My Painful Self
Health Identity Construction in Discussion Forums on Headaches and Migraines

Georg Marko

This article looks at how people with chronic headaches perceive themselves by examining how they represent their (health) identities in and through language. It focuses on health forums/message boards where lay people suffering from headaches and migraines discuss different aspects of their conditions because forums are a potential site for challenging roles defined by medicine and institutional healthcare.

The study is based on the qualitative and quantitative analysis of a 850,000-word-corpus comprising 5,000 postings to headache & migraine forums, drawing on the approach of Critical Discourse Analysis. I analyse the most frequent lexemes found in the corpus in order to get an overview of the most salient semantic domains at work in the discourse, and verbs used in connection with the headache sufferers, descriptors attributed to the pain itself, and the use of terms for medications.

The data reviewed suggests that headache sufferers usually accept medicalized conceptions of their identities, but also emphasize the subjective experience of their condition, mostly subtly, however.

1. Introduction

It is estimated that approximately 4-5% of the people in Western societies suffer from daily primary headaches (esp. migraines and tension-type headaches) (cf. Kernick/Goadsby 2009: 2, Mauskop 2009: 3), and many more have them at least regularly. This means that a relatively large proportion of the population has to organize and manage their everyday lives around headaches or at least with headaches in mind. This condition will thus play a central role for their sense of who and what they are.
This article looks at the role that language plays in the construction of headache identities, focusing on sufferers’ interaction with each other on internet discussion forums dedicated to headaches and migraines.

Even a cursory look at lay forums on headaches and migraines reveals a certain ambivalence with which contributors seem to be using and approaching such sites, an ambivalence which becomes obvious in the following two examples (both taken from the corpus I used for the research to be presented – mistakes have been corrected in this version).

*I really need your opinions on this one. [...] I went to ER for TIA like symptoms and was diagnosed with migraines. I was put on topamax.*

*This is EXACTLY what I am experiencing. I am constantly having pressure pain above and behind my right eye*

As can be seen from the first example, for some posters, a forum is an informal and anonymous expansion of medical counselling. In a factual and partly technical manner (highlighted by the use of the medical acronyms ER ‘emergency room’ and TIA ‘transient ischaemic attack’), the writer recounts the events leading up to a current problem. As the explicit purpose of her contribution is to hear some advice from others (signalled by the initial sentence), she remains in the role of the patient awaiting instructions from outside, seemingly content with the passivity associated with this position (note the passive role she assigns to herself in *I was diagnosed* and *I was put on*).

For others, the forum is a site for exchanging personal stories focusing on the experience of disease and pain and for the expression of subjective thought and emotions. This becomes manifest in the second passage, for example in the use of the progressive aspect (*I am experiencing, I am constantly having*), the intensification through adverbs (*exactly, constantly* – one even more strongly highlighted by the use of capitals *EXACTLY*), and the simple fact that the post starts with a statement on a shared experience, immediately creating an atmosphere of empathy.

In this article, I will examine to what extent these two tendencies play a role in headache sufferers’ construction of their (health) identities in and through the language they use in such forums. I will embed the analysis in a wider discussion of health identities as a site of struggle or tension between two competing forces in the social domain of health – medicalization, associated with medicine and institutionalized healthcare, and de-medicalization, associated with lay people’s lifeworld/s – and of the

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1 I will use this noun rather than *patient* since not all people having headaches actually seek professional medical help. Readers should also note that if I am speaking of headache sufferers interacting in forums, this – to be precise – also includes those related to them (family and friends) because the latter also contribute to discussions – in the sense of *My girlfriends has daily headaches, what can I do?* Contributions by family and friends are rarer with headaches than with heart disease or psychotic disorders, though).
special part that internet forums play for this conflict. But before embarking upon this, let me briefly answer the following question.

1.1 Why headaches?

Despite the article’s more general concern with health, identity and discourse, I have chosen to focus on headaches because they provide a more fertile ground for the analysis of the tension and struggle between medical and experiential conceptions of health than, for instance, infectious, life-threatening or severely degenerative diseases, as the latter probably require more immediate trust in traditional medicine.

Headaches generally appear to have an ambivalent and hybrid status. On the one hand, they are probably the most common medical condition experienced. Just to provide some (further) figures on the USA (which probably are similar for other Western countries): 90% of the population have headaches at least once a year, almost 10% suffer from migraines, and approx. 9% see a healthcare professional about headaches (cf. Evans/Mathew 2005: 1). On the other hand, headaches do not fit our general understanding of ill health considering that, for instance, many people self-medicate for headaches (more than 80% of the US population, for instance, cf. Evans/Mathew 2005: 1) and will not stay in bed or take time off from work.

Although I will not focus on it specifically in my study, I need to mention that headaches have a gender dimension, too, with women being more likely to suffer from them than men (cf. ihatetheadaches n.d.: online), which would be a further reason warranting socio-culturally-oriented research into this condition.

2. Identity, health and discourse

As mentioned, I assume that internet forums, especially those featuring interaction between non-experts, play – or at least could theoretically play – a special role in the construction of identities based on health conditions. In this chapter, I will discuss this role, based on my theoretical conceptions of identities, health identities and the communicative potential of discussion forums.

2.1 Identity

My theoretical framework of identity is based on the distinction between who I am as a concrete individual person (= personal identity) and what I am, i.e. the categories of ‘being’ that society provides (which I call social identity categories or SICs) – an opposition often found (in different forms and meanings) in social theory (cf., e.g., Kelly/Millward
Personal identity is how I interpret myself and how others interpret me, in general and/or at any given moment. Although we probably strive for unity, continuity and coherence of self, self-interpretation is a constantly ongoing process which draws upon – and thus works via association and identification with – different social identity categories. Usually we draw upon several SICs at the same time, with biographical and situational variation concerning the categories, their numbers, and their relative salience. We might thus be parents, medical doctors and migraine sufferers (among other things), with the parent category being situationally more salient when we are together with our children and biographically more salient as long as our children live with us.

Personal identity is social in two interrelated senses. Firstly, interpretation is not a solipsistic cognitive event, but happens in contact with other people. How I am behaving and how I am talking provides explicit and implicit cues to my self-interpretation, which may be accepted, rejected and/or relativized by my social environment. The latter may offer their interpretations of my self in return so that eventually the construction of personal identity happens in negotiations of interpretations in social interaction.

Secondly, interpretations of identity, as mentioned, are based on SICs, i.e. categories that are accepted and are (made) available in a society as something that I can be and something that may have an impact on who I am. The meanings of these categories are, of course, also constantly being constructed and reconstructed in social interaction.

What all this means for my concrete topic is that discourses focusing on the personal experience of headaches necessarily involves negotiations of the following three questions:

- Am I (or are you) a headache sufferer?
- In what sense am I (or are you) a headache sufferer?
- What does it mean to be a headache sufferer?

These questions are interconnected, forming a hermeneutic circle as any answer to one will necessarily have implications for the meanings of the other two.

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2 Who/what I am is short for who/what I think I am, who/what I think I want to be, who/what I think I'm supposed to be, who/you think I am, who/you think you want me to be, who/you think I'm supposed to be, etc.
3 Belonging to a certain income-class has such an impact and hence is socially consequential, while the shape of my ears – if not part of a set of features defining another category – is not.
4 This does, however, not mean that the construction of SICs – and thus answers to the last questions – cannot happen independently from the construction of
My focus will be on the last question because it is the most generalizing one, allowing more far-reaching conclusions.

2.2 Social identity categories

I have said above that SICs are categories that society presents as something to be and as something that is socially consequential. This definition has to remain vague because it will always involve elements that are dependent on the particular society we are talking about. Suffice to say that SICs may differ with respect to the following three features.

1. **Ownership:** Is the category a members’ category, i.e. one that members of a society are aware of and orient towards, or is the category imposed from outside? (The concept of members’ category is borrowed from ethnomethodology, cf. Benwell/Stokoe 2006: 36)

2. **Conceptual orientation:** (This refers to the nature of the defining features of a category.) Is the category defined syntagmatically – to use a concept from linguistics – i.e. with reference to complementary relationships and interactive contact between those belonging to the category (e.g. teachers and students), or paradigmatically, i.e. with reference to relationships of similarity between members and contrast to non-members (e.g. people with special needs). There are often both syntagmatic and paradigmatic features involved in defining categories, but usually one is predominant. (The distinction is mine, but it is similar to Jenkin’s (2004: 82) between group identification and categorization.)

3. **Institutionalization:** Is the category part of an institution or organization, i.e. are its meaning and especially the forms of interaction it entails more or less strictly defined and thus limited, or is it more or less unconstrained within the members’ lifeworld?

These features can be conceived of as scales, with SICs being positioned somewhere between the following poles:

- Owned ------------------------------------------------------------- Imposed
- Syntagmatic ------------------------------------------------------- Paradigmatic
- Institutionalized ----------------------------- Non-institutionalized

I will now briefly discuss the role of health as a SIC.

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personal identity. It is, e.g., possible for medical researchers to define what headaches are and what it means to suffer from them without being personally affected.
2.3 Health identity

Health is certainly not one of the dimensions traditional categories of identities are based on, neither informing people’s own sense of self nor being part of researchers’ theories of identities. This, however, is and has been changing as a result of the changing realities and perceptions of health in the second half of the 20th century. The two major aspects relevant here are

a. the epidemiological shift from infectious to chronic diseases

and

b. the rise of the risk society in late modernity.

The 20th century saw a decrease of infectious diseases in western societies and an increase in chronic diseases. The major reasons for the former include progress in medicine and healthcare and improvement of living conditions (esp. regarding hygiene), the principal reasons for the latter is the growing prevalence of sedentary lifestyles, increasing numbers of potential stressors in the physical and social environment, and a continuing rise in life expectancy, with older people being more susceptible to most long-term conditions (cf. Nettleton 2006: 234, Borgetto/Kälble 2007: 86-90).

The epidemiological shift may change our prototypical conceptions of disease. A disease is more and more being conceived of as something that does not just temporarily affect our lives, ending in cure (or death), but which can have massive long-term effects on sufferers, who have to (re-)organize their lives around the disease. Diseases can thus be said to have the potential of being biographically disruptive and thus having a stronger impact on our identities (on the concept of biographical disruption in long-term conditions, cf. Bury 1982: 169, cit. in Nettleton 2006: 93).

As for (b.), there is one notion that has received increased attention in the theorizing of late 20th-century and early 21st-century social changes, namely the concept of risk (cf. Lupton 1999). Ulrich Beck (1986) has even characterised today’s society as risk society, with risk being the most important aspect in our conceptions of and our actions in the world (cf. Lupton 1999: 59-64). This particularly applies to health because risk is strongly associated or perhaps even based on our perceptions of bodily vulnerabilities. This means that health concerns are playing an increasingly important part in our lives. We might even go so far as to claim that the risk society is actually first and foremost a health society. This leads to the conclusion that health also plays a substantial part in the conceptions of our selves.

5 It is commonly agreed that health and disease no longer represent a binary opposition, but rather two poles on a health scale (cf. Nettleton 2006: 120). This is why I will talk of health rather than of disease identities.
What is now the special role of discussion forms for the construction of health SICs? The last section of this chapter will be concerned with this question.

2.4 Health identity construction and the empowering function of discussion forums

Given the demographic rarity of diseases – not the epidemiological rarity (the difference lies in the quantitative comparison to either other diseases in the case of epidemiological rarity, or to healthy individuals in the case of demographic rarity) – and/or the physical constraints they may impose on our mobility, we do not normally meet many other people suffering from the same condition. This entails that those affected do not often have the opportunity to interact with each other and to thereby contribute to the meaning of the social identity category.

In the domain of health, relevant SICs are defined paradigmatically, i.e. with reference to similarities between those with the same disease and to differences from those with other diseases and, more importantly, from those healthy. The specific features shared by sufferers are described by medicine.

Health identities, especially those defined by a specific disease, also have a syntagmatic dimension in that sufferers have to fulfil the patient role in institutionalized healthcare, a role that also puts them in subordinate position to healthcare experts.

We may speak of a medicalized health identity, which means that the social identity category associated with a particular disease is first and foremost defined by medicine and institutionalized healthcare. Medicalization means that medicine and institutionalized healthcare provide the conceptual grid through which we perceive and interpret the world, especially those aspects relevant to health (cf. Kettemann/Marko/Triebl 2010; for more thorough discussions of medicalization, cf. Conrad 2007).

What is important concerning medicalized SICs is that they are based on definitions of health conditions that do not come from those affected, who are also assigned the passive role of the patients in healthcare by these definitions. Headache sufferers – and people with any other disease, for that matter – as a consequence find themselves in a weak and powerless position. This may be depressing as sufferers, being mostly isolated from each other, for a long time have not had the resources to modify medicalized SICs or offer alternatives. This problem is aggravated by the fact that, as mentioned, sufferers today are very likely to be afflicted by long-term conditions, which are often defined as being manageable rather than curable (cf. Lupton 2003: 98). This will make sufferers more reluctant to accept the traditional patient role, requiring them to fully subject themselves to the agency of the healthcare system in exchange for cure,
and it will also motivate them to seek for alternatives, alternatives in treatment and alternatives in the meanings of SICs.

The situation might, however, be changing with the introduction of discussion forums and message boards, especially those featuring lay people, who usually are sufferers, discussing health issues. This new genre could be argued to have the strongest impact on health identity construction since it allows members of paradigmatically defined SICs, i.e. people suffering from a medical condition, to get into interactive contact with each other. The interaction in forums enables sufferers to construct the meanings of the SIC in negotiation with people in the same or in a similar situation. So paradigmatic SICs acquire a syntagmatic dimension, one that is based on equality, unlike the clinical scenario based on an expert-lay gap. This increases the chances of alternative meanings being added to an existing SIC or new SICs being created, which in turn will lead to ambivalence, tension and competition.

It is difficult to predict to what extent sufferers’ conceptions of SICs differ from medicalized ones. But it seems plausible to assume that there will be some difference as sufferers are likely to – among other things – concentrate more on their subjective experience of a medical condition, on the consequences for their relationships with their environment, and on their own agency. This does not mean that medicalized elements will be missing from their conceptions, but there will also be a tendency to de-medicalize the condition or, to use an opposition often mentioned in health sociology, to see it as an illness (the personal experience of being unwell) and not just as a disease (the medically defined pathological condition) (for de-medicalization, cf. Kettermann/Marko/Triebl 2010, for illness and disease, cf. Eisenberg 1977, cit. in Clarke 2010: 29, Blaxter 2004: 20).

It is, of course, not a foregone conclusion that health is a contested category on internet forums. But it will be interesting to see in what sense it could be argued to be one, and it will be sensible to investigate this by means of this oppositional complex.

Why is this an issue worth exploring critically? Or, in other words, what is problematic about it? A medicalized view of the world in itself is not problematic – after all, it is medicine and institutionalized healthcare that in many cases provides the most efficient help. We, however, have to critically review to what extent and how a system that sustains power differences and competence gaps between healthcare professionals and patients is omnipotent and omnipresent even in defining sufferers’ identities and therefore is not or cannot be challenged. And we have to critically review to what extent and how the agency and self-determination of those affected by a disease is made visible.
3. Research question

Taking all these ideas into account, the research question my study seeks to answer is: How do discussion forums focusing on headaches & migraines construct the social identity category of the headache sufferer especially with respect to the potential tension between disease and illness, between the medicalized role of the patient and the de-medicalized role of the experiencer and agent?

Based on my experience with health forums, I think that medicalization is so strong a force that medical conceptions will still strongly predominate in the construction of health identities, with contestation and resistance only occurring occasionally and in subtle, modifying terms.

Possibly the concept of patient empowerment is to be taken literally, i.e. empowering people but at the same time keeping them in the patient role.

4. Approach & Data

4.1 Corpus-based Critical Discourse Analysis

The approach taken for my study is Critical Discourse Analysis, which seeks to critically examine socio-culturally problematic and contested issues and the role that language plays in creating and maintaining them. The analysis encompasses three interrelated stages: (a.) the description of linguistic forms in texts, (b.) the interpretation of the meanings created by these forms, and (c.) the evaluation of the socio-cultural significance of these meanings (cf. Marko 2008, Fairclough 1992, and the contributions in Wodak/Meyer 2009).

My version of CDA mainly concentrates on global meaning patterns conceptually organizing the specific ideas and attitudes of discourses, i.e. on conceptual strategies. Assuming that these large-scale conceptual patterns become manifest in recurrent discursive patterns – including recurrence of form and meaning but also recurrence of meaning independent of form (e.g. lexical variation) – found across different texts, the computer-assisted investigation of large electronic corpora is my preferred method. Using this method in discourse analysis implies that qualitative description and interpretation of linguistic details is complemented by quantitative information about frequencies and distributions.

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6 For private and professional purposes, I have spent considerable time on various forums.
7 Strategy is here used in the sense introduced by van Dijk and Kintsch (1983) as cognitive macroprocesses, not presupposing conscious awareness.
4.2 Data

The corpus used in this study of identity construction by headache sufferers consists of postings to three general health websites with (mainly lay) discussion forums, each with an individual section focusing on headaches & migraines. Two of these – *ehealthforum*, *MedHelp* – are based in the US, and one – *HealingWell* – in the UK. There probably is a tendency for natives of the respective country to contribute more often, but discussion forums are not restricted to the respective countries, which means there are many contributions by people from other countries and also by people whose native language obviously is not English. I therefore believe that national and geographical variation does not really play a significant role.

The corpus was compiled in April 2011. The same approach was applied for all three websites: I started with the most recent thread (i.e. the one with the most recent contribution) and then worked my way backwards chronologically, including all postings to each thread until the corpus produced reached a certain size (300,000 words, later reduced by editing).

The corpus has been edited and structurally annotated, e.g. inserting thread and posting boundaries, correcting spelling errors (and marking them so that information about the original version is still retrievable), and marking editorial elements (i.e. language not produced by the posters for a specific message) such as dates, names, signature lines or internal quotes so that they can be included or ignored – usually the latter – in the analysis, depending on my purpose. The corpus has also been tagged for word categories, using the automatic tagger CLAWS available through Wmatrix (Rayson 2009).

Here are the general statistical details of the corpus.

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of word tokens</td>
<td>843,981</td>
</tr>
<tr>
<td>No. of threads</td>
<td>890</td>
</tr>
<tr>
<td>No. of postings</td>
<td>5,486</td>
</tr>
<tr>
<td>Avg. no. of postings per thread</td>
<td>6.2</td>
</tr>
<tr>
<td>Avg. no. of words/posting</td>
<td>153</td>
</tr>
<tr>
<td>Posters</td>
<td>2,902</td>
</tr>
<tr>
<td>Postings per poster</td>
<td>1.9</td>
</tr>
<tr>
<td>One-time posters</td>
<td>2,219 (76.5%)</td>
</tr>
</tbody>
</table>

Table 1: Statistical information on the headache forum corpus.

Just to provide some comparison: I have also compiled corpora on other health forums (cf. Marko, in preparation) and the average numbers – e.g. lengths of contributions, numbers of postings per thread – are similar to heart disease, stroke or multiple sclerosis forums. There, however, appears to be a significantly higher number of one-time posters in the headache forum, with more than 40% of all contributions produced by them.
As one-time posters usually briefly present an urgent problem in their single posts rather than discussing their condition in greater depth, their number may indicate that the headache forums are not very likely to create any radically alternative conceptions of headache sufferer identities.

I have chosen not to use a comparative corpus even though this means that some of the results yielded by the analyses will be difficult to bring into perspective. However, I think that there is no genre or discourse that would differ from lay forums on headache and migraines in ways that would make a comparison shed light on my research question. Just to give one example: one obvious choice are scientific texts (e.g. articles from medical journals). These, however, differ from forum postings not only in attitude and perspective, but also with respect to interactiveness and formality so that it might be difficult to judge which of these factors results in which differences on the level of language.

The concordancing software used for the analysis is WordSmith Tools 5.0, created by Mike Scott.

4.3 Overview of analyses

As an exhaustive study of all aspects relevant to the issue is impossible, my focus necessarily has to be selective. I have therefore chosen to present the analyses of four very different phenomena, phenomena that appear to allow at least a partial view of what is going on with respect to health identity construction and SIC construction in headache forums. One of these phenomena is more global in nature, two focus on structures representing the two major ‘protagonists’ of the textual world created in the forums, viz. the sufferers and the pain, and one starts at a particular assumption about a specific conceptual strategy and then looks at the linguistic elements that could be argued to contribute to the salience of this strategy. More specifically and more linguistically speaking, the four phenomena are:

1. General semantic profile
   What is the general conceptual structure of the discourse?

2. Verb collocating with first person I, i.e. the poster
   In terms of which actions and events are headache sufferers represented?

3. Adjectives and determiners collocating with nouns referring to the pain
   In terms of which attributes are headaches represented?

4. Pharmacologicalization
   To what extent does medication play a central role in headache sufferers’ experience of pain?
5. General semantic profile

Semantic profiling means looking at particular linguistic structures – usually lexemes – and the semantic categories they represent – usually a mixture of universally relevant ones and classes that appear to play a substantial role in the discourse under scrutiny (partly judging from the material analysed) in order to find out which of these categories are the most salient ones. Salience is quantitatively measured in terms of token frequencies (How often do elements of a particular category appear overall in the corpus?) and lexical variation (How many different elements belong to a particular category?).

One objection sometimes raised against this approach is that it imposes meaning – in the shape of the semantic categories – on the data rather than finding it there. This point, however, could be made with the act of describing in general since describing always amounts to assigning elements to categories, which entails that results are contingent on the set of categories applied in the first place. It is true, however, that semantic categorization involves problems absent from, for example, grammatical categorization as meanings necessarily involve fuzzy edges and polyvalence (elements potentially belonging to several classes), thus defying easy categorization. This problem is partly mitigated by making the researcher’s choices transparent and presenting the categorized data sets. It is also relativized to some extent by the quantitative approach and the focus on salience as the frequency of elements in a corpus is a much less controversial aspect than their semantic classification.

In my study, I took the 1,000 most frequent content lexemes of my corpus and categorized them according to semantic categories. These categories combine general classes based on the semantic tagging approach of USAS (= UCREL [= University Centre for Computer Corpus Research of Language] Semantic Analysis System) (cf. Archer/Wilson/Rayson 2002) and my own experience with semantic profiling and specific classes suggested by the data at hand. The list of lexemes has been lemmatized, which means that different word forms of the same lexeme are subsumed under the same entry (e.g. woman, women → woman).

The full list, with all elements found assigned to their respective categories and subcategories – the latter introduced mostly for a clearer presentation of data rather than for analytical purposes – can be found on my homepage (cf. Marko n.d.).

The table below – and all further tables – contains absolute and relative frequencies. The percentages included in the table represent the relative sizes of the categories in relation to the other categories. A number of 25% would thus mean that a fourth of all words – types or tokens – can be assigned to the respective category.
Table 2: Relative sizes of different semantic categories for the 1,000 most frequent lexemes in the headache forum corpus.

<table>
<thead>
<tr>
<th>Category</th>
<th>Types</th>
<th>Tokens</th>
<th>Types</th>
<th>Tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discourse markers$^8$</td>
<td>9</td>
<td>0.9%</td>
<td>2,499</td>
<td>0.9%</td>
</tr>
<tr>
<td>General</td>
<td>59</td>
<td>5.8%</td>
<td>15,413</td>
<td>5.7%</td>
</tr>
<tr>
<td>Time</td>
<td>79</td>
<td>7.8%</td>
<td>26,943</td>
<td>9.9%</td>
</tr>
<tr>
<td>Space &amp; movement</td>
<td>56</td>
<td>5.5%</td>
<td>17,292</td>
<td>6.4%</td>
</tr>
<tr>
<td>Change</td>
<td>27</td>
<td>2.7%</td>
<td>5,720</td>
<td>2.1%</td>
</tr>
<tr>
<td>Conation$^9$</td>
<td>1</td>
<td>0.1%</td>
<td>1,787</td>
<td>0.7%</td>
</tr>
<tr>
<td>Quantification</td>
<td>109</td>
<td>10.8%</td>
<td>22,349</td>
<td>8.2%</td>
</tr>
<tr>
<td>Evaluation</td>
<td>125</td>
<td>12.4%</td>
<td>27,166</td>
<td>10.0%</td>
</tr>
<tr>
<td>Mental processes</td>
<td>113</td>
<td>11.2%</td>
<td>33,852</td>
<td>12.5%</td>
</tr>
<tr>
<td>Social processes &amp; relations</td>
<td>23</td>
<td>2.3%</td>
<td>6,881</td>
<td>2.5%</td>
</tr>
<tr>
<td>Communication</td>
<td>46</td>
<td>4.5%</td>
<td>12,489</td>
<td>4.6%</td>
</tr>
<tr>
<td>Food</td>
<td>7</td>
<td>0.7%</td>
<td>992</td>
<td>0.4%</td>
</tr>
<tr>
<td>Chemistry &amp; physics</td>
<td>14</td>
<td>1.4%</td>
<td>2,735</td>
<td>1.0%</td>
</tr>
<tr>
<td>Anatomy &amp; physiology</td>
<td>77</td>
<td>7.6%</td>
<td>21,481</td>
<td>7.9%</td>
</tr>
<tr>
<td>Medicine &amp; healthcare</td>
<td>148</td>
<td>14.6%</td>
<td>46,659</td>
<td>17.2%</td>
</tr>
<tr>
<td>Scientific practice</td>
<td>7</td>
<td>0.7%</td>
<td>1,341</td>
<td>0.5%</td>
</tr>
<tr>
<td>Undefined$^{10}$</td>
<td>112</td>
<td>11.1%</td>
<td>25,405</td>
<td>9.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,012</td>
<td>100.0%</td>
<td>271,004</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Although difficult to interpret – especially without a comparative corpus – the figures in Table 2 provide a first indication of which aspects are important in the lives of headache sufferers as described by themselves. We see the predominance of the “Medicine & healthcare” category with respect to both frequency and lexical variation. If we add the numbers for “Anatomy & physiology,” which is closely associated with medicine, the salience of this semantic domain becomes even clearer. This supports the assumption that medicalization is more influential in the headache forums than more experiential and subjective aspects.

The fact that psychological and evaluative words also show lexical variation and high token frequencies could, however, be interpreted as a slight countermovement to this general tendency, as they introduce an element of subjectivity to the world of headaches. However, some caution is warranted considering that these two semantic categories are commonly among the largest ones in any discourse or genre.

Let me briefly comment on “Evaluation,” which is not only one of the largest semantic categories but which is also interesting for its ambiguity. On the one hand, evaluations by definition introduce a subjective and thus de-medicalizing element. On the other hand, characterizing health conditions negatively, i.e. as problems that require solutions – usually cure – is a pattern typical of a medicalized world view. If the latter is

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$^8$ Strictly speaking, not a semantic but a pragmatic category, including elements whose only/primary function is interactive, especially greetings and farewells.

$^9$ Processes of trying and achieving.

$^{10}$ Highly polysemous words such as get or keep were assigned to the “Undefined” category as an exhaustive disambiguation was not feasible.
predominant in the SIC of headache sufferers created by the discourse examined here – as suggested by the data reviewed above – “Evaluation” could be expected to contain mainly negative elements. A look at the words in the “Value” subcategory (cf. Marko n.d.), however, shows a balance between negative and positive terms (see the table below), indicating that this semantic category does more than just define pain as a problem, which in turn means that the results do not add further weight to the conclusion about the predominance of medicalization.

<table>
<thead>
<tr>
<th>awful</th>
<th>odd</th>
<th>ability</th>
<th>nice</th>
</tr>
</thead>
<tbody>
<tr>
<td>bad</td>
<td>problem</td>
<td>able</td>
<td>ok</td>
</tr>
<tr>
<td>damage</td>
<td>serious</td>
<td>benefit</td>
<td>okay</td>
</tr>
<tr>
<td>difficult</td>
<td>strange</td>
<td>ease</td>
<td>positive</td>
</tr>
<tr>
<td>difficulty</td>
<td>terrible</td>
<td>easily</td>
<td>proper</td>
</tr>
<tr>
<td>freak</td>
<td>trouble</td>
<td>effective</td>
<td>safe</td>
</tr>
<tr>
<td>hell</td>
<td>unable</td>
<td>fine</td>
<td>success</td>
</tr>
<tr>
<td>horrible</td>
<td>unfortunately</td>
<td>good/better/best</td>
<td>welcome</td>
</tr>
<tr>
<td>negative</td>
<td>weird</td>
<td>great</td>
<td>wonderful</td>
</tr>
<tr>
<td>luck</td>
<td></td>
<td>luck</td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Positive and negative lexemes in the “Value” subcategory of the semantic category “Evaluation.”

In sum, the data examined in this chapter suggests that medicalization is the predominant strategy in the construction of the SIC of headache sufferers and their environment, with only a few aspects introducing more subjective and experiential elements. It remains to be seen whether the more in-depth analysis of linguistic details supports or relativizes this conclusion.

6. Representation of the sufferer

While the general semantic profile examined in the previous chapter can give a rough outline of how posters to headache and migraine forums conceptualize the world and thus the context of health identities, it does not concentrate specifically on the latter. Representations of sufferers, on the other hand, are mainly concerned with their identities.

Linguistically speaking, headache sufferers are mainly represented by the nouns used to refer to them (nomination) or by verbs and adjectives (or verb phrases and adjective phrases) that are used to describe them or the processes in which they are involved (predication) (for nomination and predication, cf. Reisigl/Wodak 2009).

I will only take a very short look at nomination. The most common nouns representing headache sufferers are patient (190 occurrences), sufferer (133 occurrences), and migraineur (31 occurrences). The frequencies between brackets indicate that posters to the headache and migraine forums use a relatively high proportion of terms that do not foreground
the institutional role of the patient. *Sufferer* emphasizes the negative experience of pain and *migraineurs*, too, by using *migraine* as the basis of the derivation, highlights the condition. Interestingly, *sufferer* takes *fellow* as a common premodifier (in addition to *headache* and *migraine*), which underscores the relational and social value of the term in the interactive community in the forum.

However, since first persons do not often refer to themselves by nominal expressions,¹¹ predication, i.e. the processes in which the posters are involved and the semantic roles they take in these processes, are a more fertile field for examining the tension between medicalization and de-medicalization in health identity construction.

A full analysis of all occurrences of *I* and *me* is not feasible considering that the corpus contains more than 40,000 occurrences of these two forms. I have therefore decided to limit my analysis to the use of progressive tenses – or progressive aspect, to be linguistically more precise – with *I* as the subject (progressive aspect with object *me* is rare and has therefore not been considered; *me* does not occur as subject with progressive aspect in the corpus, e.g. *I want them to be sleeping*). The focus is not arbitrary as one of the central functions of progressive aspect is to represent an event as ongoing and as dynamically progressing. This dynamic dimension is probably the reason why the immediate experience of processes is most likely to be expressed by progressives.

If progressive aspect indeed has an experiential function, this means that if there is a general countermovement to a disease-oriented and medicalized SIC of headache sufferers, this tendency should become more clearly manifest in progressives than in non-progressives/simple aspect.

I have looked at all occurrences of the search structure mentioned, i.e. progressive aspect with *I* as subject, and produced a semantic profile of the verbs and verb groups found. The details – including subcategories – can be found on my homepage (cf. Marko n.d.). The following table represents the relative sizes of the semantic categories used, using the same form of quantification as with the general semantic profile in the preceding chapter.

<table>
<thead>
<tr>
<th>Types</th>
<th>Types</th>
<th>Tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>21</td>
<td>4.5%</td>
</tr>
<tr>
<td>Time</td>
<td>18</td>
<td>3.9%</td>
</tr>
<tr>
<td>Space &amp; movement</td>
<td>37</td>
<td>8.0%</td>
</tr>
<tr>
<td>Quantitative &amp; qualitative change</td>
<td>19</td>
<td>4.1%</td>
</tr>
<tr>
<td>Conation</td>
<td>31</td>
<td>6.7%</td>
</tr>
<tr>
<td>Evaluation</td>
<td>6</td>
<td>1.3%</td>
</tr>
<tr>
<td>Mental processes</td>
<td>123</td>
<td>26.5%</td>
</tr>
<tr>
<td>Social processes &amp; relations</td>
<td>23</td>
<td>4.9%</td>
</tr>
</tbody>
</table>

¹¹ I ignore the use of nouns in predicative complements – as in *I am a headache patient* – as references to the condition will be rare considering that this is almost a prerequisite for participating in the discussions.
As can be seen from the table, verbs concerned with medicine and healthcare occur most often. These primarily include expressions referring to having a disease and taking medication, which can be interpreted as contributing to a medicalizing conception of headaches. However, especially the subcategory of pathology is ambivalent. On the one hand, there are relatively neutral expressions such as *have a condition* (e.g. *headaches*) or *get a condition*, which might support medicalization. But even with these, the question remains whether the progressive aspect is mostly used to indicate temporariness or whether it also adds a dynamic and experiential element even to these basic combinations, as in:

Now I'm having headaches and the back of my head is numb.

Also, I have been having headaches and migraines for one and a half years.

On the other hand, we also see many expressions that combine perceptive/emotional verbs with references to a disease, e.g. *feel a condition*¹² and *suffer from a condition*, and proprioceptive physiological processes, e.g. *pass out, shake*. These appear to add more weight to subjectivity and thus to de-medicalization. Overall, however, the fact that regarding token frequencies, the neutral expressions by far outnumber those with a more experiential dimension – e.g. *have a condition* occurs 426 times, *get a condition* 162 times, while *suffer from a condition* occurs 100 times, and *feel a condition* 34 times – and that there are also many expressions in the subcategory of “Diagnosis & therapy,” which do not show the same kind of ambiguity, still lends weight to the conclusion about a medicalizing effect produced by the “Medicine & healthcare”-category.

The second very salient semantic class of verbs is that covering processes of thinking, feeling and perceiving. This category, which by definition represents subjectivity and experience, shows even higher lexical variation than “Medicine & healthcare” and would be on level terms regarding token frequencies if I had included all medically-connoted proprioceptive expressions (*suffer from a condition*, etc.). Its salience thus can be argued to undermine the medicalization created by the other category discussed.

The data reviewed in this section suggests that the meaning of the identity of the headache sufferer is indeed ambivalent, including medi-

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¹² *Condition* here stands for expressions for any health condition, e.g. *feel a strange kind of pain* or *feel intense pressure in my lower abdomen.*
ocalizing and de-medicalizing aspects, aspects of disease and illness. We, however, have to take this conclusion with a grain of salt since, as mentioned, I specifically focused on a structure clearly favouring experiential values. Considering that progressives account for only about a tenth of all verbs phrases with a first person singular I as the subject, this probably only allows a partial view.

7. Representation of the condition

This chapter is concerned with the representations of pain by posters to headache and migraine forums and their implications for health identity constructions. I will look at which words are used in combination with headache and what they reveal about the dimensions of headaches that sufferers feel need underlining. The first section will examine premodifiers, the second one determiners.

7.1 Premodifiers

Premodifiers are words that specify and/or foreground particular semantic dimensions of a head noun, preceding this noun either syntactically, i.e. inside a noun phrase, e.g. a terrible headache, or morphologically, i.e. inside a compound, e.g. sinus headaches (I will not discuss the distinction further here). Examining which words premodify nouns for headaches will thus reveal whether sufferers tend to speak of the conditions more in terms of disease or in terms of illness. Here are three examples of the structures I will analyse.

- a constant 24/7 headache
- massive headaches
- medication-overuse headaches

In these examples, I will look at the modifiers constant, 24/7, massive and medication-overuse and the fact that the first two specify the duration and frequency of headaches, the second one their intensity, and the third one their causes.

Predicative descriptions of pains, e.g. my headaches are 24/7 and so debilitating, will probably be preferred when talking about the immediate experience, while attributive descriptions – i.e. those involving premodifiers – e.g. a constant 24/7 headache, are used when referring to an established (or quasi established) category. I have nevertheless chosen to focus on modifying elements because predicative descriptions are rare.

I limit my analysis to the words headache, migraine and head pain as these most generally and neutrally denote the condition investigated in this article. I examined all elements modifying these headwords, irrespective of the word category (adjectives – in a broad sense, including
participle – and nouns) or the embedding structure (compound nouns or noun phrases).

I included all modifiers related to the pain, even if part of a larger compound, e.g. **tension headache patient**, but not if the modifier refers to the headword of such a compound, e.g. **American Headache Society**. In some compounds referring to pathological conditions, e.g. **headache attack** or **headache syndrome**, the distinction can often not be made because in **sudden-onset headache syndrome**, it might in fact be the headache or the syndrome that starts abruptly. But as this does not make a great semantic difference, I included modifiers in such constructions.

The resulting list of modifiers was categorized semantically, producing a semantic profile of the dimensions of headache that seem particularly relevant and salient. In contrast to the semantic profiles in the last two chapters, I cannot rely on general semantic classes with this specific task, but the categories have been motivated by looking at the concrete results yielded by the analysis. As the classes are not self-explanatory, I will briefly introduce them below.

- **Basic categories:** Basic categories in established clinical taxonomies that cannot be defined otherwise, e.g. **migrainous, primary**.
- **Co-occurrence:** Phenomena co-occurring with, or caused by, headaches, including co-morbidity (e.g. **aura, vomiting**) and perception/sensation, i.e. perceptions co-occurring with or caused by headaches (e.g. **painful, dizzy**).
- **Causal factors:** Phenomena triggering headaches, including actions and events (e.g. **sexual, crash**), substances (**ice cream, alcohol-related**), body parts, i.e. the trigger is localized in the anatomy or physiology of a body part other than the brain (e.g. **sinus-related**), co-morbidity, i.e. if the trigger is another condition (e.g. **sinusitis**), therapeutic, i.e. if a particular treatment leads to headaches (e.g. **lumbar puncture**), and genetics (e.g. **familial**).
- **Diagnostics & therapy:** Diagnostic status and therapeutic measures, e.g. **undiagnosed, indomethacin-responsive**.
- **Location:** Place in the head where the pains (are perceived) to appear, e.g. **unilateral**.
- **Time:** Time-related features such as duration (e.g. **3-hour**), frequency (e.g. **daily, chronic**), phase (initiation, continuation, comple-

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13 The definitions read: *Describing headaches with respect to or in terms of…*

14 For a full appreciation of the examples given, add headache/s (or migraine/s), e.g. **migrainous headaches, primary headaches, vomiting headaches**, etc.

15 The difference to co-occurring comorbidity is the direction of causality: in **aura migraines**, for instance, the visual aura – a temporary distortion of visual perception – occurs together with the headache and is caused by the latter, while in **sinusitis headaches**, the sinus infection triggers the headache.
tion) (e.g. sudden-onset), and point in time (e.g. early-morning, subsequent).

- **Person-related:** Personal features of the patient (usually age), e.g. adult, baby.

- **Evaluation:** Aspects such as value (e.g. awful), intensity (e.g. intensive, unbearable), quality (e.g. throbbing), comparison (e.g. different), or epistemology (e.g. true).

The full set of data, organized in categories and subcategories (allowing a better overview) can be found on my homepage (Marko n.d.). Table 5 contains absolute and relative frequencies of elements assigned to the respective categories.

<table>
<thead>
<tr>
<th>Types</th>
<th>Tokens</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic categories</td>
<td>12</td>
<td>2.5%</td>
</tr>
<tr>
<td>Co-occurrence</td>
<td>35</td>
<td>7.4%</td>
</tr>
<tr>
<td>Causality</td>
<td>92</td>
<td>19.3%</td>
</tr>
<tr>
<td>Diagnostics &amp; therapy</td>
<td>9</td>
<td>1.9%</td>
</tr>
<tr>
<td>Person-related</td>
<td>4</td>
<td>0.8%</td>
</tr>
<tr>
<td>Location</td>
<td>37</td>
<td>7.8%</td>
</tr>
<tr>
<td>Time</td>
<td>107</td>
<td>22.5%</td>
</tr>
<tr>
<td>Evaluation</td>
<td>175</td>
<td>36.8%</td>
</tr>
<tr>
<td>Undefined</td>
<td>5</td>
<td>1.1%</td>
</tr>
<tr>
<td>Totals</td>
<td>476</td>
<td>3,818</td>
</tr>
</tbody>
</table>

Table 5: Relative sizes of the semantic categories of modifiers of headache, migraine and head pain in the headache forum corpus.

The categories themselves, which have been inductively established from the data, allow insights into the conceptualizations at work. It is striking that most of them – at face value – would feature in medical consultations, having diagnostic value. We could thus be expected to be asked about things such as “Where in your head? When, how often, and for how long? How strong? Accompanied by what? What did you do before? What other conditions do you have?” This in combination with the fact that none of the categories – with the exception of “Diagnostics & therapy” and “Person-related” – is insignificantly small can be taken as evidence that posters conceptualize headaches in those categories that have medical relevance, which will translate into a medicalizing effect.

We, however, also have to take into account that the two categories “Evaluation” and “Time” are more prominent than the others. Together they represent more than half of all modifiers, whether with respect to the numbers of different lexemes or token frequencies. A closer look at the subcategories reveals that there are two conceptual dimensions that stand out here, namely negative intensity and long duration. Looking at the elements representing these subcategories (see Table 6) indicates that these two aspects show what I call **cluster overwording**, i.e. many near-
synonyms are used for the same concept (in contrast to taxonomic overwording, which is intended to create fine distinctions).

<table>
<thead>
<tr>
<th><strong>Negative intensity</strong></th>
<th><strong>Long duration</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>aggressive</td>
<td>[number] -day</td>
</tr>
<tr>
<td>agonizing</td>
<td>lingering</td>
</tr>
<tr>
<td>all-out</td>
<td>[number] -hour(s)</td>
</tr>
<tr>
<td>awful</td>
<td>long</td>
</tr>
<tr>
<td>bad</td>
<td>[number] -month</td>
</tr>
<tr>
<td>big</td>
<td>long lasting</td>
</tr>
<tr>
<td>blasted</td>
<td>[number] -week (long/old)</td>
</tr>
<tr>
<td>blinding</td>
<td>month long</td>
</tr>
<tr>
<td>burning</td>
<td>24/7</td>
</tr>
<tr>
<td>crazy</td>
<td>all-day</td>
</tr>
<tr>
<td>crippling</td>
<td>consistent</td>
</tr>
<tr>
<td>crushing</td>
<td>constant</td>
</tr>
<tr>
<td>debilitating</td>
<td>continual</td>
</tr>
<tr>
<td>deep</td>
<td>continuous</td>
</tr>
<tr>
<td>disabling</td>
<td>extended</td>
</tr>
<tr>
<td>exacerbated</td>
<td>never-ending</td>
</tr>
<tr>
<td>excruciating</td>
<td>lasting</td>
</tr>
<tr>
<td>excruciation</td>
<td>week-long</td>
</tr>
<tr>
<td>extreme</td>
<td>big</td>
</tr>
<tr>
<td>fierce</td>
<td>[number] -day</td>
</tr>
<tr>
<td>full out</td>
<td>lingering</td>
</tr>
<tr>
<td>full-blown</td>
<td>[number] -hour(s)</td>
</tr>
</tbody>
</table>

Table 6: Modifiers of headache/migraine/head pain denoting negative intensity and long duration.

Cluster overwording is an indication of a subjective preoccupation with an aspect, unlike taxonomic overwording, which could be argued to be objectively required by the circumstances (however problematic this claim is). The words in the list do not represent the discrete labels of standardized diagnostic procedures, and doctors trying to categorize the headaches would not be happy to see that much variation in the characterization of the condition. But the variation of terms suggests that sufferers may have been looking for a particularly ‘strong’ word with a superlative meaning, promising a high emotional impact, and not one that they are familiar with from their visits to the doctor’s. This, in turn, points to their desire to stress the experiential value of the intensity and the length of their pains.

This also shows in the fact that especially negative intensity modifiers themselves are often intensified by different means. Intensification underlines the subjective and experiential value of the modifiers.

Intensification commonly draws upon the pattern ‘intensifier + adjective’ as can be seen from the concordance from my corpus below (extract).
Intensification is also expressed by means of reduplication, either by word reduplication, e.g.:  

- **massive, massive** pressure in my sinuses
- **terrible, terrible** pain
- **painful, painful** headaches

or semantic reduplication, where synonymous or near-synonymous words are coordinated, e.g.:  

- **severe** and **disabling** migraine
- **totally aggressive** and **deilitating** headache
- **extremely** severe and **extremely violent** sinus-like pain
- **severe**, **excruciating**, **throb**ing headache
- **horrible, horrendous** headaches
- **excruciating, debilitating** headaches

Semantic reduplication may also involve the head noun, with intensity being created by mentioning the pain twice. Although this phenomenon goes beyond the negative intensity premodifiers analysed, it has the same effect and therefore is worth mentioning here. Examples are:

- **sharp** headache pain
- **sharp** painful headaches
- **migraine** pain

The commonness of various types of intensification in connection with negative intensity will, as mentioned, further enhance the de-medicalizing dimension of this type of modifiers.
The data examined in this section supports the conclusions drawn above. Medicalization and disease are foregrounded, but there are also subtle or even more significant attempts to relativize it, too.

7.2 Determination

In addition to modifiers, noun phrases also can – or perhaps even must\(^\text{16}\) – contain a determiner. The function of determiners is usually not to add semantic content to the headword, but rather to define its information value. They thus indicate whether something has already been mentioned or should generally be known, whether something belongs to somebody, whether I am talking about a specific referent or about a category in general, etc.

There are different determiners that a noun such as *headache* can take: the definite article (e.g. *The headaches are accompanied by dizziness and nausea*.), the indefinite article (e.g. *I had a headache for two days.*), a possessive pronoun (e.g. *My headaches are almost completely gone.*), a demonstrative pronoun (e.g. *It’s almost self-fulfilling prophecy sometimes with these headaches!*), an indefinite pronoun or a quantifier (e.g. *[…] drugs which also work for some migraines.*), or no determiner (in indefinite plural noun phrases, e.g. *Headaches usually are the last symptom to emerge*, or elliptical sentences, e.g. *Severe headaches, please help!*). The most interesting determiners with respect to the representation of headaches and its relevance for the construction of health identities are possessive pronouns, especially first person singular possessive *my*, and demonstrative pronouns, i.e. *this/that/these/those*. I will briefly explain why.

There are various motives for using a possessive with a health condition, but it usually presupposes some subjective acceptance of its existence and presence in one’s life. This in turn points to a more personal, subjective relationship with the condition, which could be argued to be part of a more experiential approach and thus of an emphasis of illness over disease.

Demonstrative pronouns usually have an endophoric function if they combine with the headword *headache* or *migraine*, singling out specific headaches that have already been mentioned before. However, there is often an exophoric or deictic dimension present, too, creating a certain distance – evaluative or not – between the sufferer and the condition, e.g. in *These headaches aren’t just a headache*. The apparent need to distance oneself presupposes a certain emotional involvement and thus again a subjective and experiential moment.

As both possessive and demonstrative pronouns thus can be argued to contribute to de-medicalization, it will be interesting to see how often

\(^{16}\) If we interpret the absence of an overt determiner as one form of determination.
they are used as determiners for noun phrases headed by either *headache* or *migraine*, especially in comparison to definite and indefinite articles, which by themselves do not add a subjective element.

I looked at all the noun phrases with these headwords and counted the occurrences of the different forms of determiners. Table 8 contains the absolute and relative frequencies.

<table>
<thead>
<tr>
<th></th>
<th><em>headache</em></th>
<th>Relative</th>
<th><em>migraine</em></th>
<th>Relative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ellipsis</td>
<td>488</td>
<td>8.9%</td>
<td>243</td>
<td>6.8%</td>
</tr>
<tr>
<td>No determiner &amp; indefinite article</td>
<td>3,154</td>
<td>57.5%</td>
<td>2,294</td>
<td>64.7%</td>
</tr>
<tr>
<td>Definite article</td>
<td>860</td>
<td>15.7%</td>
<td>378</td>
<td>10.7%</td>
</tr>
<tr>
<td>Possessives</td>
<td>489</td>
<td>8.9%</td>
<td>414</td>
<td>11.7%</td>
</tr>
<tr>
<td>Demonstratives</td>
<td>307</td>
<td>5.6%</td>
<td>103</td>
<td>2.9%</td>
</tr>
<tr>
<td>Quantifiers &amp; indefinites</td>
<td>187</td>
<td>3.4%</td>
<td>116</td>
<td>3.3%</td>
</tr>
<tr>
<td>Totals</td>
<td>5,485</td>
<td></td>
<td>3,548</td>
<td></td>
</tr>
</tbody>
</table>

Table 8: Relative sizes of the different classes of determiners of NPs headed by *headache* and *migraine* in the headache forum corpus.

The results show that demonstratives and possessives are used in about a seventh of the noun phrases with *headache* and *migraine*, while definite and indefinite articles (or indefinite reference created by the omission of any article in the plural) account for approximately three quarters of all determiners. Without a comparison to other corpora, it is difficult to judge whether this is more or less than average, so conclusions have to remain tentative. But the data does not seem to suggest that determiners of nouns for headaches add a strong subjective and thus de-medicalizing element to health identity construction in forums.

The data reveals an interesting side aspect, namely that indefiniteness, normally used when introducing something new, is significantly more common than definiteness, normally used when referring to something already mentioned, in connection with headaches in the discourse examined (for a more thorough discussion of definiteness, cf. Lambrecht 1994: 79-87). Part of this can definitely be explained by the fact that forums feature short units – whether postings or threads – where the likelihood of repeated reference to the same phenomenon is not as high as in longer texts. But it may also indicate that headache sufferers speak of individual instances of the condition, with each instance being introduced as new, rather than about a general disease. This focus on individual instances, in turn, could be seen as a tendency to foreground experience rather than the medicalized conception of disease. Considering that indefiniteness – and definiteness, too – also has other functions, particularly the generic reference to categories (e.g. *men suffer from cluster headaches more often than women*), this is just an idea rather than a conclusion really supported by the data, and overall the data on determination rather suggests that the discourse on headaches in lay discussion forums on headaches and migraines adds to medicalization.
8. Conceptual strategies: Pharmacologicalization

Corpus-based Critical Discourse Analysis can also start with an assumption about a conceptual strategy and work its way backwards to the data. This is what I will do in this chapter, focusing on a strategy which I call – excuse the clumsy term – pharmacologicalization.

Pharmacologicalization means foregrounding the importance of drugs and medications in conceptualizations of the world in general and of the world of health and disease specifically. Pharmacologicalization is part and parcel of the superordinate strategy of medicalization. If we assume that the headache identities presented in the forums rest more strongly on the traditional institutionalized model of medicine and healthcare, then we will expect this strategy to play a prominent role.

What are now the linguistic structures that might contribute to the construction of pharmacologicalization in a discourse? Unsurprisingly, the most obvious one is to make explicit reference to drugs and medications, i.e. to use nouns (or complex nominal expressions) for chemical substances used as therapy or prophylaxis. These are the structures I will be looking at in the following.

Searching a corpus for such expressions is problematic since they do not share any formal features that would make tracing them feasible. While it is not possible to perform an exhaustive search, we can do an approximative search by using lists of established drugs – including brand names (e.g. Aspirin), generic terms (e.g. acetaminophen), general terms (e.g. meds), and also forms of administration (e.g. shot) – and having the concordancing programme look for any occurrence of each item included in the list. I produced such a list on the basis of two modified lists from the Internet (United States National Library of Medicine n.d. and Drug-indexOnline 2012), including some 10,000 items.

With the help of this list, I searched the corpus for pharmacological expressions. Table 9 contains the type and token frequencies of the expressions found. The full set is provided on my homepage (Marko n.d.).

<table>
<thead>
<tr>
<th>Expressions for medications</th>
<th>Types</th>
<th>Tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,062</td>
<td>8,335 (~1%)</td>
</tr>
</tbody>
</table>

Table 9: Type and token frequencies of expressions for medications in the headache forum corpus.

Even though the corpus contains more than 800,000 words and I was not too strict in classifying complex structures as different expressions (e.g. over-the-counter allergy pill counts as different from allergy pill), 1,062 different lexemes for drugs appears a high number, so that we can safely say that medications are a heavily overworded semantic field, even without comparative data.

The token number does not appear very high at first sight, considering that we find reference to a drug only every 100th word. But if considered
in relation to the number of postings or the number of threads, we see the wide distribution and prevalence of the category because we find 1.5 references to drugs per posting and almost 10 references per thread.

Average numbers have to be treated with caution, though, because looking at the data we may get the impression – although I cannot produce formal evidence for this – that many of the more technical references to drugs are not evenly distributed across the whole corpus, but tend to occur in lists and catalogues, as the following examples illustrate.

I tried Gabapentin, Amitriptyline, Imitrex, Butalbital, Propanol and now Topamax.

Moderately helpful, side effects: natural progesterone, sodium naproxen, diphenhydramine, aspirin, Tylenol 3, Lorazepam (too addicting).

Reglan along with Ativan, Maxalt, Imitrex, Nortriptyline, Topamax, Valproate, Etodolac, rest I probably don’t even remember.

To what extent this influences the effect of pharmacologicalization is difficult to judge.

Generally speaking, the data seems to suggest that there is a strong moment of pharmacologicalization in the discourse of the headache forums, contributing to a medicalized conception of the world and thus also of the identities of the headache sufferers. However, a closer look at the data also shows that there are aspects that could be argued to work against the impact of the overuse of terms for drugs.

Firstly, the list includes many general references to drugs (e.g. drug, medication, pill, tablet, pain killer), which in this non-technical sense may be integrated into our daily lives – e.g. in self-medication – so that they lose the strong link to medicine. Secondly, the list also features many references to complementary and alternative medication and general supplements, all of these coming from outside traditional medicine. Thirdly, the list contains many informal words such as clippings (e.g. med, combo, asp, ibu), paraphrasing compounds (mood changing pill, stress reducer, anti-inflammatory shot), or metonymies (effect for medication, e.g. an anti-seizure, birth control), which point to a more informal and more casual relation to the medication. Fourthly, posters make spelling errors with the more technical terms, indicating that they are not particularly careful about correctly representing the technicality of the terms. Here are examples of orthographic variation for the drug nortriptyline found in the corpus:

nortriptiline nortriptilyne nortriptyline  
nortriptiline nortripsylin nortryptiline  
nortriptilyne nortryptaline nortryptaline
All these are aspects that will certainly introduce a subjective element, relativizing at least the technical and expert rigidity of pharmacologicalization.

However, the overall impression remains that this strategy plays an important role in the construction of the headache identity and thus pushes it more in the direction of disease and medicalization.

9. Conclusion

The question this article set out to answer is whether and to what extent there are two opposing trends – medicalization and de-medicalization – at work in how headache sufferers construct their identities (and their worlds) when interacting with each other in discussion forums on the Internet. The assumption is that if people affected by a certain health condition talk among each other, they might construct meanings of the social identity category of the headache sufferer that will go beyond or challenge the conceptions promoted by medicine and institutionalized healthcare, meanings that highlight subjective, experiential, or agentive aspects of the condition over scientific, impersonal, or passive ones, seeing headaches and migraines as illness and not just as a disease.

Taking a corpus-based Critical Discourse Analytical approach, I tried to answer this question by examining a 850,000-word corpus of postings to discussion forums on headaches and migraines. The analysis was concerned with giving a general overview of meanings at work in the discourse (focusing on a general semantic profile of the 1,000 most common content lexemes), with representations of the headache sufferers (focusing on the verbs used by the posters when talking about themselves), with representations of the condition (focusing on adjectives and nouns used to modify references to pains), and with pharmacologicalization, i.e. the emphasis on drugs in conceptualizations of health (focusing on the use of terms for drugs and medications).

The data examined in the article suggests that my initial expectation, viz. that medicalization will predominate, with de-medicalization becoming manifest only occasionally and subtly, appears plausible even though de-medicalizing elements might be slightly more prominent than assumed. I still have to conclude that headache sufferers seem to conceive of themselves, in relation to their condition and to their environment, in terms imposed by medicine and institutional healthcare rather than offering alternatives highlighting the subjective experience of the condition and an agentive approach to it. The reason for the predominance of medicalization in health identity constructions in the forums may be that many posters do not see them as sites for an interactive exchange between equals, but rather treat the communication
on the sites as an extension of medical consultations, mostly seeking immediate pre- or praeter-clinical advice from ‘lay experts’ (as part of what Freidson (1970, cit. Nettleton 2006: 76) calls lay referral system). This shows in the fact that a large majority of posters contribute just a single message. It remains to be seen whether health forums will develop in this direction of quasi-medical counselling or will further enhance its challenging potential.

References


Kettemann, Bernhard/Georg Marko/Eva Triebl (2010). “‘I have MS, MS doesn’t have me.’ Social identity construction in the discourse of multiple sclerosis forums.” In: de Cillia/Gruber/Krzyżanowski/Menz (2010). 355-367.


Marko, Georg (in preparation). “‘Your story has made me feel angry on your behalf.’ Empathy and hierarchy in lay-to-lay interaction on chronic diseases.”


**Corpus**

