I. Research articles

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Fuga daemonum – St John's Wort as a conceptual blend. A cognitive study*

Abstract. The article aims to explore the cognitive mechanisms activated in conceptualising complex expressions, with the example of *Fuga daemonum*, a synonym to *St John's wort*, a flowering plant from the family *Hypericaceae*. The plant is used as a herbal remedy to treat various physical and emotional ailments (in particular depression and anxiety). The analysis is performed within the framework of the four-space model of conceptual integration (Fauconnier and Turner 2002). *Fuga daemonum* is found to be a conceptual blend, arising through the dynamism of a complex cognitive mechanism known as *conceptual integration*, where the activation of at least two distinct input spaces is required to arrive at the resultant meaning of the blend. In the case of *Fuga daemonum*, Input space 1 refers to the appearance and properties of the plant, and Input space 2 contains its symbolic and religious connotations. Thus, the process yields the emergent meaning of *Fuga daemonum*, which is not tantamount to the sum of the meanings inherent in the input spaces but which becomes a new dynamic context-dependent expression.

Key words: cognitive semantics; conceptual integration theory; construction of meaning; conceptual blend; dynamicity

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1. Introduction

The complex semantic structure and interesting etymology of common plant names are an interesting object of study (cf. e.g. Budziszewska 1972; Handke 1992, 1993; Pelcowa, 2001; Skubalanka 2009; Niebrzegowska-Bartmińska 2010; Waniakowa 2014). Known as *phytonyms*, plant names indicate, besides a well-developed polysemous structure, a high degree of synonymity (Kamper-Warejko 2014: 145). Various names ascribed to the same designated "object" pose questions not only with regard to the semantic motivation behind the plant names but also with regard to the mental processes involved in meaning construction. Ronald Langacker makes the following observation:

> I favour a conceptual or an experiential nature of meaning: the meaning of a linguistic unit is a conceptualisation, defined broadly so as to encompass any facet of mental experience [...]. It is understood as subsuming: (i) both novel and established conceptions; (ii) not just "intellectual" notions, but sensory, motor, and emotive experience as well; (iii) conceptions that develop and unfold through processing time; and (iv) apprehension of the physical, linguistic, social, and cultural context. (Langacker 2005: 11; transl. AMH)

Langacker's observation suggests that lexical items are dynamic structures with a *meaning potential* (cf. Langacker 2008: 29). This, according to cognitive semantics, manifests itself as actual meaning "in a given discourse and context" (Libura 2010: 15). Moreover, the dynamicity of meaning is inextricably bound up with another concept developed on the grounds of cognitive linguistics, *viz.* mental spaces, defined as "small conceptual packets constructed as we think and talk, for purposes of local understanding and action"; they are "very partial assemblies containing elements, structured by frames and cognitive models" (Fauconnier and Turner 2002: 102). Mental spaces, in turn, become the basis for another dynamic process known as conceptual blending, and regarded by its founding fathers, Gilles Fauconnier and Mark Turner, as a basic mental operation, the essence of which is a selective projection from at least two input spaces onto a novel blended space that further develops an emergent structure. The result is a conceptual blend: not a mere sum of elements from the input spaces but a novel space displaying a new meaning potential (cf. Fauconnier and Turner 2002, also Kalisz 2001).

The aim of this study is to inquire, by applying the tools proposed by Fauconnier and Turner, into the dynamicity of meaning inherent in common plant names in Polish. The analysis proposed here will concern the expression *Fuga daemonum*, another name for *dziurawiec* 'St John's wort' (*Hypericum perforatum* L.), and will be couched within Fauconnier and Turner's four-space conceptual blending network model.

2. St John's wort and its semantic representations

According to the definition at www.poradnikzdrowie.pl, St John's wort, *Hypericum perforatum* L., is a perennial plant that belongs to the Hypericaceae family and grows in both rural and urban ecosystems, usually in open, well-lit areas, such as meadows and glades, and does not require an especially good soil. St John's wort contains numerous compounds with documented pharmacological properties: antidepressant, choleretic, antiviral, antibacterial, and anti-inflammatory. As observed by Waniakowa, the semantic motivation for the plant's name (its common Polish name is *dziurawiec*, lit. 'the perforate one'), is grounded in two domains: (i) its appearance, and (ii) its healing and vegetative properties. According to folk beliefs, the plant is an outstanding herbal remedy "of supernatural power, also used in warding off evil spirits" (Waniakowa 2014: 234; cf. also Szot-Radziszewska 2005: 46). Its name, related to the Latin *perforatum* used in the Linnaean taxonomy (*Hypericum perforatum* L.), relates to the appearance of its leaves with translucent dots. These are glands filled with essential oils, which, when held up to the light, give the plant a perforated appearance. Other Polish names of St John's wort motivated by the appearance of its leaves are: *postrzelon* (lit. 'one that has been shot'), *przestrzelon* (lit. 'one that has been shot through'), and *przezorek* (lit. 'one that admits a peeping-through'). There are also names that exhibit a high level of metaphoricity, e.g. *Chrystowe/Chrystusowe ślozki* (lit. 'Christ's tears') (Waniakowa 2014: 237). The physical appearance of St John's wort also transpires through its name *żółtokwiatka* (lit. 'a yellow-flowered plant'); however, as empahsized by Waniakowa, recalling the image of the flower in this case is marginal.[1] Other expressions that stem form the domain of appearace of St John's wort are *krzyżowe ziele* (lit. 'a cross-like herb') and *krzyżowe drzewko* ('a cross-like tree'). Semantic motivation in this case is dictated by the arrangement of leaves, located opposite one another on the stem and, when viewed from above, resembling a cross (cf. Waniakowa 2014: 243).[2]

The properties of St John's wort are also found in other common expressions referring to the plant. Thus, many sacronyms referring to its flowering

[1] According to the author, "there are not many names of St John's wort that are motivated by the appearance of its flowers, either in Polish dialects or in other Slavic dialects. The reason for this is presumably the fact that the inflorescence of *Hypericum perforatum* is neither large nor abundant" (Waniakowa 2014: 241).

[2] Waniakowa claims that the names *krzyżowe ziele* and *krzyżowe drzewko* are mainly motivated by the "healing properties of the plant, much more important for an average person than any other feature" (Waniakowa 2014: 242). The author refers here to the opinion of Maria Henslowa, who claims that St John's wort could also be successfully used "in the treatment of backache" (Henslowa 1976: 233, 239), which transpires through its name *krzyżowe ziele* (lit. 'a herb to do with one's back').

time may be found, e.g. a widely-known name *ziele św. Jana* and its variant *świętojańskie ziele* 'St John's wort/herb', or a dialectal name *antonik* (lit. 'little St Anthony') (see Henslowa 1976: 233).[3]

Another interesting property of St John's wort that motivates its other names, such as *krewka* (lit. 'blood'), *krewka Pana Jezusa* (lit. 'the blood of Jesus Christ'), *krewka Matki Boskiej* (lit. 'the blood of the Virgin Mary'),[4] or a more metaphorical expression, *boża męka* (lit. 'God's passion'), is the burgundy-red juice that contains hipericin, one of the main biologicaly active substances found in the plant (Kobus 2006: 6). The red pigment is released when the plant's flower buds are crushed between fingers. Both the consistency and appearance of the pigment resemble blood. Another interesting name is *zwierzobój* (lit. 'animal-killer'), motivated by the fact that St John's wort is poinonous to animals, especially fair-skinned ones (Henslowa 1976: 234; also Waniakowa 2014: 242). This is because hypericin is a photosensitive toxin that causes an allergic reaction when the skin of an animal is exposed to sunlight.

The healing properties of St John's wort that are supposed to combat various diseases are alluded to in an interesting name *szczerne ziele* (lit. 'a true/good herb') (see Waniakowa 2014: 243).

It has to be noted here that a vast array of semantic motivations ascibed to St John's wort are not only connected with the physical appearance of the plant or with its healing properties: its names also allude to magical powers. Good examples include the names *dzwon/dzwoniec* (lit. 'bell'), *dzwonki* (lit. 'bells'), or *dzwonki Matki Boskiej* (lit. 'the bells of the Virgin Mary'). The plant was believed to stave off evil spirits and protect girls, young women, and young mothers (Waniakowa 2014: 243). The name *dzwonek* has nothing in common with the shape of the flower. It rather refers to the magical power of producing the ringing sounds when the seeds are released from the seed pod and dispersed by the wind (Waniakowa 2014: 244).

One of the most thought-provoking common plant names of St John's wort that exhibits a very high level of metaphoricity, where physical appearance is combined with the magical properties of the plant, is the Latin name *Fuga daemonum* 'demon's flight'.[5] From the perspective of cognitive linguistics, *Fuga daemonum* may be interpreted not only as metaphor but also as

[3] For a discussion of religious motivation of plant names, cf. Niebrzegowska-Bartmińska 2010.

[4] In all three examples, *krewka* is a rather unusual diminutive, probably used for greater respect or a sensitive-sentimental attitude to Jesus and his Mother. [transl. note]

[5] As pointed out by Elżbieta Szot-Radziszewska, the expression may be considered more universal, referring not only to St John's wort but also to other plants used to protect human beings from evil spirits (Szot-Radziszewska 2005: 45–48).

a conceptual blend, i.e. a dynamic structure that arises as a result of selective projection of elements which occur in the input spaces (cf. Fauconnier and Turner 2002; also Libura 2010).

All the names listed above should be treated as metaphors with various degrees of metaphoricity: "Both the creation and reception of metaphorical names are cultural and based on associations, as they touch various aspects of the analysed category" (Stec 2016: 99). It is so because people give meanings to selected designata on the basis of their experience of the world, processed by their cognitive abilities (Będkowska-Kopczyk 2001: 151).[6]

Assuming that common names of St John's wort presented above exhibit a high degree of metaphoricity, two important issues arise. Firstly, the majority of names proposed here should be classified as conventional metaphors, i.e. those that become "automatic, effortless and generalny established as a mode of thought among members of a linguistic community" (Lakoff and Turner 1989: 55; also Pietrzak-Porwisz 2007: 30). Secondly, many common plant names display the characteristics of occasional so-called *image metaphors* (or *one-shot metaphors*, Lakoff 1987b), where, in the source domain, conventional mental images are recalled (Pietrzak-Porwisz 2007: 31). Image metaphors are an excellent opportunity for the recipient of the message to trace similarities between the elements found in both source and target domains, as both these domains focus on palpable, physical elements, contrary to conceptual metaphors, where the mapping between the domains proceeds from the more concrete source domain to the more abstract target domain (Suchostawska 2015: 79). A good example of such metaphors are such common names of St John's wort as *postrzelon* 'one that has been shot', *przestrzelon* 'one that has been shot through', and *krewka* 'blood'.

It follows that a metaphorical character of common plant names is variable. As emphasised by Pajdzińska and Filar, "the creative extension of meaning [...] is not detached from language-entrenched judgements of the world" (Pajdzińska and Filar 1999: 195). Let us now consider whether, besides metaphorical expressions used as plant names, there are other more complex structures whose meaning derives not only from linguistic and cultural knowledge (cf. Pajdzińska and Filar 1999: 187–1986; also Bartmiński 2004: 111–113), but also from contextualised interaction between the speaker and the hearer.

[6] This stance illustrates a fundamental assumption of cognitive linguistics, *viz.* the notion of *embodied thought*, which links physical with cultural experience (cf. Lakoff and Johnson 1980, Lakoff 1987a; also Kardela 1992). The ideas of *embodied thought* and *embodied cognition* draw from the assumptions of *Experiential Realism* (cf. Lakoff 1987a).

3. *Fuga daemonum* and Fauconnier and Turner's model of conceptual integration

Let me begin with the following observation:

> Conceptual blends remain, many a time, unnoticeable. The reason for this is their deep entrenchment in our culture and tradition, or the extent to which they have become both automatic and "transparent": they appear in clichés and stereotyped texts used in everyday speech. Therefore, due to their high degree to which they have become conventional, it becomes difficult to notice the complexity of their structure. it is very challenging to notice their complicated structure. (Kamińska 2007: 80)

Kamińska's observation carries two elements of risk. Firstly, following Fauconnier and Turner's assumptions, conceptual blends should be defined as dynamic phenomena that occur in novel contexts in speaker–hearer interaction. They should therefore not be viewed as instances of deep-seated conventionalisation. Secondly, the idea of transparency of conceptual blends is misleading in that it carries an ambiguous interpretation of meaning: transparency may, but need not, suggest a frequent use of a given conceptual blend. The expression *Fuga daemonum* appears to be semantically non-transparent, which brings to mind the idea of compositionality in the way Langacker (1987) uses it. According to Langacker, expressions in which it is impossible to predict the meaning of the composite whole out of their component parts display a low level of compositionality: those expressions are less transparent (cf. Bourque 2014: 45).

Fuga daemonum, or demon's flight/escape, remains one of the most intriguing names of St John's wort, characterised by semantic complexity, non-transparency, and occurrences in context-induced utterances. These three features allow us to treat it as a conceptual blend.[7] In the data available, the name *Fuga daemonum* occurs in relation to banishing evil spirits that haunt humans, the task usually performed either by local priests or witch doctors (Turek 2005). Moreover, *Fuga daemonum* also stands for a drink made of St John's wort, used by medieval exorcists to drive away demons and other ghosts (Skarżyński 1994).[8] One can see that the name is not as popular as the other common names of the herb. Moreover, *Fuga daemonum*

[7] Due to the gradability of metaphoricity, the name *Fuga daemonum* may be treated as a metaphor that bears the features of conceptual blend in the sense of Zawisławska (2011). The author notes that the founding fathers of conceptual integration theory, Fauconnier and Turner, "accept metaphor as a particular type of conceptual blend" (Zawisławska 2011: 87).

[8] According to Skarżyński (1994), witches accused of being demon-possessed were forced to drink *Fuga daemonum*. The method was used to free them from evil spirits and to elicit confessions.

does not allude to any of the plant's properties: it appears to add an extra quality to St John's wort. On this basis, we can approach *Fuga daemonum* as a conceptual blend. In order to account for the processes responsible for its meaning, I will analyse the name within the framework of a four-space model of conceptual integration proposed by Fauconnier and Turner.

Conceptual integration is regarded as "a basic mental operation" (Turner 2001: 45),[9] which enables the construction of a conceptual blend, a new dynamically emerging and context-dependent meaning (cf. Fauconnier and Turner 2002; Fauconnier 2010).[10] Fundamental principles that govern the integration process are based on "the appropriate choice of input spaces and general rules of matching and projecting selected elements onto a new mental space" (Libura 2010: 65). The basic integration network model consists of four spaces: (i) two input spaces, partially matched on the basis of cross-space mapping,[11] (ii) generic space, which is a structure common to both input spaces but still displaying a higher level of abstraction (cf. Libura 2007), and (iii) blended space, a dynamic structure that contains emergent meaning absent from either the input spaces or the generic space. According to Fauconnier and Turner, blended space is constructed through three processes: (i) composition, (ii) completion, and (iii) elaboration (Fauconnier and Turner 2002; also Libura 2007, 2010). Composition is when selected elements from one input space are relarted to elements from the other, thus establishing cross-space mapping. The next step, completion, involves the recruitment of background knowledge by means of inducing appropriate

[9] "Conceptal integration – blending – is a basic mental operation. It is at the very center of what it means to have a human mind. It plays a profound role in all areas of thought and action, including deciding, judging, reasoning and inventing. It is dynamic, supple, and active in the moment of thinking." (Turner 2001: 45)

[10] It has to be noted here that much as the term *blending* is used in Polish derivational morphology and "may be treated as parallel with the Polish expression *kontaminacja* 'contamination'" (Waszakowa 2018, forthcoming), it should not, by any means, be identified with the notion of *conceptual blending*, developed on the grounds of cognitive linguistics. There is a difference between *kontaminaty* 'products of contamination'/*kontaminacja* 'contamination', closer to what functions in English as *lexical blend*/*lexical blending* (cf. Kemmer 2003), and *conceptual blends*/*blending* in conceptual integration theory. Conceptual blending is not confined to morphological derivation but results from mental processes that operate, besides the use of language, in other aspects of life (cf. Hamans 2010: 472; Frath 2005: 4). Therefore, conceptual blending or integration is different from what in Polish is referred to as *kontaminacja*. Rather, *kontaminacja* is similar to *lexical blending*, the latter being but a part of a broader process of conceptual integration.

[11] Cross-space mapping is based on the so-called "vital relations" that accompany the integration process, whose compression has a decissive influence on further elaboration, efficiency, and unique character of conceptual blends (Fauconnier and Turner 2002: 89; Libura 2010: 95).

frames, cognitive models, and cultural models. The third component process, elaboration, is indispensable for the development of emergent structure in the blended space, assisted by the processes of composition and completion (cf. Libura 2010). This stage is also called *running the blend* and points to a dynamic and context-dependent character of the blend.

Let us apply these notions to an analysis of *Fuga daemonum*.[12] In order to account for what is hidden behind *Fuga daemonum*, one has to "unpack" its meaning into the cognitive processes that participate in the integration process. Firstly, two input spaces have to be established. Input space 1 contains an open-ended set of aspects of the physical appearance of the plant and its properties: 'red pigment', 'flowering time', 'holes in leaves', 'phototoxic effects', 'medical practices', 'treatment of neurotic tensions', 'herbal remedy', 'general appearance', or 'doctor/medicine man'.[13] Input space 2 contains religious and symbolic connotations activated by the following elements: 'the most precious blood' (cf. *krewka Pana Jezusa* 'the blood of Jesus Christ', *krewka Matki Boskiej* 'the blood of the Virgin Mary'), 'St John's day', metaphoric extensions referring to the appearance of the plant (Jesus's tears), 'light' (the symbol of Christ's victory over death and evil spirits), 'religious rites' (including sophisticated practices, e.g. exorcisms), 'exorcising evil spirits', 'priest/exorcist', or 'holy herb', which reveal the healing and magical properties of St John's wort.

The two input spaces are linked by a variety of partial-mapping relations. For instance, between the elements 'red pigment' and 'blood' there is the relation of analogy. That relation is further compressed into the relation of change: in both cases a cognitive frame is invoked, with such elements as the colour and consistency of the exuded substance. Analogy can also be recognised between other elements, for instance in cross-space mapping between 'doctor/medicine man' and 'priest/exorcist', medical practices' and 'exorcisms', or 'treatment of neurotic tensions' and 'exorcising evil

[12] The analysis proposed here is one of many possibile interpretations. By using a four-space model of conceptual integration I deliberately select those input spaces that directly lead to the decoding of the blend *Fuga daemonum*. However, because of the dynamic nature of meaning, the input spaces proposed here need not be primary structures and can be considered conceptual blends themselves. This would call for an extension of Fauconnier and Turner's model into a new theoretical framework, which lies beyond the aim and scope of this study. Nevertheless, revisions the original four-space model have already been proposed, e.g. by Brandt and Brandt (2005) or Oakley and Coulson (2008).

[13] By introducing the term *open-ended set* I want to underscore the dynamic character of input spaces, with a potentially infinite number of elements, from which we activate only those that are indispensable for the purposes of immediate communication (cf. Fauconnier and Turner 2002: 102).

spirits'. An interesting relation of the whole-part type is observed in the juxtaposition of 'flowering time' with 'St John's day/festival'. We are dealing with metonymy here: St John's festival, celebrated on June 24, remains in a contiguous relation with the prolonged flowering time of the plant, which is in turn made manifest in the name motivated by these properties (*ziele św. Jana/świętojańskie ziele* 'St John's herb'). A relation of vital importance is the disanalogy between 'phototoxic effects' and 'light'. Here, disanalogy consists in the differences between the elements that take part in the blending process. In Input space 1, 'light' is conceptualised as the factor that causes harm to health in the treatment with St John's wort. Input space 2 invokes a completely different conceptualisation of light: light has a redemptive power; it is an attribute of God associated with warding off evil spirits.

In the subsequent stages of blend elaboration, particular attention should be paid to the generic space that represents a common ground for the two input spaces, the most explicit element of which is 'help accorded to people'. This element, however, is conceptualised differently in each of the two spaces. In Input space 1, the notion of help manifests itself via the plant's healing properties, whereas when activated in Input space 2, the notion relates to the religious and spiritual sphere, the idea of the possessed soul and the possibility of purging the soul of evil spirits through exorcism.

Let us now proceed to the meaning construction that takes place in the blended space (cf. Figure 1). The ultimate meaning of the blend emerges through to a selective and context-determined projection of elements inherited from both input spaces. The situational context recalled here complements the blend.[14] In the case analysed, the situational context is based on the knowledge of when and in what circumstances the expression *Fuga daemonum* appears most frequently: this happens mainly with reference to medieval practices of evicting evil spirits, including exorcism. *Fuga daemonum* also appears in myths and legends that describe treatments of various mental disorders usually performed by medicine men. Therefore, the context for the name is the cultural background in combination with Christian rituals and folk customs (cf. Bartmiński 2006).[15] Thus, there are mappings between

[14] In Figure 1 the situational context is indicated in grey. Elements that take part in selective projection are indicated with dots.

[15] The notions of situational and cultural context refer us to Bartmiński's linguistic worldview conception. According to the ethnolinguist, the linguistic worldview is "the interpretation of reality entrenched in a given language, which can be captured in the form of judgements about reality. The judgements can be either encoded in the language system (its grammar and lexicon) and in stereotyped texts (e.g. proverbs), or implied by linguistic forms, preserved on the level of social knowledge, attitudes, myths, and rituals" (Bartmiński 2006:12).

or a selective projection of elements from two input spaces, such as: 'phototoxic effects'–'light', 'medical practices'–'exorcisms', 'treatment of neurotic tensions'–'exorcising evil spirits', or 'doctor/medicine man'–'priest/exorcist'. The name *Fuga daemonum* is the result of the projection: it is motivated by diverse applications of the plant in various rituals, whose aim is to "purify" people from evil spirits with the help of the plant's pharmacopoeic properties. In other words, *Fuga daemonum* cures the soul with the aid of pharmacologically active compounds comprised in St John's wort.

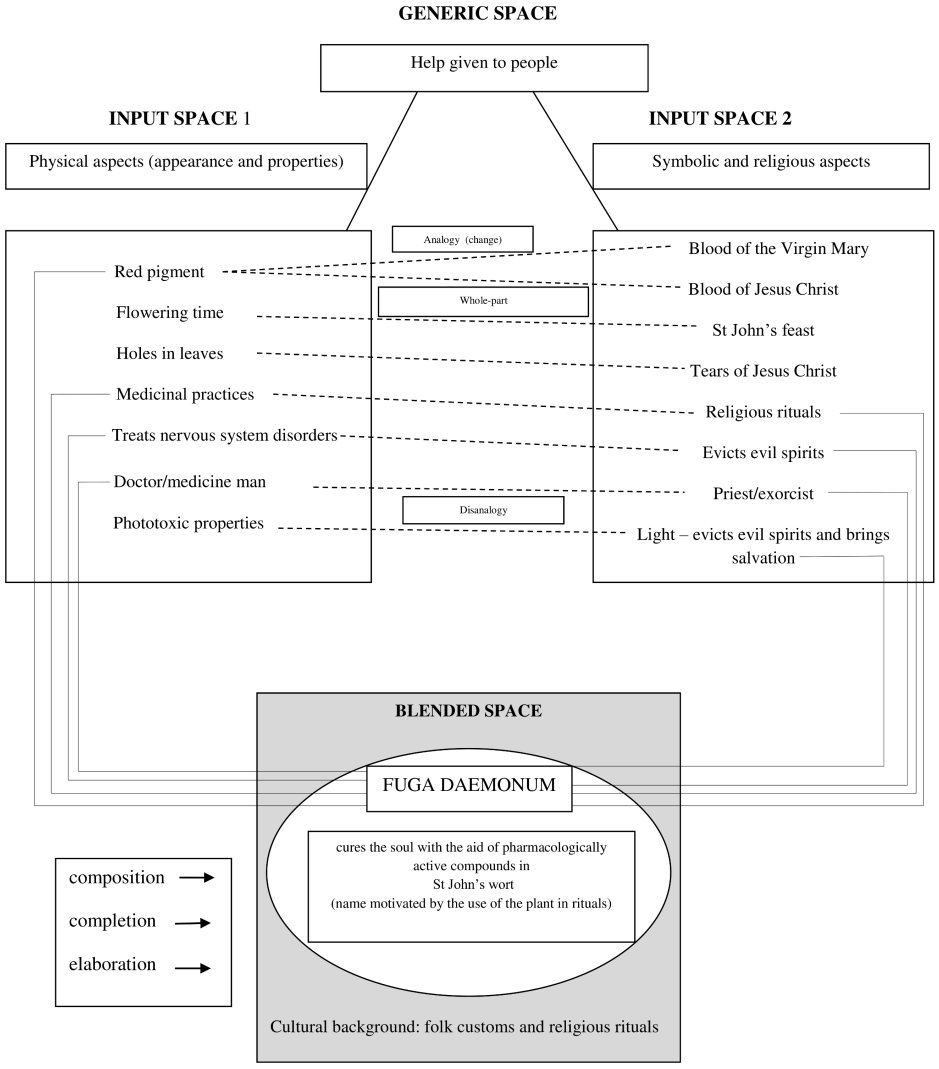

Figure 1. The Fauconnier-&-Turner four-space conceptual integration network model for *Fuga daemonum* (cf. Fauconnier and Turner 1998: 143)

4. Concluding remarks

Conceptual integration, as a basic mental operation, is one of the pivotal notions postulated in cognitive inquiry into meaning construction. The operation is both dynamic and context-dependent. The way we both encode and decode a given meaning is grounded not only in the understanding of language, but also in recalling various mental representations (Libura 2010: 19). Such mental representations as frames, cognitive scenarios, schemas, models, and conceptual prototypes underlie our understanding of the content activated by a given linguistic expression (cf. Libura 2010: 19).

The analysis of *Fuga daemonum* confirms these observations. This case study shows that it is necessary to take into account the so-called "co-linguistic data",[16] indispensable for successfully decoding meaning. Therefore, the analysis of *Fuga daemonum* proposed here contains references to folk customs, religious practices and rituals, or medicinal folk traditions. As observed by Coulson,

> Background knowledge affects utterance meaning precisely because utterances are designed to evoke information from memory in a way that supports action and interaction in the physical and social world. [...] Because cognitive activity mediates the relationship between words and the world, the study of meaning is the study of how words arise in the context of human acticvity, and how they are used to evoke mental representations. (Coulson 2001: 17)

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[16] Those involve socially entrenched knowledge of the world, shared by the speaker (sender) and the hearer (receiver), as well as conventionalised patterns of behaviour (cf. Bartmiński 2006: 14). Bartmiński regards co-linguistic data as equally important clues, beside evidence from language, in the reconstruction of linguistic worldview.

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