Mitchell et al. 2018:6) and are clearly marked as such (with discourse markers such as *I mean*, interactive particles such as *Hey*, and by intonation):

(8) **[interaction/eval:beg] I mean**, what?
(9) **I mean**, it's an easy thing to throw out, you know, like an [epithet] in the Trump era, right?
(10) **Hey**, that looks like Russian propaganda. **[interaction/eval:end]**

The narration then continues, and **we arrive at the sentence at issue**, sentence 20 repeated below as (11), which in turn is followed by sentence 21 (shown in (12)) and 22 (shown in (13)):

(11) **[factualinfo:beg]** In this case, the most obsequiously pro-Trump right wing news outlet in America **really literally** is paid Russian propaganda.
(12) [Their] on air U.S. politics reporter is paid by the Russian government to produce propaganda for that government. **[factualinfo:end]**
(13) **[interaction/eval:beg] I mean**, this is the kind of news **we are supposed to** take in stride these days. **[interaction/eval:end]**

Applying the criteria from linguistic research and the Pew Research Center already listed above makes it very unlikely that an average or reasonable/ordinary viewer of this segment would consider these sentences as opinions rather than facts: Just like the uncontroversial factual-information part of sentence 10 (shown in (1) above), sentence 20 (shown in (12)):

> was not offered with any particular lexical choices (such as modal verbs or adverbs) indicating the speaker's lack of full commitment to it – on the contrary, Maddow used two epistemic adverbs (*really* and *literally*), minimally the former of which already implies a strong commitment to the veracity of what follows (see Section 2 for a discussion of AW's claims re *really literally*);
>
> were not expressed using grammatical choices indicating the speaker's lack of full commitment to it – on the contrary, Maddow again used simple present tense, the default tense/aspect combination in English of declarative sentences reporting a state of affairs;
>
> was not produced with an intonation contour that communicates lack of commitment to it.

As to the intonation contour of the sentence, plotting Maddow's pitch against time reveals that her pitch on the final word *propaganda* is falling; as above, this would not be expected for an utterance that was supposed to intonationally mark epistemic uncertainty. This is shown on the right of Figure 2:

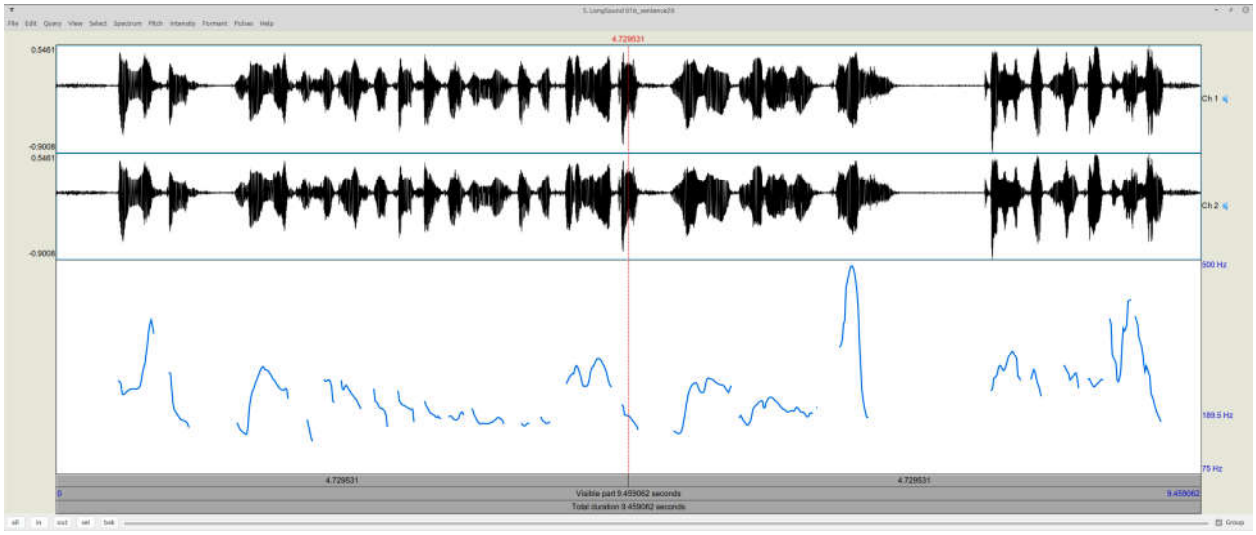


Figure 2: Plotting pitch (blue line on lower *y*-axis) against time (*x*-axis); relevant part is the rightmost decline of the blue line corresponding to *-ganda* of *paid Russian propaganda*

In addition and to reiterate from above, given the findings of the Pew Research Center, The Rachel Maddow Show's audience is particularly likely to interpret sentences 20 as a factual, rather than opinion, statement because it is more likely than other audiences to find it appealing or, minimally, compatible with their own political beliefs and, thus, more likely to view these statements as accurate.

1.3.2 Exploring the factual-information vs. opinion contrast in a bottom-up fashion

While the above line of reasoning was informed by a top-down approach – from general/theoretically-motivated features to the concrete example here – these results are also supported by a bottom-up approach. Specifically, linguistic research over the last 30-40 years on register variation provides an instructive perspective. The most influential empirical research in this domain has been conducted by Douglas Biber[2].

In a series of groundbreaking (as operationalized by citations) publications, Biber developed a method called Multidimensional Analysis (MDA) to determine/quantify the linguistic dimensions along which different texts (used broadly to cover both speech and writing) vary systematically and what the textual/rhetorical functions of these dimensions are. This analysis is usually applied to large collections of text, so called corpora (singular: *corpus*) and involves a multivariate statistical analysis called factor analysis; its main output is (i) a list of dimensions of variations that can be interpreted by researchers for their communicative function(s) and (ii) a list of features that are positively or negatively correlated with these dimensions. While the nature of an MDA does not permit it being applied to the sometimes even

[2] (Northern Arizona University, according to Google Scholar the most widely-cited living corpus linguist: <https://scholar.google.com/citations?hl=en&user=mdWIU4MAAAAJ>, accessed 24 November 2019)

only sentence-sized relevant parts of the transcript of The Rachel Maddow Show discussed here, it is the list of linguistic features characterizing a certain dimension that is pertinent to the present case.

One of the main dimensions of variation in English (discussed comprehensively in Biber 1988:101-108) is a dimension, or continuum, of "high informational density and exact informational content versus affective, interactional, and generalized content" (Biber 1988:107). The following is a selection of features that are indicative of each of the ends of this continuum:

(14) a. the informational side: nouns, long words, prepositional phrases, attributive adjectives

b. the affective/interactional side: private verbs (e.g., *think*, *feel*, …), *that*-deletion, contractions, present tense verbs, second person pronouns, *do* as pro-verbs, analytic negation, demonstrative pronouns, general emphatics.

If one checks which of these features are attested in sentence 20 (and 21), it is clear that these two sentences score highly on the informational side of the continuum and much less so on the affective/interactional side of the continuum: The sentences

> contain many nouns (*case*, *news outlet*, Amer*i*ca, *propaganda*, *U.S. politics reporter*, *government*, *propaganda*, *government* again) and many long words (and exact binomial tests indicate that the average numbers of characters of the words in these sentences are high enough to be statistically significantly longer than those of the other utterances: $p_{sent20}<0.0001$ and $p_{sent21}<0.01$);
>
> contain several prepositional phrases (*in this case*, *in America*, *by the Russian government*, *for that government*); and attributive adjectives or similarly-behaving modifiers (*pro-Trump right wing*, *Russian propaganda*, *on air U.S. politics reporter*, *Russian government*);
>
> contain no instances of private verbs, *that*-deletion, contractions first or second person pronouns, *do* as pro-verbs, analytic negation or demonstrative pronouns – the only features of the affective/interactional side they contain are (i) present tense marking and (ii) one or two emphasizing adverbs (*really literally*, to be discussed below).

Interim conclusion(s): Sentence 20 exhibits many more features characteristic of the informational register than of the affective/interactional register, making it ever less likely that an ordinary viewer would categorize it as opinion rather than factual information.

1.3.3 The immediate context and Maddow's own sign-posting of linguistic function

A final, particularly striking aspect of this show's transcript points in the same direction. The fact of the matter is that Maddow provided very explicit sign-posting/marking of linguistic function. For instance, sentence 10 ended with a factual-information part, as discussed above. It was followed by sentence 11, which consisted of just the word *what* with an incredulity

intonation; in other words, the hearer/viewer could not help but notice the clear separation of the factual-information part that is sentence 10 with and the evaluative/opinion utterance that is sentence 11.

Crucially, this patterning continues. After sentence 11, sentences 12 to 14 went back to reporting factual information, but after that sequence, Maddow again clearly highlighted the switch from factual information (in sentences 12 to 14) to opining (in sentence 15) with an explicit epistemic marker (*I mean*). When she then ended sentence 15 and returned to factual information in sentence 16, she **again** prefixed every single part of the then following interactional/evaluative interlude (sentences 17-19) with an expression that is a clear invitation to an ordinary viewer to interpret what follows as commentary:

I mean, what? in sentence 17;

I mean in sentence 18; and

Hey plus irony intonation in sentence 19.

Revealingly, sentence 20 (the sentence in question) and sentence 21 did not receive any such marking precisely because, according to all the criteria from above, **they reverted to factual-information reporting**. What is more, this analysis is supported by the fact that the very next sentence after 21 – sentence 22 – did indeed feature another marker (*I mean* again) representing another reversal to opinion statements.

In other words, both before and after the sentence in question, Maddow used both discourse markers (mostly *I mean*) and intonation to repeatedly indicate the beginning of an opining part after a factual-information part, and she also later used other epistemic and evidential markers (*I guess*, *we expect* (multiple times), and another *I mean*). However, (i) she did not do that precisely before the sentence in question and (ii) all linguistic characteristics of that sentence in question are compatible with the function of imparting factual-information rather than with that of opining. In a highly-structured and transparent way, Maddow separates informational/factual reporting and opining in a way that strongly suggests sentence 20 is factual.

Interim conclusion(s): Hardly any features of the linguistic context that we know language comprehenders use to differentiate between factual-information and opinion statements support the claim that sentence 20 is an opinion statement. On the contrary: (i) there are virtually no lexical, grammatical, or intonational characteristics both from a theory-driven top-down approach as well as from a data-driven bottom-up approach that would lead speakers to categorize sentence 20 (and 21) to be statements of opinion and (ii) Maddow's own sign-posting of her opening monolog does in fact mark many (parts/sequences of) sentences as opinions, but – crucially – not sentence 20 (or 21).

The following and final major section is concerned with the defendants' claim that the use of the word *literally* connotes opinion.

2 Does Rachel Maddow's use of *literally* mark the following as not literally true?

2.1 General introduction

The defendants contend that *literally* connotes opinion. To evaluate this contention, one needs to consider the meaning of *literally*, how it is used in general, and how it is used in the show in question – both within sentence 20 but also before.

The issue under investigation is ultimately one of ordinary meaning, namely, here, the question of how an average or reasonable/ordinary viewer would understand sentence 20. For a very long time, ordinary meaning was only approached with dictionaries, etymologies, and legal practitioners' intuitions. However, as demonstrated in detail by Mouritsen (2010) or Lee & Mouritsen (2018), relying on these sources to address questions of ordinary meaning – i.e. how an ordinary speaker/listener would use/comprehend an expression – is extremely problematic.

Dictionaries can be a suitable tool to identify **possible or permitted meanings** of a word, but they actually have very little to offer when it comes to determining the **ordinary meaning** that a word would have in a certain context, i.e. exactly what is at issue here. This is due to many things, including that dictionaries were actually never intended to document ordinary use and that dictionaries are commercial endeavors whose space constraints do not even permit exhaustive coverage of ordinary meanings.

For such reasons, experts in language and linguistic meaning have for the last 50 to 60 years more and more relied on different kinds of data to discuss matters of (ordinary) meaning: (i) collections of examples of expressions used in authentic/natural speech situations and (ii) large databases of texts produced in authentic/natural speech situations, which were above introduced as *corpora*. This is because, in a nutshell, if one wants to determine how ordinary viewers/readers would understand an expression, what's better than using the meanings or functions ordinary viewers/readers see these expression having most often/reliably?

This methodological development – the emergence of corpus linguistics as one of the currently most widespread linguistic methods – has also led to a growing use of corpus-linguistic methods in legal scholarship and practice. Many District, Federal, and Appellate Courts and even the Supreme Court of the United States have now been offered or even requested corpus-linguistic testimony, and many corpus-linguistically informed amicus briefs have been submitted to various courts in the country; see Appendix 2 for a selective list of cases using or discussing corpus-based linguistic analysis and amicus briefs.

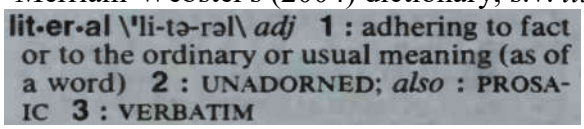
Given the fundamental shortcomings of using dictionaries to address questions of ordinary, not just possible, meaning, and the growing acceptance of corpus methods in legal application, the current analysis of expressions involving *literally* and its ordinary meaning will therefore include dictionary information as only one part, but also rely on linguistic research based on ordinary uses of *literally* in authentic settings.

2.2 The meaning and use of literally in general

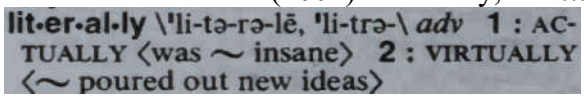
2.2.1 The meaning and use of *literally* in reference works

Looking up both *literal* and *literally* in Merriam-Webster's (2004) *The Merriam-Webster Dictionary* as well as looking up *literally* at <https://www.merriam-webster.com/> (retrieved 24 November 2019) suggests that the defendants' representation of *literally*'s meaning and use is incomplete.

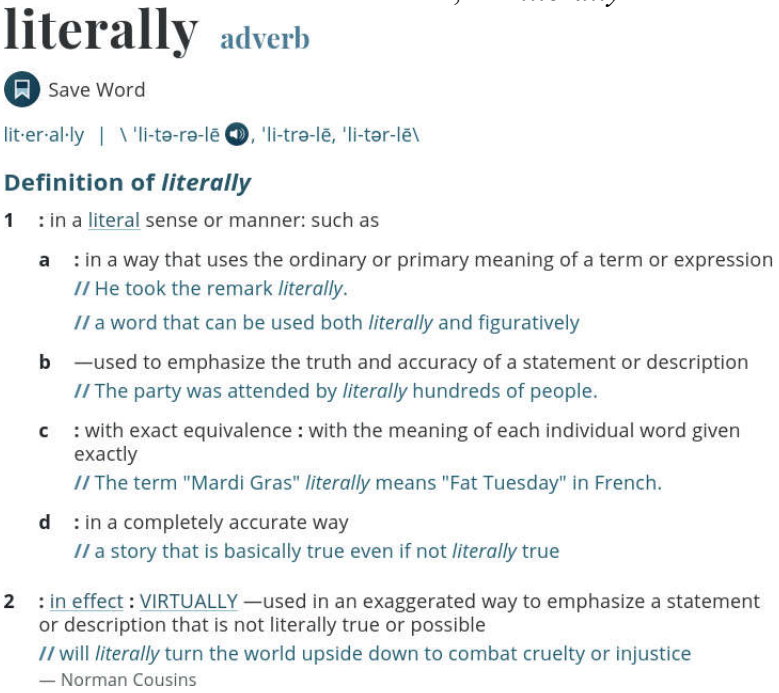
(15) Merriam-Webster's (2004) dictionary, s.v. *literal*:


lit·er·al \'li-tə-rəl\ *adj* **1 :** adhering to fact or to the ordinary or usual meaning (as of a word) **2 :** UNADORNED; *also* **:** PROSAIC **3 :** VERBATIM

(16) Merriam-Webster's (2004) dictionary, s.v. *literally*:


lit·er·al·ly \'li-tə-rə-lē, 'li-trə-\ *adv* **1 :** ACTUALLY ⟨was ~ insane⟩ **2 :** VIRTUALLY ⟨~ poured out new ideas⟩

(17) Merriam-Webster's online version, s.v. *literally*:


literally adverb

Save Word

lit·er·al·ly | \ 'li-tə-rə-lē, 'li-trə-lē, 'li-tər-lē\

Definition of *literally*

1 : in a literal sense or manner: such as

a : in a way that uses the ordinary or primary meaning of a term or expression
// He took the remark *literally*.
// a word that can be used both *literally* and figuratively

b —used to emphasize the truth and accuracy of a statement or description
// The party was attended by *literally* hundreds of people.

c : with exact equivalence : with the meaning of each individual word given exactly
// The term "Mardi Gras" *literally* means "Fat Tuesday" in French.

d : in a completely accurate way
// a story that is basically true even if not *literally* true

2 : in effect : VIRTUALLY —used in an exaggerated way to emphasize a statement or description that is not literally true or possible
// will *literally* turn the world upside down to combat cruelty or injustice
— Norman Cousins

The defendants' memorandum quotes only one definition of *literally* (sense 2, 'in effect') and, ignores sense 1; more importantly, this ignores the uses of *literally* described in senses 1b ('in a literal sense or manner', "used to emphasize the truth and accuracy of a statement or description") and 1d ('in a literal sense or manner', "in a completely accurate way").

2.2.2 The meaning and use of *literally* in linguistic research

What does linguistic research have to say about the meaning and uses of *literally*? The most sophisticated study of *literally* to date is Israel (2002), whose data consist of an *ad hoc*

collection of examples from various sources and two well-known corpora of American English (the Brown and the Switchboard corpora). Among his observations relevant to the current task, he points out one essential characteristic of *literally*: According to the famous set of Gricean maxims (after philosopher H.P. Grice), communication in general is assumed to be cooperative. That means, in the absence of evidence to the contrary, interlocutors are assumed to make statements that are true, as informative as is required, relevant, and perspicuous. That in turn means that using *literally* should only ever be required if it is necessary to indicate to the comprehender that a possible figurative meaning is not the intended one.

However, over the last 250 years or so, *literally* has also assumed a variety of other functions and the way it is doing so is in fact comparable to that of words like *very*, *really*, *truly*, or *genuinely*, whose historical developments into intensifier adverbs has been completed. While native speakers are of course usually not aware of how the meaning of an expression changes over hundreds of years, the fact of the matter is that, since *literally*'s historical development is not yet complete, at this point in time, it has multiple functions that speakers need to grapple with as they decide what to say.

Crucially for the present task, Israel shows that, currently, *literally* has a variety of different features and functions:

> Among other things, the use of orthodox *literally* may suggest: (i) that the speaker considers what is being said especially remarkable; **(ii) that the speaker is committed to the strongest possible interpretation of his or her words**; (iii) that the speaker considers this particular choice of words especially fortuitous; or (iv) that the speaker considers these words the best way of expressing what she has to say. […] While **all of these inferences** started out as conversational implicatures of *literally*'s orthodox use, they **are, by now, at least loosely associated with the word itself.** (Israel 2002:426)

He goes on to demonstrate that one of *literally*'s central functions now is not so much (anymore) that of "marking a commitment to a narrowly construed sentence meaning" (e.g., by determining which of the senses of a word is intended) but instead marking "the speaker's commitment to the intended utterance meaning". (p. 428). More to the point even, his examples show that **the use of *literally* can be "closely parallel" to uses of *really* and *truly*** (i.e. intensifiers whose historical development is complete) and that, often,

> it makes no difference whether the language used is gurative or not – the point is that the language used is perfectly suited to express the speaker's meaning, and that **the speaker is strongly committed to the truth of that meaning**. (Israel 2002:429, my emphasis)

Later studies and discussions of *literally* (e.g. Liberman 2011, Park 2016) discuss different aspects of *literally* (e.g., its co-occurrence with *almost* or different historical data), but neither alter, nor add substantively to, the inventory of functions *literally* serves.

2.2.3 The meaning and use of *really literally* in contemporary American English talk shows

Given that the sentence in question does not just use *literally*, but *really literally*, I conducted a search of examples of this expression in the Corpus of Contemporary American English (<https://www.english-corpora.org/coca/>). The search, conducted on 24 November 2019, resulted in 21 instances, 20 of which were from spoken uses (mostly TV talk shows, i.e. a context of exactly the kind relevant to the current question), with the remaining one being from Harper's Magazine. Interestingly enough, the majority of instances are instances where what *literally* modifies **is** meant literally; the following is a list of representative examples (slightly edited for clarity):

(18) If you **really literally** need to say "excuse me, where's the pay phone?" […]

(19) they are making beautiful music together -- […] – but apparently it's **really literally** just music they are making

(20) We do not want to have a war here that could cause **really literally** hundreds of thousands of casualties

(21) when you're actually standing over the bomb, and it's **really literally** impossible to think about anything other than the simple mechanics of diffusing the bomb.

(22) And that's **really literally** that simple.

Interim conclusion(s): The way in which an ordinary speaker would understand a word is often not inferrable from dictionary definitions. Research findings show that *literally*'s function often is similar to that of intensifiers such as *really* or *truly* – it often instructs the hearer to adopt the strongest possible interpretation (within a given context) – and its epistemic function is to reflect a high degree of commitment of the speaker to the truth of the utterance. However, when ordinary speakers in TV talk shows use it after *really*, *literally* typically modifies propositions that are supposed to be interpreted literally.

After this long overview, the following will now apply these points and findings.

2.4 The use of literally *in the show*

2.4.1 Which sense of *literally* did Maddow use?

The way the defense discusses sentence 20, repeated here for convenience, is problematic in many ways:

> In this case, the most obsequiously pro-Trump right wing news outlet in America really **literally** is paid Russian propaganda.

First, the defense quotes the definitions offered by the dictionary selectively: They both leave out senses 1b and 1d, which could theoretically be relevant. As shown above in Section 2.2.2, *literally* can very well be used with things that are literally true, so both dictionary senses

of *literally* are possible here. In addition, if one actually looks up *literal*, the adjective from which *literally* is derived and the adjective that *literally*'s dictionary definition relies on, one finds that one of its meanings in turn is 'adhering to fact'. Because of both of the above points, senses 1b ('used to emphasize the truth and accuracy of a statement or description') and 1d ('in a completely accurate way') are relevant to the interpretation and would, if adopted, indicate that Maddow's statement was in fact one "emphasiz[ing] the truth and accuracy of the statement" that "[OAN] is paid Russian propaganda".

Second, even if one accepted the defendants' somewhat selective conclusion that *literally* means 'in effect,' then Maddow's sentence 20 becomes the version in (23) below:

(23) In this case, the most obsequiously pro-Trump right wing news outlet in America really **in effect** is paid Russian propaganda.

Critically, this reading proposed by the defendants, if accepted, would not negate an average or reasonable/ordinary viewer from understanding this sentence as factual. Take this thought experiment. Imagine Maddow said the following on her show:

(24) President Trump **literally/in effect** paid Stephanie Clifford (a.k.a. Stormy Daniels) hush money for her silence.

The vast majority of the show's target audience, most of which probably harbor dislike of President Trump, would have no problem whatsoever considering this statement as one that is both factual and accurate. And they would do so in spite of the fact that, as far as one knows (<https://en.wikipedia.org/wiki/Stormy_Daniels#Trump_affair_allegations>), Stephanie Clifford did in fact **not** get paid directly (in the sense of 'receive a personal check signed and handed over') by Donald J. Trump.

Therefore and by analogy, if *literally*'s 'in effect' meaning results in (24) being perfectly acceptable as a factual and accurate statement, then why would the same not apply to Maddow's sentence 20? It would apply, which means that even assuming *literally*'s 'in effect' meaning in (24), this assumption does not justify the conclusion that Maddow's statement was commentary or opinion rather than factual.

2.4.2 How is *literally* actually used and what does this imply?

There are other major problems the defendants' position. We have seen in the hypothetical example (24) above, but also in the linguistic research literature, that *literally*'s function is **not** only to precede and emphasize things that not literally true, which means the mere presence of *literally* does not automatically render what follows something "that is not literally true or possible" and the sentence an opinion. The defendants' position is also severely undermined by Maddow's own linguistic choices. Recall sentence 16 of the transcript:

(7) **[factualinfo:beg]** We **literally** learned today that that outlet the president is promoting shares staff with the Kremlin. **[factualinfo:end]**

In this sentence, the presence of the evidential expression *We […] learned today* indicates that Maddow is very much committed to the truth of what follows. It is clear that Maddow herself used *literally* above precisely **not** in the way that the defendants claim *literally* is used.

Maddow also has a history of using literally in utterances where she wants the viewer to believe the proposition that *literally* modifies to be true. In other words, Maddow uses *literally* like this regularly; here are a few examples from four randomly selected show transcripts with *literally* highlighted in bold type and the content modified by *literally* underlined:

(25) You can see there there's **literally** a heading in the document the illegal campaign contribution scheme. [The Rachel Maddow Show, 17 July 2019]

(26) **Literally**, the neo-Nazis and the white supremacists who did what they did in Charlottesville, not only are they being sued by the people who got hurt there, but those white supremacists have just been ordered by a judge to pay the victims` attorney fees, which means the neo-Nazis are now being ordered by a court to pay for the privilege of themselves being sued and to pay the costs of the attorneys who are suing them. [The Rachel Maddow Show, 9 August 2019]

(27) […] they have appointed wildly unquali ed people to try to become federal judges, including some people who are **literally** explicitly rated unquali ed by the American Bar Association. [The Rachel Maddow Show, 15 August 2019]

(28) You might remember, one of the things that happened right after Trump red James Comey, **literally** two days after, that was that just by coincidence, there happened to be scheduled a big intelligence hearing, an annual oversight hearing on worldwide threats. [The Rachel Maddow Show, 12 September 2019]

In all these (and other) cases, Maddow clearly does **not** want the viewer to infer from the presence of *literally* that the following underlined material is not literally true. From a psycholinguistic perspective, this means that an average/ordinary viewer could have learned (in the psychological/psycholinguistic sense of 'implicit learning') that, in Maddow's idiolect, *literally* regularly precedes information that **is** to be taken literally, a kind of co-occurrence information, or contingency, that underlies most forms of associative learning in humans and many other species (see Ellis 2006 for contingency learning in language acquisition).

2.4.3 What did Maddow actually say?

To sum up, the relevant expression contains two adverbs, one of which (*really*) only functions as an intensifier, the other one (*literally*) is functioning as a commitment-indicating intensifier. If we return to the empirical data of how other speakers of American English use the phrase *really literally* in exactly the same context, namely TV shows (see examples (18) to (22) in Section 2.2.3 above), then these data indicate that most of the time the meaning of whatever follows *really literally* can in fact be interpreted literally; again, this means that the defense's argument – *is paid Russian propaganda* in sentence 20 is not meant to be true – is inconsistent with an analysis of ordinary meaning.

Interim conclusion: Applying the linguistic analysis and data of *literally* to Maddow's statement reveals that: (i) *literally* does not only precede material that's not literally true and, thus, an opinion; (ii) it makes the sentence's interpretation as factual information more likely; and (iii) independent data show the use of *really literally* in American talk shows regularly precedes statements that are literally true.

3 Conclusion

On the basis of all of the above and as indicated at the beginning of this report, I conclude that it is very unlikely that an average or reasonable/ordinary viewer would consider the sentence in question to be a statement of opinion. Rather, all the linguistic evidence suggests that it is much more likely that:

> the broad overall and specific context of the utterance and its specific linguistic characteristics would lead an average viewer towards considering the statement a statement of fact;
>
> the way *literally* has developed historically, the way it is used nowadays, and its juxtaposition with *really* would lead an average viewer to (i) adopt the strongest possible interpretation that the context (Maddow's contextualizing remarks) allows for and (ii) accept that as a statement of fact that Maddow emphasizes and to whose truth she strongly commits herself.

Appendix and references

Appendix 1 Transcript of the relevant opening monolog of The Rachel Maddow Show

Table 1: Sentence-by-sentence display of the transcript of the relevant part of the show, with the relevant sentence (20) as well as other expressions relevant to the analysis are highlighted in bold

#	Sentence
1	Thanks to you at home for joining us this hour.
2	Happy to have you here this Monday night.
3	If the FOX News Channel is insufficient pro-Trump for you, you may or may not know that there is another boutique little news outlet that is designed specifically for Trump mega fans.
4	It's called One America – One America News Network.
5	The Trump White House gave this boutique outfit a hard pass for access to the White House grounds and a permanent seat in the White House briefing room.
6	Remember when the White House used to hold press briefings?
7	They had a seat for those.
8	President Trump also started quoting this little news outlet and frequently telling people that they should be watching them, praising their ratings, which is the highest possible praise from this president, right?

#	Sentence
9	Today has been a more ridiculous than most day in the news and there is a ton going on, and we've got a very busy show.
10	But I have to tell you, perhaps the single most perfectly formed story of the day, the single most like sparkly [little] story of the entire day is this scoop from reporter Kevin [Poulsen] at "The Daily Beast" who has sussed out that Trump's favorite more Trumpier than Fox TV network, the one that the president has been promoting and telling everyone they should watch and is better than Fox, turns out that [little news] network has a full time on air reporter who covers U.S. politics who is [also] simultaneously on the payroll of the Kremlin.
11	**What?**
12	Because at the same time he works for Trump's favorite One America News team, he is also being paid by the Russian government to produce government-funded pro-Putin propaganda for a Russian government funded propaganda outfit called Sputnik.
13	Sputnik, of course, had a key role in the Russian government's intervention in the 2016 election to help Trump, according to the intelligence committee's assessment of that attack.
14	Sputnik has also formally registered with the U.S. Justice Department as an agent of a foreign power.
15	**I mean**, there is a lot of news today, but among the giblets the news gods dropped off their plates for us to eat off the floor today is the **actual news** that this super right wing news outlet that the president has repeatedly endorsed as a preferable alternative to Fox News, because he thinks Fox is insufficiently pro-Trump, so now he likes this is other outlet better.
16	We **literally** learned today that that outlet the president is promoting shares staff with the Kremlin.
17	**I mean, what?**
18	**I mean**, it's an easy thing to throw out, you know, like an [epithet] in the Trump era, right?
19	**Hey**, that looks like Russian propaganda.
20	**In this case, the most obsequiously pro-Trump right wing news outlet in America really literally is paid Russian propaganda.**
21	[Their] on air U.S. politics reporter is paid by the Russian government to produce propaganda for that government.
22	**I mean**, this is the kind of news we are supposed to take in stride these days.
23	And we do our best.
24	That is just one of the things we learned today.
25	And **I guess** you just swallow that and then you move on.
26	And **we expect** that they won't fire their Kremlin staffer and **we expect** that the president will keep promoting them, and **we expect** that other right wing news outlets wonder if they should have a Kremlin staffer doing U.S. politics reporting, too.
27	It probably makes it easier to get the message.
28	**I mean** – anyway, let's get to it.
29	As I said, there is a lot going on.
30	And given all of the drama that's happening right now in Washington and how much more dramatic it's going to get in Washington over the next two days, I actually want to start tonight with something in Washington that was a tremendously solemn

Appendix 2: Cases and amicus briefs using or discussing corpus-based linguistic analysis

Cases using or discussing corpus-based linguistic analysis

In the Matter of the Adoption of Baby E.Z., 266 P.3d 702, 715-32 (Utah 2011)
State v. Rasabout, 356 P.3d 1258, 1271-90 (Utah 2015)
People v. Harris, 885 N.W.2d 832 (Mich. 2016)
Fire Ins. Exch. v. Oltmanns, 416 P.3d 1148, 1163 n.9 (Utah 2018)
Carpenter v. United States, 138 S.Ct. 2206, 2235, 2238-39 (2018)
Wilson v Safelite Group, Inc., Case No. 18-3408 (6th Cir. July 10, 2019)
Concurring opinion by Judge Amul R. Thapur, slip op. 13-22 ("corpus linguistics is a powerful tool for discerning how the public would have understood a statute's text at the time it was enacted")
Concurring opinion by Judge Jane B. Stranch, slip op. 23-26 ("the use of corpus linguistics is a difficult and complex exercise … I would leave this task to qualified experts, not to untrained judges and lawyers.")
Caesars Entertainment Corp. v. Int'l Union of Operating Engineers, Case No. 18 2465, slip op. at 7-8 (3rd Cir. Aug 1, 2019)
State of Idaho v. Lantis, Docket No. 46171 (Supreme Court of Idaho Aug. 23, 2019)
Richards v. Cox, 2019 UT 57, slip op. at 8-11 (Supreme Court of Utah September 13, 2019)

Amicus briefs using or discussing corpus-based linguistic analysis I was involved in

2019. Baron, Dennis E. Alison L. LaCroix, Stefan Th. Gries, & Jason Merchant. Amicus brief with the U.S. Supreme Court in the case New York State Rifle & Pistol Association Inc., Rommolo Colantone, Efrain Alvarez, & Jose Anthony Irizarry v. The City of New York and the NYPD License Division (On Writ of Certiorari to the United States Court of Appeals for the 2nd Circuit.)
2019. Slocum, Brian G., Stefan Th. Gries, & Lawrence Solan. Amicus brief with the U.S. Supreme Court in the case Gerald Lynn Bostock v. Clayton County, GA (On Writs of Certiorari to the United States Courts of Appeals for the 11th, 2nd, and 6th Circuits.)
2018. Amicus curiae to James Heilpern & Gene C. Schaerr's amicus brief with the U.S. Supreme Court in the case Lucia & Lucia Companies, Inc. v. Securities and Exchange Commission (On Writ of Certiorari to the United States Court of Appeals for the D.C. Circuit.)
2018. Amicus curiae to James Heilpern & Gene C. Schaerr's amicus brief with the U.S. Supreme Court in the case Rimini Street, Inc. & Seth Ravin v. Oracle USA, Inc, Oracle America, Inc., & Oracle International Corporation (On Writ of Certiorari to the United States Court of Appeals for the 9th Circuit.)

References

Biber, Douglas. 1988. *Variation across speech and writing*. Cambridge: Cambridge University Press. (citations are from the 1995 printing)

Ellis, Nick C. 2006. Language acquisition as rational contingency learning. *Applied Linguistics* 27(1). 1-24.

Ferreira, Fernanda, Karl G.D. Bailey, & Vittoria Ferraro. 2002. Good-enough representations in language comprehension. *Current Directions in Psychological Science* 11(1). 11-15.

González, Montserrat, Paolo Roseano, Joan Borràs-Comes, & Pilar Prieto. 2017. Epistemic and evidential marking in discourse: Effects of register and debatability. *Lingua* 186-187(1). 68-87.

Gries, Stefan Th. & Brian G. Slocum. Ordinary meaning and corpus linguistics. *Brigham Young University Law Review* 6. 1417-1472.

Israel, Michael. 2002. *Literally* speaking. *Journal of Pragmatics* 34(4). 423-432.

Lee, Thomas R. & Stephen C. Mouritsen. 2018. Judging ordinary meaning. *The Yale Law Journal* 127. 788-1105.

Mouritsen, Stephen C. 2010. The dictionary is not a fortress: Definitional fallacies and a corpus-based approach to plain meaning. *Brigham Young University Law Review* 1915-1979.

Liberman, Mark. 2011. They almost non-metaphorically never complain about this! Language Log, URL <https://languagelog.ldc.upenn.edu/nll/?p=3007>, retrieved 23 November 2019.

Maddow, Rachel. 2019. *Blowout: Corrupted democracy, Rogue State Russia, and the richest, most destructive industry on Earth*. Crown Publishers.

Merriam-Webster. 2004. *The Merriam-Webster Dictionary*. Springfield, MA: Merriam-Webster, Inc.

Merriam-Webster online dictionary. URL <https://www.merriam-webster.com/>, accessed 24 November 2019.

Mitchell, Amy, Jeffrey Gottfried, Michael Barthel, & Nami Sumida. 2018. Distinguishing between factual and opinion statements in the news. Pew Research Center, URL: <https://www.journalism.org/2018/06/18/distinguishing-between-factual-and-opinion-statements-in-the-news/>, retrieved 23 November 2019.

Park, Semi. 2016. Literally does not always mean liter*ally: a c*orpus- based diachronic study on *literally* as an intensifier. *SNU Working Papers in English Linguistics and Language* 14. 124-142.