

Pun-based jokes and linguistic creativity: designing 3R-module

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Abstract

The development of creativity becomes a significant issue in the era of automation and information technologies. Linguistic creativity can increase the inventiveness and resourcefulness of the representatives of philological professions. We consider humour as a tool that helps to develop personal creativity. Verbal play as a form of humour is considered as one of the ways to improve linguistic creativity. The 3L-course of linguistic creativity is aimed at developing lingual, localisation & translation, and literary creativity. The 3L-course includes 3R-module designed to improve the ability to recognise, reproduce in another language, and recreate pun-based linguistic inventions and innovations. The 3R-module tasks are based: on the similarity of activity, the similarity of the modality of the stimulus material, the number of languages, and the types of language units. The 3R-module involves the 3T-stage model (transparency, training, and testing). The 3S-test based on sense-finding, solution-finding, and scope-finding tasks revealed that the combination of 3R-module with the 3T-stage model in the scope of the 3L-course would help improve the quantity and quality of ideas and avoid stalemates when creating linguistic inventions. The 3L-course can be useful for philological students, writers, translators, journalists, copywriters, native and foreign language teachers because it helps improve personal creativity and productivity.

Keywords: creativity, humour, wordplay, ideation, linguistic creativity.

1. Introduction

In the era of information technologies and automation, when many jobs can be replaced by robots and software programmes, creativity, agility, and emotional intelligence have become the most relevant soft skills that will help people remain required in the employment market. The development of creativity is one of the most challenging and complicated issues because this skill involves not only professional knowledge but also special personal qualities. Creativity is demanded by society for many reasons: “creativity not only contributes to increasing students’ motivation but also promotes problem-solving, a higher-order thinking skill” (Szerencsi 2010: 286); creativity on the job is one of the ways to boost productivity (McGhee 1999: 20).

The development of creativity becomes one of the most important issues. There are many ways to enhance creativity. One of the most effective things is motivation. Hennessey and Amabile note: “People will be most creative when they feel motivated primarily by the interest, enjoyment, satisfaction and challenge of the work itself – not by external pressures” (Hennessey & Amabile 1988: 12).

The other popular universal way to boost creativity is humour. Humour training programs have become more and more popular because humour nurtures creativity by offering practice at stretching your thinking to make sense out of something. It has been shown that going through a humour training program increases scores on the tests of creativity (Ziv 1976, 1989). Humour is often associated with creativity (see, e.g., Freud 1960; O’Connell 1976; Dixon 1980; Martin & Lefcourt 1983; Eliav et al. 2017). At the workplace, humour can be helpful in different ways: it can facilitate communication and the process of solving creative tasks. Humour is important for not only the effective workplace relationship connected with creative use of humour, but it also “stimulates intellectual activity of direct relevance to the achievement of workplace objectives” (Koestler 1964: 518).

Creativity

There exist many different approaches to the definition of creativity which depend on the purposes and areas of research. The authors of the paper devoted to the analysis of creativity definitions denote three eras of creativity: the metaphysical era, in which *few geniuses create from nothing* (from Antique to Renaissance); the aristocratic era, in which *charismatic geniuses create from something* (from Renaissance to the middle of the 20th century); the democratic era, in which *anyone creates from anything* (from the middle of the 20th century up to today) (Kampylis & Baltanen 2010: 209). In the democratic era, in which “anyone creates from anything” (ibid.), the phenomenon of creativity becomes the subject of research of different science directions e.g. psychology, pedagogics, arts, marketing, neurobiology.

As a scientific term, “creativity” has its roots in psychology. According to Guilford, creativity “... refers to the abilities that are most of characteristic of creative people. Creative abilities determine whether the individual has the power to exhibit creative behaviour to a noteworthy degree” (Guilford 1950: 144).

We distinguish two main approaches to the definition of this phenomenon. Creativity is considered: 1) as an ability to solve unusual problems by using creative ways; 2) as an ability to create an original product. The first approach is based on the ability of an individual to solve unusual problems by using original ideas and nonstandard methods (see, e.g., Torrance 1966: 8; Feist & Barron 2003: 63; Moroz 2010: 97). The second approach is based on the ability of an individual to create original products by using nonstandard solutions (see, e.g., Welsch 1980: 97; Sternberg & Lubart 1999: 3).

In some studies, these two aspects are combined (see, e.g., Corsini 1999: 234; Ferrari, Cachia & Punie 2009: 14). In this paper, we identify creativity by combining both: problem-solving and product generation approaches. We consider creativity as the ability to find new connections between ideas and/or things and to combine them in an original way to solve problems or to create a new product.

The idea of the connection of existing ideas is represented in the definitions of creativity of some studies (see, e.g., Mednick 1962: 221; Barnes & Shirley 2007: 164). It means that to develop creativity, a person needs the knowledge of the existing ideas and the skill to find the original ways to combine them.

Humour and creativity

Humour is also considered as a component of creative thinking and creativity (Mednick 1962; Koestler 1964; Torrance 1966). In some studies, it is stated that there is a connection between

humour and the ability to solve creative tasks, and creative productivity (see, e.g., Gick & Lockhart 1995; Romero & Pescosolido 2008; Martin 2006; Wood et al. 2011; Korovkin 2010; Dikaya & Dikiy 2015). Goleman notes that laughter can help people to solve problems that demand creative solutions, by making it easier to think more broadly and associate ideas/relationships more freely (Goleman 1995: 85).

The researchers suggest that humour helps to develop creative thinking (see, e.g., O'Quin & Derks, 1999; Treadwell 1970; Ziv 1976). One of the reasons why humour is helpful to creative thinking is that the process of understanding humour is similar to the process of solving creative (insight) tasks (Korovkin 2015: 174). Firstly, both are connected with the breach of rules because "Laughter is an expression of freedom – freedom from the strict laws of rational thinking and freedom to play with new ideas" (Penjon 1891: 121). Secondly, both are characterised as a rapid process and quick understanding (see, e.g., Lockhart et al. 1988: 38; Kozbelt & Nishioka 2010: 377). Thirdly, both are provided with positive emotions (Isen, Daubman & Nowicki 1987: 1123). And finally, they have a similar structure (Smallian 2008).

Under Raskin's (1985) Semantic Script Theory of Humour (SSTH), the text is humorous when it activates two scripts that are incompatible with each other (Raskin 1985). According to the General Theory of Verbal Humor (GTVH), in which the SSTH theory was revised, humour involves 1) two different scripts that are compatible in the text; 2) the script opposition (Attardo & Raskin 1991: 297-303). In other words, there is an incongruity of two elements, scripts, meanings, thoughts. The incongruity occurs when a person faces an insight task that cannot be solved using traditional methods and schemas.

The importance of incongruity for humour appreciation is mentioned in works devoted to jokes analysis (see, e.g. Attardo 1997; Ritchie 1999, 2004, 2009), in research based on cartoon humour (see, e.g., Suls 1972; Schultz 1972), and in psychological research (see, e.g., Forabosco 1992; Wier & Collins 1992; Hillson & Martin 1994). The ability to shift incongruent frameworks is considered as a cognitive process that can enhance creativity (see Rottenberg 1971; Miron-Spektor et al. 2011). Thus, creative problem solving requires the ability to connect two unrelated elements in a new way, as it is similar to humour understanding. The term *Cognitive flexibility* provided by Ziv (1988) is one more concept that is common both to humour (situations, words forms, meanings, thoughts) and creativity (approaches, ideas, methods, frameworks). The skill of understanding, translating, and generating jokes can help to enhance creativity because of humour and creativity similar characteristics, structure and mechanisms. Developing the skill of understanding humour can be useful to develop creative thinking skills.

2. Linguistic creativity and wordplay

The power to create varies from one person to another. The way to develop and measure creativity depends on the professional area and professional interests of an individual. Creativity is an integral part of the jobs which deal with different ways of language use. Creativity is important for *writers* (see, e.g., Hall 2015), *poets* (see, e.g., Toolan 2015), *advertisers* (see, e.g., Ahmad 2018), *copywriters* (see, e.g., Geiger & Suber 2019), *journalists* (see, e.g., Crystal 1998: 329), as well as for *native* and *foreign language teachers* (see, e.g., Ginting 2012; Hofweber & Graham 2018).

Researchers note that creativity also becomes the salient competence of *translators*: creativity is a crucial component of translation competence (Delisle 1980: 235); "the most competent translators possess a malleable and creative mind" (Wilss 1996: 166); in the creation of an adequate TL version creativity plays a prominent role (Neubert 1997: 19); "the challenges and problems raised by the source text will enable translation trainees to apply creative strategies and find the most adequate solutions for the translation, combining logical cognitive processes

with natural intuition” (Valdés Rodríguez 2008: 54); creativity is an inevitable aspect of the translation process (Aranda 2009: 23); creativity is something which happens in translation and is demanded of translators (O’Sullivan 2013: 46); creativity is in the essence of translation (Babae, Wan Yahya & Babae 2014: 17).

2.1. 3L-creativity

According to Sampson, the term *linguistic creativity* can be interpreted in two ways: F-creativity (fixed creativity) respecting linguistic productivity, and E-creativity (extended creativity) respecting linguistic innovation (Sampson 2016). Considering two types of creativity: generative (Chomskian) creativity and lexical creativity, Zawada notes that they need to be combined and extended (Zawada 2006: 235). Crystal considers creativity as a form of ludic play and source of pleasure (Crystal 1998: 1).

The analysis of linguistic creativity definitions made it possible to distinguish four approaches to the notion. Firstly, linguistic creativity can be considered as every act of speech, in which the person is using the language system in a creative way to express his thoughts. Chomsky noted that the “essential property of the language is that it provides the means for expressing indefinitely many thoughts and for reacting appropriately in an indefinite range of new situations” (Chomsky 1965: 6). Chomsky considers language as “a process of free creation” (Chomsky 2003: 402) and uses the term “*linguistic productivity*.” Secondly, linguistic creativity can be considered as the ability to choose stylistic means to express thought (Galkina 2011: 161). It can be called “*stylistic productivity*.” It is usually applied to the aesthetic and literary use of language. Thirdly, linguistic creativity can be considered as a deliberate violation of language and speech norms, that is aimed at performing a certain function (Gridina 1996: 116), in this case, “we are, in effect, bending and breaking the rules of language” (Crystal 1998: 1). It is often called “*verbal creativity*” or *verbal play*. Fourthly, linguistic creativity can be considered as the invention of new words (neologisms) (Melnik & Kirova 2018) and original names “*innovative creativity*”, e.g., catchy names for an advertising company. The approaches to the definition of linguistic creativity often overlap each other.

We consider *linguistic creativity* as the ability to understand & interpret, localise & translate, and create and generate new language units by using language resources in original non-standard ways to realise the idea and the required effect (e.g. comic) and enrich communication.

A new language unit (word, word combination, sentence (utterance), text) can be either in the form of **linguistic invention** (creative text where the language resources are used in a specific way to achieve a definite goal) or **linguistic innovation** (creative text where the language resources are used in a specific way to be appropriate for different purposes). The difference between *linguistic invention* and *linguistic innovation* is in the frequency of use, e.g., an occasionally created pun-based witty remark is usually a disposable one-time product comparing to the pun-based advertisement which is reusable. All the linguistic innovations are linguistic inventions (further LIN), but not all the linguistic inventions are linguistic innovations (further LINN). For example, the ideas of translation of puns in movies can be considered as linguistic inventions because they are considered as one-time product appropriate to a particular context, while a pun-based joke which can be used several times in different contexts can be called linguistic innovation.

The definition of linguistic creativity offered in this paper demonstrates the bridges between language, localisation & translation, and literature. We consider linguistic creativity as 3L-creativity involving 1) lingual creativity (the ability to recognize and correctly interpret linguistic inventions); 2) localisation & translation creativity (the ability to reproduce linguistic

inventions by the means of the other language system); and 3) literary creativity (the ability to make linguistic inventions).

2.2. Developing linguistic creativity with verbal humour

Every day, people acquire linguistic creativity by exploring linguistic innovations and linguistic inventions by interpreting or creating them in native or foreign languages. But many people want to learn how to develop their creative thinking abilities. Verbal play (wordplay, pun) can be considered as one of the forms of linguistic creativity manifestation (Bazilevich 2015), as well as one of the creative forms of humour (see, e.g., Kao, Levy & Goodman 2016: 1281; Boylan 2018: 4).

One of the possible ways to develop linguistic creativity is working with different forms of verbal humour and language play. Szerencsi, in the research devoted to the use of verbal jokes in a foreign language classroom, notes that “In case creativity is applied to teaching, old issues are dealt with in new ways, in which verbal humour and language play may function as language teaching and learning tools contributing to intellectually challenging, pedagogically stimulating and enjoyable lessons” (Szerencsi 2010: 296).

Ekvall reveals ten dimensions (nine positive and one negative) that seem to have the greatest impact on a creative environment: challenge, freedom, idea support, trust and openness, dynamism and liveliness, playfulness and humour, debate, risk-taking, idea time, and conflict (Ekvall 1996). Verbal play provides all the necessary conditions for a creative environment.

Creative thinking involves the ability to make connections between unconnected things. Spearman notes “the power of the human mind to create new content – by transferring relations and thereby generating new “correlates” – extends its sphere not only to representation in ideas, but also to fully sensuous presentations, such as are given in the ordinary seeing, hearing, touching, and the like, of every one of us” (Spearman 1930: 140). Similarly, humour is often based on the connections of unconnected thoughts.

Among linguistic inventions, we distinguish *verbal play*, *wordplay*, and *pun*. *Verbal play* involves all the forms of verbal humour both based on the ambiguity based on semantic relationships between signs (for example, homonymy, polysemy, tropes, the ambiguity of idioms) and on incongruity based on syntactic relationships (for example, chiasm, zeugma, oxymoron), which are often semantically complicated. *Wordplay* denotes all the cases of verbal play based on ambiguity. *The pun* is considered as a type of wordplay based on homonyms, paronyms, polysemantic words, and idioms. The pun is the most challenging translation task. Pun-based jokes are the ideal items for the study of creativity and creative thinking because they are of a similar short length, complexity, and frequency of use in everyday life.

In the context of semiotics, the pun (wordplay, verbal play) structure involves the **core**, which consists of interdependent *signs* which create ambiguity, *pun environment* as a minimal unit of the text that allows to realise the pun and ascertain its sense, and the *context* – a piece of text that uses a pun (for example, joke) (Aleksandrova 2018: 14-15). In other words, the unconnected signs are creatively connected by the appropriate and relevant environment and placed into a context to create new content.

Developing the ability to connect the unconnected language units (signs) to creatively realise the idea, by going beyond the scope of the traditional use of language and beyond the stereotypes, can help to increase linguistic creativity. The exercises elaborated in the scope of the 3L-course, which is aimed at the development of linguistic creativity, should involve the tasks, which would teach the students to see these connections between unconnected signs.

3. Method

The application of verbal humour to the development of creative thinking became the basis of the 3L-course. For the elaboration of the exercises to be used in the scope of the evaluation part of the 3L-course, the activities based on the connection of unconnected items were grouped by:

- 1) the similarity of activity
- 2) the similarity of the modality of the stimulus material.

To evaluate the usefulness and effectiveness of the elaborated exercises, we carried out an experiment. The test developed to assess linguistic creativity was given to two groups of participants (sixty 6th-semester students of translation department), where only one group (thirty participants) was given an opportunity to practise the exercises elaborated for the 3L-course of linguistic creativity.

3.1. Material

To elaborate on the exercises, original and translated Russian and English verbal (text) pun-based jokes, creolised (illustrated) pun-based jokes, and audiovisual pun-based jokes have been considered:

- more than 700 texts of puns-based jokes in Russian and in English taken from traditional and electronic resources;
- more than 300 cases of creolised pun-based jokes and memes taken from traditional and electronic resources;
- 30 examples of audiovisual pun-based jokes from 22 movies and 40 examples of puns from 25 animated films in English and their Russian (dubbed and subtitled) translations.

3.2. Procedure

We used the selected material to design a 3R-module based on recognising (understanding), reproducing (translating) and recreating (inventing) tasks to develop linguistic creativity and to elaborate a 3S-test based on sense-finding, solution-finding, and scope-finding tasks to assess linguistic creativity.

In the scope of the experiment, the elaborated 3R-module (12 hours) was offered to group (II) within the practical course of translation (72 hours). At each stage of the 3R-module, the students were provided with 3T-stage model activities: transparency (explanation), training (practising) and testing (assessment). The 3S-test results of group (II) were compared with the results of group (I), which was not offered the 3R-module.

4. 3R-module tasks

The 3R-module tasks were developed to boost students to ignite their linguistic creativity, when understanding, translating and creating pun-based linguistic inventions. The 3R-module tasks can be classified by the similarity of activity, the similarity of the modality of the stimulus material, the number of languages, and the types of language units involved (see Table 1).

Table 1. Classification of the 3R-module tasks

Types of tasks	Number of languages	Two languages	One language		
	Modality of material		<i>verbal (text)</i>	<i>creolized (picture)</i>	<i>audiovisual</i>
Recognising tasks		Identify the interlanguage paronyms used to create a pun-based joke.	Identify the signs used to create a verbal pun-based joke (NL). Read the beginning of the pun-based joke (NL/FL), and write the possible variants of its ending.	Identify the signs used to create a creolised pun-based joke (NL/FL). Guess the wordplay represented on the picture, identify the signs involved) (NL/FL).	Identify the signs used to create the audiovisual pun-based joke (NL/FL).
Reproducing tasks		Translate the verbal/ creolised/ audiovisual pun-based joke (NL/FL). Guess the original from the machine translation version of the verbal pun-based joke (FL). Guess the original from the literal translation of the audiovisual pun-based joke (FL). Localise (domesticate) a pun-based joke which contains realia.	Turn a pun-based joke into the other genres (idiom, quiz, slogan, title) (NL/FL). Reproduce a pun-based joke using the same core-signs but the other pun formation mechanism (homonyms, paronyms, polysemy, idiom) (NL/FL).	Turn a verbal pun-based joke into a creolised pun-based joke (NL/FL). Turn a creolised pun-based joke into a verbal pun-based joke (NL/FL).	Turn a verbal/ creolised pun-based joke into an audiovisual pun-based joke. Turn an audiovisual pun-based joke into a verbal/creolised pun-based joke.

Recreating tasks	Use two or more interlanguage paronyms to create a pun-based joke (NL/FL).	Create a text of a pun-based advertisement, title, slogan, heading using the following words (signs) (NL/FL).	Create an idea of a creolised pun-based advertisement using the following words or/and pictures (NL/FL).	Create the idea of an audiovisual pun-based advertisement using the following words (signs) (NL/FL)
NL – native language, FL – foreign language				

4.1. Tasks classified by the number of the languages involved

The 3R-module tasks can be classified by the number of languages involved. The scientists note that creative skill training courses developed in one culture are not always effective for the representatives of another culture (Ng 2001: 7). The tasks evaluated in this paper are aimed at individuals, who speak at least two languages (one native and one foreign) and are aware of the specificity of two cultures. Lubart & Georgsdottirn think “good understanding of the context in which creativity develops, and the aspects of each culture likely to either hinder or foster creativity are essential in order to build on the resources already existing in each culture to foster creativity” (Lubart & Georgsdottirn 2004: 26).

To elaborate on the tasks, we used pun-based inventions in forms of jokes. Jokes are considered “as rich sources of patterned creativity in language use they are often based on the creative use of puns” (Chiaro 1992: 3). Pun-based jokes can be used to improve lingual, localisation and translation, and literary creativity at the same time. They are also useful for everyday creativity that is an essential part of life and education.

The two language tasks involve the recognising and recreating tasks based on interlanguage paronyms use (see, e.g. *Why do French people only order one egg at breakfast? – Because one egg is un ouef* (enough)! (Aarons 2012: 179) in the native language (further NL) or foreign language (further FL) and localisation & translation tasks.

4.2. Tasks classified by the similarity of activity

According to the FourSight model, the translation process includes four main steps: clarify, ideate, develop and implement (Miller et al. 2011: 64). According to Puccio, Murdock and Mance Creative Problem Solving (CPS) approach, the thinking skill model consists of three stages: clarification, transformation, and implementation, that people do when solving a problem or examining challenges (Puccio et al. 2005: 44). That corresponds to the main stages of the humour translation process. We can distinguish three main stages, that correspond to the three stages of creativity process: understanding in the source language, transferring and recreating in the translation language. The ability to find the general idea between the two core elements of the pun (wordplay) when **understanding**, **translating** and **generating** puns can help enhance creativity. We elaborated the exercises according to the stages of the creative process.

4.2.1. Recognising tasks

According to Wyer & Collins (1992), humour appreciation can be produced from two sources: 1) from comprehension challenge, 2) from the linear quantity of elaboration on the implications of humorous stimuli after an item has been viewed and adequately understood (Wyer & Collins 1992: 664–686). Recognising pun-based jokes tasks have a double impact: they form positive

emotions, that make people more creative, and they develop insight tasks solving skills, that help to improve creativity.

The researchers note that while “incongruity is necessary for humour, resolving incongruity – discovering a cognitive rule that explains the incongruity in a logical manner – is also key” (Kao et al. 2016: 1272). When discovering a way that logically explains incongruity in pun-based jokes, people develop linguistic creativity.

“In *pun identification* (or *pun disambiguation*), the object is to identify the two meanings of a term previously detected, or simply known *a priori*, to be a pun” (Miller & Turković 2016: 63). Recognition tasks involving the ability to make connections between the unconnected pun core-signs will help to develop linguistic intuition and everyday lingual creativity of every person.

4.2.2. *Reproducing tasks*

According to Garbovskiy, “In a semiotic approach, translation is defined as a complex interpretative system, i.e. a system-based activity, making it possible to interpret the signs of one semiotic system by the signs of another semiotic system” (Garbovskiy 2004: 243). According to the semiotic approach, the translation of the pun is the manipulation of signs composing the core of the pun, which can be realised in two ways: 1) between the semiotic systems of the SL and the TL; and 2) inside the system of the TL.

Translation as interpretation involves the ability to see the common ideas in the signs from different languages. Translation process involves all the skills interpreting and generating because when dealing with wordplay, the translator does not only reproduce the wordplay represented in the SL but creates the new one in the TL. Nevertheless, the main task of the translator is the manipulation of the signs of two different language systems SL and TL, while interpreting is the manipulation of the signs in the SL system, and generating is the manipulation of the signs of the TL system.

According to Thomä, creativity in professionals is higher and more original than in students, and it is higher and more original in the translation into mother tongue than to a foreign language (Thomä 2003: 213). The reproducing pun-based jokes tasks are elaborated to translate the pun-based jokes by paying more attention 1) to the form of the core-signs, 2) to the meaning of the core-signs, 3) to the pun formation mechanism. The reproducing tasks also include the “self-translation” exercises when at the first stage the joke is translated from native language to a foreign language, at the second stage the translated version is translated back to the native language, after that the original and the final versions are compared and analysed.

Mistranslation can also be considered as a source of humour (Chiaro 2011: 374). One of the most productive tasks is the “machine translation” task when students need to guess what the original was by analysing the machine translation version or from literal translation (see, e.g., the machine translation of the joke “Why coffee is like a soil? Because it is ground” into “Почему кофе похож на почву? Это земля” [Why coffee is like a soil? Because it is land]. Bucaria notes that creativity is important for adaptation of humour (Bucaria 2008). One more productive task is to localise (domesticate) the joke which contains realia.

Reproducing tasks will be useful for translators and interpreters because they help to develop localisation & translation creativity.

4.2.3. *Recreating tasks*

Recreating task has a triple impact: 1) helps people to relax the situation with laugh 2) helps to create new product e.g. to create an eye-catching slogan for advertisement (wordplay let us experience the playfulness of language, and 3) “provokes a pleasure of the text” (Winter-Froemel et al. 2018: 5). It also helps to hide or mask some things with the wordplay: “greasy

conversation, moralising, protest, expression of absurd thoughts, irony” (Sannikov 2002: 27) by expressing the idea in a new way. Recreating tasks (advertising, copywriting, naming tasks) based on the creation of verbal, creolised, and audiovisual texts, will be useful for writers, copywriters, journalists because they help to create literary creativity.

4.3. Tasks classified by the modality of the stimulus material

The 3R-module tasks can be classified by the type of modality of the text. The recognition tasks are focused on understanding verbal, creolised and audiovisual pun-based jokes. The reproduction tasks are based on the transformation both between 1) two language systems 2) different semiotic systems (verbal, visual and audiovisual) of one language. It can be the transformation of verbal jokes into creolised jokes or audiovisual jokes or vice versa. The recreation tasks involve the creation of advertising slogans, billboards, leaflets, as well as commercials (audiovisual advertisements), containing pun-based jokes or puns.

The tasks may involve the combinations of different semiotic system signs, (see, e.g., a combination of the name Bush (the name of former American president) and a noun *bush* (a plant) in a picture with an inscription “Clinton hiding in the bushes”). It also can be a combination of audiovisual and verbal signs, (see, e.g., the joke from the movie “Master and Commander: The Far Side of the World” (2003) where the phrase “Choose the lesser of two evils” was transformed to “Choose the lesser of two weevils”). The task may also be based on the transformation of the pun-forming mechanism, for example, to turn the joke based on the use of homonyms into the joke based on the use of paronyms or polysemantic words as well as when keeping the same mechanism but changing on of the core-signs of the pun.

4.4. Tasks classified by the language units involved

The tasks can also be classified by the language units used to create a pun-based joke. The puns can be based on the use of word segments, words, or group of words (see Table 2).

Table 2. Task classification by the language unit (word segments, words, or group of words)

Word - Word segment	Word - word	Word - Group of words	Group of words - Group of words
In English, we ‘ drive cars on parkways’ and ‘park cars on driveways ’.	– What is the difference between a tree and an aircraft? – One sheds its leaves and the other leaves its shed .	Patient: They tell me, doctor, you are a perfect lady-killer (lady killer). Doctor: Oh, no, no! I assure you, my dear madam, I make no distinction between the sexes.	Reader: I sent you some suggestions telling you how to make your paper more interesting. Have you carried out any of my ideas? Editor: Did you meet the office boy with the waste-paper basket as you came upstairs? Reader: Yes, yes, I did. Editor: Well, he was carrying out your ideas.

The puns can also be based on the use of graphemes and groups of graphemes (see Table 3).

Table 3. Task classification by the language unit (graphemes and groups of graphemes)

	<i>Grapheme</i>	<i>Word segment</i>	<i>Word</i>	<i>Group of words</i>
<i>Grapheme</i>	<ul style="list-style-type: none"> -What did P say to R? -How long did it take you to grow your beard? 	<ul style="list-style-type: none"> - What do you call a fish with no eyes? - Fsh (No letter "i", so no i's). 	We have more right to the O than anyone else; for we owe everybody.	<ul style="list-style-type: none"> Q: What letter can do the work in one day that you can do in two days? A: W (Double you).
<i>Group of graphemes</i>	_____	<ul style="list-style-type: none"> - Toc Toc! - Qui est là? - Abeille. - Abeille qui? - A, B, C, D, E ... (in French) 	<ul style="list-style-type: none"> - Which three letters of the alphabet make everything in the world move? - NRG (energy). 	<ul style="list-style-type: none"> Q: What four letters frighten a thief? A: O.I.C.U. (Oh, I see you!)

5. The didactic experiment

To identify the effectiveness of the course, we carried out a didactic experiment. The test, which was composed to assess the linguistic creativity level, was given to the 6th-semester students of the translation department who had already completed the course of the theory of translation. The participants of the experiment were divided into two groups. The first group (30 participants) were not offered the 3R-module materials and had to implement the tasks using their knowledge and experience. The second group (30 participants) were given a twelve-hour 3R-module (4 hours for each part: recognising, reproducing, and recreating) in the scope of the 6th-semester course of translation (the 3R-module has been integrated into the 72-hour practical course of translation). In the scope of the didactic experiment, both groups had to do a test aimed at the evaluation of linguistic creativity as the ability to make connections between the unconnected linguistic items when understanding wordplay in a foreign language, translating wordplay and generating wordplay in the native language. The experiment can be considered as a quasi-experiment because it has involved the members of two intact groups. It should be noted that all the participants of the experiment had identical characteristics, considered as essential such as age, number and content of completed university courses. Both groups had not had previous experience in completing tasks similar to the 3S-test tasks.

5.1. Combining 3R-module with 3T-stage model

The 3R-module was supplemented with the 3T-stage model activities: transparency, training, and testing. At the *transparency* stage, the teacher was showing the students the examples and explaining how to connect unconnected signs when understanding, translating or creating pun-based jokes. At this stage, the main task was to make the 3R-module material transparent and clear, for being then easily understood. At the *training* stage, the students were trying to find a sense for the jokes, solutions for translation, and ideas to create pun-based jokes themselves by practising different types of activities (see *3R-module tasks*). Training is the process of learning the skills that you need for a particular job or activity. At the *test* stage, the students had to show their skills in understanding, translating, and creating pun-based jokes by doing a test.

The participants of the second group were provided with various types of activities at different stages of 3R-module. At the *recognising*-task part of the 3R-module, the students were given 30 examples of different modality pun-based jokes. After the analysis of the examples, the students practised their understanding skills on the pun-based jokes offered by the teacher and the groupmates. At the *reproducing*-task part, the students had to analyse 30 examples of unsuccessful and successful wordplay translations represented in audiovisual and literary products. Then the participants were practising their translation skills and discussing their translation versions. It should be noted that both groups previously were provided with information about the methods and algorithms of translation (see, e.g., Aleksandrova 2018; 2019). At the *recreating*-task part, the students were shown some examples of successful ideas of slogans, advertisement and TV commercials. Then, the participants were trying to generate ideas for pun-based linguistic inventions themselves.

5.2. The 3S-test on linguistic creativity

At the end of the 6th-semester translation course, the participants of the experiment had to do nine tasks of the 3S-test. The 3S-test consisted of three parts 1) sense-finding tasks based on a foreign language material, 2) solution-finding tasks based on native and foreign languages, and 3) scope-finding tasks based on native language material. Each part consisted of three tasks.

Sense-finding (foreign language)

1. Explain the joke. Identify the words used to create the pun. (English language)
(A: *How much space will Brexit free up in the European Union?* B: *1 GB.*)
2. Explain the picture joke. Identify the words used to create the pun. (see pic. 1) (English language)
3. Write the possible endings of the joke using a wordplay (English language).
(*What is common between bad weather and Queen Elisabeth II?...*)

Solution-finding (foreign language, native language)

4. Translate the joke from English into Russian. (*He: He always calls his wife Fare Lady. She: How romantic. Why does he call her Fair Lady? He: It's a habit – he used to be a street-car conductor.*)
5. Guess the English language original of the following machine translation version of the joke. (*Почему кофе похож на почву? – Это земля.*)
6. Translate (localise) the following English picture joke into Russian (see pic. 2)

Scope-finding

7. Create a text joke based on wordplay using the following words: *улики* [evidence], *улитки* [snails]. (Russian language)
8. Create a picture joke using the following words and word combinations: *курить* (smoke), *Мария Кюри* (Marie Curie). (Russian language)
9. Create an advertisement (slogan) using the following words: *Макрон* [Macron], *макарун* [macaroon], *макароны* [macaroni]. (Russian language)



Picture 1



Picture 2

The tasks were designed to assess the following types of linguistic creativity: lingual, localisation & translation, and literary.

5.3. The calculation of performance

The results of the 30 participants of group I, who were not given a 3R-module, were compared with the results of the 30 participants of group II, who were provided with the necessary 3R-module material.

To assess the effectiveness of the 3R-module, we have adapted the Torrance (1966) test where creativity is measured by scoring its three dimensions: fluency, flexibility, and originality.

When interpreting the results of the test we calculated fluency (the time spent on the implementation of the tasks), flexibility (the number of all ideas, and the number of relevant ideas), and originality (the number of the original ideas). The term “relevant idea” was used to identify the jokes based on wordplay, while the term “original idea” referred to ideas that were offered by only one participant of the experiment. When assessing the performance, we checked the correctness of the implementation (relevance, evaluation, and the use of wordplay requirement where it was a necessary task).

We calculated both group performance and individual performance. When assessing individual performance, we calculated the time spent on the implementation of the tasks, the total number of ideas, and the number of relevant ideas. When assessing group performance, we calculated the total number of ideas, the number of ideas for the sense-finding tasks, for the solution-finding tasks and the scope-finding tasks, and the number of ideas for every of nine tasks represented in the test.

6. Results

The calculations outlined in the previous section were carried out to discover whether the combination of 3R-module tasks based on the use of wordplay and 3T-stage model of the educational process is conducive to increasing linguistic creativity.

The time for the implementation of the tasks was 80 minutes in both groups. The average time the participants of group I spent on the tasks was 55-65 minutes. After that time most of the participants finished work and said that they did everything they could. The participants of the second (experimental) group given a twelve-hour 3R-module needed more time to do the 3S-test, spending on average 75-80 minutes on its implementation. These results can be caused by the ability of the experimental group to generate more ideas, they needed more time to realise the ideas, while the first group of participants needed less time because of the lack or fewer number of variants.

The results of the experiment revealed that the number of all ideas, as well as the number of relevant ideas and original ideas, was higher in group II which was offered the 3R-module (see Table 4).

Table 4. Calculating group performance

Criteria		All ideas			Relevant ideas			Original ideas		
3S	№	group I	group II	differ.	group I	group II	differ.	group I	group II	differ.
Sense-finding	1.	16	27	+41%	10	25	+60%	-	-	-
	2.	16	29	+45%	10	29	+65%	-	-	-
	3.	15	23	+35%	5	22	+77%	0	1	+100%
Total sense-finding		47	79	+41%	25	76	+67%	0	1	+100%
Solution-finding	4.	14	27	+48%	0	16	+100%	0	9	+100%
	5.	3	15	+80%	0	10	+100%	0	2	+100%
	6.	8	22	+64%	1	14	+93%	-	-	-
Total solution-finding		25	64	+61%	1	40	+98%	0	11	+100%
Scope-finding	7.	9	35	+74%	7	26	+73%	7	30	+77%
	8.	8	11	+27%	0	8	+100%	0	3	+100%
	9.	9	14	+38%	6	10	+40%	6	10	+40%
Total scope-finding		26	60	+57%	13	44	+70%	13	43	+70%
total		106	203	+48%	39	159	+75%	13	55	+76%

In the experimental group II the total number of attempts to solve the tasks has increased by 48% (sense-finding 41%, solution-finding 61%, scope-finding 57%). The total number of relevant ideas has increased by 75 % (sense-finding 67%, solution-finding 98%, scope-finding 70%). The participants of the experimental group have shown higher results in linguistic creativity. We can say that the 3R-module of the 3L-course linguistic creativity development can be considered as one of the key variables accounting for the difference in the results.

The facts that 93% of the participants of group I have offered only one idea for the task and 20% of the members of group II have generated more than one idea proves that the 3R-module can be helpful to increase the variability of ideas. The participants of the first group have stated that for most of the tasks of the test it was hard to generate even a single idea, while 20% of the experimental group participants offered several variants for tasks №3, №4, №7, №8, №9.

It was revealed that the performance of translation tasks by group II was much more productive. The number of relevant ideas (to the number of all ideas) increased by 75%: sense finding (1) by 60%; 2) by 65%; 3) by 77%), solution finding (4) 100%; 5) 100%; 6) 93%), scope-finding (7) 77%; 8) 100%; 9) 40%). The experimental group participants offered more pun-based jokes which in the scope of the experiment were considered as relevant, while the first group of participants often offered jokes which were not based on wordplay. These results can be caused by the fact that the experimental group participants were provided with a large number of pun-based jokes examples the ideas of which they were able to use when implementing the tasks of the test.

Tasks №4, №5, №8 were not implemented by the participants of group I, while the participants of group II offered 16 ideas for task №4, 10 ideas for task №5, and 8 ideas for task №8. For task №4, the participants offered wordplay examples based on the use of the terms of endearment: зайчик [bunny], птичка [birdie], рыбка [little fish], солнышко [sun], золоте [piece of gold], золотко [piece of gold], and people's names that sound similar to adjectives: Милой [Miloy] from Мила [Mila] and милая [darling], Милочка [Milochka] from Мила and милочка (dear, darling), Надежда [Nadezhda] and надежда [hope], Вера [Vera] and вера [faith], Любовь [Lyubov] and любовь [love], Соня [Sonya] and соня [sleepyhead]. For task №5, the participants used the idea “between lions” (lion (animal) and the statue of Lion Tolstoy), the idea “between Катюша (Katyusha from Yekaterina) and камюша (katyusha as a lorry-mounted multiple rocket launcher)”. For task №8, the students used the ideas with paronyms Кюри (from Marie Curie) and кури [smoke]: Мария Кюри, а ты не кури [Maria Curie, but you shouldn't] (Maria Curie image and a no-smoking sign); Мария, кури! [Maria, smoke!] (offering a cigarette). Almost all the ideas of the participants of group II for tasks №4, №5, №8 were original ideas offered by only one participant. These tasks, as well as task №6, are considered as the most complicated tasks of the test because they deal with two semiotic systems: translation tasks №4 and №5 deal with semiotic systems of two different languages, task №8 involves the ability to create creolised jokes dealing with text and picture semiotic systems. The results let us say that the 3R-module is helpful to avoid stalemates.

We can state that 3L-course can be useful for developing original ideas. The total number of original ideas in group II has increased by 76%. In addition to two common ideas for task №3 (son/ sun, rain/ reign) provided by several participants of both groups, one participant of group II offered an original idea of wordplay based on the use of nouns air/heir.

The experiment showed that the 3R-module can help the participants to increase the quality and variability of relevant and original ideas, as well as to avoid stalemates. The results of the test stage of the 3T-stage model activities (transparency, training, and testing) can be caused by the sufficient number of examples considered by the participants of the experimental group at the transparency and training stages. At these stages, the participants were not only provided with the materials and explanations of the teacher but also were given the possibility to practice their skills and to analyse the ideas of the other participants.

7. Conclusion

Linguistic creativity is an important skill of the professional philologists of the future because it helps to remain demanded in the era of automation and artificial intelligence. Verbal play is a significant tool which helps to develop linguistic creativity. The ability to make connections between unconnected linguistic items when understanding, translating and creating linguistic inventions is useful to increase linguistic creativity.

Linguistic creativity involves lingual creativity as the ability to recognise linguistic inventions, localisation & translation creativity as the ability to reproduce linguistic inventions

by the means of another language, and literary creativity as the ability to recreate both linguistic inventions and linguistic innovations.

The results of the study demonstrate that the application of the 3R-module containing Recognising (understanding), Reproducing (translating) and Recreating (inventing) tasks based on the use of different modality material (verbal texts, creolised texts, and audiovisual texts); different number of languages involved; and different level linguistic items is feasible and can be used to develop linguistic creativity. The 3R-module, based on the stages of the creative process combined with the 3T-stage model of activities: transparency, training and testing, can be included in the programme of the elective 3L-course. The results of the 3S-test based on sense-finding, solution-finding, and scope-finding tasks showed that the 3R-module helps to improve the quantity and quality of ideas, to avoid stalemates and increase personal creativity.

The materials of 3R-module tasks, 3T-stage model, and 3S-test assignments can be used by the teachers of linguistics, translation, literature, and other philological disciplines to develop linguistic creativity of language department students. The materials are also of practical value for translators-practitioners, copywriters, journalists, and writers. The course of linguistic creativity can help practitioners to increase personal creativity and implement professional tasks.

This work can be useful for fostering future studies devoted to the invention and adaptation of ideation techniques aimed at the development of linguistic creativity. It would be interesting to create the exercises based on the use of ideation techniques to improve language, localisation & translation, and literary creativity.

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