Attitudes towards elastic language in Australian online healthcare information

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Imagining

You went shopping and bought apple, banana, orange, potato, tomato, spinach, chocolates, milk, lamb, and ice cream.

You friend asks: What have you bought? You say … …
- “I bought apple, banana and stuff like that”
- “I bought fruits, vegetable, meat, and things”
- “stuff”
Introduction

- medical information is often underspecified.
- 1) the perception of speakers of their own ability to understand elastic language (EL) used on Australian healthcare websites.
- 2) their preference of EL or non-EL and why.
- 3) the influence of gender and age.
- Corpus of a quarter of a million words, 571 questionnaires
1 Definition

Elastic language

1) Grace is Chinese.
2) Grace is Chinese, *kind of*.
3) Grace is Chinese, *I think*.

- EL (AKA: vague language): underspecified and context-dependent (Channell, 1994)
- Fluid, stretchable, strategic (Zhang, 2015)
A flyer given after cataract surgery: ‘vision can fluctuate for the first few weeks while healing’

❑ a fluid continuum
2 Theories

Cooperative Principles (Grice, 1975)
People engaged in conversation must cooperate, and they do so by adhering to four maxims:
❖ Maxim of Quality: don’t say something untrue
❖ Maxim of Quantity: don’t say more than required
❖ Maxim of Relation: be relevant
❖ Maxim of Manner: be clear
❑ Does speaking vaguely adhere to the maxims?
❑ Rules intentionally violated, adding richness and variability to discourse.
1) \textit{10} friends attended her birthday party.
2) \textit{Many} friends attended her birthday party.
Something extra for the use of \textit{many}?

- ‘Popular’: EL more informative (Jucker et al., 2003)
- Hedging: hide a disappointing number?

Expectations
Relevance Theory (Sperber & Wilson, 1986/1995)

Your say is only relevant when it can achieve maximum cognitive effect by costing minimum processing effort of the listener.
(negative correlation)

E.g. In a supermarket, you can buy bread, coffee, apples, and things like that.
Frame Theory

- A frame: a principle of organization which governs social events and people’s subjective involvement in the events. (Goffman, 1974, pp. 10–11)
- A frame: a way of understanding social interactions, representing people’s perception and interpretation of language and experience. (Fillmore, 1976)
Frame Theory

- Frames of **gain**: highlighting the pros of message promoted
e.g. medical treatments & preventive measures

- Frames of **loss**: highlighting the cons of not complying with it (e.g. disease detection)
  (Cho & Sands, 2011)

- The benefit-framed vs. risk-framed: utilised in the evaluation of effective ways in which health information is conveyed. (ibid.)

- Relevant particularly to this study
Some previous works done on EL

Zhang (2015): EL in institutional discourse

- Australian customs Officer Craig is questioning the suspected criminal history of passenger James
- Tension-prone encounters between Australian Customs officers and passengers.
- Balance strengthening and weakening speech tones.
- Firm and soften a speaker’s stance.
- Reveal and evade the truth.
- EL: fluid, stretchable and strategic.
- serves both cooperative and competitive functions.
- Social & speech factors impact on EL use.

- Trump’s speech contained a greater number of vague expressions than Clinton.
Elasticity of health communication in Taiwan and Australia: A cross-cultural perspective
Grace Zhang & Ming-Yu Tseng

This talk is part of the above project

- Do you search online for medical info?
- An account of how elastic language works in medical communication
- Particularly on shared vs. culture-specific features in Chinese and English, based on two corpora collected in Taiwan and Australia
3 Research questions

Online healthcare information was frequently sought, especially by younger and e-health literate patients (Cocoo, 2018)

1. Do people have problems in understanding EL in online healthcare information?
2. Do gender and age make a difference in understanding the EL used online?
3. Do people prefer the use of EL or non-EL?
4. Why do people prefer EL or non-EL?
4 Methodology

Questionnaires: Common instrument exploring people’s opinions of a certain phenomenon, cost effective (Muijs, 2011)

- 571 questionnaires: participants’ evaluation on EL use in six excerpts selected from corpus
- Corpus: a quarter-of-million words, medical information collected from websites (2017 – 2018, hospital, government, professional)
#4. Anxiety disorders are the most common mental disorders, affecting one in four Australians at some stage in their life. Women are more likely to develop anxiety than men, but it is not clear why. There are many forms of anxiety disorder, but the one thing they have in common is their impact on day-to-day activities.

4a. Do you have difficulty understanding the above paragraph due to the underlined expressions?

4b. Which of the following expressions do you prefer? (Multiple choices allowed)

- There are many forms of anxiety disorder
- There are 10 forms of anxiety disorder.

Please briefly explain why you prefer such expression/s:
4a answers RQ1 & RQ2
(Understanding EL)
4b answers RQ3 & RQ4
(Preference of EL)
Four lexical categories (Zhang, 2015):

- **Approximate stretchers:** *about 20, many*
- **General stretchers:** *things, sometimes*
- **Scalar stretchers:** *more, somewhat*
- **Epistemic stretchers:** *may, possibly*

Six conditions in three groups

- **Cold, flu**
- **Thyroid cancer, pancreatic cancer**
- **Anxiety, schizophrenia**
5 Findings

Findings for RQ1

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Difficulty of understanding
about 7% found it difficult to understand the meaning of EL
in line with the common assumption (Cutting, 2007) that EL would not cause problem (but little empirical evidence had been presented)
Findings for RQ2 (gender & age)

- in the 7% group, women have a greater level of difficulty in understanding EL
- Against the common assumption that women may prefer more EL than men (Channell, 1994)
Three generally applicable correlations

- The more severe a disease is the higher level of difficulty there is in comprehending EL.
- The greater the number of elastic expressions used, the higher the level of difficulty.
- The younger the participants, the higher the level of difficulty in understanding EL.
Two possible strategies

- Avoid use EL where it is not required, as it may create high levels of comprehension problems.
- Use EL with care when the topic is severe disease or when the targeted readership includes young people.
Findings for RQ3 (prefer EL or not)

- On average, a neutral attitude emerges: close to a half of participants preferred EL and the other half non-EL.
- Unnecessary to promote or avoid the use of EL deliberately, or use more or less of EL without a purpose.
- Support Channel (1994, p.3): that vagueness in language is not a matter of all ‘bad’ or all ‘good’: what matters is an appropriate use of it.
- males prefer EL more than females, contradicts the common assumption that women may prefer EL more than men (Channell, 1994).

- Women preferred precise language over EL: consistent with women expressed greater difficulty in understanding EL than men did (RQ2 finding).

- Correlation: greater age and greater preference for EL. Again in line with RQ2 findings: older groups more comfortable than younger groups in understanding EL.
Findings for RQ4 (Why prefer?)

- 10 frames generated from the data in three groups: language-focused, language-user-focused, and diseased-focused.

- The language-focused group consists of four frames: fluidity, informativeness, relevance, and clarity. Follow cooperative principles and relevance theory framework.
Findings for RQ4 (Why prefer?)

- Fluidity
  "* Might is a lot more accommodating for possibilities which could be expected". (E3)

- Informativeness
  "A more specific sentence is more informative". (E1)

- Relevance
  "Unless the 10 forms are relevant, I don't need to know exactly how many there are, at least in this statement". (E4)

- Clarity: "* Many could mean 20 or 100 forms, isn't clear". (E4)
Findings for RQ4 (Why prefer?)

The language user focused consists of five frames:

- Trustfulness
  “More specific leading to more trust in health professional”. (E2)

- folk–individual
  “I prefer a rounded number and approximate results to quickly and easily identify information, can easily image 7 rather than 7.2”. (E2)
Findings for RQ4 (Why prefer?)

- **lay–professional**
  “It gives the impression that the writer knows what they are talking about”. (E1)

- **voluntary–involuntary**
  “Lots of fluids is not a good description. 6 glasses is a set guideline helpful to caregivers who may be unsure”. (E6)

- **indifference**
  “Both work well. If someone wants to know an exact amount, they have it, but they can also assume that from lots of. They both make sense and are to the point and equally informative”. (E6)
Findings for RQ4 (Why prefer?)

- The third grouping is disease focused; choices were made closely linked to the features of six conditions listed on the questionnaire.

“Cold is so common that people should know how much fluid to drink to get better”. (E6)
Employed both positive and negative framing in explaining their preferences.

Positive: “The emphasis on might shows that the small thyroid nodules may cause problems, but it is unlikely which makes me feel better”. (E3)

Negative: “Lots of fluids is not a good description”. (E6)
often the same expression generated two opposite types of frames (e.g. ‘clear’ or ‘not clear’) depending on the viewpoints of the participants.

no positive correlation between the severity of the illness being discussed and the preference for a higher level of EL or non-EL.

no positive correlation between the number of EL items in an extract and a preference for EL or non-EL.
Conclusions

❑ EL is effective in delivering medical information online, provided it is used for a purpose and in an appropriate way.

❑ Gender and age factors impact on the evaluation of EL use.

❑ Understandability and preferences for EL do not necessarily follow the same trend (e.g. generally applied correlations), although they may generate some similar patterns (e.g. gender impact).
Implications

- Raising awareness of using EL effectively is important in terms of both public health education and policy making.
- Information providers may need to tailor their online writing to make it more accessible to their readers (e.g. age consideration).
- Language cannot be totally held to a ‘correct’ standard, nor used just as one wishes.
- EL is a double-edged sword that can uphold or break the communication chain, we need to learn how to use it skilfully.
Further research

Investigating the use of EL in other forms, such as blogs or Facebook, to see whether the conclusions of this study are also applicable to other digital discourses.
For more detail regarding this talk

References

References