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METAPHORICAL DESCRIPTIONS OF WRONGDOERS

What is a metaphoric picture of an *evil person* made of? In a study devoted to the development of the ability to use metaphorical descriptions of humans, the semantic fields of four target metaphors – *Human-Swamp*, *Human-Snake*, *Human-Knife*, and *Human-Nettle* – were established and compared. Subjects (365 young adults) were asked to decipher the metaphors' meanings. The results were obtained mainly by qualitative analysis, with frequency analysis of clusters containing synonymous meanings. The results indicate that when creating imaginary characteristics of evil people, young adults seem to be more concerned about the possibility of suffering verbal harassment (most commonly: vulgarity, mockery, gossip, jeering) than the threat of actual physical assault. The results may prove useful for developmental comparisons.

Key words: metaphor, semantic field, perception of wrongdoing in humans

Introduction

Raymond Gibbs (2002) describes the communicative functions of indirect speech by showing the three great values of metaphors: (a) they provide a way of expressing ideas that would be extremely difficult to convey using literal language, (b) they provide a particularly compact means of communication, and (c) they may "help capture the vividness of our phenomenological experience" (p. 125).

When processing a metaphor, one thinks about one item (the *topic*) in terms of a completely different item (the *vehicle*), and at that moment one grasps the feature that makes the topic and the vehicle similar to each other (Kubicka, 2005).

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Therefore, metaphors should provide means to communicate implicit, subtle, and complex meanings by showing a surprising similarity between items that belong to different domains. One of the fields for this kind of meaning is the characteristics of humans – human personalities, hopes, strengths and faults. Understanding figurative language when it is used to describe the social environment seems to be a crucial ability, which one gains over years of cognitive development (Białecka-Pikul, 2003; Dryll, 2009; Dryll & Bokus, 2016; Kubicka, 2005). Sources indicate that some disorders or severe mental states (e.g. the autism spectrum disorder, depression) may be connected with difficulties that people experience when trying to process metaphors (Bartczak & Bokus, 2013; Pisula, 2003).

From a robust choice of human features, let us focus on human weaknesses. The reason behind this is that faults and wrongs may be a topic of a delicate nature – sometimes we speak about them plainly, but often we avoid the subject (Chance, Norton, Gino, & Ariely, 2011; Shu, Gino, & Bazerman, 2011). Such a topic provokes the use of illusive language. How do adults construct the semantic fields of metaphors concerning human "moral weaknesses"? What is a linguistic, metaphoric picture of an *evil person* made of? Will that person be defined by descriptions of his/her appearance or by descriptions of his/her behavior? The emotions he/she may express? What kinds of threat do we expect from such a person? Do people focus on one warning feature or do they build a network of associations? In social psychology, a lot has been said about prejudice and about the role of fear in processes of judgment. There are also many results of studies devoted to causal and intentional analyses in moral judgment (Cushman, 2008), conscious and intuitive moral reasoning (Cushman, Young, & Hauser, 2006), social cognition in the attribution of moral responsibility (Woolfolk, Doris, & Darley, 2006). The results suggest that when coming to a conclusion, people tend to focus their attention on the perpetrator's intentions and the victim's suffering (Gray, Young, & Waytz, 2012). Exceptions to this may be anticipated in cases of high-functioning autism (Moran et al., 2011) and psychopathy (Glenn, Iyer, Graham, Koleva, & Haidt, 2009), but the question of empathy toward people experiencing harm is not a simple one (Blair, 2005). However, all reasoning is based on and expressed via linguistic tools. Even if people refrain from explaining the motives of their moral judgement, multiple studies show the role that words play in attributing blame and responsibility (Loftus & Hoffman, 1989; Loftus & Ketcham, 1991).

As mentioned above, Gibbs (2002) points to indirect speech as a compact means of communicating particularly subtle and complex ideas. It seems that it suits the topic of faults, disadvantages, and wrongs perfectly. This leads to the main question: What are the semantic fields of metaphors describing people as evil composed of?

Speaking about indirect language, it is worth noticing that metaphors are different from similes and analogies. Authors indicate that similes belong to

literal language (Glucksberg, & Haught, 2006; Ortony, 1979), but analogies seem to be placed "on the threshold" of figurative language (Ortony, Vondruska, Foss, & Jones, 1985). What is the source of this differentiation? The reason behind analogies is often plain, while in metaphor it could be less so. Max Black (1979) says that metaphorical statements are "absurd" and "false" when taken literally. Processing them may be harder than understanding phrases of direct speech. Is it? Using metaphors may require extra cognitive effort. In 1999 John Kennedy and Daniel Chiappe published an article in which they wrote that subjects prefer metaphors over simple comparisons, as metaphors offer more meaning. In response to this, two years later, Ira Noveck, Maryse Bianco, and Alain Castry published "The Costs and Benefits of Metaphor" (2001), in which they point out that although metaphors are natural to human cognition, they often come with costs when compared to nonfigurative controls. In their study, metaphors required longer processing times. In response to this, Daniel Chiappe, John Kennedy, and Penny Chiappe (2003) conducted a study in which understanding an apt, original metaphor did not take longer than processing sentences that make perfect sense if taken literally. Admitting that metaphors seem to be natural to human cognition does not mean that processing figurative language is easy. The key points here could be aptness, comprehensibility, and familiarity. More research followed, as the quest to establish the main cognitive factors of metaphorical processes evoked a heated debate (Chiappe, Kennedy, & Smykowski, 2003; Gentner, 1983; Gentner & Clement, 1988; Gibbs, 2001; Glucksberg & Keysar, 1990; Markman & Gentner, 1990). Similes and analogies are believed to be simpler than metaphors, since metaphors operate on more complex networks of connections, but this problem is still widely discussed. One author tried to close the debate. Samuel Glucksberg (2003, 2008) stands firmly by the idea that metaphors are understood directly and that they operate on more than just plain similarity. He says:

> Literal meanings do not have unconditional priority, and so they are not necessarily easier to compute than nonliteral meanings. More importantly, metaphor comprehension is not optional; it does not depend on the defectiveness of literal meanings. Instead, metaphor comprehension is mandatory, that is, automatic. Whether or not a literal meaning makes sense in context, potential metaphorical meanings cannot be ignored. (2008, p. 68)

What's more, Glucksberg believes that metaphors are categorical, class-inclusion assertions. He says that people can understand both literal and figurative comparison statements in at least two ways. First, they can try matching the features of items belonging to two different domains. The properties of the two are extracted and are then matched with one another. Those properties are used to establish the grounds for the comparison, as well as the degree of similarity between the two. A second, alternative strategy is this: Instead of matching the properties, one can identify the closest superordinate

category that contains those two and then use that category's properties as the grounds for the comparison. Metaphors are not plain similes, and they are rarely processed as comparison. Instead, they are usually understood as class-inclusion assertions, that is to say, they work on implicit categorizations. The main factor here is reversibility: Metaphors differ from similes because the two forms often communicate very different meanings for the same topic and vehicle (Glucksberg, 2003, 2008; Ortony, 1979; Ortony et al., 1985). Why is this important? Although the authors focus on other aspects of possible consequences, it seems logical to assume that using a superordinate category could result in constructing a network of connections between the vehicle and the topic. A network instead of just one, symmetrical similarity. An interestingly convergent conclusion was drawn by Reinders Duit (1991). When Duit defines analogies as comparisons of structures between two domains, he says that in analogies, the relation is symmetrical because it is based on identities of parts of structures. Therefore, he sees the difference between analogy and metaphor as follows:

> Both analogies and metaphors express comparisons and highlight similarities, but they do this in different ways. An analogy explicitly compares the structures of two domains; it indicates identity of parts of structures. A metaphor compares implicitly, highlighting features or relational qualities that do not coincide in two domains. (p. 651)

The metaphoric process enables both the topic and the vehicle to be seen in a new light, and this discovery calls for the recipient's reaction. Not all forms of indirect speech have the same strength of influence (Glucksberg, 2001). When it comes to metaphors, the classical division was made by Paul Ricoeur (1978), who distinguished *vivid* metaphors (ones that surprise and charm the audience) and *dead* metaphors (no longer vivid, conventional capsules for previous linguistic inventions, which simply preserve well-established semantic connections). According to Glucksberg (2008), for a novel metaphor, a category is created. For a conventional metaphor, a category preexists – it was founded when the metaphor was first coined. But even if indirect speech is not surprising, it still has potential for impact, depending on the context. The present paper reports a study focusing on both kinds of metaphors: less original (*Human-Snake*, *Human-Swamp*) and more original (*Human-Nettle*, *Human-Knife*).

Method

Model

The results presented here are only a slice of wider research on the development of the ability to use metaphorical descriptions of humans, which was designed as a doctoral study (Dryll & Bokus, 2016). It was a cross-examination with comparisons between age groups focused on observing

differences in hopes of formulating hypotheses concerning development. It was essential to begin by establishing the meaning of a small number of metaphors – ones that are present in the contemporary cultural context. The list of stimuli was composed to include both conventional and original metaphors. Since the meanings of figurative language are flexible and prone to change over time, dictionaries would not suffice. Therefore, the aim of the first main study was to decipher 26 metaphors as they are understood by competent language users, that is, educated adults. The meanings indicated by adults were to be the true meaning of a metaphor. Collecting the fullest possible scope of associations was necessary to uncover the 26 semantic fields of the 26 metaphor stimuli, and to look for patterns of associated meanings, in order to enable future comparisons between subjects of different age.

The second main study was devoted to children and adolescents and their understanding of those 26 metaphors. The aim of this study was to gather results that would allow comparisons between the meanings described by adults and the meanings described by younger language users. Its results will not be discussed here, they are only mentioned in the summary (for details, see Dryll & Bokus, 2016).

Subjects and Procedure

The subjects included in the study were 551 young adults, students recruited from the Faculty of Psychology, the Faculty of Journalism (both at the University of Warsaw, Poland) and the Warsaw School of Economics. Since the results of several pilot studies have been added to the results of the main study, the number of subjects answering some of the stimuli may differ. It was decided that semantic fields would be more adequate if all the collected data was included (for details and more results, see Dryll & Bokus, 2016).

The tools for the study had to be designed. This took several pilot studies and two main studies, but finally led to completing the task (for details see Dryll, 2009; Dryll & Bokus, 2016). In short, the pilot studies enabled the selection of 26 metaphors that addressed four dimensions of human characteristics: *good* versus *evil*, *smart* versus *stupid*, *pretty* versus *ugly*, and *strong* versus *weak*. The crucial point here was that it was the participants who suggested the vehicles. In the very first pilot study, they were asked to think of metaphors that are (or could be) used to describe people as evil or good. This procedure led to working (further pilot studies) on the metaphors chosen by the subjects. Their proposals were put into categories according to the domain of the vehicle. That is to say, names of plants were grouped together but separated from brands of cars, kinds of garments, names of cities, and so on. That is how the domains that were more often used could be separated from the ones that were too unique. From the group of popular domains, four domains were chosen as the most promising, meaning that they were vast and easily accessible (common in daily experience) and therefore could be used in various groups of future subjects.

They had to be not too difficult for small children nor too trivial for adults. These four domains were: animals, plants, objects of daily use, and elements of the natural environment. The second pilot study was dedicated to finding regularities in subjects' answers. One hundred and forty-two adults (psychology students) were asked about 96 vehicles from the four domains. The results indicated that adults use various categories of description that may be related to the dimensions of human characteristics (see Table 1).

Table 1. Mean Frequencies of Categories of Description, Activated by Subjects in Reaction to Vehicles Addressed to Four Dimensions of Characteristics (T-test)

Category of description	Dimensions of characteristics			
	GOOD--EVIL	PRETTY--UGLY	STRONG--WEAK	SMART--STUPID
Subject's exclamation	1.12	**1.83**	0.45	0.58
Object's physical properties	2.13	3.26	**3.46**	2.14
Object's activity	0.31	0.26	0.22	**0.42**
Descriptions of object's activity	1.20	0.53	**1.58**	1.29
Object's intellectual properties	0.73	0.99	0.83	**2.51**
Object's emotions	2.77	2.58	**3.05**	1.84
Object's social functioning	**3.21**	1.55	1.94	1.67
Object's goals and dreams	0.52	0.60	0.53	0.88

The bolded numbers in Table 1 indicate the highest score in a row. We can see, for example, that the participants of the second pilot study most often used descriptions of the objects' social functioning when they were creating characteristics of *good* and *evil*. It also shows that the metaphors indicated by the subjects of the previous pilot study had hit the mark.

"Subject's exclamation" means responses in which participants expressed their direct, spontaneous reaction toward the object they had imagined, for example: "Human-Swamp? Ugh, the stink… I would hate him!" or "Human-Lily? I'd love her the very moment I set my eyes on her!" The other categories focused on the object, not the recipient's reaction.

"Object's activity" and "Description of object's activity" are separated to distinguish between descriptions in which a participant simply names an action performed by the object and ones in which he/she adds an adjective to depict that action. For example: *Human-Lion* could be a "politician who argues" ("argues" = object's activity) or a "politician who argues in a loud voice" ("in a loud voice" = description of object's activity). This could be differentiated from a *Human-Spider*, who "sets traps of intrigues, manipulates and argues silently." Both objects "argue" but further description ("in a loud voice", "silently") shows how dissimilar arguing can be. Although the results of the pilot study looked promising, the procedure was simplified. Categories of description

were used only when testing children and adolescents (second main study). With adults' answers, counting the clusters of associations to reveal the semantic fields was faster and more efficient.

Step by step, the list of 26 vehicles from four domains was completed (see Table 2). The metaphors addressed four dimensions of human traits (*evil-good, pretty-ugly, strong-weak, smart-stupid*). The procedure allowed to validate which of the 26 metaphors were more original (vivid), and which were quite common (dead) – as marked in Table 2. Thus, the goal of the first main study (establishing 26 semantic fields of these 26 metaphors) could be addressed. The subjects were competent language users – educated adults. Once the results had been obtained and analyzed, the second main study – comparisons between age groups – was conducted (for further details and results, see Dryll & Bokus, 2016).

Table 2. Dimensions of Human Characteristics and Domains of Vehicles, with Estimations of Metaphors' Originality (Based on the Pilot Study)

Dimension of characteristics	Domain of vehicles			
	Animals	**Plants**	**Objects of daily use**	**Elements of the natural environment**
GOOD	DOLPHIN (L)	APPLE TREE (O)	CUP (O)	SUN (L)
EVIL	SNAKE (L)	NETTLE (O)	KNIFE (O)	SWAMP (L)
SMART	OWL (L)	-	LAMP (O)	-
STUPID	HEN (L)	-	SHOE (L)	-
STRONG	LION (L)	OAK (L)	HAMMER (L)	RAINSTORM (L)
WEAK	MOUSE (L)	GRASS (O)	COTTON (O)	FOG (O)
PRETTY	BUTTERFLY (O)	ROSE (L)	-	RAINBOW (L)
UGLY	TOAD (L)	POTATO (O)	-	PUDDLE (O)

Note. O = more original; L = less original

Instruction Used in the Main Study

The subjects were asked to express their spontaneous associations in response to the metaphor stimuli – a list of 26 vehicles. The participants of the main study never knew what the metaphors are "supposed to mean." They received a list of 26 stimuli without any explanation apart from the instruction:

The words in the left column can be used as a metaphor characterizing a person's personality or appearance. For example, "sofa" could be understood as a reference to a plump man who enjoys comfort and relaxation. A person who understands that metaphor in this way would write "sofa: plump, fond of comfort, likes to relax." In answer to the metaphor "goldfinch," he/she could add "joyful, ubiquitous, fine." Please write down your first two associations to each of the 26 names in the left column.

The results of the first main study showed 26 semantic fields of metaphors used by adults. The analysis highlighted the dominant meaning of each metaphor. Establishing the dominant meaning was necessary for further research, as it allowed to follow the dynamics in changes of meanings by studying the responses of participants from different age groups. The present paper only discusses those stimuli that had been indicated by participants of the first pilot study as symbols of *evil*: *Swamp*, *Snake*, *Knife*, and *Nettle*.

The results were obtained mainly by qualitative analysis. This was enhanced with cluster analysis (clusters of synonyms) and a ratio test for dependent samples (comparison of frequency of modal category with the standard, for details see Góralski, 1987). This was done in order to discover the properties of each of the semantic fields instead of the pattern of answers of an individual subject. The procedure showed the dominant meaning of every metaphor (hence the term *dominants*). All the adults' answers were considered and counted, each and every association. In each of the semantic fields, the synonyms were joined in clusters. When in doubt, two dictionaries of synonyms and highly competent raters (linguists) were consulted. The magnitude of each cluster is shown by the number in brackets.

The answers of adults are coded as follows: the term used by a participant, italicized, the total number of occurrences of that term in that semantic field, given in round brackets. If the number in brackets is preceded by the letter *c*, it means that the term is also the name of a cluster (*c* for *cluster*). The cluster groups the synonyms together. It is easier to see the dominant meanings if we organize the synonymous terms into clusters. In order to decide which terms are synonymous, both a dictionary and the help of raters were used. All participants' answers were counted and analyzed. For example, "*Term A* (6)" means that Term A occurred six times in the semantic field of metaphor X. "*Term B* (c12)" means that (a) Term B is a cluster of synonyms and (b) elements of cluster Term B occurred in the semantic field of metaphor Y a total of 12 times.

Results

The Human-Swamp

The Human-Swamp was described in general as repulsive, but drawing in; a person that is "at the bottom." This stimulus was presented to 264 adults. Adults recognize the Human-Swamp as a person burdened with the type of evil that is associated with dirtiness. Participants' answers form an image of a "dirty person," where *dirt* is the kind of filth that stains both physically and morally. The Human-Swamp has had a troubled past and, as a result, is "rotten to the core." Adults picture a self-destructive person prone to addiction, and – interestingly – they do not speak of compassion. The Human-Swamp is not perceived as a victim but rather as a perpetrator, someone acting with full premeditation. A person that had gotten himself/herself into deep trouble and now, instead

of struggling to pick themselves up, tries to destroy others. It is a pattern of a tendency to fool oneself that "just one more couldn't hurt" with a "why don't you join me?" twist. He/she has no regard for redemption, and willingly and selfishly deposits others in his/her ever-absorbing resentment. The Human-Swamp does not attack its victims (cf. the Human-Knife), it simply immobilizes them. How is it done? The Human-Swamp is repulsive but has a wicked charisma. One could fall for him/her.

A ratio test for dependent samples (comparison of frequency of modal category with the standard) was used to compare subsequent characteristics while they were sorted from the most common to the least common. Two differences were statistically significant – based on the test, the characteristics of the Human-Swamp were divided into three groups: a group of the most frequent terms, namely *unpleasant* (c51) and *dirty* (c44); a group of less common terms: *with problems* (c30), *evil* (c28), and *insincere* (c28); and a group of terms that were rare. The dominants were: *unpleasant*, *dirty*, *with problems*, *evil*, and *insincere*.

In more detail: The Human-Swamp is *evil* (c28). This cluster consisted of, among others, *having the worst traits of character*, being someone that *acts immorally*, is *immoral*, *unethical*, *filthy*, and *the worst*. It is a complex combination. A person referred to with the Human-Swamp metaphor does not hide a hostile attitude toward others, even though he/she is *mysterious* (c8) in general, his/her aversion to people is evident. The Human-Swamp's attitude, the cluster of *unpleasant* (c51), consisting of *hostile*, *unfriendly*, and its synonyms, manifests itself in his/her behavior (descriptions: *inhospitable*, *boorish*, *rude*, *primitive*, *uncultured* linked in the cluster of *arrogant*, c4). Expressing that attitude would not make him/her socially attractive. Three people described him/her as *someone driving others into a bad mood*, *stultifying*, *tiring*, which were added to the cluster of *annoying* (c3). The emotions the Human-Swamp chooses to show match the picture above. *Forever bitter*, *depressive*, *negative*, *gloomy*, and *immersed* (after taking the context into account), *empty*, *frustrated*, a *pessimist*, *sadness*, *unhappy*, and *melancholic* added up to the cluster of *sad* (c18). He/she is also described as *hollow* (10). Subjects mentioned the Human-Swamp's *embarrassment* (added to the cluster of *shy*), being *unnecessary* and *lonely*. Two participants pointed to *querulous* (c2). He/she is a *person with a bad past*, but that person's present and future also do not promise to be good: *hopeless*, *striving towards self-destruction*, *looking for trouble*, *attracting misfortune*, *disastrous*, *having problems with oneself and with life*, *creating a lot of problems*. His/her current status is illustrated by the comments *degenerate*, *destroyed*, *broken*, *in the gutter* (c3). These and a few synonymous descriptions were grouped in the cluster of *with problems* (c30). Two subjects reported a possible cause of this situation: *addicted*, *easily falling into dependence*. That could be linked with *immobilization* and *enslaved*. The Human-Swamp is also associated with an unspecified apathy or inactivity. The terms *slothful*, *slow*, *lazy*, and *sloppy* were

included in the cluster of *phlegmatic* (c10). That person is seen as *uninterested in anything in particular*, *passive* (c3). *Dull as ditchwater*, *boring* – formed the cluster of *boring* (c14). The Human-Swamp will not change anything in his/her life, as he/she is believed to be *nonprogressive*, *steady*, *old-fashioned*. On the other hand, he/she is described as *indecisive*, which was joined with *lost* and *complicated* in the cluster of *unstable* (c5). The Human-Swamp is also said to be *giddy*, *messy*, and *disordered* which were combined in the cluster of *chaotic* (c3).

What's more, the Human-Swamp is described as a person that is not to be trusted. *Cheating*, *insincere*, *lying*, *hypocritical*, *two-faced*, *twister*, *manipulator*, *sly dog* – these and the like formed the cluster of *insincere* (c28), *deceitful* (c5), and *treacherous* (c9).

Knowing that one would assume that the Human-Swamp would be condemned to ostracism, surely everyone would avoid him? Alas, it is not so. The term *dangerous* (13) indicates the possible effectiveness of such a person's actions. Where does it come from? Why would anyone fall for it? Even his/her looks could not attract companionship. The Human-Swamp is filthy. *Unkempt, neglected*, *sloppy*, and *unhygienic* were added to the cluster of *dirty* (c44). A person described by this metaphor induces more disgust than compassion. Hence the terms *disgusting*, *detestable*, *loathsome*, *repulsive*, and *yuck*, which were incorporated into the cluster of *repulsive* (c11). As if that was not enough – he/she *stinks* (13). Appearance was described with the terms *ugly* (9), *fat* (c3), *short*, and *tall*.

So where does the source of danger lie? Subjects said that although the Human-Swamp is *unkind*, *selfish*, *egotistical* (c2), and a *loser*, he/she *has a deep personality*, which could be *charismatic*, *captivating*, and that *it is difficult to be assertive toward such a person*. Therefore, the Human-Swamp is *immersive* (here in a context of *alluring*).

Some answers were categorized as associations with the vehicle: *rainy*, *muddy*, *hunting*, *boundless*, *fear*, and *sinister atmosphere*. The use of neuter gender indicated associations with the vehicle (in Polish the term *swamp* in the meaning of *marshland* has a neutral gender). Due to that, four answers constructed in neuter gender were counted as descriptions of vast amounts of mud (*slimy*, *nasty*, *awful*, *repellent*).

The Human-Snake

The Human-Snake has been generally described as being *able to squeeze anywhere* and *capable of destroying*. This stimulus was presented to 365 adults.

There is no doubt that the Human-Snake is a negative figure. Adults indicate the traits that add up to a coherent picture. The responses were, however, less influenced by biblical references (the tempter, the exile from Eden) than had been expected after the pilot study. The Human-Snake is evil, intelligent, but secretive. Such a person does not reveal his/her goals or motives, but it is common

knowledge that he/she is unprincipled, guided only by self-interest, and therefore should not be trusted. The Human-Snake is not described as a psychopath (cf. the Human-Knife), but rather as a dodger, a yarn-spinner.

A ratio test for dependent samples (comparison of frequency of modal category with the standard) showed statistically significant differences between the clusters of *deceitful* and *false*, between *false* and *intelligent*, *intelligent* and *treacherous*, and *selfish* and *nosy*. This means that these clusters occurred separately. The most numerous cluster is *treacherous* (c192), the most frequent adjective – *sly* (125). Less frequent were *false* (c63), then *intelligent* (c49), *traitorous* (c35), *cunning* (c33), *evil* (29), *dangerous*, *malicious* (c23), and *selfish* (20). A large number of associations were counted as references to the vehicle (animal). The dominants of the Human-Snake metaphor are: *treacherous*, *false*, *intelligent*, and *traitorous*.

In more detail: The Human-Snake is *intelligent* (c49) but subjects find the adjective *sly* (125) more suitable. He/she is a *smartass* (11, added to *cunning*, c33). One person called it *wisdom*. This intellectual capacity is combined with a negative "ethical profile": *with impure intentions*, *negative character*, *bad* (19), *having a bad effect*, *toxic*, *claws his way*, *despicable*, *nasty*, *evil*, recognized as *evil* (c29). The cluster of *malicious* (c25) consists of: *malignant* (13), *mocking*, *waspish*, *harassing*, *snappy*, *biting*, *sharp-tongued*, *contemptuous*, and *provocative*. He/she is also *mean* (11) and *offensive*. Although he/she is *unpleasant* (c4), *uncongenial*, *unlikeable*, *hardly liked* (as *annoying*), *unfriendly*, or even seen as *repulsive*, *ugly*, *slimy* (context points to a human character), and *disgusting* (and synonyms joined in *disgusting*, c9), still, he/she *knows how to get respect/be heard out*.

These descriptions form a specific background for the main drawback of the Human-Snake character, which proved to be, as expected, falsehood – *treacherous* (c192), *false* (c63), and *traitorous* (c35). These clusters consisted of: *false* (19), *two-faced* (12), *mendacious*, *liar*, *hypocritical*, *cheating*, *fond of cheating*, *fond of swindling*, *prevaricator*, *mischief-maker*, *plotter* (c4), *manipulator*, *user of manipulations*, *insincere*, *dishonesty*, *hypocrisy*, *unbelievable*, and *"slippery"* (quotes marks added by the subject). The cluster of *treacherous* (c35): *treacherous* (12), *traitor*, *sneaky* (16), *can't be trusted*, *untrustworthy*, and *does not arouse trust*. This side of the Human-Snake could be paired with *tempting*, *the tempter*, *charmer*, *charming*, *sin*, and – after taking into account the context – *flirtatious* (c5) and *snaky*.

This human is *unpredictable* (c6): *acting on surprise*, *he strikes by surprise*, *can attack suddenly*, is *unpredictable*, *surprising*, behaves in a way showing *unpredictability*. The terms *dangerous* (15), *menacing*, *can destroy*, and *hostility*, contributed to the cluster of *dangerous* (c25). He/she is also *aggressive* (c3), *erratic*, *unstable* (c3). *Impenetrable*, *secretive* and *reticent* were incorporated into the cluster of *mysterious* (c8). The Human-Snake is also *gossipy*.

In the Human-Snake's descriptions, the subjects spoke of a wider range of flaws than in the case of the Human-Swamp, the Human-Knife, or the Human-Nettle. Here we see dishonesty combined with peculiar resourcefulness and parsimony, selfishness, minding other people's business, and a characteristic movement: *will curl to scrape up an acquaintance*, *sticks his nose everywhere*, *could squeeze into anywhere* (Polish idiom for entering without invitation), *knows how to adapt to the situation*, *twister*, *flexible*, *can handle anything*, *breaks the rules*, and is *nosy* (c13). *Parsimonious* (13), *has a snake in the pocket* (Polish idiom for scrooge), *greedy*. Such a person is an *egoist* that *lives at the expense of others*, *only cares about his own interests*, is *possessive*, *self-centered* (counted as *selfish*, c20).

Interestingly, a few terms add another dimension to this character: *jealous*, *suspicious* (counted as *fearful*), *rebellious*, *unruly*, *difficult to work with*, *opportunistic*, and *stubborn*, accompanied by *persistent* (c5). The Human-Snake is also seen as *self-righteous* (counted as *lofty*), *sterling* (counted as *reliable*), *powerful* (after taking the context into account, counted as *strong*), *fast* (as *energetic*), while at the same time *lazy*, *slow* (as *phlegmatic*), *clumsy* (as *weak*), and furthermore, *sad* or *joyful*, a *loner*. One subject summed up the Human-Snake's descriptions in a simple label of *insurance salesman*. Appearance: *ugly*, *unpleasant appearance*, *cunning in the eyes*, *slim*, *thin*, *pale*, *sweating*, *high*, *agile*, *lithe* (as *deft*), and *looks sophisticated* (as *elegant*).

The ambiguous terms *poisonous* – when listed next to *flexible*, indicated an association with an animal. In other cases, the term was placed between the characteristics of a human (twice near *treacherous*, once between *toxic* and *manipulator*, once close to *despicable*, between *smart* and *cunning*, twice with *character*). *Slippery* more likely relates to a human because it is mentioned between *malicious* and *treacherous*. The term *slimy* raised some doubts. It was near to *long* one time, near to *repulsive* once also, and near to *smart* two times. The adjectives *smooth*, *long*, *yellow*, *serpent-like*, and *flexible*, *narrow* were counted as a reference to the domain of the vehicle.

The Human-Knife

The Human-Knife was generally described as dividing (meaning moral evil). This stimulus was presented to 302 adults.

The most frequently used word was sharp (133). It is not entirely clear what the term was supposed to mean, as subjects often left it without any comment. This may have been a simple association with an utensil used for cutting or a reference to the two most elaborated features of the Human-Knife metaphor – psychopathy and a sense of humor, meaning the type of humor which is based on intelligent sarcasm. The Human-Knife is a *master of cutting retort*, *has a sharp tongue* (15), *hits the mark*, *incisive*, *witty*, *black humor*, is *smart-mouthed*. These terms add up to the cluster of *black humor* (c28).

A ratio test for dependent samples (comparison of frequency of modal category with the standard) showed a statistically significant difference between the clusters of *sharp* and *aggressive*. The most common terms were *sharp* (133), then *aggressive* (c39), *unpleasant* (c33), *black humor* (c28), *dangerous* (c25), and *psychopathic* (c21). The dominants were: *sharp* (133), *aggressive* (c39), and *unpleasant* (c33).

The Human-Knife metaphor shows that intelligence is not synonymous with wisdom. This semantic field portrays a person who is efficient when it comes to connecting the facts. He/she is *smart* (c17), or even *brilliant*, has a *dangerous intelligence*, and is also *cunning* and *unpredictable* (c4). There is no mention of wisdom, development, maturity, or emotional stability – quite the opposite.

The Human-Knife is associated with a specific type of evil. Adults do not name it with a single term, but the meaning is consistent. Upholding the division of clusters allows more accurate comparisons of semantic fields.

Some people tend to be disliked, even though they are considered harmless. Here, the aversion toward the Human-Knife is based on the conviction that he/she is dangerous. That threat has various degrees of severity, from more or less subtle forms of mere rudeness to inflicting devastating pain through verbal cruelty.

The Human-Knife is definitely not the kind who forgets or forgives, which is, in some way, connected with his sincerity. He/she *clearly expresses unpleasant things*, *explicitly expresses his opinion*, *doesn't mince his words*, is *brutally honest*, and *proving his point*. These and similar phrases formed the cluster of *sincere* (c10). His sense of humor gives rise to some level of approval but does not make him generally liked. Irony itself could be enjoyable if it was witty (*master of cutting retort*), but the case of the Human-Knife is much more serious. What he/she does is not innocent wordplay, it is verbal aggression. The cluster of *malicious* (c16) included *snappy*, *sarcastic*, *malignant*, *cutting remarks*, *waspish*, and – after taking the context into account – *acrid* and *harsh*. This set could be called *small-caliber allegations* if not for the fact that these terms often appear close to the elements of the cluster of *hurtful* (c19), which is composed of *can hurt*, *likes to hurt* (11), *inflicting pain*, *hurtful*, *his words hurt*, and the cluster of *arrogant* (c14), comprising *vulgar*, *gruff*, *shameless*, *arrogance*, *saucy*, *rude*, *challenging*, *difficult to get on with*, and – taking the context into account – *repellent*. *Unpleasant* and *unwholesome* joined the cluster of *unpleasant* (c32), he/she is also *mean*. The Human-Knife's behavior is sometimes described in more detail as *rejecting the opinion of others*, *does not care about others*, *not caring about the feelings of others*, which were joined in the cluster of *selfish* (c3). The generalized terms of *hostile*, *enemy*, and *arousing fear/anxiety* were joined within the cluster of *dangerous* (c25). This is a person who *likes to tease*, is *feisty*, *irritable*, *combative*, *belligerent*, *offensive*, *intrusive* (as *annoying*), *feeling anger*, *violent*, and *bloody*. These terms were added to the cluster of *aggressive* (c39). *Cynical* and *without principles* were incorporated into *evil* (c13). *Uncompromising* and *unyielding* were considered

elements of the cluster of *rigid* (c2). The Human-Knife is, at the same time, a bit *nervous*. Some adjectives would not have had a negative tone if they were used in a different combination. However, in this context, the properties of *abrupt*, *hasty*, *rapid*, and *operating fast* were bundled into the cluster of *impulsive* (c7) and *energetic*. They enhance information about a threat. These two clusters were separated in order to conduct more accurate comparisons with other semantic fields. The Human-Knife has flaws far more severe than just a sharp tongue: He/she is a traitor and a psychopath. The Human-Knife will not wait for someone to annoy him/her, instead he/she will attack first. What is more, he *claws his way*, is *insane*, *inclined towards psychopathy*, a *psychopath*, *mentally ill*, *excruciating*, *murderous*, *deadly*, *felon*, *sarcastic* (after taking the context into account), *cruel*, *ruthless*, *absolutely relentless*, and *unscrupulous*, which formed the cluster of *psychopathic* (c21).

There is a trace of treachery, but in significantly lower numbers than in the metaphors described earlier. The Human-Knife somehow manages to combine his/her sincerity with covert hostile actions. The terms *manipulator*, *calculating*, *untrustworthy* (c2), and *back-stabbing* were added to *treacherous* (c10). Such a person is *secretive* (as *mysterious*), a *liar* (as *false*).

The image is completed by terms that appear in small numbers, but add a lot: *quiet*, *disciplined* (as *persistent*), *effective*, *too sure of himself*, *commands respect*, *respected* (as *authority*), *imperious*, *lofty*, *greedy*, *possessive*, *jealous*, and *lonely*.

Only one adult associated the Human-Knife with a profession - cook. The Human-Knife's appearance was described as *thin* (c6), *tall*, *well-built* (c2), *handsome*, *short hair*, and *bald*. The terms taken to be simple associations with the vehicle were: *sandwiches*, *you can cut bread*, *rustproof*, *sharpened*, *sparkling*, *shiny*, *pointy*, *smooth*, *long*, *clear*, *fine*, *a tool*, *knife*, *useful*, and *self-mutilation*. In the case of *dull*, the context was not sufficient to decide whether it is a characteristic of a person's intellectual capacity or an association with an unsharpened utensil. One person associated the Human-Knife with *an unpleasant event*.

The Human-Nettle

The Human-Nettle was generally described as being *sincere to the point of pain*. This stimulus was presented to 264 adults.

A ratio test for dependent samples (comparison of frequency of modal category with the standard) allowed comparisons between consecutive clusters, sorted from the most common to the least common. It showed a statistically significant difference between the clusters of *unpleasant* and *malicious*, *malicious* and *hurtful*, *hurtful* and *evil*, and *evil* and *mean*. The most common terms were: *unpleasant* (c86), *malicious* (c66), *hurtful* (c48), *mean* (34), and *evil* (c25). Other terms appeared less frequently. The dominants were: *unpleasant*, *malicious*, *hurtful*, and *evil*.

The Human-Nettle's characteristic is negative, moderately complex. Adults imagine a person that they associate with the prickly-burning feeling which the plant's leaves leave on human skin. They use various adjectives, but most allegations come down to malice and unpleasantness caused by words. The cluster of *unpleasant* (c86) consisted of, among others, *unpleasant* (31), *ill-favored*, *unfriendly*, *rough*, *acrid*, *argumentative*, and *disagreeable* (32). Being unkind manifests itself in the fact that the Human-Nettle is *hurtful* (c48): *inflicts pain* (12), *is someone who likes to tease*, *inflicts injury*, *is able to cause distress*, *painful*, *brings suffering*, *painful in treating others*, *sometimes hurtful to others*, *stings others*, *harms*, and so on. Unpleasantness associated with interaction with the Human-Nettle is mainly due to what he/she says and how he/she says it. Such a person is *mean* (34). There are also a lot of synonyms, including *snappy*, *sarcastic*, *cutting remarks*, *stinging* (13), and *has a ready tongue*. After analyzing the context, these were counted as exemplars of *malicious* (c66). Interestingly, there is also criticizing constructively, attached to *sincere* (c4). The Human-Nettle's malice may be aimed at a particular person, but is a sign of an attitude toward the world in general. This person is *vulgar*, *rude*, *surly*, *has a nerve*, *cheeky*, *tacky*, *feisty*, and *crass*, which were combined in the cluster of *arrogant* (c7). The subjects also spoke about reactions to what the Human-Nettle does. It demonstrated poor functioning among people: *irritating*, *annoying*, *unbearable*, and *someone we try to avoid* were joined in the cluster of *irritating* (c10). The Human-Nettle is perceived as *disgusting* (c15), *cold* (c6), or at least *unnecessary* (c3). The emotions experienced by the Human-Nettle seem to be consistent with that: *irritable* and *excitable* (c6, as *impulsive*). He/she is also *stubborn* (c3, as *tenacious*), *grouchy* (as *nagging*) and *confident*. *Independent*, *values independence* (as *strong*, c2), *an individualist*, *selfish*, and *egocentric* were added to the cluster of *selfish* (c3). There is probably a hint of being lonely in a crowd, as *recluse* (c9) and *ubiquitous* were also mentioned, although not in big numbers.

There are also references to other, perhaps more severe flaws: *nasty*, *bad*, *toxic*, *you can get burned on her*, *disastrous*, *nasty character*, *does not want to help*, *gets their own back*, *vengeful*, *envious*, *unfriendly*, *hostile*, *gross*, and *having a bad effect on someone*. These characteristics were added to the cluster of *evil* (c25). *Mean* (18) and *sharp* (14) were counted separately. *Merciless* (as a *psychopathic*), *aggressive*, and *uncompromising* (as *rigid*), The Human-Nettle cannot be trusted. He/she is *deceitful* (c5) and *false* (c8). *Disloyal* joined the cluster of *treacherous* (c9). *You have to watch him*, *menacing*, and so on joined the cluster of *dangerous* (c11). He/she is believed to be *crazy*.

These themes have already appeared in the descriptions of other stimuli addressing evil, but with varying intensity. Both the Human-Knife and the Human-Swamp were treacherous. The Human-Knife was also malicious. However, each of these metaphors has its own specifics. The Human-Nettle is not a delusional addict (as the Human-Swamp is) nor a psychopath (like the

Human-Knife). The material includes only a few terms that are unambiguously positive. There is a mention of *weakness* (c6) that consists of *uncertain*, *inconspicuous*, *sad*, and *quiet*. Nevertheless we can see a gentle outline of a more favorable opinion about the Human-Nettle. He/she can be *helpful* (c7): *seemingly unpleasant*, *really helpful and having a soothing effect on people*. One subject shed new light on the Human-Nettle's harshness: *firm, and thanks to that able to help*, *intelligent*, *warm on the inside*, and *good*. On the whole, the material shows nine direct associations with health, treatment, and rheumatism. However, these are associations expressed in one word and the context is not clear enough. Raters were not sure if these meant human qualities, and thus were not a reference to the opinion that drinking nettle infusion preserves health. There were also seven individual descriptions of *healthy*. The Human-Nettle's appearance was described as *ugly*, *pretty*, *colorfully dressed*, and *thin*. The terms considered as associations with the vehicle were *green* and *long*.

Discussion

Let's take one more look at the dominants in the semantic fields of the four metaphors: the Human-Swamp, the Human-Snake, the Human-Knife, and the Human-Nettle and see if they have anything in common.

- Dominants of the Human-Swamp: *unpleasant*, *dirty*, *with problems*, *evil*, *insincere*.
- Dominants of the Human-Knife: *sharp*, *aggressive*, *unpleasant*, after that: *black humor*, *dangerous*, *psychopathic*.
- Dominants of the Human-Snake: *treacherous*, *false*, then: *intelligent* and *traitorous*, *cunning*, *evil*, *dangerous*, *malicious*, *selfish*. Most frequent adjective: *sly*.
- Dominants of the Human-Nettle: *unpleasant*, *malicious*, then: *hurtful*, *mean*, *evil*.

Subjects were asked to produce any associations that come to their minds in response to the stimuli. They were not told about the purpose of the study nor informed about dimensions of human traits, domains, dominants, etc. Nevertheless, the semantic fields seem to be consistent. Most descriptions that the adults used name some kind of social behavior. These are not answers to philosophical questions nor negations of abstract ideals, apart from the general *evil* (the Human-Swamp, the Human-Snake, the Human-Nettle). Instead, these descriptions are based on everyday experience, somewhere between social interaction and cognitive functioning. We can try to regroup them into: not being safe (*dangerous*, *psychopathic*, *sharp*, *aggressive*, *hurtful*, *with problems*), not being cooperative (*unpleasant*, *malicious*, *mean*, *selfish*), not telling the truth (*insincere*, *treacherous*, *false*, *traitorous*, *cunning*, *sly*), and not being clean (*dirty*). An evil person can be *intelligent* and can have a *sense of* (black) *humor*. Physical traits are not dominant in the characteristics of an evil human, only the

dirty in the semantic field of the Human-Swamp could refer to looks. Otherwise, looks seem to be of lesser importance.

So, what were adults afraid of? Was it physical damage, like murder? The analysis of metaphors concerning evil shows that adults see wrongdoing mainly as inflicting pain by using words. The semantic fields of metaphors describing people as evil are composed of references to fear of the damage that could be done by verbal harassment, in the light of social coordination (Rączaszek-Leonardi, 2011).

This paper is a report concentrated on the semantic fields of four metaphors addressing evil. But the analysis of the remaining 22 shows a significant similarity. As the psychopathic Human-Knife wounds with his sense of humor, the Human-Toad takes revenge in the form of gossip, constant moaning, and verbal offence. The Human-Hammer repels others with his/her rudeness. Even the beautiful Human-Rose is dangerous, because she can *sting with her reply* when she is tired of receiving adoration. The Human-Fog avoids giving straight answers while the Human-Rainstorm floods his/her victims with tears, deluges them in fury or bitterness. The Human-Hen produces tiring tirades about trivialities. Although each of these metaphors addresses a different set of human characteristics, there is something they share, the *evil core* is surprisingly stable: maledicta – it is words that hurt. In the adults' world, the dominant type of threat is verbal aggression. Danger lies in talking. Physical violence is rare. It is words and meanings that we fear, not knives, hatchets, ropes, or needles. Evil manifests itself in what we say and how we say it. It is in what we choose to talk about or brag about. Acts of wrongdoing occur at moments when we believe we are scathingly witty or want to be honest at all costs, when we jeer, ridicule, mock, and smirk openly, or when we manipulate words to plot, cheat, trap somebody in his/her promises, or force a promise or break a promise. It also happens if we choose to remain silent when somebody needs words of encouragement. Wrongdoing can be explicit or implicit depending on who hears us.

It is different with children. The results of the second main study (not discussed here) show that the participants of the youngest age group (5 years 3 months – 8 years, M_{age} = 6 years 7 months) see danger as a physical threat. They vividly explain what *being bad* means: it is biting, scratching, kicking, hitting, breaking, suffocating, killing, cutting off fingers, cutting off the head, putting a knife in somebody's stomach, eating somebody alive, peeling somebody's skin off while he is still alive, ruining somebody's house, scalding somebody with boiling water (or burning them with flames), melting somebody with acid, pulling somebody's eyes out and so on. We have no doubts as to the physical aspect of aggression. Older children (8 years 1 month – 10 years 1 month, M_{age} = 8 years 9 months) begin to describe an *evil person* in a social situation, but still, the images are full of physical violence (Dryll & Bokus 2016). Somehow, as we grow up, we switch from one threat to another.

Children speak of uncontrolled physical aggression, adults focus on verbal harassment. But still, most participants agree that an evil person is guided primarily by self-interest and allows himself/herself to get what he/she wants at all costs. Younger participants focus on explicit forms of danger. Children rarely spoke of intrigues. It was either an open attack or exclusion ("she doesn't want to play when other kids try to join her group of friends"). In children's answers, the victim is fully aware of the whole conduct, while adults fear both explicit and implicit forms of evil. They suspect various forms of hidden activity and use several names for it (*slyness*, *lies*, *falsehood*, *deceit*, *treachery*, and many more). This verbal diversity suggests complex meanings.

Observing differences between the responses of adults and children brings to mind the broader problem of categorizing wrongful deeds. Kurt Gray, Liane Young, and Adam Waytz (2012) describe one of Kurt Gray's studies (still in review) in which he asked 100 participants from various cultures to list acts that are morally wrong. As he reports, 51% of participants listed murder/killing/ raping/intentionally harming another – Gray puts all acts of direct harm in one basket. Others were: stealing (19%), adultery (7%) and cheating/lying (10%). As the author says, the combination of homosexuality, bribery, nepotism, gossip, having sex in public, and betraying your siblings all accounted for less than 10%. Since the description is very laconic, we can only guess that the participants were adults, and that the procedure was straightforward, not focused on any indirect meanings – quite the opposite. It would be interesting to conduct a cross-cultural study in which subjects would create such lists in various linguistic contexts. Somehow it seems to be similar to the situation in which we ask Christians to recite the Ten Commandments. Which ones come to mind first? Probably "thou shalt not kill", "thou shalt not steal". But does it necessarily mean that people observe others to detect potential killers? Another interesting way to test moral preferences is to ask the participants to select from among Haidt's moral domains (Graham, et al. 2011; Haidt, 2007). Moral domains is a construct related to a theoretical model of five universally available (but variably developed) sets of moral intuitions: harm/care, fairness/reciprocity, ingroup/loyalty, authority/ respect, and purity/sanctity. Gray, Young, and Waytz (2012) report a study like that (an unpublished manuscript by Van Leeuwen and Park) in which participants grouped according to their political inclinations were asked to distinguish the moral concern most important for building an ideal society. The most commonly selected domain (approximately 50% of participants) was harm. "Harm" is a term that covers lots of meaning, but, according to Gray, Young and Waytz (2012), the result supports the hypothesis that perceptions of suffering unify various moral domains, and that harm is the most important of moral domains. Moral acts can be defined in terms of intention and suffering. Empathic aversion causes judging of deeds as "immoral," provided that perpetrators are seen in terms of capacity to do right or wrong and victims as able to experience pain.

This complexity brings to focus the discussion concerning the very nature of metaphors. What is a metaphor – is it a way to point the listeners' attention toward one surprising similarity between two different items, or is it much more? These results lean toward the hypothesis formed by Samuel Glucksberg (2008): Metaphors could be comprehended through both categorization and comparison processes because the semantic fields of the four metaphors portray networks of references. In each field, one association led to another but they remained coherent. Still, we could find a superordinate, implicit category that would encompass them.

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