

Metaphor and Metonymy in English Expressions of Bodily and Behavioural Reactions of Disgust

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Introduction

Cognitive linguistic studies of emotions claim that the language of emotion abounds in figurative expressions, which can be classified as metaphors and metonymies (Lakoff 1987; Kövecses 1990, 2000). Metaphors mostly capture our subjective experiences, while metonymies mainly capture bodily and behavioural reactions that accompany our emotions.

Disgust is one of the six universal basic emotions (happiness, sadness, anger, fear, disgust and surprise) (Ekman 1999; Ekman et al. 1972). Disgust is identified as a universal basic emotion because the facial expressions and bodily movements (Darwin 1872/1999) going together with disgust are very similar and easily recognizable throughout the world. Based on this fact one would expect that the language of disgust is rich in metonymies just like the other universal basic emotions, happiness, anger or fear (Kövecses 1990). However, Stefanowitsch (2006) and Kuczok (2016) only discuss metaphors of disgust without referring to metonymies in the language of disgust in English (and Polish).

The aim of the present paper is to reconsider the language of disgust using a corpus built from sentences on the internet site <https://sentence.yourdictionary.com/disgust> and to show that it contains a number of metonymies besides metaphors and investigate what aspects of disgust they conceptualize.

1. Disgust

Disgust is defined as “strong dislike for something/somebody that one feels is not right or good” by Hornby (1989). Darwin states that “The term ‘disgust,’ in its simplest sense, means something offensive to the taste. It is curious how readily this feeling is excited by anything unusual in the appearance, odour, or nature of our food” (Darwin 1872/1999: 256). He points out that people also experience disgust when they smell, touch or see something revolting. Darwin claims that the typical facial expressions of disgust are frowning, opening the mouth, protruding the lips, wrinkling the nose, which may be followed by characteristic bodily reactions such as spitting, vomiting and pushing away the object that evokes the emotion (Darwin 1872/1999: 257–260).

Ekman et al. (1972) identify the same universal basic emotions as Darwin and prove by research that respondents living in various cultures are able to recognize disgust by looking at facial expressions of people experiencing disgust. They argue that facial expressions of disgust are basically the same throughout the world therefore they must be biologically (and not culturally) determined, in other words, they are related to vegetative response patterns accompanying the emotion disgust.

Plutchik (1980) investigates the actions that are related to the experience of disgust and finds that we feel disgust when we meet a gruesome object and we see it or think of it as a potential poison for us. Often as we feel the emotion, we may push the object away or turn away from the object (the disgust elicitor) and make a disgusted face or even vomit. Plutchik finds that a very similar course of events may happen in practically all human cultures therefore he argues that it has an evolutionary significance.

Focusing on the survival value and social function of disgust Rozin and Fallon (1987) and Rozin et al. (1993) distinguish two types of disgust. By ‘core disgust’ they mean disgust that comes about when we eat some food that is considered to be dangerous, poisonous or contagious, while by ‘interpersonal disgust’ they refer to situations in which disgust appears when we see ill people, very unattractive strangers, misfortunate or morally tainted people. Both core disgust and interpersonal disgust function as ‘techniques’ to keep us away from people or things that are dangerous to our health or may make us dirty or filthy.

McGinn (2011) makes a philosophical analysis of disgust and compares it to hatred and fear. He argues that while hatred and fear are existence-dependent emotions, disgust is not an existence-dependent emotion because we may feel disgust even in situations in which no disgust elicitor is present physically but it appears in our minds. In other words, we may experience disgust if the disgusting object (or person) is real and present or if it is real but not present or even if it is imaginary. However, it does not matter whether the disgust elicitor is present physically or appears only in our minds, we focus on its proximity and we “seek to avoid being close to what disgusts us” (McGinn 2011: 15). It is interesting to note that the aforementioned researchers emphasize that disgust is a result of certain vegetative responses, that is, it is an experience originating from and combining bodily and behavioural reactions. McGinn, on the contrary, points out that in his understanding disgust is more of a consciousness-centered emotion than a body-centered emotion since when we are disgusted, we tend to keep our consciousness clean from perceptual contact with any real or imaginary disgust elicitor.

2. Cognitive linguistic background to the study of emotion

Cognitive linguistics claims that linguistic expressions of an emotion describe the emotion experience under investigation in its totality, therefore by studying the language of emotion we are able to understand the emotion concept fully. Kövecses (1990: 40) argues that emotion concepts have a highly complex structure combining the following components: (a) a system of conceptual metonymies, (b) a system of conceptual metaphors, (c) a set of concepts linked to the emotion concept in question, and (d) a category of cognitive models, one or some of which are prototypical.

Studying the language of emotion, we find that it contains a large number of figurative expressions as well as literal expressions describing various details of an emotion experience. Figurative expressions fall under the categories metonymy and metaphor. In cognitive linguistics metonymy and metaphor are viewed as cognitive mechanisms (Lakoff 1987, Kövecses 1990, 2000). Metonymy is often defined as a ‘stand for’ relation. Radden and Kövecses (2000: 336) define metonymy “as a cognitive process in which one conceptual entity is mentally accessed via another entity.” In relation to emotions it means that the emotion in question (one conceptual entity) is mentally accessed by a physiological change, behavioural reaction or a facial expression (another entity) accompanying the emotion, e.g. *He is white as a sheet* may stand for fear, and the expression instantiates the metonymy BLOOD LEAVES FACE STANDS FOR FEAR (Kövecses 1990: 70).

Metaphor is traditionally understood as a literary trope which involves identification. In cognitive linguistics, however, it is viewed as a cognitive mechanism in which one entity (the target) is understood in terms of another entity (the source) (Lakoff–Johnson 1980). In relation to emotions it means that emotions are understood in terms of concrete experiences like FIRE, HEAT, COLD, WAR, JOURNEY, INSANITY and many more. Kövecses (1990, 2000) investigates a number of emotion concepts (e.g. anger, love, fear, pride, etc.) and finds that (1) one emotion may be conceptualized by several metaphors, (2) several emotions may be conceptualized by one metaphor, and (3) specific emotions converge in the generic concept of emotion, which uses the container image as its source domain in its conceptualization. For

example, the emotion LOVE is conceptualized by the images FIRE, WAR and JOURNEY in the following linguistic expressions, *I am burning with love*, *She conquered him* and *It's been a long, bumpy road*, which instantiate the metaphors LOVE IS FIRE, LOVE IS WAR and LOVE IS A JOURNEY, respectively (Kövecses 2000: 26). The emotions LOVE and ANGER are conceptualized by the source domain entity FIRE in *He was burning with love* (Kövecses 1990: 46), *Those were inflammatory remarks* (Kövecses 1990: 58), which instantiate LOVE IS FIRE and ANGER IS FIRE; by NATURAL FORCE in *She swept me off my feet* (Kövecses 2000: 26), *It was a stormy meeting* (Kövecses 2000: 21), which instantiate LOVE IS A NATURAL FORCE and ANGER IS A NATURAL FORCE; while LOVE, ANGER and FEAR are conceptualized by INSANITY in *I am crazy about you* (Kövecses 2000: 26), *The man was insane with rage* (Kövecses 2000: 21), *Jack was insane with fear* (Kövecses 2000: 23), which instantiate LOVE IS INSANITY, ANGER IS INSANITY and FEAR IS INSANITY, respectively. Beyond identifying specific-level metaphors for particular emotions Kövecses (1990) identifies a generic-level metaphor conceptualizing the prototype of emotion: EMOTION IS A FLUID IN A CONTAINER (Kövecses 1990: 144–159), on which all other specific-level emotions converge, e.g. *Peter is filled with anger/rage/love/disgust*.

3. Disgust metaphors

Consulting literature related to my research topic I have found two studies concerning disgust. Stefanowitsch (2006) gives a corpus-based analysis of several emotions and their metaphors in English, while Kuczok (2016) discusses a large number of English and Polish disgust expressions taken from his corpora and compares English and Polish metaphors of emotion under investigation.

Stefanowitsch (2006: 89) lists the source domain entities of English metaphors of disgust and gives ample examples from his corpus. For ease of reference, I include Stefanowitsch's metaphors here in the form I use throughout the present paper (however, it must be noted that he uses the form DISGUST/BEING DISGUSTED IS X):

DISGUST IS A MIXED/PURE SUBSTANCE,
DISGUST IS A SUBSTANCE IN A CONTAINER (UNDER PRESSURE),
DISGUST IS AN OPPONENT,
DISGUST IS PARALYSIS/A DISEASE,
DISGUST IS HIGH/LOW (INTENSITY),
DISGUST IS COLD,
DISGUST IS FOOD,
DISGUST IS LIQUID,
DISGUST IS PAIN,
DISGUST IS AN ORGANISM,
DISGUST IS HEAT,
DISGUST IS A BALLOON,
DISGUST IS A HEAVY OBJECT.

Kuczok (2016: 35–42) finds that English and Polish share most disgust metaphors he identifies in his corpora and arranges the metaphors into the following groups:

- physiological metaphors (cf. Apresjan 1997): DISGUST IS BEING SICK, SHUDDERING and GRIMACING,
- metaphors with sensory experiences as source domains: DISGUST IS TASTING SOMETHING BAD, SMELLING SOMETHING BAD, SEEING SOMETHING SPOILED/ SOMEONE ILL/ SOMETHING DIRTY/ SOMETHING UGLY, and SEEING/TOUCHING AN UNPLEASANT ANIMAL,
- force dynamic metaphors (cf. Talmy 1988): DISGUST IS A REPULSIVE FORCE and DISGUST/OBJECT OF DISGUST IS AN OPPONENT,

- ontological metaphors (cf. Lakoff–Johnson 1980): DISGUST IS A CONTAINER, DISGUST IS AN INSTRUMENT/MEANS FOR DOING SOMETHING and DISGUST IS A FLUID,
- orientational metaphor (cf. Lakoff–Johnson 1980): DISGUST IS DOWN.

It is interesting to note that the two lists are rather different, however, four source domains can be seen as fairly similar. (1) Both Stefanowitsch and Kuczok identify the source domain OPPONENT, (2) Stefanowitsch includes PARALYSIS/DISEASE in his list, while Kuczok discusses BEING SICK, (3) Stefanowitsch also includes FOOD, while Kuczok covers TASTING/SMELLING SOMETHING BAD and (4) Stefanowitsch lists SUBSTANCE IN A CONTAINER, while Kuczok has CONTAINER/FLUID IN A CONTAINER. The small rate of similarity and the considerable diversity in the range of metaphors identified by the two researchers may probably be explained by the fact that they have worked on two corpora built from different sources. (There are two additional remarks to be made here: (a) neither of the two authors cover metonymical expressions of disgust, so we do not know whether or not their corpora contain any, and (b) Stefanowitsch’s (2006) corpus contains only expressions combined with the term *disgust*, while Kuczok (2016) has a corpus of expressions containing the term *disgust* or a number of related words such as *sick*, *nauseate*, *distasteful*, and a lot more in his English corpus.)

4. My research

Kövecses (1990) claims that an emotion concept always contains a set of conceptual metonymies and a set of conceptual metaphors among other things. I assume that Stefanowitsch (2006) and Kuczok (2016) have not covered metonymies only because the study of disgust metonymies has been outside the scope of their research. I hypothesize that in my corpus of disgust expressions I will find a number of metonymies conceptualizing such physiological reactions as shivering or shuddering, behavioural reactions like turning away from or pushing away a disgusting object and facial expressions like making grimaces or protruding the lips. My hypothesis is built on the idea that disgust is a universal basic emotion and since it is a universal basic emotion it must be accompanied by characteristic facial expressions and bodily movements.

For the aim of the present paper, I have built a corpus of sentences presented on the internet site <https://sentence.yourdictionary.com/disgust>. My corpus contains 175 sentences, all of which are combined with the term *disgust*. *Disgust* is used as a noun in 169 sentences and as a verb in 6 sentences. Reading through the material I have found that the sentences capture a wide range of disgust experiences, among which there are descriptions of facial expressions, behavioural and physiological reactions to disgusting situations or events. My research questions are:

1. What metaphors of disgust can be identified in my corpus?
2. What metonymies of disgust can be identified in my corpus?
3. How do my findings relate to Stefanowitsch’s and Kuczok’s research findings?

In the remainder of this paper, I will answer the above questions.

5. Discussion: metaphors and metonymies of disgust in my corpus

In my corpus I have found the term *disgust* in the following prepositional phrases: (*do something*) *in disgust*, (*do something*) *with disgust*, (*feel*) *disgust at something*, (*feel*) *disgust for something/someone*, (*feel*) *disgust to/toward somebody*, (*express*) *someone’s disgust with something/someone* (I put the verbs in brackets to indicate that the verb component of these phrases varies in the examples).

The phrase (*do sg*) *in disgust* appears in 48 sentences in my corpus and is combined with 33 different verbs. In situations like the one described in sentence (1)

- (1) I have seen customers put merchandise back and walk out of a store *in disgust* when the line at the cash register was too long or not moving fast enough.

It is probably too difficult for the experiencer to cope with the situation therefore he/she leaves the place where he/she is, resigns from his/her position, quits, flees or turns away, in other words he/she gets away (physically or mentally) from the situation that disgusts him/her. Besides the behavioural reaction of getting away from a situation people may have certain other agitated behaviour or bodily movements like shaking one's head or slumping down on the sofa as in sentences (2) and (3):

- (2) Dean said as the others returned to work, Rita *shaking her head in disgust* and Harrigan trying to talk on the phone by sticking a finger in one ear.

- (3) He *slumped down on the sofa in disgust*, waiting for Randy to finish the conversation, his foot kicking open the bicycle magazine.

The phrase *in disgust* makes use of the CONTAINER schema, however, examples (1–3) do not instantiate the metaphor EMOTIONS ARE FLUIDS IN A CONTAINER/DISGUST IS A FLUID IN A CONTAINER (cf. e.g. *I am filled with disgust*, where the human body is the container for disgust) because here the container is not the human body of the experiencer but the emotion itself is the container for the experiencer. Sentences (1–3) instantiate another version of the container metaphor: EMOTIONAL STATES ARE CONTAINERS (Kövecses 1990: 145), thus the specific-level metaphor DISGUST IS A CONTAINER. Furthermore, it is interesting to note that leaving a place, shaking one's head, etc. may be viewed as examples of agitated behaviour and physical agitation, which may be used in metonymies for emotions. Kövecses (1990: 70–73) identifies PHYSICAL AGITATION STANDS FOR FEAR and FLIGHT STANDS FOR FEAR among a number of other metonymies for fear, e.g. *he was shaking with fear* and *When he heard the police coming, the thief took to his heels*, respectively. Based on the same analogy I propose the metonymy PHYSICAL AGITATION/AGITATED BEHAVIOUR STANDS FOR DISGUST and claim that in sentences (1–3) there is a combined use of metaphor and metonymy.

I have found the expression (*do something*) *with disgust* in 9 sentences and *fill/imbue somebody with disgust* in two sentences. Examples like (4–5):

- (4) She inspected a T-shirt of mine, *sniffed it with disgust*, and tossed it into a trash can across the room.

- (5) Jackson *shook his head with disgust*.

describe behavioural reactions to something that the experiencer finds disgusting or revolting, while examples like (6) and (7)

- (6) *His body ached with repressed memories and disgust*.

- (7) [...] he *shrank with disgust* from the illiberal technicalities of practice.

Depict physiological reactions, physical agitation accompanying the emotion disgust. Sentences (4–7) instantiate the metonymy PHYSICAL AGITATION/AGITATED BEHAVIOUR STANDS FOR DISGUST. (N.B.: Kuczok (2016) identifies examples similar to (4–7) as instantiations of the metaphor DISGUST IS AN INSTRUMENT/MEANS FOR DOING SOMETHING, his example is “*That's not the point,*” *Peter said with disgust*. I question whether the phrase *with disgust* refers to the instrument used by the agent on the grounds that human agents need no instrument at all to say anything except their speech organs.)

In sentences (8–9) the verbs are *fill* and *imbue* (and not action verbs as in (4–7)):

- (8) The sight of her right now must *fill him with disgust*.

- (9) This way of solving [...] the ultimate problems of thought has had many followers in cultured circles *imbued [...] with disgust [...]*.

Examples (8–9) present disgust as a fluid and a substance contained in the human body, that is, they instantiate the metaphor DISGUST IS A FLUID and DISGUST IS A SUBSTANCE IN A CONTAINER, respectively.

My corpus contains 22 sentences using one of the phrases *have/feel/show/express disgust* followed by a preposition. The sentences describe relatively stable situations, in which the emotion disgust has already come about and obviously exists for some time as in (10–13):

- (10) In 59 Thræsea first openly *showed his disgust at* the behaviour of Nero [...]
- (11) I really did like him and cared about him, but now I just *have disgust for him*.
- (12) I thought you *felt disgust toward me* and would turn me away.
- (13) Verbal toddlers may *express their disgust with the new sibling* by asking, "Isn't it time to send him back?"

The phrase after the preposition *at* in (10) names the disgust elicitor, while the phrases after the prepositions *for*, *toward* and *with* used after the term *disgust* in (11–13) specify the people who trigger the experiencer's emotion, however, no action or event causing disgust is mentioned in which they may be involved or responsible for. In all the examples (10–13) disgust is conceptualized as an object, thus the metaphor DISGUST IS AN OBJECT.

My corpus contains 30 sentences that describe facial expressions of disgust as well as physiological and behavioural reactions that accompany the emotion disgust. The eye area is a very central part of the human face because the eyes are very informative about a person's mood, feelings and state of mind. We often describe the way one is looking at somebody or something in a particular emotional state and the expressions are usually instantiations of the metonymy WAYS OF LOOKING STAND FOR EMOTION as in (14):

- (14) *Sneering at Jackson in disgust*, Victor stood in front of Elisabeth and began hitting her [...].

Sentences like (14) instantiate the specific-level metonymy WAYS OF LOOKING STAND FOR DISGUST. Sentence (15), too, refers to a disgusted facial expression:

- (15) He made no attempt to hide the *disgust in his eyes*.

This example, however, makes use of the CONTAINER schema and instantiates a specific version of the CONTAINER metaphor, namely DISGUST IS A SUBSTANCE IN THE EYE CONTAINER, which is a combination of the metaphors DISGUST IS A SUBSTANCE and THE EYES ARE CONTAINERS FOR EMOTIONS.

I have found four sentences in my corpus describing details of the face, including sentences (16–18):

- (16) *with a grimace of disgust*, he began to turn away.
- (17) The wives then review the rule guide left by the other wife, which usually results in some *raised eyebrows or sighs of disgust* from the wives as they read about the rules of the family they are about to join temporarily.
- (18) On seeing Rostov, Denisov *screwed up his face* and pointing over his shoulder with his thumb to the room where Telyanin was sitting, he *frowned and gave a shudder of disgust*.

Sharing Kövecses's (1990) view that facial expressions, physiological and behavioural reactions conceptualize human emotions using the cognitive mechanism of metonymy I argue with Kuczok (2016) who identifies expressions like (17–19) as physiological metaphors (DISGUST IS GRIMACING, DISGUST IS SHUDDERING). I claim, on the contrary, sentences (16), (17) and (18) instantiate the metonymies GRIMACING STANDS FOR DISGUST, RAISED EYEBROWS STAND FOR DISGUST, FROWNING STANDS FOR DISGUST, respectively, which may be subsumed under the metonymy PHYSICAL AGITATION OF THE FACE STANDS FOR DISGUST. It must be noted that sentence (18) contains the phrase *sighs of disgust*, while (19) contains the phrase *gave a shudder of disgust*, which refer to some other forms of physical agitation, breathing and shivering/shuddering, respectively, thus the metonymies WAYS OF BREATHING

STAND FOR DISGUST and SHIVERING STANDS FOR DISGUST, again I disagree with Kuczok's (2016) analysis of similar examples as physiological metaphors. (Cf.: Kövecses (1990) identifies the metonymies PHYSICAL AGITATION STANDS FOR FEAR (N.B.: shivering is a form of physical agitation), INABILITY TO BREATHE STANDS FOR FEAR, AGGRESSIVE VISUAL BEHAVIOUR STANDS FOR ANGER, etc.).

Finally, I present six examples taken from my corpus, which refer to a series of actions of verbal behaviour in sentences (19–25):

- (19) She *gave a sigh of disgust* and retreated.
- (20) Edith *let out a sound of disgust*, loud enough that clearly said she didn't care if Cynthia heard it or not.
- (21) *The single word was a combined expression of disgust* and distress.
- (22) As they passed near a church in the Khamovniki (one of the few unburned quarters of Moscow) the whole mass of prisoners suddenly started to one side and *exclamations of horror and disgust* were heard.
- (23) He read it thoroughly and, when he failed to find anything useful, discarded it *with a loud snort of disgust*.
- (24) Brutus started after them, *snarling and barking his disgust*.
- (25) I have to *spit with disgust* every time I see his wrinkled old face.

Sentence (19) describes a way of breathing, (20) shows the start/an initial stage of vocalizing, (21–22) refer to verbalizing certain things, which is characteristic of humans, (23–24) describe human behaviour in terms of agitated animal behaviour (snorting and snarling/barking are characteristic of horses and dogs, respectively), while (25) refers to agitated human behaviour having the aim of getting rid of some distasteful or dangerous food substance in the mouth. The expressions in (19–25) instantiate the metonymies WAYS OF BREATHING STAND FOR DISGUST, WAYS OF SPEAKING STAND FOR DISGUST, AGITATED HUMAN BEHAVIOUR/SPITTING STANDS FOR DISGUST. At the same time, I find that examples (24–25) allow for the metaphor AGITATED HUMAN SOUND PRODUCING IS ANIMAL SOUND PRODUCING, or to put it even more generally AGITATED HUMAN BEHAVIOUR IS ANIMAL BEHAVIOUR.

Conclusion

In the present paper, I have outlined the theoretical background relevant to my research into the language of disgust including the metaphors identified by Stefanowitsch (2006) and Kuczok (2016). I have discussed sentences taken from a corpus built from the site <https://sentence.yourdictionary.com/disgust>.

My hypothesis that my corpus of sentences composed with the term *disgust* should contain not only metaphoric but also metonymic representations of the emotion has become justified. Comparing the metaphors instantiated in my corpus to Stefanowitsch's and Kuczok's lists of disgust metaphors I have seen that their range of metaphors is considerably larger than mine. In my corpus, I have found instantiations of the CONTAINER metaphor in four versions, DISGUST IS A FLUID IN A CONTAINER, DISGUST IS A SUBSTANCE IN A CONTAINER, DISGUST IS A SUBSTANCE IN THE EYE CONTAINER, DISGUST IS A CONTAINER, and identified two versions of the AGITATED BEHAVIOUR metaphor, AGITATED HUMAN SOUND PRODUCING IS ANIMAL SOUND PRODUCING and AGITATED HUMAN BEHAVIOUR IS ANIMAL BEHAVIOUR. The latter two metaphors are not covered by either Stefanowitsch or Kuczok. As for metonymies, I have identified the following metonymies conceptualizing physiological and behavioural reactions, and facial expressions accompanying disgust: PHYSICAL AGITATION/AGITATED BEHAVIOUR STANDS FOR DISGUST, WAYS OF LOOKING STAND FOR DISGUST, WAYS OF BREATHING STAND FOR DISGUST, WAYS OF SPEAKING STAND FOR DISGUST, and their specific-level versions are GRIMACING STANDS FOR DISGUST,

SIGHING STANDS FOR DISGUST, SHIVERING/SHUDDERING STANDS FOR DISGUST, SPITTING STANDS FOR DISGUST. By identifying these metonymies, I have challenged Kuczok's physiological metaphors: DISGUST AS GRIMACING, DISGUST AS SHUDDERING; and his ontological metaphor: DISGUST AS AN INSTRUMENT/MEANS FOR DOING SOMETHING. Furthermore, I have identified an example of a combined use of metaphor and metonymy in the phrase *shake one's head in disgust* instantiating the combination of the metonymy PHYSICAL AGITATION/AGITATED BEHAVIOUR STANDS FOR DISGUST and the metaphor DISGUST IS A CONTAINER. On the whole, I have demonstrated that a number of metonymies conceptualize bodily and behavioural reactions of disgust and identified certain metaphors of disgust that have not been covered by either Stefanowitsch or Kuczok. By having done so I hope to have contributed to a more complex understanding of the metaphoric and metonymic conceptualization of disgust.

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