Straightforward metonym, versatile metaphor: 
The power of non-literalness in how adults perceive idioms

Background All language can be localized on a "(non)literality" scale with two extremes: a literal and a figurative pole. Metonymy and metaphor are two key phenomena at different areas on this scale. Theoretical and empirical findings suggest metonymy to be more basic to cognition than metaphor and both to be more complex than literal language. Metonymy might thus be closer to the literal pole than metaphor. Is this difference in non-literalness also mirrored in the cognitive/semantic processing of fixed multiword units, given that these seem to be stored in the mental lexicon as superlemmas? This project focuses on the effect of non-literalness on semantic/cognitive processing of idioms. Degree of familiarity, transparency, and degree and kind of non-literalness are expected to influence processing difficulty, also in idioms.

Method As a first exploration, 400 adult German native speakers used a 5-point Likert scale to rate idioms on one of four properties: familiarity, degree of non-literalness, understandability, and relation between each idiom and its meaning (transparency). Understandability and relation are teased apart here because while they are interrelated, an idiom might possibly be perceived as highly understandable even if the relation between it and its meaning were perceived as distant. The items are 80 literal, 80 metonymic, and 160 metaphorical idioms (differing in transparency), classifications unknown to the participants.

Key results Participants strongly differentiate in their ratings of a) the relation between an idiom and its meaning and b) its degree of non-literalness. A highly significant correlation (r=0.84, p<0.001) was found between degree of non-literalness and relation, i.e. the more non-literal an idiom was rated, the more distant the relationship between idiom and meaning was rated. Understandability and relation also correlate highly significantly (r=-0.7, p<0.001). In metaphors, understandability ratings are generally higher than relation ratings: While they are rated rather high on understandability (m=3.6, 5 being the highest score), relation is rated as intermediate (m=2.8), on average. No such difference is found in metonyms.

Non-literalness is found to be the strongest predictor for idiom type (to which participants were naïve); relation in turn is the strongest predictor for non-literalness. Metonyms are rated as both more easily understandable and more literal (m=2.4) than metaphors (m=3.9) throughout. Metaphors reveal much more variance in how they are perceived. An additional classification study shows the same results. – The findings indicate that 1) metonymic structure is indeed perceived as substantially different from metaphorical structure 2) these structures are also active in idioms 3) transparency drives how metaphors are perceived.

Examples from the idiom corpus

Literal:
1) etwas in bester Absicht tun, [do sth. with best intent]
2) außer Betrieb sein, [be out of order]
3) keine Chance haben, [have no chance]
4) alle Erwartungen übertreffen, [surpass all expectations]

Metonymic:
1) jmđ. schlägt das Herz bis zum Hals, [sb.’s heart is beating up the neck; be very afraid]
2) ein Auge für etwas haben, [have an eye for sth.]
3) ein offenes Wort sprechen, [speak an open word]

Metaphorical:
1) jmđ’es Herz schlägt für jmđ, [sb.’s heart beats for sb.]
2) den Stier bei den Hörnern packen, [take the bull by the horns]
3) jmđ. eine Standpauke halten, [give sb. a standing kettledrum; give sb. a real telling-off]
4) Geld auf den Kopf hauen [hit money on the head; spend money recklessly]

References