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**A cognitive linguistic analysis of humour surrounding Chernobyl and its
possible applications**

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Szeged, 2024

Abstract:

The aim of this paper is to integrate humour studies into a practical and applicable cognitive linguistic framework by analysing jokes from Svetlana Alexievich's books *Chernobyl Prayer*, the English version and *Csernobili Ima*, the Hungarian version. Firstly, through the combination of fundamental humour theories with the basic principles of cognitive linguistics the *raison d'être* of the paper and its multidisciplinary approach will be established. The second part will provide the explanation as to how language is understood in cognitive linguistics and how it can be connected to humour to analyse it employing a bottom-up process from the basic theories of frames and its elements through mental spaces, schemas, blending theory and metaphor and metonymy theories to create a framework for the analysis of humour. In the analysis section, the established framework is applied to categorise jokes into the three main theories of humour and dissect them through the cognitive linguistic principles to further our understanding of their inner workings. In the last section, the applicability of humour through cognitive reappraisal strategies and group therapy, with a special attention given to its usage in oppressed societies will be presented along with the reasons for its evolution. All in all, this paper hopes to offer a novel approach to integrate humour studies into the realm of cognitive linguistics.

Absztrakt:

A dolgozat célja, hogy a humortanulmányokat egy alkalmazható kognitív nyelvészeti keretbe integrálja Svetlana Alekszijevice angol fordítású *Chernobyl Prayer* és magyar fordítású *Csernobili ima* című könyveiből vett viccek elemzésével. Először is, az alapvető humorelméletek és a kognitív nyelvészet alapelveinek összekapcsolása révén megalapozom a dolgozat célját és a multidiszciplináris megközelítésének okát. A második rész magyarázatot ad arra, hogy a kognitív nyelvészet eszköztára hogyan kapcsolható össze a humortanulmányokkal és ezt egy *bottom-up* megközelítésen keresztül, a fogalmi keretek és elemeitől a mentális tereken, sémákon, fogalmi integrációkon, valamint a metafora- és metonímiaelméleteken keresztül a humor elemzésének keretét felállíthassam és alkalmazhassam. Az elemzési részben ezt a megközelítést alkalmazom a viccek kategorizálására a humor három fő elméletébe, és a kognitív nyelvészeti elveken keresztül taglaljuk, hogy tisztább, érthetőbb legyen ezek belső működése. Az utolsó szakaszban a humor

alkalmazhatóságát a kognitív „újrértékelési” stratégiákon és a csoportterápián keresztül mutatom be, különös tekintettel az elnyomott társadalmakban való használatára, valamint a humor kialakulásának okait. Mindent egybevetve, a dolgozat célja, hogy egy újszerű megközelítést kínáljon a humor tanulmányozására, és a kognitív nyelvészet területére történő integrálására.

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“If we hadn’t laughed and had fun, we’d have hanged ourselves ages ago.”¹

A cognitive linguistics analysis of humour surrounding Chernobyl and its possible applications.

1. Introduction

Humour surrounds us. It is truly important in many ways and can signal a person’s or a group of people’s feelings, attitudes, and thoughts on certain topics (Kuipers 2008: 361). In this paper, I will present and analyse jokes told by people who survived Chernobyl. As the point of the paper is to present different theories regarding humour and move them closer and possibly into the realm of cognitive linguistics, the examples that are sourced for this must come from a place that is thoroughly researched, accepted, and highly recognized. This is the reason why the source used is Svetlana Alexievich’s book, *Chernobyl Prayer* which is a great corpus to source examples that are important with respect to the subject of analysis of this paper and therefore provides a deeper examination of the survivors’ humour. She interviewed the survivors of the catastrophe and compiled these into the book, which was first released in 1997, with a revised version published in 2013.

This paper argues that to further understand humour in regard to the individual, group and society, and to apply it for – among other – therapeutical purposes, cognitive linguistic theories should be more closely examined and analysed. The foci of the analyses will be based on their categorisation, production, and their effects on people and political systems. Their categorisation will be based on the three most widely accepted theories, these being Incongruity Resolution Theory, Superiority Theory and Relief Theory (Nilsen & Nilsen 2019: 251). Regarding production, a cognitive linguistic analysis will provide a foundation based on frames, mental spaces and their production. Metaphor theory and metonymy in regard to Chernobyl will also be presented. Later, focusing on its aspects in therapy, therapeutical purposes and strategies will be mentioned through studies centring on traumas and humour production. Through involving the works of Kuipers (2007) and Hankiss (2014), an introduction to the rationale behind the development of humour in humans and its reasons will be introduced. Lastly, its impact on oppressed societies will be examined.

¹ Alexievich 2016: 49

These analyses will include multiple disciplines based on the Thesis of Embodied Cognition. The two aspects of the thesis encompass embodied experience and grounded condition. Embodied experience means that the understanding of the way in which we perceive our world is rooted in the capabilities of our bodies to perceive it and our surroundings to be perceived (Evans 2012: 131). This not only means that it is species specific, but also that it is individualistic in its nature as well. These capabilities and differences are clearly present in humans. These influence cognition, thus establishing the other aspect of the Thesis of Embodied Cognition, which is grounded cognition (Evans 2012: 131-132). It relates to the subjective experience's humans have in relation to their environment, how they interact with it and how it influences them. These effects and influences range from sensory-motor experiences to emotions (Evans 2012: 132). This has recently been extended to a body-mind-culture triad, which allows cognition to be placed and examined in regard to culture-specificity and linguistics relativity (Sinha 2002, Zlatev 1997 [In.: Hampe 2005: 4-6]).

Therefore, as all aspects that constitute the Thesis of Embodied Cognition rely on a great range of fields of study to understand them, a multidisciplinary approach to this paper should deliver better results. That is the reason behind the inclusion of studies focusing on neuroscience, sociology and linguistics in this paper.

The idea of local sense of humour is fundamental to the paper. Universalities, such as the presence of the normal and the abnormal, begin to surface when humour is closely analysed from a sociological viewpoint. Nevertheless, alternatives and varieties are present. These are characteristic to certain cultures, nations and communities in certain times of their history. This variation can be attributed to the unique essence that each community possesses, create and simultaneously recreate, labelled as local sense of humour (Kuipers 2008: 379).

2. Methodology

The aim of this part of the paper is to provide an explanation as to how the study was conducted. The focus is not only going to be on the corpus, but also on the goal of the study and the way in which the highlighted material was selected.

Firstly, the corpora of the study, namely *Chernobyl Prayer* (2016) and *Chernobili Ima* (2016) by Svetlana Alexievich, are going to be presented. The decision to use books that are compilations of interviews is important for two reasons. One, it is widely available, therefore the readers can not only check whether the usage is correct or not, but also it is an exact and

unalterable data-set, void of change for personal purposes. Second, corpus-based studies are part and parcel of linguistics, and as the approach is rather novel, the methods should not stray away from the widely established and conventional ways.

Second of all, the field of Cognitive Linguistics, as presented above, allows the paper to be multidisciplinary, since language in this understanding is not a device unaffected by, but rather based on the body-mind-culture triad (Evans 2012, Sihna 2013). Therefore, the inner workings of language in the case of trauma induced humour can be studied in a manner that is based on cognitive linguistics, sociolinguistics, philosophy and psychology (Evans 2012, Kuipers 2008, Hankiss 2014, Pérez-Aranda et al. 2019 so as to mention some of the main papers used).

Thirdly, the aim of the study is to provide a bottom-up and novel approach to humour studies and its integration into the field of cognitive linguistics. Naturally, certain ideas and theories have been established decades earlier, but most of the works used are contemporary particularly for this reason. In regard to criticism, it has to be mentioned for academic integrity that the study is not fully exhaustive and rather impersonal as it lacks the clearly defined and established approaches in other fields of study when compared and the data was not collected through interviews conducted by the author. This is why the goal is to lay the foundation for a dissimilar study that can be later, through criticism and further work, be improved or even disproved entirely.

All in all, the study's corpora are *Chernobyl Prayer* and *Csernobili ima* for the previously mentioned reasons. The collection of the selected material is to source concrete examples for the hypotheses and works used. The study intends to provide a framework for the integration of humour studies into the field of Cognitive Linguistics through a multidisciplinary and universal approach.

3. Literature review

First of all, a general overview of humour in light of our current understanding will be provided. Humour as of now is divided into three major parts that will be presented with a special focus given to their creation, which as the paper argues, can be integrated into cognitive linguistics, specifically through Conceptual Blending Theory.

Their categorization will be based on the pre-academic and therefore rather philosophical understanding of relief, superiority and incongruity resolution theories (Kuipers

2008: 362). As the early theories and the works surrounding the topic of humour do contain broad generalisations (Kuipers 2008: 363-364), they not only need to be mentioned, but also updated. With the help of Nilsen and Nilsen (2019) a more recent point will be presented, and so as to examine the different parts of these theories and how they function they will be examined through the already established and well-researched field of cognitive linguistics and its main elements.

2.1 Humour theories and frames

Humour as a concept does not have a universal theory; instead, most researchers try to rely on one of the three main ones, these being Relief Theory, Superiority Theory and Incongruity Resolution Theory (Nilsen & Nilsen 2019: 251). Superiority Theory is based on the idea that other people's shortcomings are funny and, when turned into a joke or a humorous remark, it helps to create a sense of superiority (Nilsen & Nilsen 2019: 252). Relief Theory and Incongruity Resolution Theory, the former meaning that laughter itself is a tool to release nervous energy or built-up tension and to overcome sociocultural inhibitions (Nilsen & Nilsen 2019: 251). The latter states that the resolution of incongruity is what humour is rooted in (Nilsen & Nilsen 2019: 252). They hold more merit when analysing humour surrounding Chernobyl. This way of examining humour is also particularly useful when considering jokes against a political system or human nature. These are three distinct, yet by no means unrelated approaches to humour, which emphasize different aspects of it.

So as to continue, after presenting the foundational theories through which humour is analysed in current academic works, the field of cognitive linguistics will help us to further our understanding of the manner in which they function and the way in which they work. A rather universal way to approach humour is through conceptual integration or 'blending'. To create these 'blends', frames and mental spaces are constitutive (Fauconnier 2013: 351, Turner 2013: 377). Therefore, in this part, a description of how humour is believed to be created will be presented.

First of all, we have to examine how frames are created and highlight their importance. Frames have an integral part in Cognitive Linguistics, thus aiding in the never-ending search to better understand language and to grasp the creation and use of humour. Frames are structured mental images that are based on our experiences. They do not represent reality in and of themselves, but rather a mental image that is based on prototypes and prototypical scenarios

(Kövecses, Benczes 2010: 225). They form a system in which to comprehend the system or any of its parts it is fundamental to understand the system in its entirety (Petruck 1996: 1). Additional parts and elements can be added to these frames through their introduction to the existing ‘network’. These additions automatically unlock the whole system. These structures, that formulate frames, help us to better navigate in our lives because they function as an integral part in understanding it (Petruck 1996: 1). An early example presented by Fillmore (Fillmore 1971 [In: Cienki 2013: 171]) focuses on the different verbs that carry – because of the context in which they are used in – different notions. His example of verbs used for judgement (Fillmore 1971 [In: Cienki 2013: 171]) is still applicable. When the verb judge is used it implies that there is someone doing the judging, in this case, “the Judge” Fillmore (Fillmore 1971 [In: Cienki 2013: 171]) as Fillmore refers to it, and the one who is being judged takes the position of “the Defendant” Fillmore (Fillmore 1971 [In: Cienki 2013: 171]). It is a rather simple example, but it works well to highlight the roles and actions we ascribe to people in conversations based on a single syntactic element. Another, and a little bit more complex, example of this is the “Commercial Transaction Frame” (Petruck 1996: 1). In this structure we have to know what an action, such as ‘buy’ means in order to understand any other element, but we can only understand what ‘buy’ means if we already understand the existing elements around it, such as ‘goods to be sold’ or ‘cashier’ (Petruck 1996: 1).² These frames can and do move from specific towards a more generic frame and vice versa (Fauconnier 2013: 352). An example could be SWIMMING EQUIPMENT being more specific in the more generic SPORTS GEAR frame while SWIM GOGGLES are more specific in the now more generic SWIMMING EQUIPMENT frame. Here we have to mention Fillmore’s (Fillmore 1985a [In.: Petruck 1996]) work regarding U-semantics in contrast to T-semantics. U-semantics, or semantics of understanding, considers the construction

² As it was established in Polio’s 1966 work, there is a hierarchy of verbal associates (Polio 1966: 12-13). These hierarchies vary in sizes for different stimulus words (Polio 1966: 13). The factor for the different sizes is rather linear, as the more frequent words are higher in the existing hierarchies and have more connections to other words (Polio 1966: 13-17). The frequency of pairing could be related to a sort of schema, which will be discussed later on in this paper. What is interesting is the fact that war or waging war on something, or its variants – such as fight or fighting – appear to be rather universal in propaganda. Examples from the Franco-era mentioned and analysed later on in this paper. These are really useful sources to see the associations, words, expressions, and examples they used to illustrate their points. As these rely on communication to a wider public, the elements that they mean to highlight should be shared and understood widely, this is why they are proper examples to analyse not only humour, but components and hypotheses in connection with cognitive linguistics in general.

of frames through the understanding of its parts, these being words, phrases or grammatical structures (Petruck 1996: 3). It stands in sharp contrast with truth conditional semantics, or T-semantics, which is based on the idea that to comprehend a sentence each symbolic representation has to support one another to create a sentence that is true. Only under these conditions can a sentence be regarded as true or fitting for a situation (Petruck 1996: 3). U-semantics considers the other approach where the situation is to be determined for a sentence to have meaning without the exclusionary aspect of having each symbolic representation be fit (Petruck 1996: 3). This is in close cooperation with the constitutive tenet of cognitive linguistics, which places meaning over form (Evans 2012, Gibbs 2003, Ellis 2019).

In sum, frames perform an integral role in cognitive linguistics and therefore in this paper, because they are a representation of how we can describe the world that we live in. Sharing certain elements that constitute frames are important not only for the fulfilment of the pragmatic way of viewing language – simple exchange of information – but also for humour. This will be applied later on in the Analysis part of the paper.

When considering the frame ‘Chernobyl’, the elements associated with the network are both universal and subjective, as long as there were additions based on individual experience. This is central to gain insight into the jokes that were told by those who lived through the nuclear disaster, since those individual elements are likewise shared by a unique community, hence creating the previously mentioned local sense of humour.³ These elements therefore can both be ‘home’ or ‘disaster’, depending on the input through which the frames were generated and how the additional elements were added.

Based on the logic of frame semantics (Petruck 1996, Ciencki 2013), if someone had died before the accident, they would not be able to comprehend the elements that were added through that action taking place, unless witnessing it or gaining information, additional elements about it. This can also be said about the first example provided for frame, the Commercial Transaction Frame (Petruck 1996: 1). If someone has never been to a modern supermarket in which self-checkout machines are available, the ‘interaction with the cashier’ element is an integral part of their frame, while the ‘self-checkout machine’ is non-existent as an element. Therefore, if someone lived through the nuclear disaster in Chernobyl, the frame’s elements had to expand through the actions that took place, but only if all of the elements are actually understood by themselves and through their connections. This means that through

³ Kuiper (2008) defines the notion of local sense of humour as the humorous *Zeitgeist* that each community possesses (Kuipers 2008: 379). These are prone to change as these communities are affected by different changes, events and shared memories (Kuipers 2008: 379).

gaining information about certain places in connection with Chernobyl, the elements ascribed to them expanded. For example, if someone worked in reactor Number Four and survived, the elements of the frame changed from workplace to a workplace that exploded and became deadly. If the person had immediately died at the beginning of the accident, the elements of their frame could not have changed as there were no additions made. For instance, if we focus on Attardo's borrowed example regarding a "humorous" metaphor, which is "His thoughts tumbled in his head, making and breaking alliances like an Italian Renaissance prince." (Oring 2003 [In.: Attardo 2006: 97-98]). Here, his assumption is that the loss of incongruity is present because of the relatively high status of the princes (Attardo 2006: 97). In my understanding, the issue here is different. First of all, the frame of ITALIAN RENAISSANCE PRINCES is less understood – as it requires historical knowledge – in comparison to other, more convenient and more frequently used ones (the other example was about underwear in washing machines, these being more frequent and better understood than the former, since it does not require historical knowledge). Second of all, I would like to highlight the issue in regard to high status. Jokes and other humorous constructions do not fail because of a frame or an element from a higher hierarchical part is included in them. We can see this in the example mentioned later on in the paper regarding the Communist Party's membership book. Evidently, the joke does not fail there because the rules and the inner workings of the Communist Party are clear, therefore the joke can in fact occur because the elements of the Communist Party are well known, and not because the Party would not be viewed as an element from a higher status. Based on the previously mentioned frames, the addition of elements expands through learning more about them (Petruck 1996: 1-3). Because of U-semantics, most aspects have to be understood in order for a sentence to make sense (Petruck 1996: 3). Therefore, the joke here fails simply because there just are not enough elements in the frame of ITALIAN RENAISSANCE PRINCES (generally speaking) for the metaphor to be humorous, especially when compared to underwear in a washing machine. This is due to entrenchment. Based on Langacker's position (Langacker 1987: 59 [In.: Schmid 2013: 117-119]) the frequency of the usage of structures is what entrenchment is based upon. His idea was more specified in the works of Geeraerts, Grondelaers, and Bakema (Schmid 2013: 119) where the basis of entrenchment also included the idea that the usage of the alternative versions of certain meanings and functions when contrasted to the more frequently used versions is also a considerable factor in determining entrenchment (Schmid 2013: 119).

All in all, entrenchment, understanding, creating and the inner workings of frames and other elements of language are based on experience, usage and meaning. Just as in the case of the “humorous” metaphor of the Italian renaissance princes and the Communist Party, the former is less understood than the latter because – as a result of entrenchment and therefore frames – through lived experience and acquiring information one has more elements that are known when compared to the other (Petrucci 1996, Ciencki 2013, Schmid 2013).

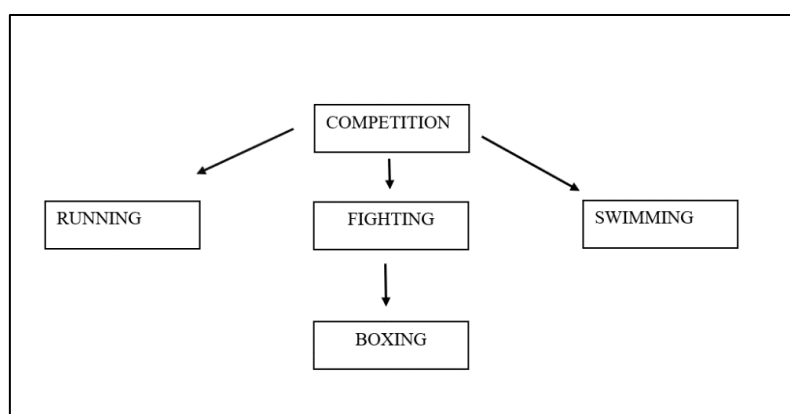
2.2 Mental spaces and schemas

Having covered the main theoretical principles of Frame Semantics using some illustrative examples for references, it is now time to move on to mental spaces. Mental spaces are conceptual structures and can be regarded as a consequence of what we know about the role of frames in mental processes (Kövecses, Benczes 2010: 228). They are made up of different domains and are structured through framing. These change and shift with discourse (Fauconnier 2013: 351) and can be activated through certain elements that constitute them (Kövecses, Benczes 2010: 228).

The domains are connected to both long- and short-term memory, and work with their combination, the working memory, the domain with which we continuously create a coherent ‘picture’ of the discussion (Fauconnier 2013: 351). These domains can and do combine themselves with other ones to create or modify a given mental space without the indication that they must retain identical properties and components (Fauconnier 2013: 352). These can move from a specific frame to a more generic one. Fauconnier provides the examples BOXING, FIGHTING and lastly, COMPETITION (Fauconnier 2013: 352). (See Figure 1.) Naturally, as these frames are somewhat personal and change with added information or lived experience, someone who belongs to a specific frame, such as a boxer, will likely think about a BOXING COMPETITION, when elements of COMPETITION (or even the more generic form, the frame COMPETITION) are mentioned. They will be more likely to understand and therefore work with the elements added to BOXING COMPETITION when sports or competitions in general are discussed. If place of competition is considered as an example of an element attributed to the frame of COMPETITION, for a boxer it will likely be a ring, whereas for a swimmer, a swimming pool. Neither of these elements are in disagreement with the frame of PLACE OF COMPETITION, but rather specific ones

within the frame itself.⁴ These are in connection with image schemas. Image schemas are internally structured and highly flexible dynamic patterns that lend structure to our experiences (Hampe 2005: 1-2). For example, the image of *COMPETING* does not constitute a closed set; therefore, it has divergent subsections relating to among others (to keep to the example brought up in regard to frames previously) specificity (Hampe 2005: 3). Competing or going to competitions will have the divergent subsections attributed to different sports, such as the previously mentioned place of competition, but since there are divergent subsections, these places can differ. This is visible in the other example of *LACK OF GEAR* as well, since missing a pair of swim goggles might result in buying another pair to have a *COMPLETE GEAR*, while missing a chess piece could result in the purchase of a whole set not to have a *COMPLETE GEAR*, but essentially to replace the previous one. As the earlier works hypothesized that these schemas are mostly grounded in neural embodiment, they lacked the culture-specificity image-schemas can and do bear. For example, breaking glass, even if the image itself is clearly having a piece of glass break into many pieces of glass, have different meanings depending on the situation in which the glass breaks (Hampe 2005: 5). As it is the same embodied experience of seeing a whole structure breaking into many pieces, but if it takes place in a kitchen when we are alone, it does not have the same meaning as it is taking place during a Jewish wedding. This is in similarity *TO MISSING GEAR* and what we think of without the specification of context and discourse. See Figure 1. for the broadly accepted presentation of the structure of frames.

Figure 1.: Example of frames. Adapted from: Jiang Canzhong (2015: 60).

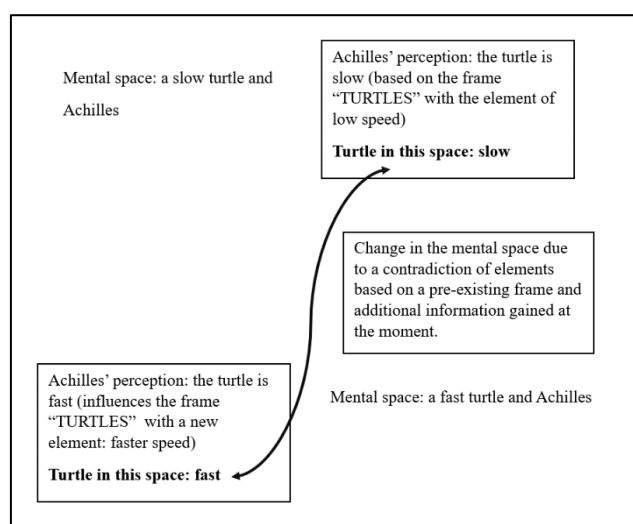


⁴ This can also be applied to the significant element of examples and metaphors in the cases of information exchange from the scientific community towards the general public (Koteyko and Atanasova 2016), discussed later on in this paper.

Simply from these frames mental spaces are created, but they are rather generic in and of themselves. However, as the conversation unfolds and more specific information is continuously added to the mental spaces, they modify it. These modifications transpire through the already existing frames that might be involved later on or recent information that is used to specify the mental space being “under construction”. These additions can both support or contradict the previous mental spaces and frames by reinforcing or altering the elements found in them. In the previously mentioned COMPETITION frame LACK OF GEAR MIGHT refer to not having a swimsuit or a swim cap for a swimmer, but if two swimmers are setting up a chessboard it is clear – regardless of what they would generally attribute to LACK OF GEAR – that they should not look for a swim goggle, but rather a bishop or a queen. Naturally, this does not mean that LACK OF GEAR only refers to a missing chess-piece, but the context in which it is pointed out, the mental space and its construction clearly specifies it.

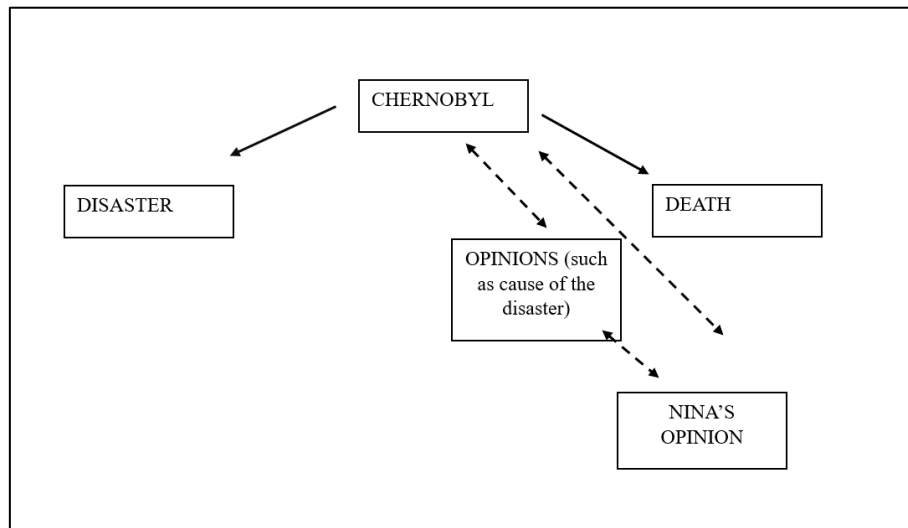
Another example from Fauconnier (2013) is the ancient story of Achilles believing that the turtle is slow, but in reality, it was fast. Certain elements of the mental space do hold true as the turtle is a turtle from the beginning through the end, it looks like a turtle, has four legs and other elements that are attributed to the frame TURTLE, but certain properties that the mental space is initially built up from with the turtle from already existing frames, namely that the turtle is slow, does not hold true at the end, as it is not slow (Fauconnier 2013: 357-358). See Figure 2., which highlights the contradiction between what we believe to be true (based on knowledge) and what appears to be true in the given situation.

Figure 2.: Change in a mental space. Adapted from: Gilles Fauconnier (2013: 156-360).



If we consider an example from one of the interviewees in Chernobyl Prayer, we can use the generic frame CHERNOBYL to go the more specific OPINION to a much more specific NINA'S OPINION, which is – as she put it – fatalism (Alexievich 2016: 131). Nina's -who was a teacher during the nuclear disaster and when the interview was conducted- opinion does not negate the properties already existing in the frames of CHERNOBYL and OPINIONS, but adds to it, thus making it more specific, in the same manner in which BOXING does not negate the properties of neither FIGHTING nor COMPETITION, but rather constitutes as a specific part of them. To observe the proposed frame of Chernobyl with the additional elements of Nina's opinion see Figure 3.

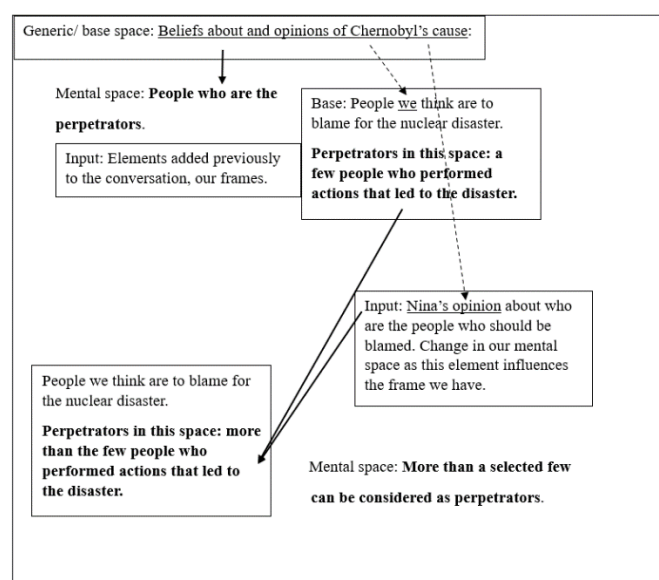
Figure 3.: The frame of Chernobyl with the addition of Nina's opinion. Adapted from: Jiang Canzhong (2015: 60).



Therefore, when examining the discourse and the mental spaces that are created during the combination of existing frames and recently gained information in the case of Chernobyl, they should build up a more specific mental space and modify the frame that was already existing before the conversation that modified it. For example, when looking for a perpetrator, someone who simply understands what took place might look for certain individuals, but if we gain

insight into Nina's example from the interviews, we learn that she blames themselves and everyone. This could add to the rather specific frame PERPETRATORS -which is related to the more generic frame CAUSE OF CHERNOBYL - and contain an even more specific frame that is Nina's opinion, EVERYONE (Alexievich 2016: 132). The changes in the mental space through specification and added elements to the frame of perpetrators through entrenchment see Figure 4.

Figure 4.: Change in a mental space and addition of elements to the frame of perpetrators. Adapted from: Gilles Fauconnier (2013: 156-360).



It should also be noted that the work done on self and autobiographic memory is related to the formation of frames (and schemas) as well (Sinha 2013: 1274-75). The construction of self and how we narrate our lives do not only help us survive, but also form our understanding of life itself (Sinha 2013: 1275). Firstly, they affect the lived past (Damasio 1999 [In: Sinha 2013: 1274-1275]), because of the reconstructive nature of memory (Sinha 2013: 1274). It also influences the way in which we imagine the near-future and its events to play out because it correlates with our identity and experiences (Damasio 1999 [In: Sinha 2013: 1274-1275]).

It is highly theoretical, but an example that could be helpful is how we regard clumsiness and its results. If we think of ourselves as clumsy, the reason to that might be because of the number of glasses that we have knocked off of a table and saw them break into pieces. If this action takes place often enough to formulate the idea of ourselves being clumsy, our identity

will be formed with the addition of clumsiness and as a result, the way in which we will narrate our lives will include it. Moving on, if we knock a glass off of a table, through our past experiences where it already took place (many times) we can anticipate the actions and events that will take place in the near future. Namely, that the glass will break into a million pieces. Therefore, if the glass does not break, we are surprised. Because of this, that particular glass will be thought of as more durable compared to other glasses, which will inevitably reshape our concept of GLASS.

In the case of Chernobyl, a soldier's remarks about how his history with the clean-up effort began, he likens it to a crime novel (Alexievich 2016: 90). This is a clear example of the understanding of life and the way it could help people survive their situation. Another example is another soldier's rather pragmatic approach to this event that altered his life, he clearly stated that he has to save the Motherland, as it is their sacred duty (Alexievich 2016: 84).

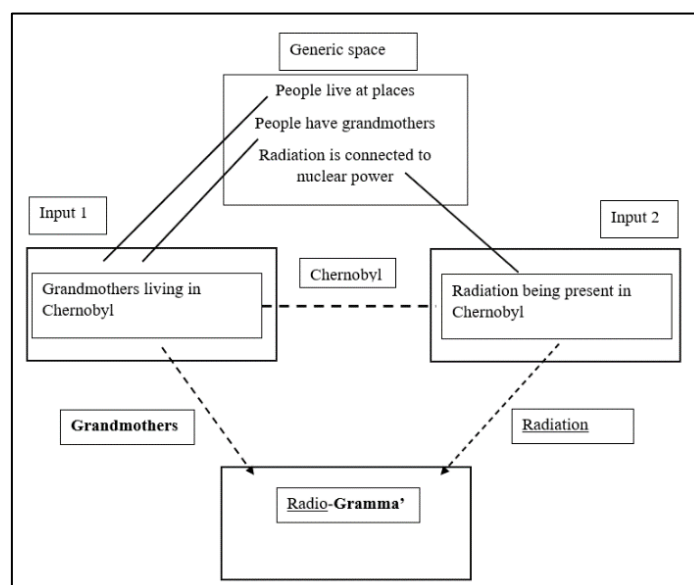
All in all, when compared to frames, we can establish that mental spaces are much more specific. As mentioned earlier, frames provide a structure for mental spaces to be constructed through discourse (Fauconnier 2013: 352). Therefore, while frames provide generic ideas from our long-term memories to help with the construction of mental spaces (Kövecses 2010: 5-6) with the addition of elements to the existing frame by gaining knowledge regarding it in the present (Petruck 1996: 1). Image schemas provide a flexible set so as to understand "events" with their specific outcome (Hemp 2005: 1-5). These impact how the self views the life in which it is placed and what elements bestows upon itself as it narrates its life (Sinha 2013: 1724-25). As to continue, two other important elements related to mental spaces are worthy of mention here because of their connection to the topic of this paper, the Access Principle and Counterfactual Spaces.

2.3 Blending theory

The Access Principle allows speakers of a language to access other domains and mental spaces through a connecting element that is present in both of them (Fauconnier 2013: 353). This can take place by description in a space that the person or element resigns in or by mentioning or naming its counterpart in another space (Fauconnier 2013: 360). This constitutes another significant factor when the creation of jokes is closely examined. An example could be 3.a. Hungarian translation, which would not be possible without the understanding that people including grandmothers lived in Chernobyl and that radiation was present in Chernobyl. The

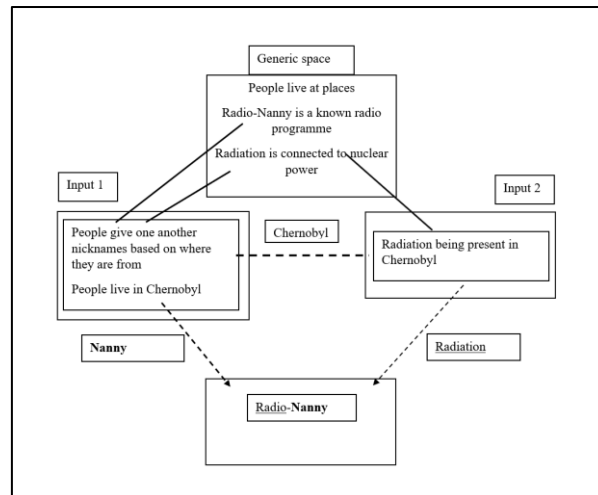
element of ‘Chernobyl’ connects these two domains in the mental space that is created during the joke through the common element noted above. To observe the proposed inner workings and the way in which the joke is constructed, see Figure 5.

Figure 5.: How joke 3.a Hungarian translation is built up. Adapted from: Mark Turner (2013: 379).



In the same manner, without understanding Radio-Nanny and its pervasiveness in the Soviet society, the English translation – and probably the original Russian script – would not make sense to us. This is because, without the frame of the radio programme existing in our brains and therefore in the generic space, the inputs would not be sufficient enough to make a coherent joke. To examine the changes that are present due to cultural differences and how it affects the proposed framework see Figure 6.

Figure 6.: How joke 3.a English translation, which shows the cultural differences is built up . Adapted from: Mark Turner (2013: 379)



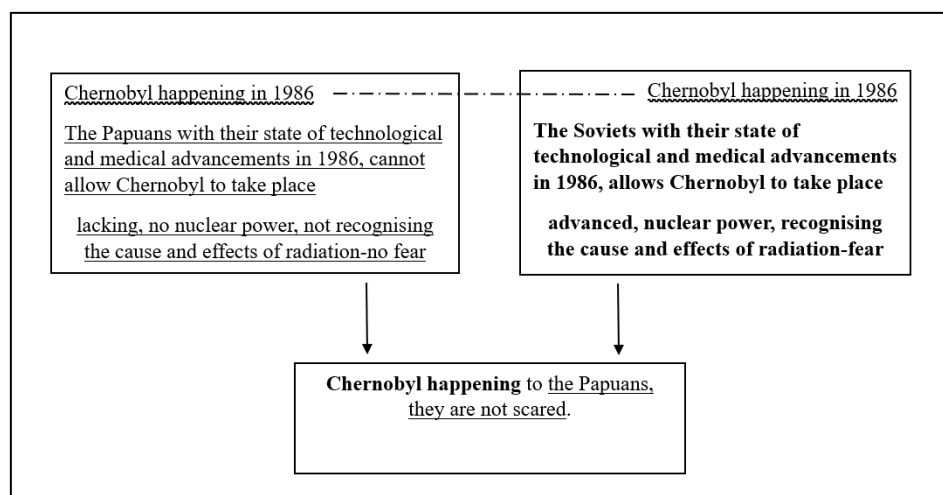
Counterfactual Spaces enable us to create blends that are believable through conceptual integration, even if they are not real or factual, as long as they contain elements that are either believable/possible or true. It is a mental operation working through mental spaces. Without them jokes are not likely to be made, since they mostly contain elements that have a ‘false’ truth value.

An example of this in the book is the following:

“[...] if Chernobyl had exploded on Papua New Guinea, everyone but the Papuans would be shaking with fear.”

(Alexijevics 2016: 97)

Figure 7.: How the joke about the Papuans is built up. Adapted from: Mark Turner (2013: 388).



This example demonstrates the constitutive principles required to create this blend. These being cross-space mapping, generic mental space, selective production, and the blended space (Turner 2013: 377-378). For cross-space mapping, we have those who lived in the developed world at the time of the disaster and those who lived in Papua New-Guinea, the generic mental space contains humans, as that is what common between the two inputs. Moving onto the selective production, the qualities of the inhabitants is what the selection is based on. As Papuans -in this joke- are regarded as technologically and medically delayed compared to the world, but at the same time capable of the technological advancement of having a nuclear powerplant from the developed world, in this case, the Soviets. In the last one, the blend, these elements create a Counterfactual Space in which the technologically lacking Papuans not only had a nuclear powerplant, but in addition to that, a disaster the size of Chernobyl. Nevertheless, as the element included and attributed to the Papuans is that they are behind the developed world, they are unable to grasp the size and importance of the disaster itself.

In short, new blended spaces are created through the projection of structures and elements from different mental spaces that can be viewed as source or input. These contain and connect domains through mutually shared elements. These need not be real as long as they are connected to a part of the discourse that is in fact true or possible. When we analyse humour in this way, the focus is on the created or constructed conceptual integration of the mental spaces where the cognitive clash can occur (Marín-Arrese 2003: 5).

3.4 Metaphor and metonymy

Based on the CHERNOBYL IS WAR metaphor – which is quite common in the book – I would like to present metaphor theory as well. The analysis of the metaphor of CHERNOBYL IS WAR is important for two main reasons. Firstly, metaphors are a thoroughly examined part in the field of cognitive linguistics. Secondly, through this analysis we can gain further information of the cultural background survivors had. Lastly, there are metaphors that are humorous, thus creating the connection between them and the aim of this paper.

Metaphors are built up and based on frames (Kövecses, Benczes 2010: 225). In conceptual metaphor theory this means that we understand one domain of experience, which is

usually abstract, in terms of another domain, which is usually concrete (Lakoff and Johnson: 1980 [In: Kövecses 2020: 1]). Therefore, what we can clearly establish and the definition that we can work with is “A conceptual metaphor is a systematic set of correspondences between two domains of experience” (Kövecses 2020: 2). Their pervasiveness is disputed, but their occurrence in language is uncontested. A rather fundamental linguistic metaphor is EMOTION IS HEAT/FIRE (Kövecses 2014). In this case, the source domain FIRE with the help of which we understand and describe the target domain ANGER are both experiences that we came into contact with during our lives. For example “He was burning with anger. ANGER IS FIRE” (Kövecses 2014).

This also points back to the previously discussed Thesis of Embodied Cognition (Evans 2012: 131). Naturally, not everything can be mapped from any source to any domain as there are several hypotheses that limit the range of metaphors. These can focus on the target domain, such as Lakoff’s “invariance hypothesis” (Lakoff: 1990 [In: Kövecses 2020: 5]) stating that mapping depends on the target’s image-schematic structure (Kövecses 2020: 5). Grady argues that the only parts belonging to the source domain which can be mapped are the ones that are based on “primary metaphors” (Grady: 1997a, b [In: Kövecses 2020: 5]). Lastly, Kövecses argues that the source domain maps those conceptual materials that belong to its primer meaning target or targets (Kövecses 2000a, 2002/2010 [In: Kövecses 2020: 5]). The issue that should be brought to attention here is the fact that none of these are universally accepted or all-pervasive (Kövecses 2020: 5).

In the case of CHERNOBYL IS WAR, we have a more generic frame, which is war, that shares certain elements with the more abstract frame of Chernobyl. The elements of suffering and death for example are rarely as present in any other frames as they are in the cases of ‘Chernobyl’ and ‘war’. In this case, the source domain is WAR which is mapped onto the target domain CHERNOBYL. As metaphors themselves are not only present in language, which is the understanding of cognitive linguistics, other aspects, such as cultural background and bodily experiences should be examined as well (Kövecses, Benczes 2010: 89). WAR is the source domain, because it is much more concrete in this case than ‘Chernobyl’. This is rather interesting, because in most cases the source is rarely a concept, such as war, which can and does take many forms, but rather something concrete, such as a journey or building (Kövecses, Benczes 2010: 81). An example from Kövecses might be “They attacked the foundations of my theory.” A THEORY IS A BUILDING (Kövecses 2005: 137-138). This is in agreement with Kövecses’ statement focusing on the default direction of metaphorical conceptualization which

is from tangible towards less tangible (Kövecses 2020: 6). As a continuation, when the language of those people who lived through and after the disaster is examined it is rather common to encounter thoughts that are based on this metaphor. This is related to the understanding that metaphors do not only occur in language but in our thought processes as well.

Examples from the book could be the following:

“So long as there is no war... I’m terrified of war” (Alexievich 2016: 58)

“They say it’s like a war. The war generation. That’s who they compare us to.” (Alexievich 2016: 232)

“Chernobyl. The war to end all wars” (Alexievich 2016: 55)

“I wasn’t involved in the war, but this reminded me of it...” (Alexievich 2016: 182)

These cases point towards the idea that not only did they think about Chernobyl as if it was a war, but also that Chernobyl evoked thoughts related to war. This both shows the relation between the source and the target domain and also begins to establish the link between the frame ‘Chernobyl’ and metonymy of Chernobyl because of its shared elements. The selection of these is embedded in cultural factors and cognitive processes and are related to prototypes (Kövecses 2010: 73). What influences these processes is the way in which the general public is given these elements by the scientific communities. The two most accepted ways to promote public awareness are the ‘deficit’ and the ‘contextual’ models (Groos 1996 [In.: Koteyko and Atanasova 2016: 296]). The former describes a “one-way flow” (Koteyko and Atanasova 2016: 296) of information to the general and in this case to the passive public from the scientists. The latter states that it is an active public that has to be persuaded and invited into a conversation that not only uses the canonized scientific knowledge, but also includes the local knowledge of the public (Groos 1996 [In.: Koteyko and Atanasova 2016: 296]). In the manner of this communication metaphors are proven to be rather impactful tools not only to enhance understanding, but also to emphasize important elements (Koteyko and Atanasova 2016: 297). This is because the explanation of scientific works and fields are rather complex, hence the usefulness of metaphors when the aim is for the public to understand them (Pauwels 2013 [In.: Koteyko and Atanasova 2016: 296]). In their works, Koteyko and Atanasova (2016) focused

on the metaphors that surround climate change. Framing devices such as metaphors are truly important for the conversation between the general public and scientists, as explained above. In Entman's view, framing relies on selecting certain pieces of information so as to highlight them and make them more salient in communication to aid in the understanding of a certain point, definition or recommendation that is important for the speaker (Entman 1993 [In.: Koteyko and Atanasova 2016: 298]). Hence, it is a structure that helps us to decode complex issues, suggest solutions and point to agents to make sure that these solutions are done (Nisbet and Mooney 2007: [In.: Koteyko and Atanasova 2016: 298]).

In the case of climate change the frames used were DUTY, NATIONAL INTEREST and MISSION. These are related to war metaphors. War metaphors are both widely used and potent in the call for actions. They are widely used as the war metaphor have been applied to wars against poverty, terrorism, and even obesity among others (Koteyko and Atanasova 2016: 299). The pervasiveness of war metaphors is not surprising, as Cohen suggested (Cohen 2011) in relation to climate change policies in Britain, since they allow for a wider range of acceptance of bolder interventions and can create opportunities for those in power to make and propose policies that are more extreme (Cohen 2001 [In.: Koteyko and Atanasova 2016: 299]).

This view is applicable in the case of Chernobyl as well, as the public had to be told about the disaster and had to understand it, drastic measures had to be taken to remedy the dire situation and to aid in the clean-up. An example could be the author's recollection of Chernobyl. She stated that "our minds just wanted to capitulate" (Alexievich 2016: 32) which is clearly placed in the metaphor of Chernobyl is war. Another example of this is a soldier recalling how some people, who volunteered in the early phases of the clean-up effort, believed that "they were "doing something heroic" (Alexievich 2016: 76).

As we use Chernobyl to provide access to other disasters in which nuclear energy is present, it also functions as a metonymy for disasters in which nuclear energy and/or a wide range of destruction are present (Kövecses, Benczes 2010: 65). The distinction that we have between the metaphor of CHERNOBYL IS WAR and using it as a metonymy shows that the frame of Chernobyl both evolved and became better understood to the level that it can function as a source domain in and of itself. Chernobyl and its elements can and do evoke access to a target domain because of the common elements that allow this to happen (Kövecses 2010: 76). This is identical to the definition of metonymy, which is that "an element in a domain, or frame, provides mental access to another element within the same domain" (Kövecses and Radden 1998; Radden and Kövecses 1999 [In: Kövecses 2020: 36]).

In this case, these could be nuclear power or destruction or both. Based on this, the metonymy is CHERNOBYL FOR NUCLEAR POWER RELATED DESTRUCTION/DESTRUCTION. This is why we can understand the headlines “Putin won’t shrink from triggering Chernobyl 2.0” (Kluth: 2022) and “Csernobili szintre emelték a japán reaktorbaleset minősítését [They have raised the Japanese reactor accident’s classification to that of Chernobyl’s] (ORIGO: 2011, my translation). However, it has to be stated that it took time and those who experienced the disaster had to find a(nother) source domain through which their understanding of the events taking place became clearer.⁵ This is the reason behind the importance of metaphors in cognitive linguistics and the attention it should be provided for better insight.

In the case of humorous metaphors, Attardo’s work suggests that there is no universal theory in regard to why certain metaphors are or are not funny (Attardo 2006: 106). Nevertheless, we can place them in different sub-types, mostly depending on their basic elements, such as mapping domains or violation of primary metaphorical relationships; or what they are to fulfil in relation to humour theory, for example antanaclasis or different types of comparisons (Attardo 2006: 106, Table 2).

Therefore, it is not surprising that humour metaphors appear in the book as well. For example, in relation to the survival of an academic in the system, the PAST IS ANOTHER COUNTRY metaphor appears (a), not avoiding this danger and greatly complying with this system works with A SYSTEM IS A MACHINE metaphor (b).

a.:

“I was proposing to emigrate to the past...” (Alexievich 2016: 143)

b.:

“I was saved from the mincer” (Alexievich 2016: 143)

All in all, it can be concluded that metaphors and metonymies are present in our languages. As we can consider them as tool in which people can not only better understand ideas, problems and in certain situations life itself, avoiding them in this paper would have been a mistake. In connection with humour, they are used in jokes and can be categorized in this aspect as well. We can see the transformation of a rather new idea of what Chernobyl is

⁵ A recent thesis that focuses on the negative emotion development in metaphors related to illnesses such as cancer or the coronavirus has pointed out that this is a rather delicate subject to analyze unambiguously and without generalizations. These negative associations can arise for different reasons. They can be attributed to the already existing negative elements these frames carry, the source domains they work with and their influence on cognition and conceptualization due to the effect they have on the body (Soós 2022).

transforming into a metonymy describing nuclear disaster. The usage of metaphor is present in political and scientific discourses as well.

2.5 Conclusion

To sum up, theories of humour are not universal, but the way in which they are constructed can be looked upon as such. Nilsens' (2019) work helps to create the necessary categories to group jokes according to theories that are related to human nature, sociocultural inhibitions and resolutions of incongruity. Through conceptual integration the language that builds up humour can be further analysed and described. The important elements to understand here are conceptual integration, frames, their creation and their networks as well as mental spaces, the Access Principle and Counterfactual Spaces. Understanding these categorisations, concepts and networks provide support to further analyse them and the functions of their parts. Metaphors and metonymy in language and culture, their roles and shifts are also noteworthy parts of the conversations and jokes surrounding Chernobyl.

4. Analysis and discussion

In this part of the paper the focus will shift towards the analysis of jokes and possible functions of humour. Firstly, through the previously established framework, jokes about Chernobyl that were told by its survivors will be analysed. Secondly, its functions and a basis for its continued usage in therapy will be introduced.

3.1 Analysis of jokes

First of all, will analyse the jokes. The cognitive linguistics analysis of jokes will be based on mental spaces, frames and structured through the three main categories established by humour theorists.

(1.) Relief Theory:

1.a:

“[...] -nobody was interested in money. (*He laughs*)” (Alexievich 2016: 86)

1.b:

“You’re not even allowed through the Pearly Gates. (*Laughs suddenly, for the first time in this long conversation*)” (Alexievich 2016: 254)

1.c:

“Just the way things were (*Laughs*)” (Alexievich 2016: 86)

In all three cases the built-up tension is released. During the interviews the interviewees touched upon topics that are taboos, such as money or death. Death itself is tightly connected to the elements of the Chernobyl frame, especially for those who lived through the events. Firstly, these additional elements were added through experiencing the catastrophe, thus supporting the grounded cognition aspect of the Thesis of Embodied cognition (Evans 2012: 131-132). Secondly, taboos themselves are quite important in sociological studies that focus on the inner workings and functions of humour in a society (Kuipers 2008: 164).

(2.) Superiority Theory: Soldiers

2.a:

“We will never be like the Dutch or the Germans. And we’ll never have good roads or groomed lawns. But we’ll always have heroes!” (Alexievich 2016: 85)

2.b:

“A zillion gamma ray won’t zap.

The hard-on of a Russian chap. (Alexievich 2016: 89)

2.c:

“‘What is seven times seven? The answer: ‘Ask a Chernobyl survivor, they’ll count it on their fingers.’” (Alexievich 2016: 54)

In these cases, the use of mental spaces and frames are valuable for the deeper analysis of them. In 2.a there are different frames attributing to the mental spaces. These could be the frames “the Dutch and the Germans” (“Westerners” from now), while the other frame is “We”. The elements that we ascribe to the frame of “Westerners” are good infrastructure and lack of heroes. The other frame assigns to the “We” is the lack of good infrastructure, and the -in this case- more important element of having heroes. It is not an exemplar case for the Superiority Theory, but it is useful in a way that it demonstrates the range of it. As it clearly belongs to the Superiority Theory, but also attributes negative aspects to the “superior” side, not only positives.

In 2.b the frame attributed to others change. Here everyone besides those who are elements of the frame “Russians” are less than those who can be recognized as elements of the said frame. Therefore, it could be considered as more opaque, but when looking at the possible frames that are used to create the mental space in which the jokes grouped into the Superiority Theory can be constructed, it is much clearer. The elements attributed to the “Russian penis” is that it is superior when compared to all other penises in the case of its function not being affected by radiation, thus concluding that the frame of “other penises” contain the element “being affected by radiation”. Specifying the others, such as in the case of 2.a is not necessary as long as one frame’s elements are clear enough for us to know why one group is superior when compared to the other. In 2.b the frame of “Russian penises” the element clearly excludes unaffected function when in contact with radiation when compared to the frame “other penises”, thus creating a mental space in which the structuring frames and their elements precisely indicate the reason behind superiority.

In the case of 2.c the superiority is rather interesting. It is clear that being able to count something easily, such as count it with your fingers, especially doing this with a higher number, means that someone is good at that. Regardless, the superiority in counting means inferiority in physical wellness, since the modified bodies of Chernobylans are sick.

(3.) Incongruity Resolution Theory: Villagers

3.a:

English translation:

“What’s a Radio Nanny?’ A grandmother from Chernobyl.’ (Alexievich 2016: 52)

Hungarian translation:

“-Mi az a radionyanya? [What is a radio-Gramma’?]

-Hát a csernobili nagymama! [A grandmother from Chernobyl!]

 (Alexievics 2016: 69, own translation)

3.b:

“Men who can’t get it up are either radioactive or radiopassive’.” (Alexievich 2016: 140)

3.c:

“Have you heard, everyone’s got the white blood cancer now?’ [...] ‘Rubbish! Yesterday, I cut my finger, and the blood was red.’” (Alexievich 2016: 49)

The decision to include both translations stem in the idea that it is a model example to demonstrate the influence of culture regarding the development of frames. In the English translation, the translators stuck to the original, most likely literal translation of the joke. Nevertheless, without addition information the joke would not be funny for those who did not grow up in the Soviet Union when the radio programme labelled ‘Radio-Nanny’ was popular. To make sure that the reader – who is most likely someone who would not understand the reference – “gets the joke” additional information was provided. In this case, the mental space’s elements originate from (childhood) memories and recent events. The identity connector is “Radio” referring to both the radio programme and the radiation in Chernobyl.

In the case of the Hungarian translation however, since there are no elements or frames attributed to a radio programme as such, and since the translators decided not to include that information, they opted for a pun. In that case, the constructed mental space of 3.a Hungarian translation which is on Figure 5., the elements are listed to present the identity connector that allows mental spaces and their frames to function. In the created mental space, the “absurd” frame is “Radio-Gramma”. This incongruity is solved by the continuation of the construction of the mental space in which further building and structuring frames are revealed. This incongruity can only be solved if the resolution’s frames contain elements that are related to the impossible part of the mental space whose construction began at the start. As depicted, the identity connector is Chernobyl, which is an element in both the frames of “radiation” and “people, including grandmothers living in Chernobyl”.

In 3.b the construction starts and finishes within a sentence. The identity connector is clearly pointed out by the sentence itself, which is impotence. The frames that structure the mental space are related to Chernobyl once again. In this example, understanding the elements of the frames in both the cases of “radioactive” and “radiopassive” requires context for the joke to occur. It has to be understood what the disaster was, how it was dealt with, and the effects of radiation. It also “establishes” a line of demarcation pre- and post-Chernobyl. These are clear examples of the creation of and the addition to frames, since people without the needed elements (or even frames if they do not know about Chernobyl) would not be able to understand the joke, since the structuring frames are either non-existent or do not contain the necessary elements for the incongruity both to occur and to be solved.

In 3.c the connecting element is blood. The structure of the frame is mostly related to radioactivity, not necessarily Chernobyl, as it could have been said by others who have survived other nuclear disasters. For us to understand the joke, we have to know what white blooded means. If we do, it is clear what elements make up the frame WHITE-BLOOD and how does it differ from normal blood. The joke here is obviously the misunderstanding and lack of knowledge.

When it is compared to the two different translations of 3.a, it can be said that the Hungarian and the English translations do not differ that much, especially not in meaning. This is because the development of the frame of white blood as a sickness must have developed in the same manner in both cultures. Therefore, there is not culture specificity in this case, since its entrenchment is based in the natural consequences of leukaemia, how it changes blood and how visible it is.⁶

In short, the cognitive linguistic analysis in regard to jokes from Chernobyl hold merit. In the case of one of the aspects of the Thesis of Embodied cognition, particularly grounded condition, the examples of 1.a and 2.b provide instances in which the experience of an event, namely the nuclear disaster in Chernobyl, affects how we use language. As we are taught that death is a taboo, therefore the element of taboo is attributed to the frame of death, and the element of death appears in the frame of Chernobyl, the nervous energy that builds up when talking about these can be released with laughter. When looking at mental spaces, identity connectors, frames and their elements perform an important role in the analysis of jokes in the

⁶ Naturally, one could argue that with regard to basic colour terms there are cultural differences. It is true; however, the major difference between Russian, Hungarian, and English in regard to their basic colour terms are the Russian terms for a darker blue, *siniy* and a lighter *goluboy*, the Hungarian *vörös* and *piros* for red and their non-existence in English. None of these are related to white, therefore we cannot talk about cultural distinctions in regard to what kind of white do they describe. (Berlin and Kay 1969)

case of Chernobyl. What is required is the frames and their elements to be expanded well-enough that the users of the language can understand both the superiority they project and the incongruity they present (and in some cases solve).

3.2 Production of humour

Secondly, the production of humour in cases of trauma will be presented. Chernobyl was clearly and utterly traumatic especially for those who had first-hand experience with the nuclear disaster. The usage of humour for veterans will be in focus based on the aforementioned CHERNOBYL IS WAR metaphor. Relief Theory is also important in this part since stress and trauma are universal, but the way in which someone handles them is based on the individual.

In these cases, humour and its development are important for two main reasons. One being its value in society and the other is the biological effects of laughter (Garrick 2008: 173). As endorphins are released during laughter, which can be considered as a hormone that is opiate-like, it is clear that humour biologically alters and affects people (Garrick 2008: 173). When humour as a tool was introduced to a group of Vietnam War veterans in therapy sessions, it helped the individuals of the group not just to cope with only the stress that the war had caused, but also to recognize and develop their own sense of humour, which is important as is stated both biologically and socially. In groups it can humanize the healing processes, has the ability to promote cohesiveness, better understanding, and introduce creativity to problem-solving (Curtis 2001[In.: Garrick 2008: 170-171]).

The two most common forms of humour in cases of trauma survivors are gallows humour, which surrounds death and black humour, which is based on oppression and/or prejudice in life (Lipman 1991 [In: Garrick 2008: 175-176]). Gallows humour in Garrick's paper mostly focuses on their usage for workers whose professions include encounters with death, such as firefighters. However, since Jews who had suffered through the Holocaust also used humour to cope with the struggles of death during their captivity it is clear that this phenomenon cannot be only attributed to those working in specific fields, but also to communities experiencing immensely traumatic experiences. A sense of humour was extremely influential for Jews in their survivals in the camps. Based on this, and the earlier mentioned local sense of humour, it can be hypothesised that humour was also a key instrument for survival for those facing similarly tragic and distressing circumstances in Chernobyl.

The usual foci of black humour are the perpetrators (Garrick 2008: 176). Their ability to decide over life and death greatly contributed to the development of black humour, and thus the psychological resistance of those who used it (Lipman 1991: 43). This notion appears in a study specifically focusing on the jokes told by those who left the Soviet Union. The main parts were usually food shortages and the secret police (Lipman 1991: 45). In these cases, there were typical figures to whom these misfortunes were connected to, unlike in Nazi-Germany (Lipman 1991: 46). Lipman provides a reason for this, which is geological and linguistic differences across Europe. However, it could be argued that it is much more related to the fact that a single perpetrator, or oppressor was much harder to point to.

It can also be noted that in the case of Chernobyl it is hard to point out those, who can actually be held accountable for the disaster. Nevertheless, when it comes to the suffering caused, many jokes were told about those who enforced the system or the way in which it worked. An example could be the following:

“A guy comes home from work and complains to his wife, ‘They say tomorrow it’s off to Chernobyl or hand in my Party card.’ ‘But you aren’t in the Party!’ ‘That’s why I’m trying to get hold of a Party card by morning.’ (Alexievich 2016: 86)

The social context of humour by its definition is a shared experience. What should also be mentioned is the argument that through laughter and jokes social control is enforced. The three forms that will be mentioned here are exclusionary, hierarchy maintaining and social cohesive (Kuipers 2008: 364-366). If the laughter is directed at something or someone without them being a part of it, it is exclusionary and signals that it is outside of the socially accepted norm. Humour and laughter can also aid in maintaining an existing hierarchy. A study concluded that people in a given hierarchy are more likely to joke down. In addition to this, people ranking high on said hierarchy tend to receive more laughs than those in lower tiers of it or at the bottom. When social cohesion was examined amongst equals in a given situation the study concluded that humour was a useful tool to create social bonds between strangers (Kuipers 2008: 366). Humour and joking in these situations tend to take up a form of an invitation. Laughing or smiling means to accept said invitation, performing neither means to reject it (Kuipers 2008: 366.)

Another important element worth discussing is the introduction of certain sensitive topics into an unknown group to examine their reactions and continue the conversation or their

relationship depending on said reaction. It presents the potential to discuss topics that would normally be regarded as taboo (Kuipers 2008: 374). This may have been crucial for people who were sent to work in Chernobyl and had to create a socially cohesive atmosphere, establish a hierarchy, exclude non-normal phenomena, function under the formerly established hierarchy and under immense pressure. These functions are influenced by many factors, such as context or content (Kuipers 2008: 368).

Therefore, it is not surprising that when groups of people were interviewed about how Chernobyl affected their lives, jokes were told. From the context we cannot clearly tell whether it is one person from each group who told jokes or multiple, but in all of these cases, the jokes were told in a group setting which clearly signals its social role. One of the groups consisted of people who live(d) in a village close to the nuclear power station and another of people who were soldiers aiding in the efforts of the clean-up. In both of these cases, there are instances in which jokes can be attributed to each of the three categories mentioned earlier. These examples are the above mentioned '1.a'; '2.a'; '2.b'; '3.a' and '3.b'.

In these cases, people using humour as tool to deal with trauma show us another interesting insight into the development of humour itself. I. M. Suslov suggests that the development of humour was first purely biological and then it became a social function (Nilsen & Nilsen 2019: 252). The cause for the development of humour through evolution could be attributed to its biological effects as well (Nilsen & Nilsen 2019: 252). In the cases of those who suffer from chronic pain humour showed promising results for patients during treatment for physical illnesses while having positive effects on their symptoms too. That is if these were not related to the illnesses themselves, but rather to the anxiety in connection to them. Self-enhancing humour was more promising than self-defeating ones. A study's conclusion states that higher pain tolerance is correlated with a better sense of humour (Pérez-Aranda et al. 2019: 11-14). This clearly involves the people who lived through the Chernobyl disaster as well. That is because the interviews were conducted years after the disaster had taken place and people who were still alive had suffered or had been suffering with both mental and physical pain.

Focusing on the social factors of humour, another interviewee's comments can be helpful. He stated that jokes about the situation in Chernobyl had been present since the beginning of the disaster. Naturally, their functions differ, but it is clear that humour was present throughout its course. If we consider Chernobyl as an example of problems, stress, and trauma that humanity can possibly experience and endure, it might have the capability to show us some insight into its development from the purely biological function – which can be observed among

rats– (Nilsen & Nilsen 2019: 252) to the highly contextual and complex humour produced socially by humans (Kuipers 2008).

In short, humour to cope with trauma appears to be a natural process in narratives and recollections about Chernobyl as well. As it is a rather recent event in human history, we are given an opportunity to rethink humour as a tool or a function and to improve our understanding of its creation and the role it played in our past, both historically and evolutionarily.

3.3 Cognitive reappraisal strategies

As a third scope of my research, I would like to focus on cognitive reappraisal strategies and the way in which humour can be used to cope with trauma.

Cognitive reappraisal strategies can be widely considered as rather effective coping mechanisms (Perchtold et al. 2019: 1). It is the process of reinterpreting an emotionally evocative event's subjective meaning so as to alter its emotional impact on the individual (Perchtold et al. 2019: 2). In a rather recent study, participants had to generate humorous cognitive reinterpretations to lower their stress and anxiety when confronted with threatening and self-relevant situations. The study's data-collection was based on a modified version of the Reappraisal Inventiveness Test (Perchtold et al. 2019: 2).

The two main categories here were positive reinterpretation and de-emphasising. Through selection within subcategories, the most popular ones were the positive reinterpretation “strategies”, which include finding general positive aspects, worst-case comparisons, and interpreting disadvantage as advantage, and the de-emphasising category. (Perchtold et al. 2019: 2-3) The most popular sub-categories were finding alternative explanations, trivializing the problem, and handing over responsibility (Perchtold et al. 2019: 5). Through these reappraisal categories researchers were able to conclude that the people who reported the usage of less malicious humour used the subcategory of finding positive aspects. In their case, the strategy is associated with less depressive experiences, but the overall ability to produce humorous responses to the situations were not in correlation, suggesting that a better sense of humour does not necessarily mean a greater sense of well-being (Perchtold et al. 2019: 10). The usage of benign humour was also not connected to any of the DSM-V personality trait domains, which are, namely, negative affectivity, detachment, antagonism, disinhibition, and

psychoticism (Perchtold et al. 2019: 8-9). DMS-V is concerned with diagnosing mental illnesses.⁷

To circle back, the sub-category used with more humorous structure was the worst-case comparison, which entailed more depressive experiences within in the daily lives of the subjects who produced them (Perchtold et al. 2019: 8). This study therefore concludes not only that the ability to produce humour does not equal the ability to deal with situations with a positive outcome on the users' mental well-being, but also that if these are not constructed in the benign form, but in the malicious way, they are likely to be harmful to the individual (Perchtold et al. 2019:10-11).

This study is neither totally universal nor completely exhaustive. However, it can function as a solid ground on which additional research can be conducted to further analyse and better understand the relation between humour and emotion regulation.

With this in mind, it is not surprising that the usage of inappropriate humour indicates the suppression of feelings. These can manifest in many different forms, such as telling jokes or smiling when telling painful memories, which signals a person's need to obtain a certain distance from the topic, or laughing after each sentence, which can signal lack of confidence or low self-esteem (Garrick 2008: 176-177). Many people who survived trauma(s) comparable to the Chernobyl nuclear disaster believe that their sense of humour is not fit for the general society (Garrick 2008: 178-179). It shows a general sense of alienation compared to the rest of the society. This does not necessarily mean that these people should avoid the usage of humour if they cannot use 'socially appropriate' forms, but rather they have to be educated about them, since it can help them to use humour in a therapeutic form (Garrick 2008: 178-181). In one instance, a veteran was able to find certain activities in his life that he enjoyed before his traumatic experiences had occurred and use it to better regulate his emotions (Garrick 2008: 179). This example shows a connection to the study of Perchtold et al. (2019) mentioned earlier. In his conclusion, Garrick points out that therapists should not focus only on the negative aspects of a patient's humour regarding their trauma. As ignoring its positive effects might result in the lack of understanding between both the patients' and the therapists' perception of how these events are understood. This is extremely important since the way in which someone was brought up reflects on their worldview. Therefore, the way they had experienced these

⁷ Evidently, as the study of mental illnesses is ever evolving, constant update is required. After further collection of data and research, the DSM-V was released in 2013. Its aim is to help in the categorization and classification of mental disorders people suffer from. It is based on thorough research, constant peer-review and conferences held to improve the former and revised version, released in 2000 (American Psychiatric Association 2013: 5-17).

events, how they managed to survive, how they reflect on them and how they deal with the guilt that comes with the fact that unlike others, they managed to survive, can manifest in the way in which they joke about those experiences (Garrick 2008: 181). Thus, it is not surprising that the usage of humour during traumatic experiences is also recalled by the survivors of the Chernobyl disaster.

One of the best explanations provided for this phenomenon is given by Hankiss Elemér. He argues that even if the world was not created for us, we do need certain ways in which we can escape this reality. Humour is one of these. (Hankiss 2014: 332)

Hankiss (2014) presents humour as a tool for survival and states that it is similar to religions and myths. These similarities are present since all of them impugn the challenges presented by the world which we live in through presenting another one. What they do differ in is the fact that humour does not try to explain the world and directly help us, but rather just questions and theoretically destroys its structure for a short period of time, after which the structure of the world reassembles itself and we continue to live in it (Hankiss 2014: 332-352).

Nevertheless, Hankiss also noted that it is also a rather fear-inducing endeavour since it takes us out of the world that is governed by the speculative relativity and rationality that we wanted to break free from through humour in the first place (Hankiss 2014:351).

He presents Bergson's (1971[1900]) suggestion too (Hankiss 2014: 349-350). Bergson (1971[1900]) tried to explain the reason behind humans laughing at a man who slips and falls because of a banana peel. In his reasoning, part of the laughter is caused by our fear of losing our bodily autonomy to the physical forces of our world. In this sense, our bodies' autonomy, the one we so feared to lose, is simply non-existent to these physical forces. This scene also breaks away from speculative rationality, as we rarely see people fall but more often walk. Although at first this might seem to go against the belief that humour is to escape from reality, through these experiences we can learn about and better understand our world. In addition to this, we know that it is neither a definite nor a final state in the period of time in which this happens, thus aiding to cope with the idea of the inevitability of what it represents. (Hankiss 2014: 350)

A critique that can be presented and noted here is that Hankiss mainly focuses on the Incongruity Resolution Theory to explain the phenomenon that is humour and joking (Hankiss 2014: 334). The fundamental works mentioned in this part of his book relate to Freud's and Bergson's ideas surrounding humour. As both of their works on humour can and did function as a base for studies conducted now and later on, they are deeply influential and should not be

dismissed. However, what should also be noted here is the fact that the discipline of humour studies began its expansion into numerous fields of research (Kuipers 2008: 364).

All in all, humour can be seen as a way through which humanity can weather reality. It allows us to experience a certain break in the reality that we built up on logic and rationale. Even in the instances in which we are scared of them for different reasons. One of these reasons can be the loss of autonomy, which gives us a way to endure imminent truths of life (Hankiss 2014: 350).

In summary, cognitive reappraisal strategies and humour as coping mechanisms in cases of trauma can greatly benefit the individuals who had to live through those experiences as long as certain lines are not crossed. These being the general function of humour to reanalyse a stressful and anxious situation, the help from therapists to lower the feeling of alienation survivors experience and the road survivors have to go through to find enjoyment so as to gain or regain the ability to better regulate their emotions. The reason behind this could be attributed to humanity's need to break the existing, rationality-based cycle and create through conceptual integration, another reality. This 'reality' could be helpful in managing stress and ideas that are frightening.

3.4 Humour in oppressed societies

In this part of the paper the focus will move from the groups and individual survivors of trauma to a much larger scale, to the society of a certain country or time in our history in which people as a collective had to go through hardships. In connection with the regime under which the Chernobyl nuclear disaster had occurred we can look to the Spanish Franco regime and the political cartooning and whispered jokes of that era in order to better understand the way in which a society copes with trauma through humour. The reason for this is that the Soviet government did not allow caricatures or jokes to be published to the public in any form; therefore, creating the need to consider other oppressive regimes that allowed this to happen to continue the analysis of counter-factual spaces in the creation of humour in cases of trauma. Under the Franco-regime, cartoons that were critical towards the regimes were published (Marín-Arrese 2003: 9).

The main parts here will be based on the need for context in oppressive regimes when the opacity of jokes is a necessity and how jokes are helpful in keeping up morale through whispered jokes.

The opacity of the jokes will be examined in this part. Because of the Soviet Union's strong control over the publication of cartoons a supporting example is required. For this reason, Franco-era cartoons will be used so as to properly continue and not break the structure of the paper. When we observe a Spanish cartoon from 1977 which is critical towards the regime and the economic situation of the country of the time the important elements here are rather hidden. Therefore, context is required to be able to construct the joke from the source or the mental space to create the blend that represents confrontations between employees and employers (Marín-Arrese 2003: 13).



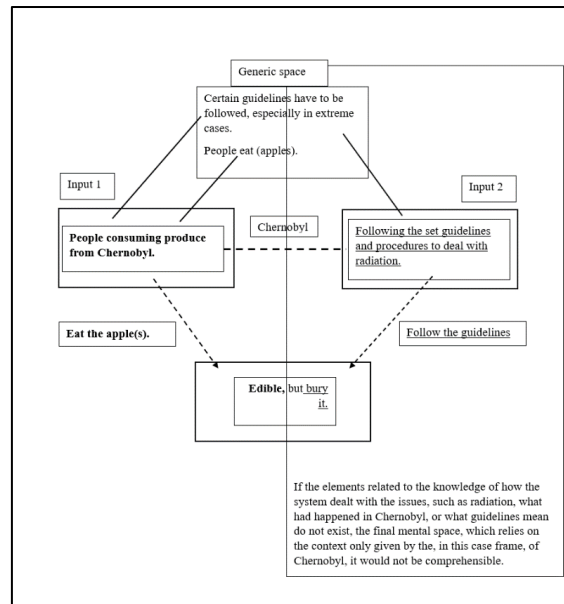
(Roca&Ferrer 1977 [In Marín-Arrese 2003: 13])

This naturally changed as censorship became lighter and therefore context became less necessary as the cartoons were much more explicit. An example of this is also provided: “Recent events: Shoots up into the air to dissolve a demonstration hits a dwarf.” (Marín-Arrese 2003: 15); in this case, context is not necessary to understand the given era for the cognitive clash to occur and to understand the joke; however, to understand the way in which it is critical towards the regime is not completely explicit, only deductible.

A good example of this in the case of Chernobyl, where context is required for the joke and its criticism towards the regime to be understood is the following:

“‘Is it okay to eat Chernobyl apples?’ The answer: ‘Yes but bury the cores deep in the ground.’” (Alexievich 2016: 54)

Figure 8.: How the joke about apples is built up. Adapted from: Mark Turner (2013: .379).



Here, to understand the colliding mental spaces the reader must understand the way in which the system's clean-up efforts dealt with contaminated material. With this knowledge, we can understand the joke and how it criticizes the regime's guidelines during the nuclear disaster. In all of these cases, criticism is rather abstract and veiled. Its targets are not clearly identifiable (Marín-Arrese 2003: 12). This is also very typical in Spanish cartoons during the era in which freedom of speech and expression is much more limited, just like in the Soviet Union.

In sum, the opacity of jokes in oppressive regimes is determined by and therefore an indication towards the regimes' position. If more context is required from the input spaces to build up the mental space in which the jokes perform its intended purpose, which is to be funny, the stronger the regimes' control is over those who tell these jokes or make these cartoons.

Secondly, I will introduce the position whispered jokes have in oppressive regimes and societies. Both Kuipers (2007) and Marín-Arrese (2003) point out that there are differences in how "whispered jokes" or *Flüsterwitze* (Kuipers 2008: 369) function in oppressive regimes. There is an understanding between them which is that their function regarding those who are oppressed is rather similar. They both agree that these could be regarded as forms of non-aggressive resistance against the oppressors (Marín-Arrese 2003: 14-15). What is worthy of mention is the notion that compared to the cartoons just discussed, whispered jokes cannot be considered as Marín-Arrese put it "the true form of resistance" (Marín-Arrese 2003: 15) as they cannot be found in public spheres (Marín-Arrese 2003: 15). However, Kuipers (2007) points out that the effect whispered jokes have do matter, but differently. Their power is not used against the oppressive regime itself, but rather as a way to boost morale among those who are

oppressed (Kuipers 2008: 369). Therefore, their effects are minimized against the oppressors. Nevertheless, when closely dissecting these texts, an issue appears. As stated previously, Hankiss (2014) pointed out that jokes help us to deconstruct reality for a quick period of time after which it is reconstructed. After examining both Kuipers' (2007) and Marín-Arrese's (2003) work, it is clear that these jokes focus on the obvious flaws within an oppressive regime that is to be hidden or denied by the oppressor. For that reason, I argue that in contrast to Hankiss' work, in these cases humour's and jokes' functions are not the deconstruction of reality, but rather to construct 'the reality' that is to be hidden or denied. In the cases of whispered jokes, their role should not be approached holistically either, as even Kuipers had pointed it out, when mentioning studies done in Czechoslovakia examining the role of whispered jokes, their effects highly depended on the oppressors' reaction (Kuipers 2008: 369).⁸ Nevertheless, it has the potential to function as a beginning of a conversation that allows people to voice their opinions on otherwise silenced matters (Goldstein 2003: 10 [In: Kuipers 2008: 370]).

To conclude, the effect and role of whispered jokes cannot be summarised and fully grasped. On one hand, their role cannot be left unaccounted for, since in the 20th century alone there are three distinct and different cases in which under oppressive regimes they had occurred and performed important functions for those societies or larger groups of people. On the other hand, their effect cannot be described simply by the reaction of the oppressors, the role they play in mobilising the oppressed or continuing their "guerilla warfare" (Pi-Sunyer: 1977: 187 [In: Marín-Arrese 2003: 15]) as it is too opaque to be measured as of now.

3.5 Conclusion

In short, the way in which the jokes that a given society uses to deal with trauma can clearly tell us about its stand on freedom of speech and expression. As long as the given society's population cannot rely on the facts given by the media or its government, only or mostly opaque jokes will occur to ease tension and to criticise the regime or the leaders of the society (Marín-Arrese 2003: 20). The role of whispered jokes constitutes an issue that should

⁸ What should be mentioned here is the fact that *Flüsterwitze* do not necessarily have to be verbal. In the case of a memoir written by someone who had survived Auschwitz, it is mentioned that in one case the "resistance" and its manifestation was a tattoo of the SS insignia done on male genitalia (Wieslaw 1981: 66-67). This is important to mention in my opinion, because it connects the verbal forms of humour with the non-verbal forms, such as cartoons, posters and in this case, even tattoos.

be resolved by further studies. In my opinion, these studies should be based on the established humour theories and further investigate frames, mental spaces and relations so as to better understand how they function in these societies.

5. Conclusion

To conclude, the general aim of this paper was to demonstrate that a new approach to humour studies within the realm of cognitive linguistics can be established. A cognitive linguistic analysis can provide a deeper understanding of the way humour functions and the purpose of humour in therapy and in our society using the Chernobyl nuclear disaster as an example. The corpus used was the books of Svetlana Alexievich titled *Chernobyl Prayer* (2016) and *Csernobili ima* (2016). With supporting examples from this book, the paper was built up into four distinct, but intertwined approaches.

Firstly, in the introduction the main framework was presented. These focused on the fundamental theories of not only humour, such as the works of Nilsen and Nilsen (2019), but also on the main principles and tenets of cognitive linguistics. Nilsen and Nilsen's (2019) work was used to give basis to a certain approach to humour studies, which helped to distinguish between humorous remarks, jokes and laughter in certain cases. After this has been established the basic principles of cognitive linguistics that are constitutive not only in regards to the paper, but also to the field, were laid out. Specifically, these are the thesis of embodied cognition (Evans: 2012) with a special attention to culture specificity (Shina 2013). From the branch of sociolinguistics, the work of Kuipers (2007) was mentioned to establish the theory of the local sense of humour, which allows this paper to specifically focus on certain groups and people in order to further understand the usage and usefulness of humour as a tool for humanity.

Secondly, the literature review presented the means through which language is understood in cognitive linguistics and how this apparatus can be used to analyse humour. The basic principle followed here is a bottom-up process wherein from the most basic elements of language use, such as frames (Kövecses-Benczes 2010, Kövecses 2010, Petruck 1996) and their function, role and structure through mental spaces (Fauconnier 2013), schemas (Sihna 2013), blending theory (Turner 2013), metaphor and metonymy (Kövecses 2020, Kövecses-Benczes 2010, Attardo 2006, Koteyko and Atanasova 2016) theories the argument has gained a "device" that lends not only structure for further analysis, but also presents the way in which

language in general is used and understood through the lens of cognitive linguistics. Without these constitutive elements the work followed by it would be meaningless.

In the analysis part, the actual argument of the paper was tested. Through the presented framework jokes from the books were grouped into the three main theories of humour, specifically, relief theory, superiority theory and incongruity resolution theory. In the case of each group, the inner workings of these humorous remarks -and in the case of relief theory environmental influences for laughter to occur- were analysed. This has supported the argument of the paper, which is that humour can be integrated into and better understood in a cognitive linguistics framework.

In the last part of the paper, the reasons for humour's evolution and its applicability were presented. The reason for the decision behind placing these two, seemingly distinct parts into one was that, as presented, humour is a tool for survival. Because of this, through the works of Kuipers (2007) and Hankiss (2014), the societal and philosophical arguments behind its evolution were presented as fundamental notions for their application in the cases of cognitive reappraisal strategies (Perchtold et al. 2019), group therapy (Garrick 2008) and on a much larger scale, oppressed societies (Marín-Arrese 2003). All of these showed not only the applicability of humour to deal with life-altering events and experiences, but also that through the proposed framework, not only can further theoretical studies be conducted, but also it can be applied to present issues, people, groups and in certain cases societies, to understand their view on life through these basic principles.

All in all, I hope to have successfully accomplished the integration of humour studies into a cognitive linguistic framework that is applicable. The established structure and rationale – once properly polished and further studied – should provide aid in cases such as the recent Covid-19 pandemic and its consequences for those who were traumatised by it. A further study in the future regarding this could help determine whether or not these established theories and analyses function as they are proposed to be and how they can be further improved upon. This is why further studies should be conducted.

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