CREATIVITY IN MEANING CONSTRUCTION AND TRANSLATION – A COGNITIVE PERSPECTIVE ON THE HUMUROUS LANGUAGE USED BY BIG FRIENDLY GIANT IN ROALD DAHL'S THE BFG IN ITS ENGLISH, POLISH AND PORTUGUESE VERSIONS

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Abstract:
The paper explains how our mind creates a meaning in a wordplay. The model of mental maps (Author, 2020) based on the theory of conceptual blending (Fauconnier,1997, Fauconnier & Turner, 2002) and the geneplore model based on the theory of creative cognition (Finke, et al, 1992) presented in the paper describe the operations in the mind related to generating, exploring and transforming ideas and/or linguistic and non-linguistic units that result in the emergence of a new meaning embedded in the wordplay. To illustrate the cognitive processes in meaning construction, the paper refers to the humorous language of Big Friendly Giant in Roald Dahl's *The BFG* in its original English version as well as its translations into Polish and Portuguese.

Key words: conceptual blending, mental maps, creative cognition, humour, children's literature

Introduction

As Albert Einstein claims, "combinatory play seems to be the essential feature in productive thought" (*Ideas and Opinions,* 1954/2010, p. 25), which briefly explains how our mind works in the moment of creating "something new". In my paper I would like to show how cognitive mental maps can be used as cognitive tools to track down this kind of 'play' in the writer's/the translator's mind while constructing/reconstructing the meaning in the language invented by Roald Dahl for Big Friendly Giant – the main protagonist in the children's book *The BFG*.

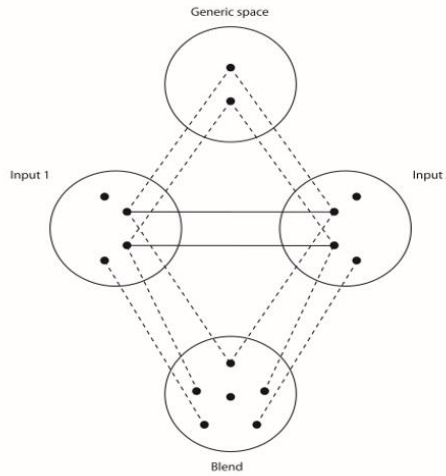
The theory of conceptual blending (Fauconnier, Turner) and creative cognition (Finke, Ward, Smith) shall be applied as the basis for the cognitive analysis,

with the use of the mental maps (Author), of Big Friendly Giant's humorous expressions used to describe the giants' food. The mental maps will support us in visualization of the 'combinatory play' between images and words in the creative process of meaning construction and its reconstruction in translation. By mapping the writer's/the translators' thoughts while inventing the language of Big Friendly Giant we will be able to see common mechanisms governing their creative decisions and at the same time we will have a chance to appreciate the individual approaches of the creators.

1. Cognitive processes in wordplay construction: the theory of conceptual integration and the model of mental maps

The theory of conceptual integration or blending theory (BT) is considered as central for human thought and imagination. It refers to the operations in the human mind that, by way of associations between two or more concepts, lead to the construction of a novel meaning. Blending is a dynamic, multidimensional process based on the mapping (analyzing and comparing) between at least two input spaces defined by the founders of the theory as 'small conceptual packets constructed as we think and talk'(Fauconnier & Turner, 2002, p. 40). The partial match between the input spaces and their selective projection result in the emergence of a new structure – a blended space (or a blend). The projection and selection of the cognitive parts coming from the input spaces is possible due to the existence of the generic space that represents the general information/characteristics common for both spaces. The blending process has been illustrated by the blend theorists in the following diagram:

Figure 1. Conceptual integration – the emergence of a blended space (novel structure) according to Fauconnier 1997, p. 151.

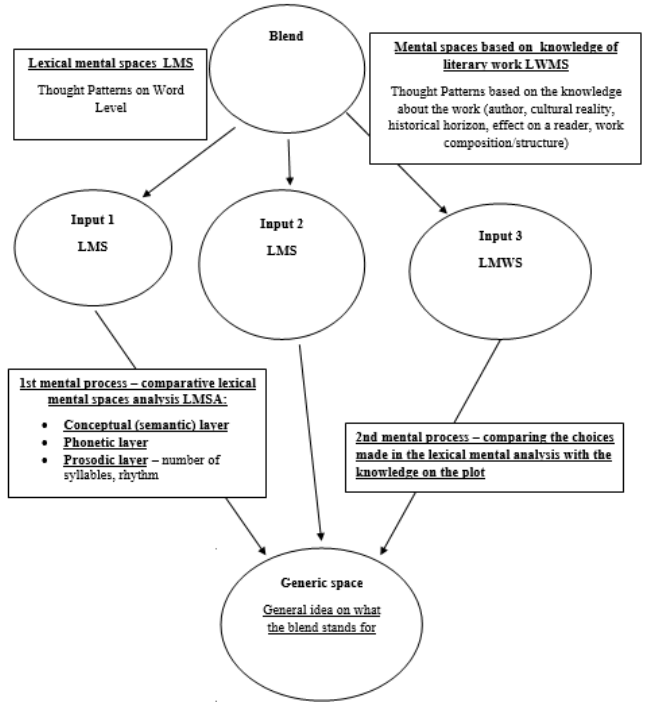


The blending theory has been applied by researchers to explain phenomena related to such areas of human activity as art, science (mathematics, computer science, genetics), social studies (psychology, anthropology), but it "was originally developed in order to account for linguistic structure and for the role of language in meaning construction, particularly 'creative' aspects of meaning construction like novel metaphors, counterfactuals and so on." (Evans, V, Green, M., 2006, p.401).

The conceptual integration understood as the process of creative meaning production and interpretation has become a subject of interest among scholars involved in humour studies. The space structuring model (Coulson, 2001, Coulson et al 2006) uses the blending theory to explain the mechanisms of joke comprehension based on the simultaneous interactions between multiple mental spaces that result in the emergence of novel, creative meaning of a given linguistic input. The model of mental maps (Author, 2020), also based on the theory of conceptual integration, focuses on mental operations that lead to the formation and interpretation of wordplays.

The mental maps illustrate the creative power of human mind working at lexical level and the general knowledge level. They serve as a way to visualize possible thought paths followed by the author of the wordplay. The general mental map for wordplay deconstruction (i.e. the map that displays all linguistic and non-linguistic elements that contribute to the formation of a wordplay) is as follows:

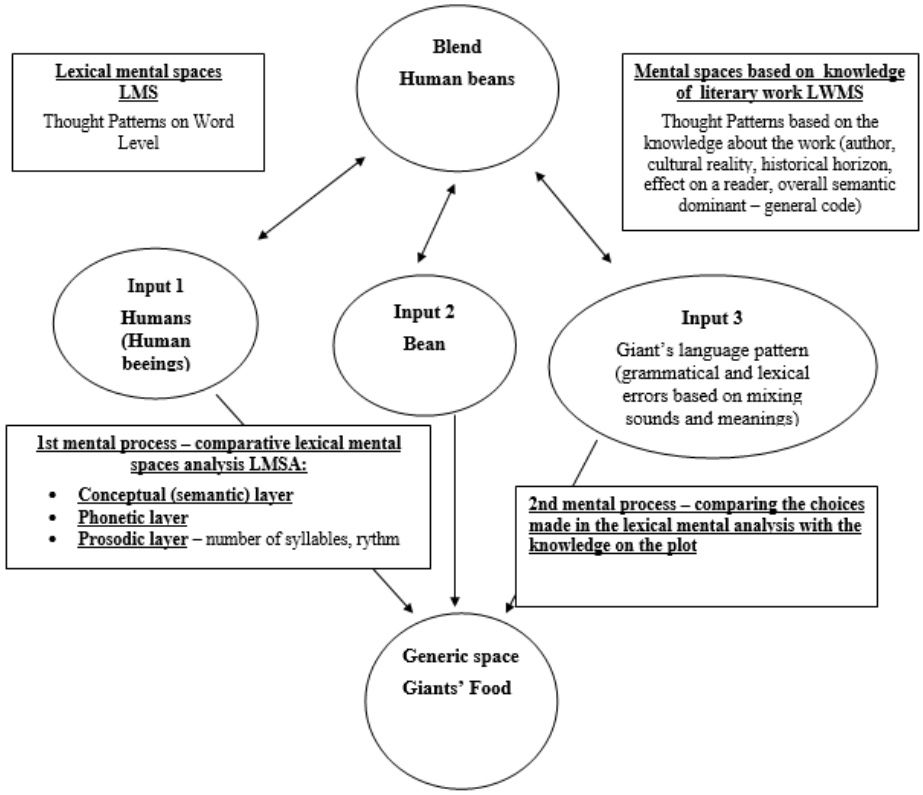
Figure 2. Mental map: wordplay construction (Author, 2020, p.60)



In the mental map the lexical level comprises all information on the input spaces that influence directly the meaning and the sound of the wordplay: two or more words (their semantic, phonetic and prosodic layers) blended together lead to the emergence of the wordplay. But, in more demanding circumstances, like the use of wordplay in literary works, the creation of the wordplay is not only based on the interaction at the word level but it can also be highly determined by the general structure of the literary work, the linguistic style typical for its author, its historical context as well as the audience (their linguistic capacity, general knowledge and expectations) it is dedicated to: all these aspects belong to the group of mental spaces based on the knowledge of the literary work.

The mental map for the wordplay "human beans" taken from the BFG by Roald Dahl can serve as an example for using the mental map to track down the processes that result in the creation of the wordplay (see Figure 3).

Figure 3. Mental map for "Human beans" Dahl, 1982, p. 17



As we look at the map, we can see the interactions between input spaces: the 'combinatory play' with meaning and sound together with the reference to general code applied in the book (the rules of the language invented by the author for his character Big Giant). But is it enough to describe what happened in

the author's mind? All what we can see are the final operations in the author's mind who decided to 'play' with the phrase 'human beings', but he might have first considered other words that stand for 'people' (in the book people are giants' favourite snacks), like: 'persons', 'individuals', 'humans' or even 'mortals'. These are just speculations, we do not know the thought paths that had been followed by the author before he chose to 'play' with 'human beings'. Therefore, the creative process cannot be described by a few mental operations, it is far more complex and sometimes its stages cannot be easily tracked down. The whole process of associating and combining various information is difficult to grasp as some of the mental operations might be done automatically, unconsciously (the case when the author/translator cannot explain why they decided on that particular wordplay), others are based on deliberate choices – acceptation or rejections of some translation solutions.

In order to clarify the creative processes in the mind of the author and/or the translator, in the following section I will refer to the theoretical model proposed by psychologists Roald A. Finke, Thomas B. Ward and Steven M. Smith – the Geneplore Model.

2. Creative cognition and creativity – the Geneplore Model

The creative cognition approach to creativity aims to ' identify the cognitive processes and structures that contribute to creative acts and products' (Finke et al, 1996, p. 1). Creativity is defined as 'the generation of novel and appropriate products through the application of basic cognitive processes to existing knowledge structures' (Ward, 2006, p. 28). The theory shows cognitive mechanisms underlying the creative thinking; it explains what kind of operations are applied by our mind in order to provide creative solutions to a given problem.

The Geneplore Model implies the existence of two phases involved in the creative process: the generation of ideas and their exploration (hence the name of the model: geneplore is the blend of the words 'generation' and 'exploration'). The generative phase consists of the activities in the human mind that lead to the emergence of the so called preinventive structures understood as primary novel ideas that come up in our mind when we are faced with a problem that needs to be solved in a creative way. The mental operations at this phase of the creative process include:

- memory retrieval (Perkins, 1981, Ward 1994, 1995): when we compare a new situation to our previous experiences
- association and combinations between associations (Mednick, 1962, Murphy, 1988, Baughman & Mumford, 1995, Hampton, 1997): when we try to find a solution to a problem by associating it to a similar problem/situation,
- mental synthesis (Thomson & Klatzky, 1978): when we compare and combine different concepts and/or its parts,

- mental transformation (Shepard & Feng, 1972): when we modify the existent idea and transform its structure into a new form,
- analogical transfer (Gentner, 1989, Holyoak & Thagard, 1995, Novick, 1988): when we refer to another discipline and transfer knowledge from it to provide a solution to a new problem, e.g uses of the knowledge on biological processes in technology), and
- categorical reduction (Finke et al, 1992): when we reduce a certain object to its function or characteristics, e.g rose to its scent). (based on the table by Finke et al, 1996, p.20)

The retrieval of existing structure from the memory and the association of different facts and concepts happen quickly and automatically in our mind whereas the operations such as mental synthesis or mental transformation require conscious and deliberate activities and strategies that call for additional intellectual effort. In these processes our mind deconstructs the existent concepts, rearranges and reassembles their parts and combines single concepts into more complex conceptual structures with new (or potentially new) meaning and usefulness.

The preinventive structures conceived during the generative phase assume the forms of "novel visual patterns, object forms, mental blends, category exemplars, mental models, and verbal combinations" (Finke et al, 1996, p. 2) ready to be analyzed and tested in the exploratory phase.

The exploratory processes serve to examine the effectiveness and potential involvement of the preinventive structures in the construction of the final product in the creative process. In the exploratory phase the following mental operations can be applied:

- attribute finding (Finke & Slyton, 1988): when we look for novel attributes or features emergent from the mental structures,
- conceptual interpretation (Ortony, 1979): when we look for a more general or metaphorical meaning of a generated preinventive structure,
- functional interference (Finke,1990): when we explore the potential uses or functions of a preinventive structure,
- contextual shifting (Smith, 1979, Barsalou, 1987): when we analyze a preinventive structure in new or different contexts in order to see possible uses or meanings of the structure,
- hypothesis testing (Shepard,1978): when we interpret preinventive structures as a source of possible solutions to a problem
- searching for limitations (Finke et al., 1992): when we search for practical or conceptual limitations of the preinventive structures

Creative thinking is a cognitive process based on continuous cycling between the generative and exploratory phases. Our mind generates preinventive structures that are analyzed, interpreted, compared and, if needed, also modified or rearranged in the course of creative exploration. If the preinventive structures are

accepted as successful creative solutions to a problem they are transformed into creative products of our thinking, but if they are rejected as inappropriate, incomplete or unsatisfactory, our mind abandons them and generates other preinventive structures with new features and possible functions. The procedure continues until suitable results are achieved. (Finke et al, 1992, pp. 24-26)

In the geneplore model there is one more element that needs to be taken account in the creative process: the existence of product constraints that can influence, at any time, both generative and exploratory processes. We can distinguish such product constraints as a product type, its functions and/or components, a category and its features, e.g. if we need to invent a new machine we should take into account its size, functions, materials it is made of, the cost of its production, etc. – all these aspects may determine our decisions taken during generation and exploration of the preinventive structures. In case of language creation or recreation (e.g. BFG's invented language and its translation into other language) such constraints are imposed by the rules of the system of language that need to be followed in order to consider it as the correct manifestation/realization of the language.

3. The relation between the geneplore model and the model of mental maps

If we compare the geneplore model to the model of mental maps the first thing that strikes our attention is the associative power of our mind and the dynamics of cognitive processes visualized by the two models.

The creative process in the wordplay construction starts with the generation of the preinventive structures here represented as linguistic units with their semantic and phonetic layers as well as their images created in our mind. Such linguistic units (preinventive structures) are tested as to their usefulness in the meaning construction in the wordplay (generative phase), they are compared to other possible linguistic units (other preinventive structures), accepted or rejected (exploratory phase) as the final input spaces (final preinventive structures) that contribute to the emergence of the wordplay – the final product of the creative process.

The cognitive processes involved in the construction of the wordplay (its meaning and sound) are similar to the ones mentioned by the founders of the theory of creative cognition. The generative processes such as memory retrieval, association, mental synthesis or transformation work mainly at the lexical level (the first stage in wordplay construction in the mental map) whereas the exploratory processes such as conceptual interpretation or searching for limitations refer to the structure of the text in which the wordplay is inserted (the second stage in the mental map).

The cognitive mechanisms common to both models: the geneplore model and the model of mental maps can be best recognized and analyzed if we compare the thought paths taken by the author at the moment of the wordplay creation to

the thought paths of the translator engaged in the reconstruction of the wordplay (both its meaning and sound) in the target language. The translator's task is to track down the technique applied by the author of the original wordplay and guess possible preinventive structures generated in the author's mind so that the translator could follow the same steps in the creative process based on the generative and exploratory phases that lead to the emergence of the equivalent wordplay in the target language.

In the translation process the differences between two systems of language: the source and the target language may originate restrictions as to the translation decisions in cases where there is no equivalent word/phrase/sentence structure in the language a given linguistic unit is translated into. We can consider such cases as product constraints which contribute to the application of mental operations prescribed to the generative and explorative phases in the creative thinking process.

The geneplore model of creativity provides a new perspective on the creative meaning construction and reconstruction of wordplays represented by mental maps. The author's/the translator's mind engaged in creative thinking is exposed to a continuous cycling between the phases of generation and exploration: various preinventive structures are generated, explored, rejected or accepted before the final preinventive structure is applied in the wordplay creation/recreation. The mental map visualizes the final preinventive structures that directly contribute to the emergence of the wordplay. Thanks to the theory of creative cognition we can develop the interpretation of the mental maps by tracking down possible thought paths taken by the author/the translator before they decide on the particular preinventive structures – the precursors and carriers of the meaning of the invented/reinvented wordplay.

To illustrate the processes discussed above, the following section provides some examples of the mental maps of humorous language spoken by Big Friendly Giant in the book *BFG* by Roald Dahl. Supported by the comments on the mental operations described in the geneplore model, we will gain a greater insight into creative capacities of the author's/the translator's mind engaged in wordplay creation and their translation.

4. The joined power of the creative cognition and the mental maps: on the creativity in meaning construction and reconstruction of humorous language

Big Friendly Giant in the *BFG* by Roald Dahl collects good dreams and speaks gobblefunk – the language where English grammar rules are constantly broken, but still they remain organized in a well-thought-out system, and the words sound like English but they seem to be mispronounced or distorted and often their meanings are mixed up, also in a thoughtful manner. Sophie, a little girl kidnapped by the Big Friendly Giant into the Giants' country, takes some time to get used to the Giant's peculiar way of speaking in order to follow the line of their

conversations. Both Sophie and the readers' of the novel (as well as its translators) need to decipher the code of the language invented by the writer in order to understand the logic of the BFG's thoughts. In other words, to discover the meaning in gobblefunk we (readers and translators) need to 'imagine' the sequence of preinventive structures generated and explored in the author's mind and then 'grasp' the final results of the mental activities in the exploratory phase in the process of creating the giant's language. The mental maps may support our efforts in visualizing the mental operations in the author's mind. To illustrate the cognitive mechanisms, let's analyze some humorous expressions pointed below.

When Sophie and BFG are talking about the Giants' eating habits and tastes, the readers find out that:

> "Turks from Turkey is tasting of turkey'
> "Greeks from Greece is all tasting greasy"
> ' (…) human beans from Wales is tasting very whooshey of fish. There is something fishy about Wales."
> 'Human beans from Jersey is tasting of cardigans'
> 'Danes from Denmark is tasting ever so much of dogs'
> 'The human beans in Wellington (…) taste of (…) boots' (Dahl, 1982, pg. 18-22)

As our mind processes the sequences of words in the sentences, it discovers the play with sound based on the alliteration effect (**T**urks – **T**urkey (country) – **t**urkey (animal)/ **G**reeks – **G**reece – **g**reasy / **W**ales- **w**ales (animals) / **D**anes – **D**enmark – **d**og/ **W**ellington (city) – **w**ellingtons (shoes)). Later on (or probably almost at the same time) we can perceive the categorical relation between the words engaged in the humorous description of the Giants' food – the rule is to find a nation, a country and a type of animal/ clothing/ taste of food whose names, when put in the line, give the alliteration effect. We do not know which category: nation / country / food (animal or piece of clothing / taste of food) served as a starting point in the author's search for the sequences of the words. The author could have picked the name of the nation and/or the country in order to later look for the name of the animal/piece of clothing with the same initial letter or he could have chosen the name of animal/clothing in order to add the names of country and nationality to the sequence of words starting with the same letter.

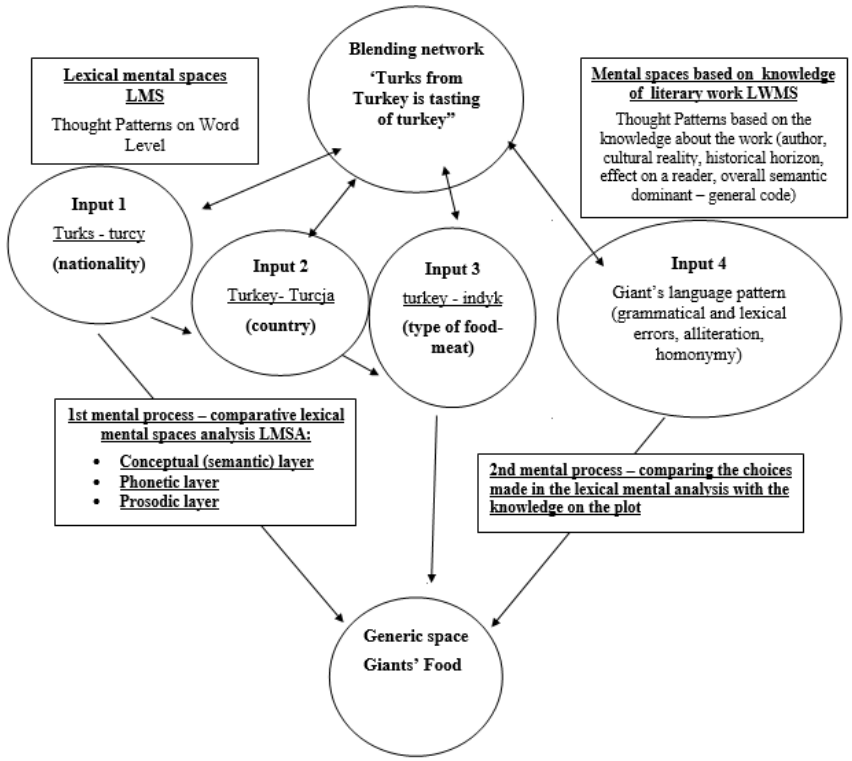
The possibilities of other phonetic and semantic play within the categories mentioned above that are not present in the passage can be treated as preinventive structures that are generated, explored and rejected by the author of the BFG. We can only speculate on or 'imagine' other sequences (preinventive structures) such as: German – Germany – German Shepherd or Hungarian – Hungary – hungry. And as we know the code according to which the sequences of words are organized, we can apply the same mechanism if we want to translate the BFG's humorous descriptions of Giants' food into a target language. We can 'imagine' the possible associations that might appear in the translator's mind as well as

visualize the cycling of the preinventive structures in the generative and exploratory phases of the translation creative process. Here, the mental maps can be used as graphic representations of the thought paths followed by the translator, i.e. they can show the interactions between the final preinventive structures (in the model of mental maps defined as input spaces) that lead to the emergence of the final product of the creative thinking (defined as blending networks) in the translation process.

Let's analyze the mental maps[1] of the word sequences (blending networks) "Turks from Turkey is tasting of turkey" (Dahl,1982, p.18) and 'Wellington is in New Zealand. The human beans in Wellington (…) taste of boots' (Dahl, 1982, p. 22), together with their translations into Polish and Portuguese.

The mental map for "Turks from Turkey is tasting of turkey" goes like this:

Figure 4. Mental map for "Turks from Turkey is tasting of turkey" Dahl, 1982, p. 18

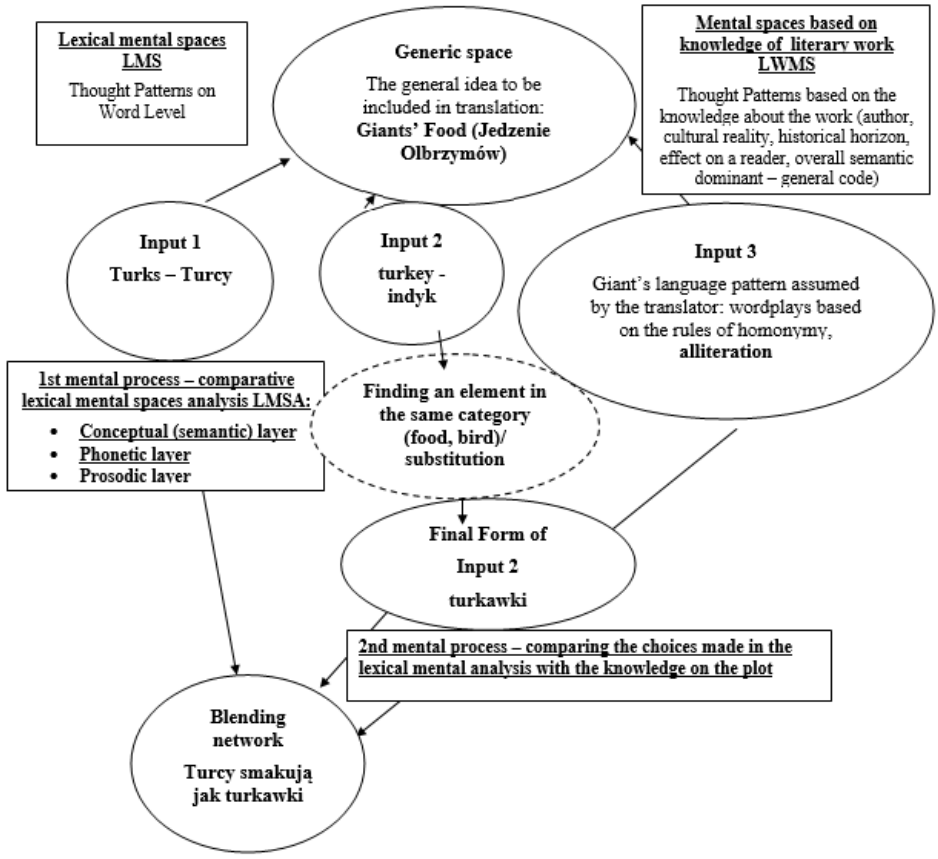


[1] All mental maps have been first presented in the book Author. 2020. *Humour and Translation in Children's Literature. A Cognitive Linguistic Approach*, Wydawnictwo Uniwersytetu Śląskiego, but in the book the comments to the maps refer to the skopos (objectives) of the translation and children's capacities to appreciate humour.

Thanks to the mental map we can observe the interactions between inputs (‘final’ preinventive structures in the geneplore model) on the lexical level with the simultaneous reference to the general language code applied in the book. The translator can use the map to visualize the components of the blending network (the product of the creative thinking) in order to reconstruct it in the target language. The creative thinking in the translation process shall start with the generation of the preinventive structures that represent three categories: country, nationality, animal (food) and later they will be tested (explored) to see if they fulfil the requirements of the alliteration effect or respond to the general rules of gobblefunk.

Polish translator’s thought paths in the blending network “Turcy smakują jak turkawki” (Łoziński, 1982/2003, p. 24) can be visualized in the following mental map:

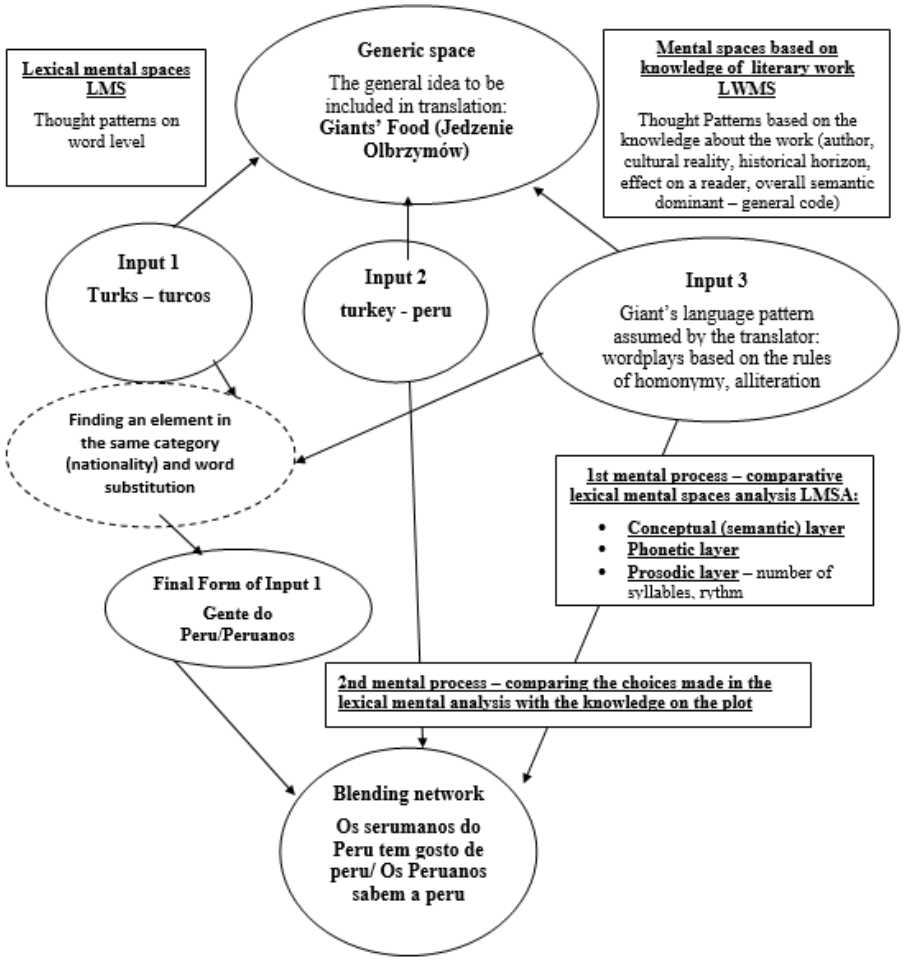
Figure 5. Mental map for “Turcy smakują jak turkawki” Dahl, 1982
trans. Jerzy Łoziński 2003 p. 24



The translator's task is to find the equivalent components that form the blending network in the original version. The mental map shows that the translator's thoughts follow the line: nationality – country - animal (food) applied in the source language. Jerzy Łoziński uses analogy to reconstruct the blending network in the target language. But if he translated the word 'turkey' directly into Polish ('indyk') the alliteration effect would be lost. Therefore, the translator needs to look for another object within the same category: animal (food) that starts with the letter 't'. The generative phase in the creative process at this point of translation begins with the memory retrieval: gathering all the words that stand for animals, preferably birds that can be served as a meat dish. Possible preinventive structures could be: 'kurczak'('chicken'), 'gęś' ('goose'), 'bażant' ('pheasant'), 'kuropatwa' ('patridge') – all these rejected in the exploratory phase as they do not comply with the alliteration rule applied in the blending network. The translator's final choice is 'turkawka' ('turtle dove'), acceptable as it fits in the sequence of 't' words, but still during the exploration some limitations of this preinventive structure (input space) can be detected. As 'turkawka' is not a common word in Polish, children might have problems with understanding its meaning and there is high probability of their interpretation of the word as the mispronunciation (distortion) of the word similar in sound 'truskawka' ('strawberry'). A sudden shift in the meaning of the whole sequence can be observed – in BFG's language in its Polish version Turks have a strawberry flavour, if we follow children's imagination.

Brazilian and European Portuguese translations: "Os serumanos do Peru tem gosto de peru"(BRpt: Angela Mariani, 1982/1999, p. 25) and "Os Peruanos sabem a peru" (pt: Susana Ferreira and Bárbara Soares, 1982/2015, p. 30) follow slightly different thought line that can be analyzed with the use of the following mental map:

Figure 6. Mental map for "Os serumanos do Peru tem gusto de peru"/ "Os Peruanos sabem a peru" Dahl, 1982, trans. Angela Mariani, 1999, p. 25 / Susana Ferreira & Bárbara Soares, 2015, p. 30

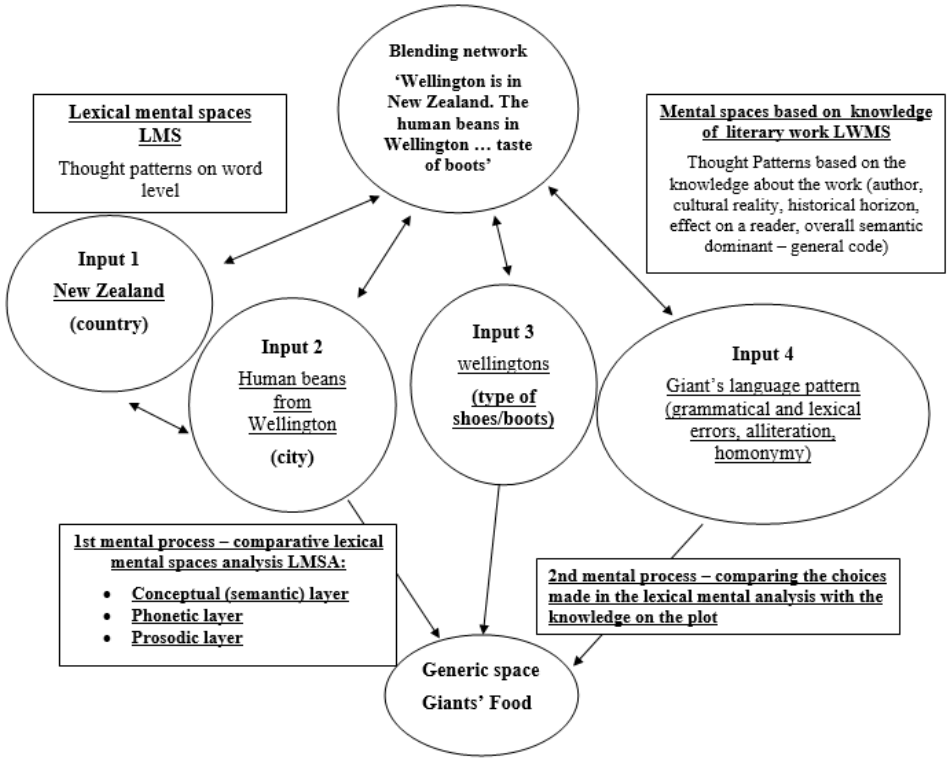


The creative process in the translation of the blending network represented in the above mental map is reduced to a direct translation of the name of the animal (food) that in Portuguese, similarly to English, has its homonymic counterpart in the country category. The only mental operation required to transfer the blending network into the target language is the detection of the analogy between the homonymic set of words 'turkey'(animal)/'Turkey'(country) and 'peru' (animal) /'Peru' (country) in English and Portuguese respectively. Such search for analogy is typical for the generative phase in the geneplore model, but still the possibility of the direct translation of the word 'turkey' imposes the reduction of the generation of preinventive structures to a zero level. As we have a direct equivalent in the target language no other preinventive structures are necessary, the exploratory

phase can be omitted and the translation solution emerges automatically in the translator's mind.

Slightly more complicated mental operations are involved in the construction and the reconstruction of another blending network: "Wellington is in New Zealand. The human beans in Wellington (…) taste of boots"(Dahl, 1982, p. 22). The mental map with the thought paths taken by the author is as follows:

Figure 7. Mental map for "Wellington is in New Zealand.
The human beans in Wellington (...) taste of boots" Dahl, 1982, p. 22



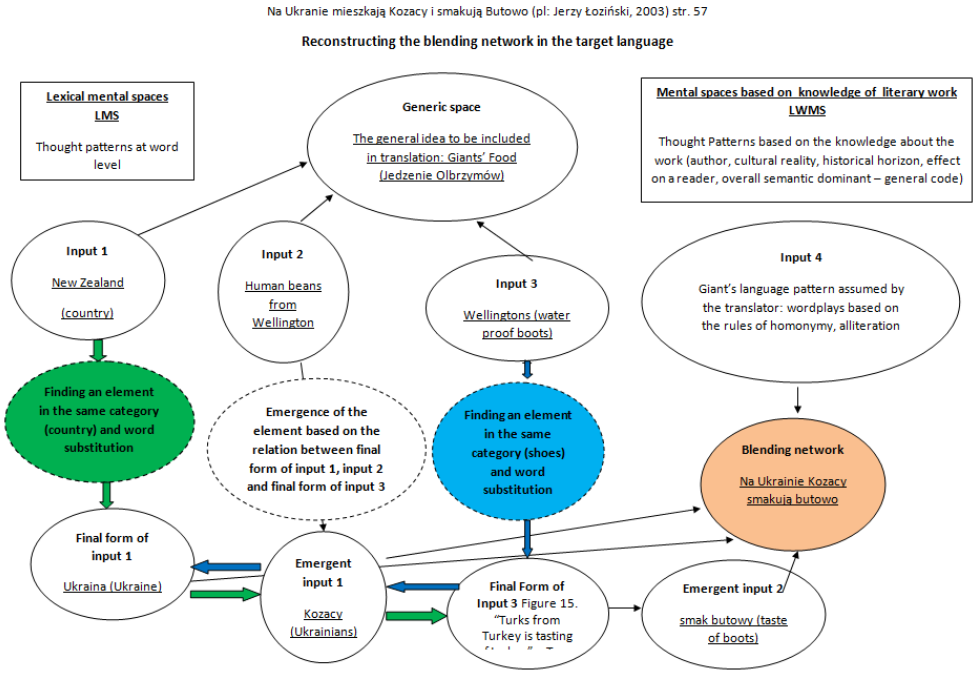
The creative process of inventing the blending network represented in the mental map is based on the same pattern applied in the blending network discussed earlier in the paper, i.e the generation of preinventive structures that lead to the emergence of the blending network is closely related to the sequence of words: nation – country (name of the city) – animal(food)/clothes. The author looks for other homonymic relations between the words representing the categories pointed in the sequence, i.e. his mind generates various sets of word combinations and explores their capacity to fit in the logic and sound of the BFG's language. In the example analyzed, there are a few possible thought paths that contribute to the creation of the blending network. First the author can follow the previously established sequence: nation – country (city) – animal (food)/ clothes, he can

choose to reorder the words in the sequence, or even decide to reverse the order in the sequence starting with animal (food)/clothes – country – nation. Such 'combinatory play' opens new possibilities in the recreation of the blending network in the translation process.

Let's analyze Polish and Portuguese translations of the blending network by looking at the mental maps displaying the interactions between respective elements (input spaces) involved in the wordplay reconstruction in the target language.

Polish version is as follows:

Figure 8. Mental map for "Na Ukrainie mieszkają Kozacy ….. i smakują butowo" Dahl, 1982, trans. Jerzy Łoziński, 2003 p. 28



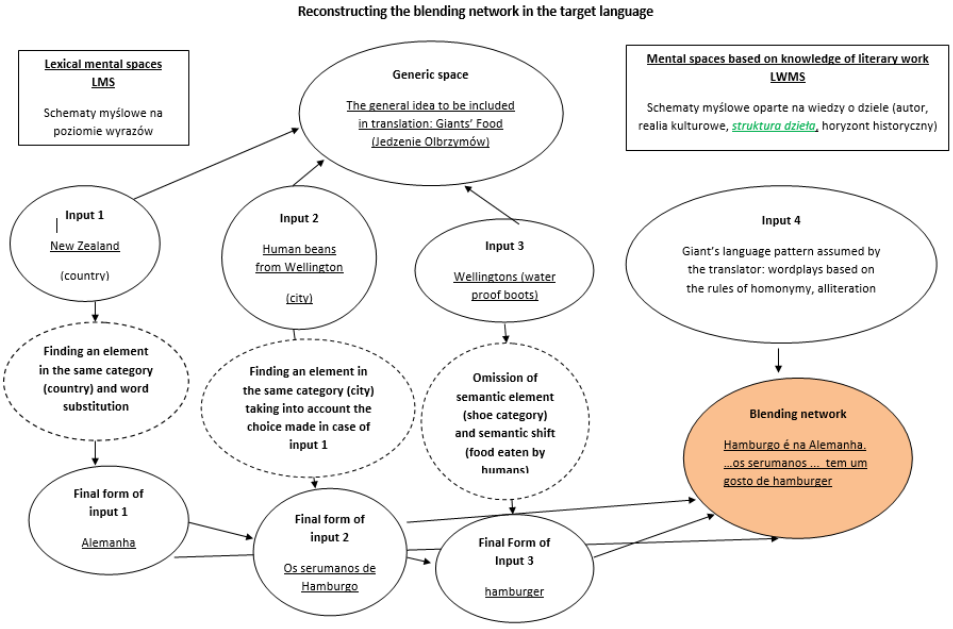
If we look at the mental map for the Polish translation of the blending network discussed above, we can see that the translator decided to reconstruct the sequence of words: country(city) – nation – animal(food)/clothes, but his 'combinatory play' rather started in the reversed order: clothes – nation – country. We can imagine the associative power of the translator's mind engaged in the generative phase in which various names for the types of shoes were recalled to be subsequently tested in the exploratory phase as to their adequacy and/or usefulness in the reconstruction of the blending network in the target language. From the set of the names such as 'kalosze', 'trzewiki', 'oficerki' or 'kozaki' – all standing for 'boots' in Polish, the translator chose 'kozaki' as the word phonetically resembles the historical name for Ukrainians – 'Kozacy'. Although the combination

'Ukraina/Kozacy'('Ukraine/wellingtons, boots') reflects the code applied in the word sequence and logic of the original version, the creative process of translation didn't end at this point. As younger readers might have difficulty in understanding the word 'Kozacy' (the word used only in historical contexts), the translator needed to provide them with simple explanation: 'Kozacy' live in Ukraine (Polish version: 'Na Ukrainie mieszkają Kozacy') as well as describe the taste of the 'human beans' who live in that country – the taste of boots, in Polish language, the taste of particular boots called 'kozaki'. But the translator went even further as he decided to invent a new word in Polish to translate 'taste of boots' from the original version into 'butowo' – a non-existent word in the Polish dictionary, but still created according to the Polish rules for adverb formation.

The mental map for the blending network "Na Ukrainie mieszkają Kozacy i smakują butowo" enables the visualization of the creative processes in the mind of the translator. It shows the interactions between the final pre-inventive structures, here represented by input spaces, both at linguistic and non-linguistic levels. We can see the pattern recreated in the translator's mind, analyze the linguistic and non-linguistic components of the recreated wordplay and speculate how the author/the translator generated and explored ideas that led to the creation/recreation of the wordplay.

Now, if we take a look at the mental map of Angela Mariani's Brazilian version of the blending network "Wellington is in New Zealand. The human beans in Wellington (…) taste of boots' translated as "Hamburgo é na Alemanha. …os serumanos ... tem um gosto de hamburger ", the first thing that strikes our attention is the phonetic relation between the words "Hamburgo" and "hamburger". We can imagine that the creative process of the wordplay reconstruction started with the translator's decision to recreate the alliteration effect present in the original version (in the mental map represented by the input space standing for the general code applied in the BFG's language). The generative phase in the process consisted in generating a set of words standing for both names of the city and pieces of clothes that, in the exploratory phase, were tested as to their resemblance in sound. As the translator couldn't find a perfect Portuguese equivalent that would reflect the phonetic 'city-clothes' match present in the original version (Wellington /wellingtons), she decided to explore the possibilities of combining the words standing for city and food. The creative process at this point here is based on the analogy to the sequence nation – country(city)- food applied in other blending networks in the book (e.g Turks/turkey/turkey analyzed above). Although the translator substitutes 'wellingtons' ('clothes' category) by 'hamburgers' ('food' category) , her thought path remains faithful to the overall code applied in the language of BFG. Below the mental map illustrates the interactions between final preinventive structures that lead to the emergence of the Portuguese version of the original blending network:

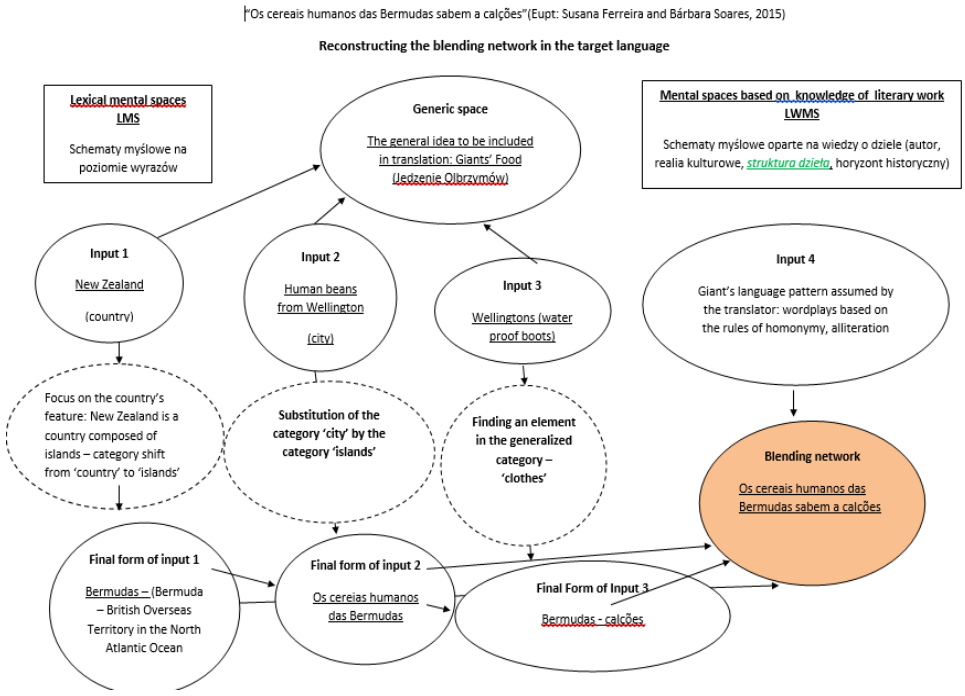
Figure 9. Mental map for "Hamburgo é na Alemanha. …os serumanos ... tem um gosto de hamburger " Dahl, 1982, trans. Angela Mariani, 1999, p. 26



Susana Ferreira and Bárbara Soares propose another Portuguese translation of "Wellington is in New Zealand. The human beans in Wellington (…) taste of boots' discussed above: 'Os cereais humanos das Bermudas sabem a calções' (Ferreira & Soares, 1982/2015, p. 34). The mental map of this phrase shows the final outcome of the 'combinatory play' between preinventive structures (input spaces) generated with the purpose to find analogical relation between words that represent the country/city and clothes categories (New Zealand (Wellington)/ wellingtons) present in the original version. It is evident that the alliteration effect is lost in translation and probably a reader, especially a young reader, may take some time to see the relation between "Bermudas" and "calções"("shorts"). What are most probable mental operations that happened in the mind of the translators? The attempt to find equivalent pair of words standing for 'city' and 'shoes', i.e. the generation of preinventive structures (input spaces) representing the category of 'country/city' and 'shoes', ended in failure. The translators needed to go deeper into the relation between meanings and images present in the original blending network. In the generative phase of the creative process the translators used their knowledge on geography (the mental operation comparable to memory retrieval). As New Zealand is a country composed of islands, instead of looking for a name of the city (Wellington), another option could be finding a name of some other group of islands, hence the translation solution of 'Bermuda islands' (in Portuguese Bermudas) and the subsequent emergence of the type of shorts called 'bermudas'. In this line of thought we can observe the shift within the same

'clothes' category from 'shoes' to 'other types of clothes', acceptable if we take into account the general code of the BFG's language. But still the final phrase sounds 'Os cereais humanos das Bermudas sabem a calções', which means that the translators decided not to use the word 'bermudas'('Bermuda shorts') but 'calções' ('shorts'). Here another (slight) shift within the category can be noticed, justified by the supposition that younger readers could not know the word 'bermudas' as it is not common in Portuguese language or the bermunadas is intentionally hidden and is treated as a kind of challenge for decoding the meaning of the whole phrase.

Figure 10. Mental map for 'Os cereais humanos das Bermudas sabem a calções' Dahl, 1982, trans. Susana Ferreira & Bárbara Soares, 2015, p. 34)



5. Conclusions

In order to understand the associative power of our mind, we need to combine the findings of various disciplines whose objective is to track down and explain cognitive mechanisms that govern creative processes. Interdisciplinary perspective on the meaning construction discussed in the article sheds a light on how our mind works when faced with creative writing and translation of texts filled with humor, with the special focus on wordplays.

Cognitive linguistics (the model of mental maps) supported by psychology of creativity (the geneplore model) provide an insight into a complexity of mental operations engaged in "combinatory play" between images, information and linguistic units (input spaces) that contribute to the emergence of a creative product – humorous book dedicated to children.

Mental maps visualize the interactions between input spaces at the final stages of the creative process, i.e an author/ translator's thought paths taken before making the final decisions as to the choice of the words used in the wordplay (indicated as the blending network in the map). In the map we can directly see the constituent parts of a wordplay and relations between them.

The geneplore model enables a deeper analysis of the creative processes engaged in the wordplay construction/reconstruction as it shows a diversity of possible ideas (indicated as pre-inventive structures in the model and referred to as final pre-inventive structures in the mental map) that are generated and tested to be later rejected or accepted by the author/translator in the creative process.

Both models complement each other and provide a wider explanation on what happens in the mind of an author at the moment of wordplay creation. They can also be used as a guideline for a translator in their search for the best translation solutions that would reflect the original version in the most faithful manner.

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