The obesity epidemic as a linguistic challenge: Pathways towards information optimization
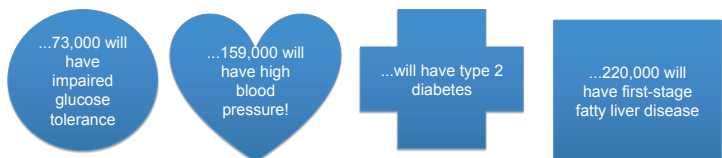
Aims & Scopes

The global obesity epidemic continues to escalate despite decades of international effort. To date, most work in this area has focused on technical requirements and affordances, with little attention to the conceptual structures underlying the framing of health messages received by the general public. We propose that efforts to contain the obesity epidemic may be hindered by the language used in educational materials. As such, the aim of this bi-national, trilingual, and multidisciplinary project is to take on the linguistic challenge. We present an analysis of medical brochures in three languages (German, French, Dutch) with the goal of optimizing the transmission and reception of the information they contain.

Reading any type of text is a complex mental activity requiring the coordination of visual, attentional, linguistic, logical, and communicative faculties. This process becomes considerably more complex for medical brochures given the difficulty associated with understanding medical concepts. Nevertheless, medical brochures are the ideal resource to analyze the tremendous gap between readability, comprehension, and learning of health information. They not only combine text with illustrations, but also follow a clear rationale and have precise information to convey. Although substantial research has been conducted on patient education by means of written sources such as brochures, to date, none has focused on

(1) the special semantic requirements of analyzing medical brochures,

(2) nor on the cognitive reception of this type of advisory text.

Relevance (http://www.obesityday.worldobesity.org/

By 2025...

...73,000 will have impaired glucose tolerance

...159,000 will have high blood pressure!

...will have type 2 diabetes

...220,000 will have first-stage fatty liver disease

In the Spotlight: Negative Trigger Words

We begin with the assumption that the successful reception of health education materials, which is the ultimate goal of the corpus under investigation, is seriously hampered by terminological choices. Specifically, the use of seemingly neutral concepts such as "sports" or "physical activity" may evoke potentially negative associations in readers wrestling with excess weight. We identify and further analyze potential trigger concepts, as well as the cognitive and emotional barriers that might prevent cognitive processing and assimilation of the target information.

To address these issues, we used a frame-based corpus analysis in combination with eye-tracking. This combined approach is required to capture the complexity of reading medical brochures, i.e. the coordination of visual, attentional, linguistic, logical, and communicative faculties. Beyond reading and comprehension, the information must also be stored. We propose that how information is stored is influenced by "trigger words". A "trigger word" is one where an otherwise neutral term may become negatively loaded in a given context. For example, a person affected with an illness described in a text may anticipate and link undesired unfavorable associations with given words.

Gemeinsames Projekt mit Cornelia Wermuth & Geert Brône (KU Leuven/Antwerpen)

Obesity-Frame

http://www.osityaction.org/understanding-obesity
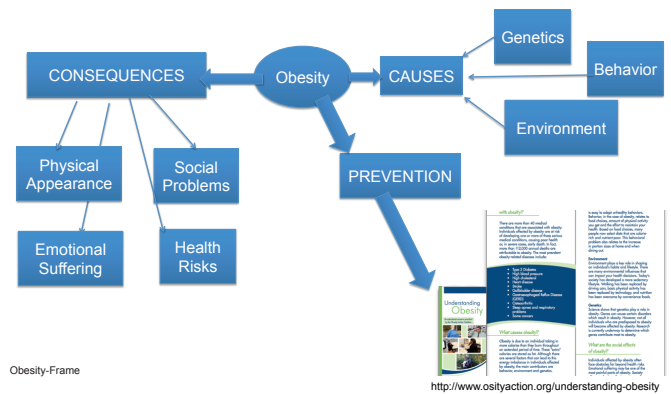
It's all about *Frames*

Frames produce expectation patterns. As such, they are extremely useful when analyzing medical brochures. On the one hand, they reflect the expectations of the experts associated with a given concept, and on the other, they can be used to illustrate the associations of a patient triggered by the same concept.

Frames may have different entry points, and it is precisely the choice of perspective that determines which attributes are evoked, e.g. the concept "sport" will trigger positive effects in expert, but most likely will evoke negative associations in patients.

We assume that up to a certain point, brochures do not present any information to patients that differs from what the patients are anticipating. We suggest that they might even expect these trigger words, and are prepared to respond negatively before even encountering them.

In the worst case scenario, the trigger word will prevent the reader from continuing to read the brochure, resulting in incomplete exposure to health information that never undergoes assimilation.
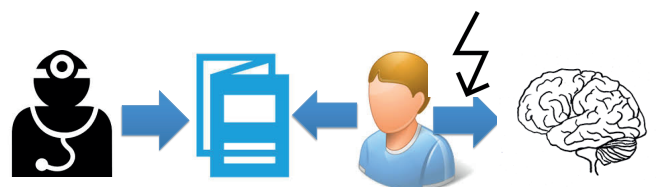
Furthermore, although experts believe they are using the same linguistic code as patients, they may not be aware that this code is linked with only partially overlapping conceptual systems. The diversity in structure of these two systems depends on the different expectations and backgrounds of medical professionals as producers of health information, and patients as recipients.

Liane Ströbel

Phone: +49 241 80-96119
E-Mail: liane.stroebel@ifaar.rwth-aachen.de

Institut für Anglistik, Amerikanistik und Romanistik
Lehr- und Forschungsgebiet Romanische Sprachwissenschaft
Kármánstraße 17/19 | 52062 Aachen | GERMANY
www.romanistik.rwth-aachen.de
Phone: +49 241 80-96119
Fax: +49 241 80-92381