

Feminine Rhyme: stocking/shocking, glamorous/amorous

Masculine Rhyme: blow/flow, confess/redress

- Announcements:
  - Bring Computers to class on Thursday
  - Supplemental readings uploaded to Canvas Files
  - Purpose of next week's assignment
  - Attendance, reading
- Jones:
  - What does it mean to say “she talks like a man?”
- Inoue:
  - Indexicality, indexical order, indirect indexicality, indexical inversion
  - Language ideology

What's the point of saying that Clinton is talking more like a man?

What does it mean?

At what point does the use of a few features become a style?

When does research become part of the problem?

Table 2 Generalized linear model results		
	Full model	Ratio model
Intercept	1924.00*** (24.56)	2049.82*** (7.57)
Pronouns	1.29 (0.84)	
First-person singular	0.21 (0.73)	
Verbs	-0.32 (0.59)	
Auxiliary verbs	2.11* (1.01)	←
Social references	-0.77 (0.49)	
Positive emotion	2.02* (0.85)	
Negative emotion	-1.30 (1.14)	
Cognitive mechanisms	-0.84 (0.55)	
Tentative words	-2.35* (0.98)	←
Words > 6 letters	1.81*** (0.32)	←
First-person plural	1.93* (0.77)	
Articles	1.38† (0.80)	←
Prepositions	0.90† (0.54)	←
Anger words	8.43** (2.57)	←
Swear words	-12.08 (18.27)	
Feminine/Masculine ratio		-21.39*** (3.40)
N	85	22
Log Likelihood	-214.09	-60.86
AIC	460.18	125.71

\*\*\*p<.001; \*\*p<.01; \*p<.05; †p<.1

Standard errors in parentheses. Models are based on time-series data: the full model is a quarterly time series, while the ratio model is a yearly time series.

**Table 3**  
**Weighted average for all linguistic markers (%)**

1<sup>st</sup> Lady

Sec'y of  
 State

Examples		1992–1999	2000	2001–2006	2007–2008	2009–2013
<b>Feminine style</b>						
Pronouns	I, you, she, it	18.6	17.4	17.3	17.7	16.3
1st person singular	I, me, my	4.3	5.3	4.2	4.6	2.8
Verbs	Went, walk, listen	18.0	16.9	17.3	18.0	16.6
Auxiliary verbs	Have, is, will, I'm	11.5	10.8	11.1	11.4	10.9
Social references	Friend, they, talk	12.0	9.8	10.3	10.1	10.8
Positive emotion	Enjoy, nice, thank	3.6	4.2	3.7	3.6	3.9
Negative emotion	Worry, nasty, cried	1.1	0.7	1.7	1.3	1.6
Tentative words	Maybe, perhaps, guess	3.2	2.2	2.5	2.2	2.2
Cognitive mechanisms	Cause, think, believe	20.9	19.0	20.6	19.3	20.1
<b>Masculine style</b>						
Words > 6 letters		16.4	17.4	18.8	17.9	19.4
1st person plural	We, our, let's	2.5	2.3	3.1	3.1	3.4
Articles	A, an, the	5.7	7.0	6.8	6.5	7.1
Prepositions	After, to, for, of, by	13.7	14.2	13.5	14.0	14.1
Anger words	Hate, kill, annoyed	0.3	0.2	0.4	0.5	0.6
Swear words	Ass, bastard, crap	0.0	0.0	0.0	0.0	0.0
<b>Feminine/Masculine ratio</b>		2.42	2.10	2.09	2.10	1.91
Word count		465,848	31,515	70,563	129,781	389,128
No. documents		156	19	56	65	271
<b>Total word count</b>		1,086,835				
<b>Total No. documents</b>		567				

Note: Raw values for each transcript were weighted by word count in calculating yearly averages. Values are expressed as a percentage of total words per year and for multiple years, yearly values were averaged.

For the women who contributed 8,353 text files to the study, the English language was more likely to be used for discussing people and what they were doing, as well as communicating internal processes to others, including doubts. Thoughts, emotions, senses, other peoples, negations, and verbs in present and past tense figured high on the list of words that women used more than men.

For the men who contributed 5,970 files, language was more likely to serve as a repository of labels for external events, objects, and processes. Along with discussion of occupation, money, and sports were technical linguistic features such as numbers, articles, prepositions, and long words. Swear words added emphasis to male language.

Newman, Matthew L., Carla J. Groom, Lori D. Handelman & James W Pennebaker. 2008. Gender differences in language use: An analysis of 14,000 text samples. *Discourse processes* 45.211-36.



- Labs from all over the world have provided us with language samples based on written and transcribed spoken language. In addition, we have accrued samples of books, poems, song lyrics, and other art forms—many of which had never been subjected to linguistic coding.
- Our second goal in this study was to examine whether the context in which text samples were produced affected gender differences in language use.
- The studies were conducted over a 22-year period (1980–2002), and included samples of fiction going back as far as the 17th century.
- written (93%) or transcribed from speech (7%)

TABLE 2  
Characteristics of Text Files, by Context and Participant Gender

<i>Context</i>	<i>No. Text Files</i>	<i>Mean Word Count (SD)</i>	<i>% Aged 18–22</i>	<i>% Written</i>
Emotion				
Men	3,603	1,566 (5,159)	62.7	96.7
Women	5,263	1,574 (4,724)	57.9	93.0
Time management				
Men	520	299 (213)	82.3	96.9
Women	723	295 (201)	86.4	97.2
Stream of consciousness				
Men	793	481 (246)	89.8	95.2
Women	1,033	561 (260)	88.5	96.2
Fiction				
Men	37	21,593 (52,366)	0.0	100.0
Women	29	24,302 (55,593)	0.0	100.0
TAT–inkblot				
Men	680	266 (175)	98.9	100.0
Women	996	311 (211)	97.3	100.0
Exam				
Men	170	631 (636)	100	96.5
Women	90	706 (455)	93.3	97.8
Conversation				
Men	168	3,466 (4,370)	54.1	0.0
Women	219	7,808 (7,575)	39.3	0.0

*Note.*  $N = 14,324$  text files (5,971 men; 8,353 women). Age percentage refers only to the subset of the sample (70.7%) for which age information was available. TAT = Thematic Apperception Test.

TABLE 1  
Main Effects of Gender on Language Use

LIWC Dimension	Examples	Female		Male		Effect Size (d)
		M	SD	M	SD	
Linguistic dimensions						
Word count		1,420	5,403	1,314	6,016	ns
Words per sentence		21.26	31.22	23.90	48.12	-0.07
Question marks		3.21	7.33	3.07	7.86	ns
Words $\geq$ six letters		13.99	4.42	15.25	5.91	-0.24
Numbers		1.37	1.31	1.59	1.55	-0.15
Negations	no, never, not	1.85	1.10	1.72	1.17	0.11
Articles	a, an, the	6.00	2.73	6.70	2.94	-0.24
Prepositions	on, to, from	12.46	2.44	12.88	2.64	-0.17
Inclusive words	with, and, include	6.42	1.88	6.34	2.03	ns
Exclusive words	but, except, without	3.82	1.54	3.77	1.64	ns
Psychological processes						
Emotions		4.57	1.99	4.35	2.07	0.11
Positive emotions	happy, pretty, good	2.49	1.34	2.41	1.40	ns
Optimism	certainty, pride, win	0.56	0.58	0.58	0.61	ns
Positive feelings	happy, joy	0.61	0.61	0.51	0.65	0.15
Negative emotions		2.05	1.65	1.89	1.56	0.10
Anxiety	nervous, afraid, tense	0.48	0.68	0.38	0.64	0.16
Sadness	grief, cry, sad	0.55	0.76	0.47	0.70	0.10
Anger	hate, kill	0.61	0.81	0.65	0.92	ns
Swear words	damn, ass, bitch	0.09	0.25	0.17	0.44	-0.22
Sensations		2.22	1.27	2.06	1.30	0.12
Feeling	touch, hold, feel	0.58	0.67	0.47	0.66	0.17
Hearing	heard, listen, sound	0.78	0.74	0.71	0.72	0.10
Seeing	view, saw, look	0.72	0.78	0.74	0.83	ns

Cognitive processes		7.35	2.57	7.17	2.82	0.07	
Causation	effect, hence	1.02	0.76	1.02	0.88	ns	
Insight	think, know	2.40	1.28	2.28	1.38	0.09	
Discrepancy	should, would, could	2.32	1.31	2.23	1.46	0.07	
Tentative	perhaps, guess	2.54	1.43	2.54	1.57	ns	
Certainty	always, never	1.35	0.94	1.21	0.96	0.14	
Hedge verb phrases	I + guess, I + reckon	0.57	0.67	0.50	0.67	0.11	
Social processes							
Social words		9.54	4.92	8.51	4.72	0.21	
Communication	talk, share, converse	1.26	0.95	1.20	0.95	ns	
Friends	pal, buddy, coworker	0.37	0.51	0.33	0.53	0.09	
Family	mom, brother, cousin	0.77	1.04	0.64	1.01	0.12	
Humans	boy, woman, group	1.22	1.33	1.15	1.33	ns	l)
Pronouns							
First-person singular	I, me, my	7.15	4.66	6.37	4.66	0.17	
First-person plural	we, us, our	1.17	2.15	1.07	2.12	ns	
Second person	you, you're	0.59	1.05	0.65	1.15	-0.06	
Third person	she, their, them	3.41	3.45	2.74	3.01	0.20	
Time and space							
Time	till, started, hour	4.09	1.94	4.03	2.14	ns	
Past-tense verb	walked, were, had	4.36	2.97	4.02	2.84	0.12	
Present-tense verb	walk, is, be	11.71	4.00	10.98	4.10	0.18	
Future-tense verb	will, might, shall	1.27	1.03	1.33	1.18	ns	
Space	here, up, around	2.40	1.18	2.47	1.31	ns	
Motion verbs	walk, move, go	1.22	0.89	1.15	0.93	0.07	
Current concerns							
Occupation	work, class, boss	2.34	1.88	2.59	2.10	-0.12	
Money	cash, taxes, income	0.25	0.39	0.29	0.49	-0.10	
Metaphysical	death, god	0.41	0.88	0.47	0.97	-0.06	
Leisure	house, TV, music	1.11	0.92	1.07	1.08	ns	
Home	house, kitchen, lawn	0.80	0.76	0.68	0.79	0.15	
Sports	football, play, game	0.13	0.30	0.19	0.50	-0.15	
Physical functions	ache, breast, sleep	1.33	1.22	1.28	1.29	ns	
Sex	lust, pregnant, gay	0.30	0.53	0.27	0.60	ns	

TABLE 1 (Continued)

<i>LIWC Dimension</i>	<i>Examples</i>	<i>Female</i>		<i>Male</i>		<i>Effect Size (d)</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Pronouns		14.24	4.06	12.69	4.63	0.36
First-person singular	I, me, my	7.15	4.66	6.37	4.66	0.17
First-person plural	we, us, our	1.17	2.15	1.07	2.12	<i>ns</i>
Second person	you, you're	0.59	1.05	0.65	1.15	-0.06
Third person	she, their, them	3.41	3.45	2.74	3.01	0.20
Time and space						
Time	till, started, hour	4.09	1.94	4.03	2.14	<i>ns</i>
Past-tense verb	walked, were, had	4.36	2.97	4.02	2.84	0.12
Present-tense verb	walk, is, be	11.71	4.00	10.98	4.10	0.18
Future-tense verb	will, might, shall	1.27	1.03	1.33	1.18	<i>ns</i>
Space	here, up, around	2.40	1.18	2.47	1.31	<i>ns</i>
Motion verbs	walk, move, go	1.22	0.89	1.15	0.93	0.07
Current concerns						
Occupation	work, class, boss	2.34	1.88	2.59	2.10	-0.12
Money	cash, taxes, income	0.25	0.39	0.29	0.49	-0.10
Metaphysical	death, god	0.41	0.88	0.47	0.97	-0.06
Leisure	house, TV, music	1.11	0.92	1.07	1.08	<i>ns</i>
Home	house, kitchen, lawn	0.80	0.76	0.68	0.79	0.15
Sports	football, play, game	0.13	0.30	0.19	0.50	-0.15
Physical functions	ache, breast, sleep	1.33	1.22	1.28	1.29	<i>ns</i>
Sex	lust, pregnant, gay	0.30	0.53	0.27	0.60	<i>ns</i>

Symbol  
(convention)



# Icon (resemblance)





# Index (contiguity)





# 3 basic sign types

Peirce, Charles S. 1868. On a new list of categories. Proceedings of the American Academy of Arts and Sciences 7.287-98.

## Symbol



/dɔg/

## Icon



[arf]

## Index



[du<sup>ə</sup>g]

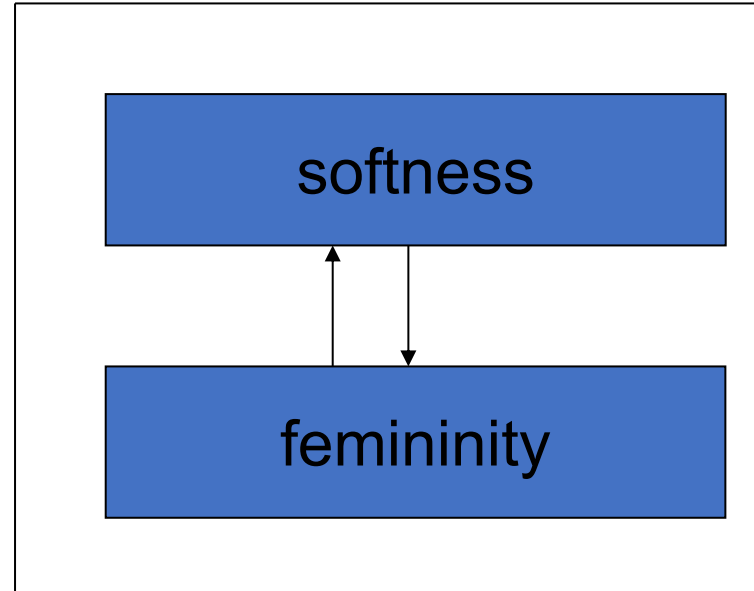
# Orders of Indexicality

- Once a difference in form comes to be associated with something in the world, it becomes a sign.
- Things in the world come with associations.
- The use of a sign can pick among, and enregister, those associations.



Silverstein, Michael. 2003. Indexical order and the dialectics of sociolinguistic life. *Language and communication* 23.193-229.

## Indirect Indexicality



“Women use *wa* **because** it sounds gentle and soft.”

“*Wa* sounds gentle and soft **because** women use it”