The Research article: Stylistic variation across disciplines and change over time

Maria N. Melissourgou

University of the Aegean

Laura Maruster

University of Groningen

Katerina T. Frantzi

University of the Aegean

Question: Changing trends in research articles (Informality?)

Academic genres have often been characterised as "uptight", conservative and resistant to innovation (Heylighen & Dewaele, 1999; Hundt & Mair, 1999; Seone & Loureiro-Porto, 2005).

The growing international diversity of the writers and the global publishing context are likely to affect the 'Research Article' (Swales, 2004; Tardy 2016)

Is academic writing becoming more informal? (Hyland & Jiang, 2017)

How?

Corpus & Genre analysis

Corpora
- 3 disciplines (Philosophy, Economics and Medicine)
- 3 time periods (1965, 1985 and 2015)
- 5 journals per discipline
- 1,941,644 words, 650,000 w per discipline

➢ POS tagged - TagAnt v. 1.1.2 (Anthony, 2014)
➢ WordSmith Tools v. 6 (Scott, 2015)

Ten features of informality (Hyland & Jiang, 2017 – adaptation of Chang & Swales', 1999 set of features).

Table 1. List of informal features.

1. First person pronouns to refer to the author(s) (I and we)
   e.g., "I will approach this issue in a roundabout way."

2. Unattended anaphoric pronouns (this, these, that, those, it) that can refer to   antecedents of varying length e.g., "This is his raw material."

3. Split infinitives – an infinitive that has an adverb between to and the verb stem   e.g., "The president proceeded to sharply admonish the reporters."

4. Sentence initial conjunctions or conjunctive adverbs
e.g., "And I will blame her if she fails in these ways."

5. Sentence final preposition
e.g., "A student should not be taught more than he can think about."

Table 1 List of informal features (cont.)

6. Listing expressions ('and so on', 'etc', 'and so forth' used when ending a list)
e.g., "These semiconductors can be used in robots, CD players, etc."

7. Second person pronouns/determiners to refer to the reader (you and your)
e.g., "Suppose you are sitting at a computer terminal which assigns you role R"

8. Contractions
e.g., "Export figures won't improve until the economy is stronger."

9. Direct questions
e.g., "What can be done to lower costs?"

10. Exclamations
e.g., "This is not the case!"

So?

Table 2. Distribution of features of informality over time (per 10,000 words).

Discipline	1965	1985	2015	% change
Philosophy	291.6	283.9	226.1	-22.5%
Economics	127.1	108.1	105.2	-17.2%
Medicine	49.7	58.3	68.9	38.6%
Averages	156.1	150.1	133.4	-14.5%

Table 3. Distribution of features of informality over time (per 10,000 words). Hyland & Jiang 2017

Discipline	1965	1985	2015	% change
Applied linguistics	213.8	202.7	191.7	-10.30%
Sociology	205	200.5	198.8	-3%
Electrical engineering	142.4	150	155.2	9%
Biology	112.3	121.4	140.2	24.8
Averages	168.4	168.7	171.5	2%

Philosophy Vs Medicine: Greatest difference & change over time

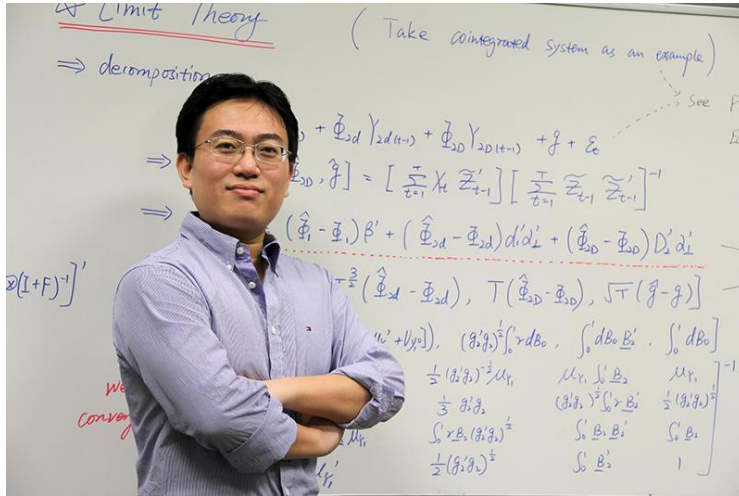Medicine: No instances of '2nd person pronoun', 'contractions', 'exclamation', 'direct questions'

Feature	Philosophy			Economics			Medicine		
	1965	1985	2015	1965	1985	2015	1965	1985	2015
First person	104.4	91.9	79.2	23.9	32	23.6	2.82	12.1	18.9
Unattended reference	128.8	130.9	106.4	74	50.8	54.2	37.1	30	24.4
Initial conjunctions	37.1	42	29.8	24.8	21.4	19	9	14.4	23.5
Second person	8	6	3.5	0	0.8	3.9	0	0	0
Listing expressions	4.7	2.9	2.2	1.8	0.2	0.9	0.1	0.1	0.2
Contractions	3.8	5.8	0.1	0.5	0.6	0	0	0	0
Preposition ending	1.6	2.4	2.7	1.3	1.6	1	0.3	0.8	0.4
Exclamation	0.5	0.7	0.5	0.1	0.3	0.2	0	0.1	0
Split infinitives	0.2	0.3	1.1	0.4	0.3	2.2	0.4	0.8	1.5
Direct questions	2.5	1	0.6	0.3	0.1	0.2	0	0	0

Table 4. Changes in use of informality features by discipline (per 10,000 words).

Economics breaks the pattern :
 closer to Medicine for 2015 measurements (formal), still considerable decrease in informality features

Numbers & formulas – Verbal argumentation

Disciplines
'soft'--------- 'hard'
\   /
Economics
(Hyland, 2005)

Chang & Swales, 1999 =>   tendencies towards informality
(Philosophy, Statistics, Linguistics)   but, disciplinary variation

Hyland & Jiang, 2017
(Applied Linguistics, Biology, Engineering, Sociology)
⇒'it depends'. More informal, by small margins. Disciplinary variation. The
science and engineering disciplines => less formal & the social science fields
=> less informal

Melissourgou, Maruster & Frantzi 2019
(Philosophy, Economics, Medicine) => Medicine => more informal, Philosophy
& Economics => less informal. No overall increase in informality features.
Compared to Hyland & Jiang's results Philosophy & Medicine seem to be at
opposite poles regarding their writing style.

There is hope
☺

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