Abstract: The meaning of health has been debated among Western philosophers and medicine practitioners for over two millennia. To date, more than 300 various definitions of health have been proposed in medicine, psychology, pedagogy, sociology, and other disciplines preoccupied with the human condition, yet an unequivocal definition of health remains as elusive as it is fundamental to our existence. This study approaches the concept of health as an array of primary conceptual metaphors that arise from the cognitive embodiment. Taking into account data found in the British National Corpus and the Corpus of Contemporary American English, this paper discusses the conceptual mapping of health as a general condition of human functioning onto two basic dimensions of embodied experience, which include up–down and strong–weak scales. From this perspective, health as the metaphorical concept forms gradable antonymy, where contrasting properties between health and disease are represented in terms of a scale running between two poles. Within this gradable antonymy health can be graded against different norms, which means that there is no absolute criterion by which one can tell what it means to be healthy and there may be a partial overlap between different scales.

Keywords: health, conceptual metaphor, metonymy, objectification, gradable antonymy, cognitive corpus-based linguistics

1. Obscurity of the meaning of health

There is an ongoing discussion on what health means, which takes place across all of science, including medicine, psychology, sociology, pedagogy, philosophy, as well as other disciplines preoccupied with the state of human condition (Loudon 1997). Mateusiak, Gwoźdecka-Wolniaszek, and Januszek (2011) emphasize that the meaning of health pertains to four basic dimensions of human existence: physical, psychological, social, and spiritual, which makes it a multidimensional concept. Moreover, the meaning of health alternates as it is adjusted to the human life cycle, which involves coping with different developmental tasks. Additionally,
the concept of health is subject to multiple criteria. Among them, (a) a medical criterion is understood as a lack of deviations from certain norms, which is assessed through medical examination; (b) vitality refers to the strength and energy that an individual has; (c) functional capability can be identified as the potential to achieve different aims; (d) a sense of balance includes capabilities of dealing with adversity; and (e) a sense of well-being depends, at least to large extent, on an overall lack of malady. Furthermore, the concept of health is relative because it encompasses inalienable categories, such as age, sex, level of education, as well as norms and values held by an individual, which can be viewed from historical, cultural, social, and economic perspectives.

Traditional approaches to the meaning of health relied on a distinction between health and disease as marking two opposite poles of one dimension (see Korwin-Szymanowska 2015 for a review). For instance, a biomedical model of health is based on the assumption that any disease has a specific etiological background caused by particular factors leading to changes in the structure and functioning of the human body. Body functions, which are based on biochemical processes of cells and organs, can be measured precisely with biological analyses and other ways of assessment, which produces a set of normalized medical standards of health. From this perspective, health can be defined as a lack of biological dysfunctions. However, since this model focuses predominantly on the level of cellular processes, it leaves out psychological and social aspects, which are also key facets of one's health (Allen 1998; Brannon & Feist 2010).

More recent attempts at a coherent delineation of health take into account additional, subjective factors, such as emotions, convictions, and self-awareness, which are separate from the objective biomedical health indicators. Among most prominent definitions of health that follow this track is that proposed in 1948 by the World Health Organization. It views health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO 1948: 100). It derives from Sigerist’s (1941) thesis that health involves an internal balance between an individual’s body and mind, as well as her interactions with the physical and social environment. From this perspective, health can be viewed as the process of having control over one’s mental and physical capabilities, as well as having the ability to adapt to changes happening in the surrounding environment.

Although the definition proposed by WHO is still considered as a breakthrough in health studies, some researchers consider it as utopian and too generic for practical applications. They point out that the state of perfect balance between various health factors is hardly attainable for an individual. More importantly, however, the
WHO definition shifted the focus of attention from biomedical factors towards more holistic models of health, which are open to psychological, social, and other interpretations (see Brannon & Feist 2010; Woynarowska 2007: 18–19 for discussions).

For instance, a new paradigm of health understanding proposed by Engel (1977) under the label *biopsychosocial model of health* assumes an ongoing interaction between the mind and the body, as well as the environmental and social influences, which relates to numerous health aspects. As summarized by Suls and Rothman (2004):

This perspective holds to the idea that biological, psychological, and social processes are integrally and interactively involved in physical health and illness. The initially provocative premise that people’s psychological experiences and social behaviors are reciprocally related to biological processes has fueled dramatic advances in health psychology over the past 25 years … As a guiding framework, the biopsychosocial model has proven remarkably successful as it has enabled health psychologists to be at the forefront of efforts to forge a multilevel, multisystem approach to human functioning (Suls & Rothman 2004: 119).

While the above-mentioned biomedical model of health basically treats the human being as a machine that can be repaired when broken down by a disease, the biopsychosocial model sees the individual as a unity, emphasizing the fact that apart from illness there are other factors relevant to health, such as motivation to recover, understanding of the disease, social support, etc. (Allen 1998; Brannon & Feist 2010; Korwin-Szymanowska 2015).

There are also other models of health that have gained certain popularity. For instance, *ecological models* (see Sallis, Owen, & Fisher 2008 for a review) situate health and health behavior in the context of ecosystem. The ecological framework includes the *health triad*, which sees health as a dynamic equilibrium between the host, the environment, and the agent. Upsetting the balance within this triad usually upsets the health of an individual in one way or another. This particular model was proposed as a solution for dealing with the interconnectedness of many global problems and complexities related to managing and caring for our natural environment.

Woynarowska (2007: 18) has identified more than 300 different variants of health understanding, which lay emphasis on specific aspects within different frameworks. This diversity of perspectives results in ambiguity of the term *health*, which recently tends to be substituted by notions such as *well-being*, *quality of life*, or *happiness* (see Heszen & Sęk 2007; Kahneman, Diener & Schwarz 2003). An overall conclusion emerging from the multitude of health definitions is that, although its meaning is intuitively graspable to all of us, a comprehensive description of health escapes mono-disciplinary attempts. This study approaches the
concept of health from still a different angle. Following the observation that our conceptions of health tend to be discussed figuratively in terms of an up–down scale (Lakoff & Johnson 1980), this paper examines the concept of health as an array of conceptual metaphors originating from certain basic dimensions of embodied physical experience.

2. Health as a metaphorical concept

In their seminal work *Metaphors We Live By*, Lakoff and Johnson (1980) put forward the hypothesis that metaphor is essentially a matter of thought, i.e. an important part of our conceptual structure is metaphorical in nature. Using numerous examples from disparate domains of human activity, they assume that conceptual metaphors shape our understanding and have a potential to determine how we reason about abstract concepts.

Many aspects of our experience cannot be clearly delineated in terms of the naturally emergent dimensions of our experience. This is typically the case for human emotions, abstract concepts, mental activity, time, work, human institutions, social practices, etc. … Though most of these can be experienced directly, none of them can be fully comprehended on their own terms. Instead, we must understand them in terms of other entities and experiences, typically other kinds of entities and experiences. (Lakoff & Johnson 1980: 177).

Although the theory has undergone various adjustments and updates since its original conception (e.g. Lakoff & Johnson 1999; Lakoff 2008; see Ruiz de Mendoza Ibáñez & Pérez Hernández 2011 for a concise up-to-date review), the conceptual metaphor can be defined in a nutshell as a conceptual mapping, i.e. a set of correspondences between two conceptual domains, in which a previously stored conceptual representation of one cognitive model is used to provide a structured understanding of another. The source domain is less abstract, i.e. more accessible to perception, than the target domain. Only a part of the source domain is mapped onto the target, and only a part of the target domain is involved in the mapping because one concept cannot be the same as another.

A good example of a concept that is experienced directly, yet remains as elusive as it is fundamental to our existence is health. As discussed in the previous section, although health constitutes an inseparable part of our daily functioning, it evades a single clear-cut definition due to its numerous dynamic multi-dimensional biopsychosocial aspects. Unfortunately, linguistic studies on figurative conceptions of health as such have been relatively few and far between. While discussing orientational metaphors Lakoff and Johnson (1980: 15) point out that common examples for this category include health is up and sickness is down metaphors,
e.g. “She’s in top shape” vs. “He’s sinking fast”. Lakoff and Johnson (1980) add that “GOOD IS UP gives an up orientation to general well-being, and this orientation is coherent with special cases like HAPPY IS UP, HEALTH IS UP, ALIVE IS UP…” (Lakoff & Johnson 1980: 15). This indicates that metaphorical conceptualizations of health are grounded in embodied experience (Gibbs, Lima, & Francozo 2004; see Gibbs 2005; Semin & Smith 2008 for edited collections of studies, cf. Mahon 2015 for a recent discussion).

Grady (1997, 1999) introduces a distinction between complex and primary metaphors. Essentially, primary metaphors are simple patterns that map basic perceptual concepts onto equally fundamental but not directly perceptual ones. They arise directly from basic recurring units of human experience. Grady assumes that source concepts for primary metaphors are typically based on various basic force-dynamic concepts (cf. Talmy 1988), such as UP, DOWN, FORWARD, BACKWARD, BRIGHT, DARK, etc. The corresponding target domains in primary metaphors include fundamental building blocks of mental experience that escape direct perception, such as HAPPY, SAD, DIFFICULT, SUCCESS, and HEALTH. In contrast, complex metaphors do not arise directly from experiential correlations but are made up of primary metaphors. For example, various complex metaphors referring to the concept of journey, such as LOVE / A BUSINESS / A TASK IS A JOURNEY can be accounted for in terms of the primary metaphor PURPOSES ARE DESTINATIONS, which explains why the sentence “We are going nowhere” can be used just as well for discussing a marital crisis, an unsuccessful business venture, or frustration with the task at hand.

Lakoff and Johnson (1980: 139–141) observe that health functions as the source domain in complex metaphors. For instance, LOVE IS HEALTH metaphor views the relationship in terms of a patient, e.g. “It’s a healthy relationship”, “Their relationship is reviving”. As summarized by Kövecses (2010: 19), “Both the general properties of health and illness and particular illnesses frequently constitute metaphorical source domains”, which includes such examples as: STATE IS HEALTH and ECONOMY IS HEALTH (see Boers 1999; Urbonaite & Šeškauskiene 2007). However, it must be emphasized that complex metaphors in which HEALTH acts as the source domain are beyond the scope of this study.

In this study of domains used for mapping the meaning of health onto other concepts we take into account the recent theory of objectification proposed by Szwedek (2007, 2011, 2014), who views conceptualization of abstract concepts in terms of concrete entities as objectification. Szwedek (2007, 2011) argues that for a metaphorical structure to exist, it is necessary to objectify the concept by assigning it some physical status. Since all other domains depend on the physical object that
is accessible to our senses, the object schema acts as the ultimate source domain, which provides grounds for metaphorical conceptions of health. Taking the assumption that health is a primary metaphorical concept that arises directly from embodied human experience, this paper discusses fundamental scales used for its conceptual mapping from the perspective of data found in linguistic corpora.

3. Methodology

This study approaches the question of figurative dimensions of health from the perspective of cognitive corpus-based approach to language study, which brings together the descriptive framework of cognitive linguistics (Croft & Cruse 2004; Janda 2015) with the methodological workbench of corpus linguistics (McEnery & Hardie 2012). Essentially, cognitive corpus-based linguistics relies on the explanatory frameworks of cognitive linguistics, but approaches them in such a way that their relevance to a given linguistic phenomenon can be empirically validated in large corpora (see Lewandowska-Tomaszczyk & Dziwirek 2009 for an edited collection of studies). More specifically, this study employs a corpus-illustrated approach, i.e. one in which claims about language structure are illustrated with examples taken from corpora (Tummers, Heylen, & Geeraerts 2005).

Grounding research on the conceptual metaphor in empirical corpus data has been advocated by Deignan (1999, 2005, 2008), who points out that “a computerised corpus can enable the researcher to detect patterns of usage more quickly than either the use of intuition or the analysis of individual texts, as words or expressions are automatically retrieved from the corpus and sorted” (Deignan: 178). She adds that grounding research on the conceptual metaphor in the corpus data “can reveal many linguistic details that could be passed over in the examination of single texts, and might not be observed at all when data are elicited rather than gathered from language in use” (Deignan: 293). Since one of the most significant objections against the conceptual metaphor research has been overreliance on decontextualized examples, the application of corpus data for this purpose makes observations more inter-subjective and allows one to accept results with a greater confidence (Fabiszak & Konat: 2013).

This research employs two reference corpora for English. One is the British National Corpus (henceforth BNC), which is a 100 million word collection of samples of written and spoken contemporary British English from a wide range of texts, not limited to any particular subject field, genre, or register (see www.natcorp.ox.ac.uk for more information). The other is the Corpus of Contemporary American English (henceforth COCA), which contains more than 450 million words balanced between spoken, fiction, academic journals, popular magazines, and
newspapers from 1990–2008 (see corpus.byu.edu/coca/ for more information). Both these resources are publicly available standard reference corpora (McEnery & Wilson 2001: 32), which have been used by researchers in a variety of contexts, including research on conceptual metaphors (e.g. Fabiszak & Kaszubski 2006).

The corpora employed for this research were queried with *SlopeQ Desktop* (ver. 01.05), which is a part-of-speech-sensitive concordancer with support for lemmatization and proximity queries (see Pęzik 2015 for more information). Due to the part-of-speech annotation of the corpora (see Garside, Leech, and McEnery 1997), it enables, for instance, searching specifically for all adjectives used to qualify the noun *health* with the query “*<pos=AJ.>* health” or searching specifically for all nouns qualified by the adjective *healthy* with the query “*healthy <pos=N.*>*.” From an array of different strategies which can be used for extracting linguistic expressions that reflect conceptual metaphorical mappings from corpora (see Stefanowitsch 2006 for a review), this study employs searching for sentences containing lexical items from both the source domain and the target domain. The examination was implemented by looking for expressions in which nouns used to refer to *health* as the conceptual source domain, either precede or follow lexemes used to refer to *up/down* and *strong/weak* as metaphorical target domains investigated in this study. Specifically, lexical items used to refer to “health” were limited to: *health, condition, state, form,* and *shape.* The “up” state was specified using the lexemes: *up, upward, peak, top*; while the “down” state using: *down, downward, bottom, downhill.* The “strong” state was specified using the lexemes: *strong, powerful, robust, stout,* *sturdy;* whereas the “weak” state using: *weak, feeble, enfeebled, frail, fragile.*

Moreover, expressions referring to transitions in the state of health were found by looking for the noun *health* followed by verbs marking a positive change: *improve,* a negative change: *deteriorate,* or stabilization: *stabilise (stabilize).* Negative changes expressed in terms of downward movement were found by looking the noun *health* followed by verbs: *decline, drop, plunge,* and *tumble.* Different factors that affect health were found by looking for the noun *health* preceded by verbs used to express either positive or negative influence: *help* or *damage,* respectively. Finally, examples for phrasal verbs expressing the negative change of health as down-transition were found by looking for verbs: *strike, come, go,* followed by the particle *down,* and then lexemes related to sickness: *disease, symptoms, illness,* *sickness, cold,* and *flu.*

Finally, metonymical references to health and disease in terms of *strength* and *weakness* were taken into consideration (see Section 4.2). Expression referring to transitions in the state of health as changes in one’s strength were found by
looking for the noun *strength* preceded by verbs expressing either restoration of the previous state: *restore, recover, recoup, regain*, or a loss of strength: *lose, drain, sap, rob*. Examples for a change in the health state expressed in terms of getting weaker or stronger were found by looking for combination of verbs *get* and *feel* with comparative adjectives *stronger* and *weaker*.

Searching was implemented using proximity queries (Bernard & Griffin 2009). They allow for searching with a slop value, which specifies how far apart lexical items included in a query can be from one another to be still returned as a result to the query. The slop can be used in combination with the binary (yes/no) preserve order option, which indicates whether the original order of query terms should be retained in results. In this study, proximity queries were implemented by adjusting the value of slop between 1 and 5, depending on the number of examples retrieved from the corpus. The preserve order option was set to either to “yes” or “no”, depending on the particular query. Setting this option to “no” allows, in some cases, for finding both examples of health changing its state, e.g. “Baxter's health greatly improved”, and factors affecting its state, e.g. “The right lighting can ... improve your health”. All queries used to obtain the examples are listed in Appendix, which provides for immediate replicability of the study. Since this paper does not aspire to make any quantitative claims about health metaphors based on their frequency in the corpora (cf. Fabiszak, 2008), this methodology seems to be reasonably adequate for the purpose of the study.

4. **Figurative dimensions of health**

A discussion on figurative dimensions of health must start from the observation that the word “health” is a polysemous lexical item, which embraces a cluster of meanings that are closely connected to one another (Lewandowska-Tomaszczyk 2007). In one sense, health functions in language as the semantically charged concept that signifies the positive condition of one’s being *healthy*, as opposed to the negative condition of one's being *ill*. This meaning is defined in OED (2009) as “Soundness of body; that condition in which its functions are duly and efficiently discharged”. As illustrated in Figure 1, this sense refers to that part on the scale of biopsychosocial functioning of an organism which marks the positive condition, which fits into the model of health and illness promoted by Antonovsky (1987).

*Figure 1. Health as the positive condition of biopsychosocial functioning.*

- DISEASE HEALTH +
Examples found in the corpus data indicate that health as the expressly positive condition is something we often wish for ourselves and others, e.g. “We all love, hate, cry, fear, bleed, die, and wish for health and happiness” (BNC), “I sincerely wish you health and happiness” (COCA). Moreover, it tends to be associated with happiness: the phrase health and happiness occurs 14 times in the BNC and 75 times in the COCA. Moreover, in this positive sense it functions as the root for the adjective healthy, whose meaning refers to “possessing or enjoying good health; hale or sound (in body), so as to be able to discharge all functions efficiently” (OED, 2009). This adjective is used in various contexts with reference to individuals and the community, e.g. healthy adults, healthy baby, healthy children, healthy population, healthy society; body parts, e.g. healthy cells, healthy hair, healthy heart, healthy skin, healthy teeth and gums; and all sorts of living organisms, e.g. healthy animals, healthy plants, healthy crops, healthy trees. It also functions in another closely connected sense, which means “conducive to or promoting health” (OED, 2009), in a wide variety of literal expressions such as healthy air, healthy breakfast, healthy diet, healthy environment, healthy lifestyle, and metaphorically to denote “sound condition” (OED, 2009), e.g. healthy country, healthy democracy, healthy economy, healthy industry, healthy market, etc.

However, the word “health” has also another sense, which as noted in the OED (2009) evolved from the above prototypical sense by extension. It can be defined as “the general condition of the body with respect to the efficient or inefficient discharge of functions” OED (2009). As illustrated in Figure 2, this other sense refers to the whole dimension of biopsychosocial functioning of an organism.

Figure 2. Health as the whole dimension of biopsychosocial functioning.

Since health in this sense is semantically uncharged, it includes both positive and negative parts of the scale. Accordingly, it can be qualified by both positive, e.g. good health, blooming health, excellent health, perfect health, and negative modifiers, e.g. bad health, failing health, ill health, poor health, and weak health, which occur multiple times in both corpora analyzed in this study. Moreover, health in this sense tends to be discussed as a state/process that undergoes either positive or negative transitions (cf. Pustejovsky 1991). It can deteriorate, as in “His health has deteriorated substantially in prison” (COCA), improve, as in “After a week in the country, Baxter’s health greatly improved” (BNC), or stabilize as in “The pope’s health has stabilized” (COCA). Additionally, it can be influenced by a multitude of different factors, which affect health either positively, e.g. “The right lighting
can boost your mood and improve your health” (COCA), “Sporadic exercise can help general health” (BNC), or negatively, e.g. “Smoking can seriously damage your health” (BNC), “Overwork as an undergraduate damaged his health” (COCA).

4.1 **Up–Down Scale**

Since health as the general dimension of biopsychosocial functioning has a tendency to fluctuate and can be affected by countless factors, its exact condition is difficult to specify in absolute terms. Probably for that reason, as observed by Lakoff and Johnson (1980), it tends to be mapped conceptually onto an **up–down scale**. While the *up* part is associated with the positive condition of the human health, i.e. *health* in the above-discussed prototypical meaning, the *down* part of the scale is associated with the negative condition, i.e. *disease*. This metaphorical mapping can be illustrated with a variety of examples from corpora probed in this study. For instance, an alternating positive and negative condition of one’s health can be described in terms of *up and down* states, e.g. “John’s health had been up and down for years”, “Mrs. Fassbinder’s health has been up and down over the past five years, but she has not had to stay overnight in the hospital” (COCA).

Since the positive condition of one’s health is associated with the top part of the scale, somebody who is very healthy is said to be at the peak of health, e.g. “Only forty-seven, Drake had appeared to be at the peak of health”, “[Caine] jumped down from the fence, moving like a man at the peak of health”, or in the peak of health, e.g. “Meijer tries to stay in the peak of health by eating right and exercising”; “[Her doctor] pronounced her in the peak of health and quite ready to go home” (COCA). Similarly, efforts taken to maintain a positive condition of an organism can be expressed in terms of *keeping in peak health*, e.g. “The aim is simple: … to keep your hair in peak health”, “weekly maintenance … should keep your … livestock in steady conditions and peak of health” (BNC). A person whose health is in a very positive condition can be described as being in top health, e.g. “He missed the game against Detroit and has rarely been in top health” (COCA), top form, e.g. “She was still taking medication after her breast cancer operation but she seemed to be on top form” (BNC), or top shape, e.g. “Burke was certain his heart had always worked just fine, always been in top shape” (COCA).

In contrast, the negative condition of one’s health can be described in terms of being located down the scale, as in “My health is down since the damn tractor laid on my chest” (COCA). A gradual deterioration of one’s health can be expressed in terms of *health going downhill*, e.g. “[She] says her health started to go downhill soon after she received mercury fillings in her teeth”, “Soon after giving birth to Brody and Conner, Rachel’s health had begun to go downhill” (COCA). When
one’s health deteriorates it *declines*, e.g. “Shortly after that, Messick suffered a stroke and her health declined”; “In recent years, Sinatra’s health declined and he rarely was seen in public” (COCA), *takes a plunge*, e.g. “When we arrived with a U-Haul, my grandmother’s health took a plunge downward”, “[He] has recently gone public with the news that his mental health took its own plunge years ago” (COCA), or *tumbles*, e.g. “The immune system is like a set of scales that sometimes tips sharply enough to send a person’s health tumbling” (COCA). When one gets ill, she/he is *struck down* with a disease, e.g. “Have you been struck down with flu this year?” (BNC), *comes down* with a disease, e.g. “I came down with a blood and kidney disease that was diagnosed first as possible leukemia” (COCA), or *goes down* with a disease, e.g. “He went down with influenza symptoms on Tuesday evening” (BNC).

### 4.2 strong–weak scale

What additionally emerges from the corpus data is that health as the general dimension of one’s biopsychosocial functioning can be mapped conceptually onto other scales originating from the embodied experience. Another scale used for the conceptual mapping of general condition of health is a strong–weak scale. In this source domain, figurative expressions of health appear to employ a *metonymic* (Kövecses & Radden 1998; Panther & Thornburg 2007; see also Bierwiczzonek 2013 for a recent account) mapping of *strength* and *weakness* as standing for the positive or negative condition of health, respectively. This fits into the category of metonymic schemas of *causation*, which are based on a cause-and-effect type of relationship (Kövecses & Radden, 1998, p. 56). In this case, an *effect for cause* metonymic relationship is created, in which strength is mapped metonymically onto the positive part of the scale as the effect brought about by good health. On the other hand, *weakness* as the effect typically caused by disease is mapped metonymically onto the negative condition of health. In the realm of health conceptualizations, the conceptual relationship between elements in this metonymical frame can be specified more precisely as *physiological effect for biopsychosocial state*.

What can be observed in this context is that the concept of health undergoes *objectification* (Szwedek 2007, 2011). Since health and disease are certain states and all states are objects,¹ health is *objectified* as an object. Figurative expressions of health condition along the strong–weak scale map the dynamic multidimensional concept, which includes a variety of bio-psycho-social aspects, onto a

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¹ Szwedek (2011, 2014) proposes the following line of reasoning: if states are conceptualized as *containers* (Lakoff & Johnson 1980: 30) and containers are objects, then *states are objects*. See also *states are objects* in Kövecses 2000: 93–97.
single dimension of embodied experience. More specifically, the objectification of health–disease as strength–weakness results in the creation of conceptualizations that “map values from the source domain onto states in the target domain” (Szwedek 2014: 371). Due to that, the condition of health can be reduced to a certain state within the physical realm. Specific metaphors that may be proposed in this context include health is a strong human (body) and sickness is a weak human (body). Within the scope of these metaphors, health is given a coherent structure and inherits properties of the prototypical object,\(^2\) which can be specified in basic physical terms (see Szwedek 2014 for a broader discussion on the relationships between domains in metaphorization).

The metaphorical mapping of health–disease onto strength–weakness can be illustrated with a variety of examples taken from the corpora probed in this study. For instance, a positive condition of health can be described as robust (good) health, e.g. “[She] insisted that her mother, a woman in robust health, was gravely ill”, “Their return to robust good health was swift and uninterrupted” (COCA), or sturdy health, e.g. “If you want to live a long, long time in sturdy health…” (BNC). By analogy, an ailing person does not enjoy robust health, e.g. “Mozart, never in robust health, died Dec. 5 after a streptococcal infection” (COCA). Treatment can be expressed as restoring strength, e.g. “[They had] drawn the angry scarlet blush from his wounds, and restored his strength” (COCA). Recovery from illness can be put across in terms of regaining one’s strength, e.g. “[MacDougal has been] trying to regain his strength after a bout with a stomach virus”; “[The] pope did suffer ‘a bout of difficult health’ a few years ago, then regained his strength”, or recovering one’s strength, e.g. “As soon as she recovered her strength, she returned to her hours in the library” (COCA). Likewise, the process of recovery can be described as getting stronger, e.g. “Now on antiviral medication, he’s getting stronger”, “I had been quite ill and had that pleasant feeling of getting stronger each day”, or feeling stronger, e.g. “Tina had just battled back from two weeks of terrible sickness, and was feeling stronger again” (COCA). On the other hand, a deterioration of one’s health condition can be expressed in terms of losing strength, e.g. “She was 81; she knew she was losing her strength; and she felt she might not recover it” (COCA). Disease is associated with something that drains strength, e.g. “The diarrhea had utterly drained her strength”; saps strength, e.g. “frequent operations and hospitalizations sapped what was left of his strength”; or robs strength, e.g. “a paralysis

\(^2\) In his theory of objectification, Szwedek (2007, 2011, 2014) follows Kotarbiński’s philosophical doctrine of reism, which assumes that “Persons ought to be regarded as objects, i.e. sentient objects” (Kotarbiński 1990: 4).
that robbed his strength”, “[He] puts up a gallant fight against the brain tumor that daily robs him of his strength” (COCA).

At the opposite pole of the scale, the negative condition of one’s health is associated with weakness. Accordingly, sickness can be expressed in terms of weak state, e.g. “He’s in a weak state of health”, or weak condition, e.g. “Her general condition was so weak that he had arranged for the doctors to take special care of her”. Generally poor health can be described as weak health, e.g. “She was a premature baby, and suffered weak health during early childhood” (BNC), “He privately he made fun of his weak health” (COCA); frail health, e.g. “They ignored the Michael Jackson’s frail health or pushed him too hard”, “Pope John Paul II may have to cut back on his travels due to his frail health” (COCA); or fragile health, e.g. “[The King] had been in fragile health since he was hospitalized in the United States four years ago for lung problems” (COCA). A deterioration of one’s health condition can be expressed in terms of getting weaker, e.g. “Gee, I’m getting weaker, I’m deteriorating”, “I kept getting sicker and sicker and weaker and weaker” (COCA). When one’s health falters below certain level, it can be described as too weak, e.g. “He was already too weak to undergo a liver transplant”, “She was too weak with AIDS to leave her home” (COCA). Similar adjectives used in this context include feeble, e.g. “My son was so feeble that I thought I would lose him at birth” (BNC), “He felt now like a man who, long enfeebled, is finally cured of a serious illness” (COCA); and frail, e.g. “Moving a frail parent with chronic disease into your home is certainly a gesture of love”, “When you and your parent visit a frail friend or relative in the hospital…”, “She was beginning to feel a little ‘frail’ and was admitted to hospital” (COCA).

5. Conclusions

From the cognitive corpus-based linguistic perspective, the conceptualization of health as the dimension of human functioning appears to hinge on conceptual mappings derived from basic aspects of embodied experience. The spatialization of health in health is up and sickness is down metaphors may be attributed to the physical basis: while healthy condition is associated with the upright posture, illness typically forces us to lie down physically (Lakoff & Johnson 1980: 15). Similarly, the conceptual mapping of health as strength and sickness as weakness can be motivated by embodiment: while the physical strength of the human body is associated with good health, weakness is among common symptoms of illness. The use of these particular scales suggests that people’s ordinary conceptualizations of health and disease are deeply grounded in the cognitive embodiment, and indicates that people have a strong tendency to rely on embodied
experiences to understand the nature of health and illness (see Gibbs & Franks 2002; Semino et al. 2015 for studies conducted in the specific context of cancer). Although the up/down and strong/weak dimensions appear to be prevailing conceptual domains in health conceptualizations, other domains can also be used for this purpose, albeit perhaps not as consistently, e.g. a bright/dark scale, as in “You look wonderful, said John, glowing with health” vis-à-vis “that’s better than fading away in a hospital bed” (BNC) (see Kövecses 2010: 18–23 for a review of common source domains).

Figurative expressions of health as the dimension along the up–down and strong–weak scales indicate that health and disease form gradable antonymy, i.e. a pair of words with opposite meanings, where contrasting properties between the two meanings lie on a continuous spectrum running between two poles (Cruse & Togia 1995; Lewandowska-Tomaszczyk 2010, see Jones, Murphy, Paradis, & Willners 2012 for a recent comprehensive discussion on antonyms in English), rather than the +/– axiological property of a word (Krzeszowski 1997). As noted by Croft and Cruse (2004: 169), the principal image-schema for antonymy of this kind is scale, which construes a property in terms of more and less. Since within the gradable antonymy health can be graded against different norms, there is no absolute single criterion by which one can tell what it means to be healthy. Moreover, there may be a partial overlap between different scales used for the conceptual mapping of health. This, coupled with an extensive set of varying states between health and disease, contributes to the vagueness and imprecision (Tuggy 1993; Solt 2015) of figurative health expressions.

Finally, there are other aspects of the meaning of health that have been left out of the scope of this paper, such as ontological domains used for the objectification of health in the prototypical sense of the positive condition of human functioning, as well as inherent force-dynamics in health conceptualizations. They undoubtedly require further analysis, which opens several paths for further cognitive corpus-based linguistic studies on health as a figurative concept.

References
Figurative dimensions of health


Figurative dimensions of health


Corpora and resources


SlopeQ. (2015). A part-of-speech-sensitive concordancer with support for lemmatization and proximity queries, ver. 01.05. [Developed by Piotr Pęzik]. Łódź: University of Łódź.

Appendix

The corpora used for this study were searched with the SlopeQ concordancer, which offers support for the part-of-speech tagging, lemmatization, and proximity queries (see Pęzik, 2015 for more information). Lemmatization allows for queries incorporating all English inflectional forms with the use of double asterisk (**) as a wildcard. For example, the query “go**” substitutes for “go, goes, went, gone, going”.

The value of *slop* and *preserve order* option used for proximity queries is indicated below. The pipe symbol ( | ) indicates logical OR, which enables executing multiple queries in a single line. All queries were implemented for the full contents of the corpus. The following queries were implemented in this study:

[ANY ADJECTIVE] HEALTH: <pos=AJ.> health

HEALTHY [ANY NOUN]: healthy <pos=N.>*

HEALTH AS UP/DOWN: health|condition|state|form|shape up|upward|peak|top|bottom|down|downward|downhill [Slop=5, Preserve order=No]

HEALTH AS STRONG/WEAK: strong|powerful|robust|stout|sturdy|frail|weak|feeble|enfeebled|frail|fragile health|condition|state|form|shape [Slop=5, Preserve order=No]

HEALTH AND HAPPINESS: health and happiness

HEALTH TRANSITIONS: health improve**|deteriorate**|stabilize**|stabilise** [Slop=3, Preserve order=No]

FACTORS AFFECTING HEALTH: help**|damage** health [Slop=3, Preserve order=Yes]

HEALTH AS NEGATIVE CHANGE DOWNWARD: health decline**|drop**|plunge**|tumble** [Slop=5, Preserve order=Yes]
VERBS EXPRESSING DOWN-TRANSITION OF HEALTH: strike**|come**- |go** down disease|symptoms|illness|sickness|cold|flu [Slop=5, Preserve order=No]

HEALTH AS RESTORATION/LOSS OF STRENGTH: restore**|regain**|recoup**|recover**|lose**|drain**|sap**|rob** strength [Slop=5, Preserve order=Yes]

CHANGE OF HEALTH AS GETTING WEEKER/STRONGER: get**|feel** stronger|weaker [Slop=1, Preserve order=Yes]