A Theoretical Approaches to Creativity and Routine

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# **Creativity and Routine in Word-Formation**

Three Case Studies

**Abstract:** The venerable tradition of studying creativity (overviews in Jordanous and Keller 2016; Jones 2016, etc.) has led to the recognition that linguistic creativity is a multifactorial phenomenon whose parameters vary along the axes of numerous contributing factors and remains a concept difficult to operationalize for empirical investigation. Creative linguistic behaviors involve at least the following: heightened linguistic awareness, intentionality, deviance from established norms, attention grabbing properties, novelty, effectiveness, successful communication, etc. The chapter discusses three case studies which showcase the interplay of different contributing factors in different communicative settings, emphasizing the gradient spaces between individual, conscious, and effortful creations and societal, incidental bursts of creativity, etc., leading to the recognition of the complex ontology of routine and creativity as two feedback loops greasing the mechanisms of everyday language. The analysis reveals that the techniques of recombinance and rechunking are constant across various situations of creativity enhancement, highly sensitive to the immediate contextually variable values of co-semiosis in individual acts of communication. The degree of creativity results from the overlaying of various axes of cumulative effects of converging forces in individuals negotiating meaning in specific contexts. In view of language being an emergent complex adaptive system (Beckner et al. 2009) and cognition characterized as highly distributed (Hutchins 2010; Sharifian 2015, 2017), the inception of creativity is invariably achieved in micro events (interpersonal communicative acts) whose rippling consequences may become in time fully conventionalized, resulting in language change. The analyses of the case studies, each focusing on a different leading factor contributing to heightened creativity (conscious, purposeful and playful creations, interlingual translation, and analogy-based enhancement of the productivity of a process) corroborate the hypothesis that the nature of the word formation process is of the least significance for creativity (as reanalysis + deaffixation, affixation and blending can be equally creative), whereas context, which brings into the picture shared cognitive routines and markedness of the hypostatized concept, either in terms of novelty or unexpectedness, verging on incongruity, and formal experimentation (involving violation of highly routinized form-meaning mappings) play far more significant roles in creative word formation.

"Creativity is piercing the mundane to find the marvelous". Bill Moyers

### 1 Introduction

The ecology and nature of (linguistic) creativity has been a definitional and analytical challenge ever since Croce's (1994 [1902]: 37) proclamation that "language is perpetual creation" and has generated a viable scholarly tradition. Definitions of linguistic creativity range from detailed and comprehensive ones (Munat 2010: 147-148; Zawada 2006: 236-237; for an overview of definitions see Jordanous and Keller 2016; for comprehensive accounts see Jones 2016; Kaufman and Stenberg 2010; among many others) through ones identifying it as a psychological factor in word formation (Körtvélyessy, Štekauer and Kačmár 2021: 1018–1019) to one-line adages such as "[Creativity] is seeing what others see and thinking what no one else ever thought" (Schopenhauer 1851) or "blind variation and selective retention" (Simonton 2011: 158).

The question as to who or what is creativity a property of has also accrued opposing views, deducible from the modifiers used to indicate types thereof, such as linguistic creativity, artistic creativity, human creativity, individual (psychological) creativity, historical creativity (Boden 1990), etc. The multidimensionality, multifactoriality and indeterminacy of immediate causality (agency, contextual environment, degree of effectiveness, degree of intentionality, degree of novelty, etc.) have posed a number of debatable questions regarding creativity in and of language whose answers depend on the understanding of the nature and architecture of language as a semiotic system, the essence of language-mediated communication and the nature of meaning. The latter two inevitably lead to associating creativity with interoperationality between communicators. Just as beauty is in the eye of the beholder, item familiarity and lexical network awareness on the part of the perceiver have a strong influence on the identification and recognition of creativity in language and more specifically in word formation.

No less problematic is the relation between routine and creativity, with the former basically perceived as the background against which creative products are profiled. As Munat (2010: 147) reasons, picking up from Pope XIV, it is not clear whether creativity resides in "initiating things, continuing them or completing them". The nature of this relationship has been interpreted as modification, extension or violation of rules of productivity (or routine) (Bauer 2001). A further complication arises from the understanding of routine, which itself is not less di-

<sup>1</sup> The adage has been attributed to numerous scholars and authors, among whom Albert Einstein (see https://quoteinvestigator.com/2015/07/04/seen/).

verse, from rule-based understanding of word formation as opposed to extragrammatical creations (Dressler and Barbaresi 1994; Mattiello 2013), the opposition between word creation and word formation (Ronneberger-Sibold 2006, 2010, 2015), through exemplar-based schema abstraction (Audring 2019) or analogical extension to recognising it as a characteristic of the individual's established linguistic habits (Schmid 2020). Further contentious issues stem from the difficulty of teasing apart and quantifying (if possible) the multiple factors playing a role in recognizing, applying or analyzing creativity. The parameters suggested as minimally necessary and sufficient in the standard definition of creativity (Runco and Jaeger 2012: 92), "originality and effectiveness", pose challenges with their indeterminate, gradient nature. Originality has been identified as co-terminous with novelty or innovativeness (e.g., Bergs 2018; Hoffmann 2018), where novel necessarily dictates that "the creative product did not exist previously in precisely the same form . . . . The extent to which a work is novel depends on the extent to which it deviates from the traditional or the status quo" (Stein 1953: 311). Such definitions highlight the mutual dependency and inherent opposition of the notions of routine and creativity, which as the two extremes of a gradient scale enclose the space of innovation and productivity in word formation.

In the chapter qualitative commentary of three case studies is offered. The case studies can be grouped into ones showcasing individual creativity and those showcasing societal or linguistic creativity (i.e., one not directly contextually attributable to a single individual's mind). In each case, a different leading factor among the relevant ones takes the upper hand in underscoring creativity: conscious effort and heightened language awareness of the creator (author and translator) as the leading ones in two of the case studies, and lay people's extensions and modifications of linguistic routines in the other. The chapter is structured as follows: Section two overviews the parameters deemed essential for the detection and functioning of creativity in word formation; Section three showcases the three parametrically differentiated case studies, Section four provides general commentary based on the case studies and Section five concludes.

## 2 Creativity in Word Formation

In the middle of a traffic jam the tired and hungry driver says: I'm one oid. "What is oid?" asks the passenger and reflects, "Well, if you are one oid, then you are . . .?" Applying the rules of English grammar, the passenger completes with an oid – and the penny drops. This example fully conforms to the definition of creativity as "the ability to produce work that is both novel (i.e., original, unexpected) and appropriate (i.e., useful, adaptive concerning task constraints" (Sternberg and Lubart 1999: 3). The form is unexpected and unfamiliar, yet the listener manages to comprehend the message, i.e., the effect is achieved. The mechanism employed here for achieving (and alerting to) linguistic creativity capitalizes on linguistic awareness by employing homonymy and intermixing levels of patterning (word formation and syntax) by substituting the conventionalized deverbal adjective used for naming the concept not with a different form of the same category (a complex, derived word) but by a different construction – a pseudo noun phrase.

More specifically, word-formation creativity "is conceived as the ability of any speaker of a language to approach the naming act in a creative way by selecting one out of a number of possible ways of semiotic representation of an object to be named" (Körtvélyessy, Štekauer and Kačmár 2021: 1017, citing Štekauer 2005). Although according to this definition creativity is at the heart of any naming act, i.e., in any instance of word formation, additional restrictions have been suggested for distinguishing routine word formation and creative word formation. The latter is characterized as "non-rule-governed and therefore intentional" (Bergs 2019: 175; see also Fernández-Domínguez 2010; Lieber 2010; Ronneberger-Sibold 2010). This invites the contrast between productivity, which is identified as rule governed and therefore automatic and unintentional (Körtvélyessy, Štekauer and Kačmár 2021), and creativity. The opposition is neither binary, nor privative. It represents the complex gradient space between F-creativity and E-creativity as defined by Sampson (2016: 19) as, "activities which characteristically produce examples drawn from a fixed and known (even if infinitely large) range as 'F-creative', and activities which characteristically produce examples that enlarge our understanding of the range of possible products of the activity as 'E-creative'". F-creativity is witnessed in the creation of numerous novel lexical items via analogical modeling following an exemplar as when "the suffix -er is used to create new words such as mansplainer "somebody who mansplains" (Bergs 2019: 175). Bergs (2019) directly maps F-creativity onto productivity but fails to define E-creativity. He evokes Haspelmath's (2002: 100) distinction between "(mostly unintentional, subconscious) productivity and intentional, creative neologisms that do not follow any major, productive pattern" (Bergs 2019: 175) as in "va-jay-jay" vagina"" (Bergs 2019: 175). This understanding significantly problematizes the correlation between creativity and routine in word formation. As the case studies presented below illustrate, all creative word formation products (be they intentional or not) employ the same mechanisms and formal manipulations, albeit the degree of intentionality varies. Despite the fact that routine and creativity have traditionally been conceptualized as opposites, they are not only definitionally tightly connected, but coexist in a dynamic ontology where the former is the background for the recognition of the latter, which is transformed into the former by conventionalization of the pattern

which has led to the initial fabrication of the creative product via schematic abstraction and societal propagation.

Against this theoretical background, the three case studies below provide corroborative evidence for the hypothesis that creativity cannot be ascribed individually to any of the factors mentioned above, let alone be associated with specific processes in word formation. It can only be measured in the interaction among all factors in specific contexts. Amongst this complexity of creativity, it appears that semantic incongruity (conceptual clash or contrast) or unexpectedness of the hypostatized concept is most likely to be recognized as creative in communication

### 3 Three Case Studies

In Zawada's (2006: 236–237) definition "[l]inguistic creativity is primarily the activity of making new meaning by a speaker (in the broadest sense of the user of language in all forms and in all mediums), and the recreation and re-interpretation of meaning(s) by a receiver. Linguistic creativity is secondarily observable as a feature or product in a language." This suggests that cognitive / conceptual flexibility (the intended new meaning) is, if not a causal factor for word formation creativity, at least a very strong correlate. When the infinity of conceptual combinability is captured by a recognizable and hypostatizing linguistic form word formation creativity ensues. Each case study underscores the idea that despite the heightened significance of diverse factors, unexpectedness of a newly hypostatized concept or conceptual integration of incompatibles seems to be an indispensable ingredient of creativity. In the first two case studies the pragmatic dimension of the communicative act and the contextual factors are the common denominator. Conscious creative effort on the part of the producer and the pragmatically informed expectations on the part of the comprehender are leading factors in the first. With slight modifications, in the second, again the highly elaborate efforts on the part of the producer (due to the inherent constraints imposed by the situation of interlingual translation), as well as the comprehender's expectations, paly a leading role. The third stands apart in terms of pragmatic and contextual supporting factors, as it focuses on unrestrained spontaneous creative productions in unspecifiable immediate contexts, where the significance of the nature of the hypostatized concept stands out as the generator of creativity.

### 3.1 Heightened Effort on the Part of the Creator

The first case study focuses on a recognizably conscious effort on the part of the creator as its context is a vocabulary competition. The poem appeared in the Opinion section of the New York Times under Schott's Vocab op-ed portion on 19 April 2010. "Schott's Vocab is a repository of unconsidered lexicographical trifles – some serious, others frivolous, some neologized, others newly newsworthy. Each day, Schott's Vocab explores news sites around the world to find words and phrases that encapsulate the times in which we live or shed light on a story of note" (New York Times, 19.04.2010). This particular poem appeared in Schott's Vocab. A miscellary of modern words and phrases amidst a weekly competition for examples of and definitions of words among co-vocabularists. The actual author of the poem is not known but Schott ascribes it "to one J. H. Parker". Ben Schott quotes the poem as tribute to the winners of the weekly vocabulary competition. The original context of the composition and its initial appearance in front of the public eye remain unknown. The use of the poem as a tribute to the efforts of voluntary contributors to a vocabulary competition suggests that the poem is considered a worthy achievement of creativity. The pragmatics of praising the creative achievement of the unknown author determines the readers' expectations of something out of the ordinary and noteworthy, i.e. of something with heightened creativity.

A Very Descript Man, J. H. Parker

I am such a dolent man, I eptly work each day; My acts are all becilic, I've just ane things to say. My nerves are strung, my hair is kempt, I'm gusting and I'm span: I look with dain on everyone And am a pudent man.

I travel cognito and make A delible impression: I overcome a slight chalance, With gruntled self-possession. My dignation would be great if I should digent be: I trust my vagance will bring An astrous life for me.

The tongue-in-cheek poem is most revealing about the influence of three specific factors for the recognition of creativity of word formation products: i) intentional deviation from established routine – reanalysis of synchronically unanalyzable, i.e. considered simplex lexemes, by the lay speaker of the language who lacks detailed diachronic knowledge, followed by removal of presumed prefixes (some of which are diachronically actual prefixes), ii) conscious or purposeful creation on the part of the producer, who demonstrates heightened linguistic awareness and purposeful form manipulation and iii) (genre-specific) expectations on the part of

the comprehender for heightened conscious creativity on the part of the writer due to the nature of the communicative act (consuming poetry).

The poem itself reads as purposeful showcasing of deviations from established affixation routines in English. It experiments quite intentionally with the plasticity of word formation as a cognitive-linguistic routine demonstrating a distorted pattern of deaffixation<sup>2</sup> (Renner 2020) or if we are to use traditional labels it would come closest to the process of backformation, with which it shares movement of lexeme internal boundaries. The mechanics involve reanalysis in its simplest form, i.e., re-segmentation (Burridge and Bergs 2017: 107-109; Gaeta 2010; Haspelmath 1995, among others) and removal of an affix (which is synchronically not easily identifiable without specialized linguistic knowledge of the diachronic development of separate lexemes such as disdain, disgruntled, etc.). Despite the ease with which an analyst would recognize the process, the removal of elements does not exactly follow the routine affixal combinations in English, since many of the resultant elements can hardly be recognized as bases (or) roots with the potential to realize free standing lexemes. Even though dolent can be recognized as sorrowful (albeit a recognition dependent on the linguistic acumen of the reader as the word is identified as archaic), neither eptly, nor pudent can be recognized as legitimate lexical items or roots in English. The author quite systematically employs the novelty and unexpectedness dimension of creativity to invite the comprehender to put some extra effort into understanding both the message and the employed linguistic technique. By removing elements from quite familiar words, where some of the manipulated elements are synchronically homophonous with prototypical prefixes (e.g., dis-, in-, non-, im-), while others are quite arbitrary segments (e.g., -mund or -ane), the author pliably extends the rules of English affixation. Truncation surfaces as an across-the-board routinized process used by the author to sensitize readers of the poem to the malleability of words and the limitless potential for novel word creation by form manipulation. The human propensity for pattern completion, which is activated in decoding/retrieval (Hunsaker and Kesner 2013), and the Gestalt principle of the whole taking precedence over constituent parts (Wangemans et al. 2012) are immediately activated to substantiate the form manipulation with a parallel manipulation of the semantics, thus maintaining the biuniqueness of the linguistic sign, understood as form-meaning isomorphism (Ungerer 1999: 309). The conceptual recalibration is straightforward since the removal of what resembles a negative marker results in a positively

<sup>2</sup> Renner (2020: 5) uses the term "desuffixation" for "the deletion of a suffix or pseudo-suffix to bring about a change of lexical category". By extension here the term is transformed to deaffixation to include prefixation and to encompass meaning change with a preservation of lexical category.

marked concept. The fully intentional conceptual creativity of the author spans over diverse cognitive/semantic domains but utilizes a single technique – deaffixation. The semantic transparency and consistency – creating a positively marked concept from a presumed negative one, maintains an optimal balance between economy and transparency, with resultant iconicity of reducing form in parallel with deleting a semantic feature. The removed elements (some of which happen to be homonymous with prefixes or are diachronically such) are all treated as if they were synchronically functioning prefixes denoting the semantic feature "negation", a procedure supported by the typically prefixally composed negative forms of adjectives in English. The routinized knowledge of English speakers that the addition of the prefix im- to polite leads to the negation of the quality, i.e. the semantic feature "lack of", guides the reader of the poem into computing pudent and becilic as adjectives affirming the possession of a property and helps them interpreter the intended meaning. The paradigmatic semantic relation of oppositeness of meaning (i.e., antonymy/contrast, Murphy 2010: 117-123) eases the conceptual manipulation and helps the comprehender appreciate or at least acknowledge the creativity of the author.

### 3.2 Constrained Creativity

In the second case study, the intentionality and conscious efforts of the creator are constrained by the task at hand - rendering an English text into Bulgarian. Fully aware of the complexity of literary translation and the impossibility to comprehensively analyze the creativity of translating Shakespeare in any language, the focus is exclusively on the "thumping neological creations" (defined as such by professional translators and commentators of the translations, e.g., Pancheva 2013, 2014) found in the latest rendition of the four great tragedies (Othello, Macbeth, Hamlet and King Lear) in Bulgarian by Alexander Shurbanov (2012a). Not downplaying the individual cognitive and linguistic creativity of both the original author and the translator by restricting the data chosen for analysis, the parameters employed for the sampling are: lack of the formations in previous translations of the same text and their analytical singling out as "unfamiliar", "strange", "creative neologisms", "novel stumbling creations" (Pancheva 2013, 2014; Shurbanov 2012b) by literary critics, linguists and general readership. The choice of this narrow perspective on interlingual translation is congruent with its classical definition "as an interpretation of verbal signs by means of some other language" (Jakobson 2004: 139 [emphasis mine]) and with the definition of words as "affordances: they afford opportunities for individuals to experience the meaning of things and situations and events" (de Oliveira and de Souza Bittencourt 2008: 25).

Remaining again in the realm of individual (linguistic) creativity (of Shakespeare and the translator), I cherry-picked from the identified neologisms in Bulgarian a sample of the word formation products resulting from the most frequently employed process<sup>3</sup> in these renditions of the tragedies in Bulgarian – (re) affixation<sup>4</sup>. The creativity of the individual as a cognizing agent in translation is multiply constrained (by the original text, the socio-historical and cultural context of the translation process, etc.) in comparison to the freedom of poetic creations. Yet, the translator has at his disposal the possibility of highly selective choices in terms of interpretation of the original text and harnessing the expressive potential of the target linguistic system. Despite countless possible choice for the translator, words remain the smallest salient verbal signs for the readers of the translation. This salience is what Veale implicitly highlights (2012: 87 [emphasis mine]) in defining creative language as "a form of conceptual rewiring that allows us to influence, with words alone, how ideas are connected and emotions are channeled in the heads of an audience".

It can be hypothesized that the individual creativity of the translator regarding the utilization of linguistic resources in the receptor language is employed to match the conceptual (and/or) formal creativity of the source message and the creative efforts of the original author. As these complex correlations can hardly be operationalized for analysis, the choices of the translator of viable nonroutinized expressive means in the target language in an attempt to achieve results truthful to the original's effects are recognized as tokens of creativity. Shakespeare is notorious for his neological creativity (Garner 1987; Lederer 1991) and to reflect this and to do justice to the pragmatic, aesthetic and linguistic characteristics of the original, the translator has adopted the strategy of deviating from firmly established routines in the target language, relying heavily on analogy, combined with paradigmatic relations (all instances of affixing non-extant bases as in 3axaa [zahaja, 'start caring'], analysed below) and contextual framing (using an associated base or providing semantically suggestive cues in the surrounding co-text as in the case of omcmpeкава [otstrekava, 'dissuade').

<sup>3</sup> The texts abound in neological compounds but the complexity of their analysis far exceeds the scope of the current chapter. The Bulgarian texts are replete with neological verb prefixation, creative name renditions, etc., but affix manipulation is the most frequently employed process. It is quite natural for affixation to be the most frequently employed process as Bulgarian is characterized as a predominantly affixing language (Avramova and Baltova 2016). In the four plays 43 examples of affixally encoded creativity have been identified against 11 instances of creative compounding (Bagasheva and Stamenov 2015).

<sup>4</sup> The term is intended to capture both the reanalysis of a monomorphemic word as a derivative and the individuation of a presumed affix and the use of existing affixes on atypical bases or non-extant bases.

According to Roberts et al. (2021: 121) a "generative process with a special link to creativity that has undergone careful experimental examination is analogical reasoning", defined as "the reorganization of existing category knowledge to form ad-hoc or goal-derived categories to meet a particular need". The role of analogy (e.g., Blevins and Blevins 2009; Gaeta 2010; Fertig 2020; Fischer 2019; Itkonen 2005), more specifically four-part or proportional analogy, has recently been recognized also as an extremely powerful and almost ubiquitous process in language, including synchronic word formation (see Arndt-Lappe 2015 for an overview). Recognizing the pattern in a specific derivational model between the base and the derivative and applying it to establish the same pattern between a new base and a possible derivative or the reverse (a lexical item from which a possible base and a possible affix are produced as in the poem above), constitutes an act of creative interpretation. Such is the case in which the translator conscious of the systematic morphosemantic (directional) opposition between the inchoative/ inceptive or resultative 3a- [za-, 'begin doing'] prefix and the privative, reversive prefix om- [ot-, 'reverse the result of', 'accomplish'] in Bulgarian in such pairs as sanuua [zapisha, PREF<sub>accomplishment</sub>-write, 'enroll'] and omnuua [otpisha, PREFreversive-write, 'to delist, to drop out'], заключа [zaklyuča, PREF<sub>accomplishment</sub>-lock, 'to lock'] and отключа [otklyuča, PREF<sub>reversive</sub>-lock, 'to unlock'] relies that the perceived relational similarity will be strong enough to get activated in the pair *cmopuлa*<sup>5</sup> [storila, Ø-do, 'to do'] – *omcmopuлa* [otstorila, PREF<sub>reversive</sub>-do, 'to undo'] (the original is "undo't"). The reversive meaning maintained in the opposition between 3a- [za-] and om- [ot-] is assumed to work even in the case of  $\emptyset$  and om- [ot-]. This is possible due to the lexical semantics of the base which encodes accomplishment whose reversal is a natural conceptual correlate. This intralingual analogy in prefix use is heavily exploited, for example in using the conventionalized monomorphemic verb nodcmpeκasa [podstrekava, 'to incite, to instigate'] as a source of reanalysis, removal of a presumed prefix  $no\partial$ - [pod-, 'completion' / 'under'] and creating the novel reversive antonymic verb omcmpeκαθα [ot- + strekava<sub>presumed base, resulting from deprefixation</sub>, 'to dissuade'] (in the original this is "unprovokes") by presumably substituting a prefix, which does not actually figure in the base. The translator freely uses this strategy, since analogy correlates with a textual function of word formation defined by Bauer (2000: 836) as "the tendency for new words to occur in close textual proximity either to their

<sup>5</sup> The words analyzed are given in the form in which they appear in the translation but are glossed in the respective base form. All the examples are taken from the 2012 translation of the four tragedies by Alexander Shurbanov. In the paper the exact appearance of the examples is not indicated. A table with detailed information for all the excerpted examples, where both the play and the page are identified, can be provided upon request.

base words or to another derivative from the same base. This phenomenon most clearly helps the listener to interpret the new word, but it probably also helps the speaker to coin it". Thus the appearance of *nodcmpeкaвa* [podstrekava, 'to incite, to instigate'] (synchronically unanalyzable) naturally facilitates the recognition and acceptance of the new coinage *отстрекава* [otstrekava, 'to dissuade'], which in the absence of the former might be difficult to interpret. The privative and reversive meaning of the prefix om- [ot-], substituting the presumed prefix  $no\partial$ - [pod-] helps the perceiver to immediately recognize the meaning (which is also exploited in *откадят* [otkadyat, 'disperse smoke', PREF<sub>causative, reversive</sub> - ot-smoke] ("fire" in the original), *отродена* [otrodena, 'deprived of relatives'] ("unfriended" in the original), etc.).

A case similar to *nodcmpeκaea/omcmpeκaea* [podstrekava/otstrekava] is 3axas [zahaja, 'start caring']. Hexas [nehaja, 'do not care'] is not analyzable synchronically and the negative particle He- [ne, 'not]' is spelled together with the verb violating the general rule for verb negation in the language. Xas is hardly more immediately understandable than would be \*becile, unless as an antonym of imbecile. Substituting the presumed negative prefix He- [ne-] with the inchoative prefix 3a- [za-] results in a neologism, which can only be understood by contemporary readers with reference to *Hexas* [nehaja, 'do not care']. The reader/listener is again facilitated by the appearance of the new coinage 3axaa [zahaja] (in the original "would make thee care for me") in the immediate verbal context of the well-established and familiar *Hexas* [nehaja]. No matter whether such creations are embedded in a suggestive context or not, they will necessarily attract attention and make the cognitive prosody of the text choppy and have special effects on the readers.

The neologism начелник [načelnik, lit. PREF<sub>over</sub> – forehead-SUFF<sub>entity</sub>, 'visor'] ("visor" in the original) enters a paradigm-driven analogy. The productive model (or a series of exemplars) on which it is based can be traced in нагръдник [nagradnik, lit. PREF<sub>over</sub> – chest-SUF<sub>entity</sub>, 'breastplate'], нашийник [nashiynik, PREF<sub>over</sub>neck-SUFF<sub>entity</sub>, 'neckpiece'], намордник [namordnik, PREF<sub>over</sub>-muzzle-SUFF<sub>entity</sub>, 'muzzle']. Commenting on the decisions of a previous translator, Shurbanov (2004: 52-53) points out as a determining factor in such choices "the recognizability" of the components in the lexical choice and praises one of the previous translators for his avoidance of забрало [zabralo, 'visor'], an old Slavic word for visor, and his resorting to a creative neologism лицебран [licebran, 'face-guard'] (a compound formation), whose second component is easily recognizable and renders the meaning of the coinage transparent and includes the new word in a series of literary and obsolete words with the same positional constituent. Shurbanov's choice, instead, relies for its effectiveness on the series of semantically related lexical items for different types of body part covers and may be analyzed as a suffixal quasi phrasal compound based on the prepositional phrase на чело [na chelo, 'on the forehead'] + the suffix -*Huκ* [-nik] or alternatively as the result of circumfixation.

The list of noteworthy nonce-formations excerpted from the latest translation of the four great tragedies can be extended ad infinitum. The cumulation will be exclusively quantitative without any qualitative change, since the same word formation processes and mechanisms are employed. The comprehenders perceive them as creative since they involve deviations from or modifications of established routines.

### 3.3 The Creativity of Blends

The creativity of the products that are in general circulation and whose creator is unknown originate initially in the same manner as ones recognized for the creativity of the minds that created them, with the difference that in societal creativity the initial moment and immediate context of the creation are unknown. The inability to assign authorship immediately transfers creativity properties directly to the product.

Consequently, from the product's perspective in the complexity of the creative word formation act, linguists have ventured to assess the creativity of different word formation processes and blending has surfaced as the most ludic and comprehension-challenging (Hamans 2011; Kjellander 2018, 2019; Renner 2015; etc.) or the most creative one (Kjellander 2018; Gries 2012). The reasons for this high creativity ranking of blending can be read off some of the crucial features of blending as identified by Gries (2012: 145, [emphasis mine]): "not as rule-governed as other derivational processes; more creative than most derivational processes; usually involves conscious effort and wordplay, sometimes violating rigid morphological rules". The mere status of the process as "a phenomenon of word creativity, or [...] a regular and predictable mechanism of word formation, remains an open question" (Beliaeva 2019: 1). For the purposes of the current argument, blends are assumed to be lexical items arising from the non-morphemically motivated gluing of two (or more) base words into a single lexeme, with a unified meaning, resulting from conceptual integration, which is assumed to iconically mirror the structurally varied integration of the constituent elements participating in the blend (Beliaeva 2014; Kjellander 2018, 2019; Renner 2015; Ronneberger-Sibold 2010; etc).

One of the morphological rules that splinters (or blend constituents) violate is their non-discriminative behaviour in relation to the various kinds of elements they attach to: other splinters (e.g., robogasm), roots (e.g., mindgasm) or with inde-

terminate first element (e.g., floorgasm < floor+-gasm / flo- + orgasm). In other words, the secretion of a novel splinter, its utilization as a blending component and potential transformation to an affix-like element may be conceived as tracing the cline from word creation to full routinization of a word formation pattern. The more affix-like a splinter's behavior becomes, the less creative its products are considered (e.g., Bauer et al. 2019; Beliaeva 2019). This reduction of creativity, triggered by routinization, relates back to the wearing off of novelty, recognized as a property of creativity (see above).

#### 3.3.1 On the Conceptual Creativity of -gasms

#### 3.3.1.1 Theoretical Framework and Methodology

Evans (2016) contends that humans have at their disposal two semantic representational systems (the conceptual and the linguistic), which are characterized by qualitative differences, even though they constitute a co-evolved symbolic assembly for meaning construction in language. The two systems have different representational formats, and only the linguistic one can be interpersonally exchanged as it has a material, expressible side (Evans 2016: 1). Language is assumed to provide "an "executive" control function, operating over embodied concepts in the conceptual system. The essence of this function is to facilitate "access to knowledge representation – concepts – in the conceptual system, in order to construct meaning, during the course of communication" (Evans 2016: 2). Concepts in the conceptual system are directly grounded in the modalities of the perceptual, body-based experiences internally represented for an immersed experiencer (Barsalou 2008; Gallese and Lakoff 2005; Zwaan 2004; etc.). The dynamic view of concepts in the conceptual system is best summarized in the claim that "the concept is the skill or ability to produce a wide variety of situated conceptualizations that support goal achievement in specific contexts" (Barsalou 2005: 626). It is this flexibility of the conceptual system that underscores creativity in blending as a linguistic mechanism. For Evans (2016) the general-purpose conceptual system is analog in nature, while the linguistic conceptual system utilizes parameterized concepts. Parametric concepts provide "a level of schematic representation" which guides "how analog concepts are activated and, consequently, how simulations are constructed in the service of linguistically mediated meaning construction" (Evans 2016: 7). They provide access to large knowledge structures, streamlined by the specific linguistic encoding. Lexical concepts are associated with lexical items and function as alternative schematic evocative attentional cues for perceptual states encoded in memory. This coheres with the accounts of lexical semantics of both Fillmore (2006) and Langacker (2008), who insist that word

meaning is always relativized against larger knowledge structures, among which frames are central, Barsalou and Hale (1993: 131) contend, "Ihluman knowledge appears to be frames all the way down." Fillmore (2006: 378) defines the relation between frames, construal mechanisms and lexical items as a mutually implicating one: "[frame is] the structured way in which the scene is presented or remembered, we can say that the frame structures the word-meanings, and that the word 'evokes' the frame." Besides being central for the emancipation of lexical concepts, frames appear to be of relevance within word formation as well. This specific relevance is onomasiological in nature, i.e., it aids the human conceptualization capacity in forming parameterized linguistic concepts. As Koch (1999: 153, [emphasis mine]) recapitulates,

[f]rames, which are relevant not only to metonymies but also to certain types of word formation, can - and in fact, should - be defined onomasiologically, so that even cross-over links within one and the same frame realized in different languages, concepts which have not yet been expressed, senses of a given word which do not yet exist, and new words which have not yet been fanned can all be provided for.

This provides an operationalized methodology for studying meaning-form correlations from a word-formational perspective. Adopting the definition of lexical meaning provided by Evans (2016) and the methodology of onomasiologically informed frame semantic analysis (Fillmore 2006), below I provide the third case study of word formation creativity.

#### 3.3.1.2 The Nature and Functional Specialization of Blending

Blends are produced by gluing initially indeterminate constituents, employing the formal mechanism of composition. This allows users to produce complex concepts without the intervention of other parameterized linguistic elements. Blending provides the tools for maximal informativity with minimal linguistic parametrization. As a linguistic mechanism blending provides the formal side of "multistable meaning structures" (Kjellander 2019: 1) whose meaning computation requires cognitive creativity against formal similarity. Besides, blending specializes for the performance of two super-functions within word formation: the transconceptual and the compacting function. The latter two are defined within the "ecosystem view of English word-formation" (Renner 2020: 4) as two of the four basic lexical functions transcategorial, transconceptual, evaluative, and compacting, which word formation processes in English specialize for. The transconceptual function is defined as "the function of changing the conceptual (or denotative) meaning of an input" (Renner 2020: 7) and is likened to Plag's (2018) "lexical-expanding" or "labeling" function (Renner 2020: 7). The transconceptual function accounts for modifications of concepts in terms of subcategorization, complex concept formation and conceptual in-

tegration. Renner (2020: 8) expounds that "compounding and blending encode the transconceptual function." Meanwhile the compacting function is defined as shortening "a preexisting complex lexical unit without any alteration of its meaning" (ibid.: 8). In short, as a mode of maintaining "multistable meaning structures", blending allows for parallel manipulation of the formal and meaning sides of an isomorphically constituted lexical items and provide space for heightened creativity. As Kemmer (2003: 71) claims, blends are "words that are cognitively linked to pre-existing words which are co-activated when the blend is used". This complexity of blends, associated with reduced linguistic parametrization and inherent multistable meaning construal influence the perception of blending as a highly creative word formation process requiring cognitive efforts for interpreting its products with even standardly glued elements.

#### 3.3.2 The -qasm Family

The -gasm family has been rapidly expanding for the last twenty or so years (Barrena Jurado 2019 and Beliaeva 2019). Its cumulating members (attesting to type productivity (Beliaeva 2019), which within the F- vs. E-creativity space may be identified as growing routinization) raise interesting questions about the meaning contribution of supposedly the same splinter-constituent -gasm, which easily participates in such products as scorgasm, eargasm, foodgasm, and chillgasm. The creativity dimension in operation can safely be assumed to be exclusively conceptual since three formal parameters are identical: same process – blending, identical second constituent – -gasm. Most of the products are still considered neologisms (Bauer et al. 2019). The family can be conceived of as an intermediate constructional schema (on the types of schemas in construction morphology see Audring 2019; Booij 2007, 2010a, 2010b, 2016, 2017; Croft 2001; etc.) with a fixed second constituent:

[Xi gasm<sub>i</sub>]Nk  $\leftrightarrow$  [SEMfeeling of pleasure or satisfaction<sub>i</sub> with relation R to SEMXilNk

Such schemas are intermediate not only in relation to levels of abstraction and item specification, but also as occupying an intermediate position along the gradient scale between creativity and routinization. The schema has the power to coerce an interpretation of new -gasm types roughly as 'pleasurable experience/ enthusiasm in relation to X', but this coercion involves specific conceptual combinations, whose role is not insignificant. It is exactly in this combinatorial calculation that the creativity of *-gasm* blends flourishes. Considering that "similarity and recognisability of the source words" are constitutive properties of blends (Gries 2012 and Beliaeva 2014, 2016, 2019), it takes some cognitive effort to recognize the similarity

of and combine concepts such as 'shoe' and 'orgasm' or 'rage' and 'orgasm'. It is not a trivial matter for both a creator and a comprehender to fathom out how score. for example, combines with -gasm in parallel to ear + -gasm (and aurgasm), nerd + -gasm, and chill + -gasm. A facilitating factor is the high anthropocentrically motivated recognizability of the source word orgasm and the remnant subversive inuendo associated with its history as a taboo word (on the essence and functioning of "the organs and acts of sex" as taboo words and their fate in English see Allan and Burridge 2006). Experimental data (Arndt-Lappe and Plag 2013 and Beliaeva 2016) have revealed that recognizability of the source words is a strong psycholinguistically relevant constraint for blending. In the majority of -gasm blends both source words are easily recognizable (especially cases in which -gasm attaches to roots, e.g., foodgasm, eargasm, winegasm, etc.). Unlike the recognizability condition, the similarity condition is far more difficult to satisfy (or analytically detect). Its violation is responsible for the perception of creativity in relation to novel -gasm products, which arises from the unexpectedness of the concepts combined with the recognizable splinter and depends on the plausibility of conceptually associating the components. No straightforward dimension of conceptual similarity can be established between cry and orgasm, program and orgasm. To be more precise, the conceptual computation of blends is based on the cognitive constraint identified by Kjellander (2018: 163-164) as ease of schema transfer. Schema transfer belongs to one of the two proto models describing conceptual combinations (Medin and Rips 2005; Murphy 2002; inter alia). Psycholinguists have spilled much ink in trying to establish the cognitive mechanisms behind conceptual combination and their efforts at present seem to gravitate towards two core models: schema-based models and relational models (Medin and Rips 2005; Estes et al. 2011). In schema-based models a conceptual schema with well-defined slots (properties or participants in case of event schemas) is established by one of the constituents (in compounding) and gets filled by relevant properties or participants from the schema of the second constituent (e.g., Murphy 1988; Wisnewski 1997). Relational theories on the other hand (e.g., Gagné and Shoben 1997; Gangé and Spalding 2006, 2015) emphasize the establishment of a plausible relation in which the constituents act as arguments. Or as Jones and Golonka (2012: 2) claim, the thematically related concepts play complementary roles in a given action or event and are amenable to a "script" interpretation. A thematic analysis of a compound will interpret *flu virus* as a virus causing flu (Medin and Rips 2005: 51), while a schema based one will interpret truck soap as soap for cleaning trucks (Medin and Rips 2005: 51).

Understanding the meaning of blends requires a plausible cognitive scenario of concept combination. Collapsing the two overarching models of concept combination in the psycholinguistic literature, Gagné (2000: 384) claims that both "relation interpretations and property interpretations" involve a process whereby "the

selection of a relation is followed by an elaboration process in which the properties/features of the newly formed combinations are derived". This is exactly the type of conceptual elaboration that according to Fillmore a frame coerces and aids in computing meaning. Frames (Fillmore 2006) as concept-language associated knowledge structures and as patterns of packaging cognition and the general cognitive principle of indexicality (cause-effect relations) (Ciecierski 2021) seem to be the most facilitatory ones in conceptual combinations in context. Kjellander (2019: 3) adds to these ambiguity as a major cognitive factor, where ambiguity is understood "as lexical structures allowing, or even driving, meaning construal involving unresolved semantic conflicts". Such semantic conflicts may be identified as mismatches whose resolution is achieved through coercion (Ziegeler 2007: 992). The necessity to identify and apply appropriate cognitive mechanisms to resolve the mismatch for successful communication to occur lies at the heart of creative linguistic processes (Bergs 2019). The creativity in the -gasm family is associated with the unspecified fusion of arbitrary parts (from whole words to chance splinters) of source words with a semantically more specific element, where the fusion coerces a mixture that has to be conceptually computed with creative effort, unlike in other blends, which "'mix' random parts of existing lexemes ('splinters') – structurally and semantically – and there is the additional semantic component blending/mixture" Fandrych (2008: 111), whose hybridity is iconically matched with the formal mixture (e.g., labradoodle). What renders most -gasm blends creative against their formal uniformity is the complexity of the *floating*<sup>6</sup> concept resulting from the cognitive efforts for "multistable meaning construal" (Kjellander 2019: 22 [emphasis in the original]).

The positionally fixed constituent (the splinter -gasm) is reported to derive from the source word orgasm (Beliaeva 2019: 10) which was borrowed into English in the "17<sup>th</sup> century from New Latin *orgasmus*, from Greek *orgasmos*, from organ - 'to mature, swell'" (Collins Dictionary). The Online Etymological Dictionary describes a semantic differentiation and specialization of the borrowed word, "1680s, 'sexual climax, the acme of venereal excitement', from French orgasme or Modern Latin orgasmus, from Greek orgasmos – 'excitement, swelling', from organ – 'be in heat, become ripe for', literally 'to swell, be excited', related

<sup>6</sup> A floating concept is a rich and dynamic cognitive structure, which arises when "a new concept is forged out of the conceptual substance of two base concepts and from additional conceptual input. Especially with prototypical compounds whose attributes do not suggest an obvious conceptual link with the other concept, this is a difficult job" (Ungerer 2003: 564). Although the definition is provided for N + N compounds, the mechanism of composition described applies with double force to blends, where truncation of a source word further complicates conceptual computation.

to orge - 'impulse, excitement, anger', from PIE root \*wrog- 'to burgeon, swell with strength'. Also used in 17<sup>th</sup> century of other violent excitements of emotion or other bodily functions; broader sense of 'immoderate excitement or action' is from 1763" (Etymonline).

This semantic differentiation and specialization in the word from which the splinter has been secreted is reflected in the members of the *-gasm* family in the 21st c., which can analytically be grouped into two overarching subschemas – pleasure in any sense-related realm (e.g., eargasm, foodgasm, eyegasm, and metonymic extensions thereof (of foodgasm) beergasm, fruitgasm, etc.) and "excitement, enthusiasm about something" (e.g., bookgasm, postergasm, vetogasm, neologasm, etc.). The subschemas can for analytical purposes be modeled via the method of frame semantics, which necessarily involves the study of the multidirectional backgrounding/foregrounding relations between concepts and the lexical items evoking and evoked by them. A frame for the purposes of semantic analysis is understood as a "system of concepts related in such a way that to understand any one of them you have to understand the whole structure in which it fits; when one of the things in such a structure is introduced into a text, or into a conversation, all of the others are automatically made available" (Fillmore 2006: 373). Frames constitute the gestalts against which the multistable semantic relations within a complex word are established.

The frame semantic analysis of 173<sup>7</sup> gasms confirms that there are two basic subschemas: a) 'physical or sensual pleasure' and b) 'excitement or enthusiasm about'. The subschemas differ in terms of the nature of the index i on the specified X constituent in the intermediate construction schema and the nature of R. The two subschemas within the -gasm family can be summarized in the subschemas:

[Xi gasm<sub>i</sub>]Nk  $\leftrightarrow$  [SEMgasm<sub>i</sub> with *R physical or sensual pleasure* to SEMXi]Nk [Xi gasm<sub>i</sub>]Nk  $\leftrightarrow$  [SEMgasm<sub>i</sub> with *R* excitement or enthusiasm *R* to SEMXi]Nk

These two subschemas are associated with different frames, and these motivate the interpretations in the combinations of blend constituents of *-gasm* formations. The respective frame coerces the most plausible or cognitively least demanding interpretation that fits the Xi constituent into the relevant frame. The FrameNet (https://framenet.icsi.berkeley.edu/) provides the following descriptions of the respective frames:

#### **PLEASURE**

<sup>7</sup> The data (173 -gasm blends) have been harvested from Barrena Jurado (2019), Beliaeva (2019), COCA, GloWbE, enTenTen, and Urban Dictionary.

The words in this frame describe an *Experiencer*'s emotions with respect to some Content. Although the Content may refer to an actual, current state of affairs, quite often it refers to a general situation which causes the emotion.

Content is what the Experiencer's feelings or experiences are directed towards or based upon. The Content differs from a Stimulus because the Content is not construed as being directly responsible for causing the emotion.

The *Topic* is the area about which the Experiencer has the particular experience.

The Frame Element Expressor marks expressions that indicate a body part, gesture or other expression of the Experiencer that reflect his or her emotional state.

#### And of EXCITEMENT/ENTHUSIASM, respectively

an Experiencer who is feeling or experiencing a particular emotional response to a Stimulus or about a Topic. There can also be a Circumstances under which the response occurs or a *Reason* that the *Stimulus* evokes the particular response in the Experiencer.

The Reason is the explanation for why the Stimulus evokes a certain emotional response.

The Stimulus is the person, event, or state of affairs that evokes the emotional response in the *Experiencer*.

The differences between the two frames are captured in *Expressor* specialised for the Pleasure frame and Reason for the Enthusiasm frame. From this ensues a difference concerning conceptual combinations: the first subschema does not require extensive cognitive efforts, since it is easy to calibrate conceptually how a pleasurable feeling is associated with the Stimulus, Expressor or Topic. Experiencer is a bit more complicated but does not pose a real "intellectual challenge" in Kajellander's sense (2019: 22). The Experiencer in the Pleasure frame requires more extensive frame fusion as it is not immediately obvious which specific property of the *Experiencer* is elaborated. Consider beergasm<sup>8</sup>, chocogasm, eargasm and mouthgasm. In the first two Stimulus is easily detectable, and people effortlessly recognize the meaning of the blends as 'pleasure of drinking beer' or 'eating/tasting chocolate'. In the second pair the cognitive effort is a bit more extensive since there is the need for an intraframe metonymic transfer to the Expressor 'ear' and 'mouth' as the receptors for the pleasurable experience - 'a sense of pleasure derived from listening to some-

<sup>8</sup> Meaning definitions of all members of the -gasm family used in the chapter are provided in Appendix 1.

thing, particularly music. A sense of pleasure derived from physical stimulation of the earlobe or ear canal, such as when using a Q-Tip to clean the ear' and 'a sense of pleasure derived from eating food which tastes good'. In the EXCITEMENT framedriven and supported meaning computation of nerdgasm, fangasm, geekgasm, etc., the Experiencer frame element is saturated but the fixation of the multistable conceptual construal is not as straightforward as in the case of Expressor. While in the Expressor script, the relation of the experiencer is directly evocated and is sensory in nature, in the Experiencer script, the nature of the experiencer is underspecified and remains semantically multistable and opened to interpretation, as it is basically similative, encoding a type of experience resembling the one a nerd experiences when enjoying their niche interest. First, the sensory pleasure meaning is overridden by the secondary, derived meaning of enthusiasm, hence the -gasm family follows the meaning differentiation and specialization of the source word for the splinter. Second, the focus is on the nature of the experience: nerdgasm - 'a thrill of excitement felt in response to something relating to a subject in which a person has an obsessive interest', which leaves a wide margin for interpretation, which can be only contextually narrowed down to a relevant unitary meaning, since the nature of the experience is dependent on the subject of interest.

The multistability of the construal can also be inferred from the fact that all possible slots can be and have already been saturated as exemplified below:

Experiencer - nerdgasm, horgasm, herogasm, Berbgasm Content – laughgasm, chillgasm, coregasm Stimulus – beergasm, beefgasm, cakegasm Topic – vogasm, Berbgasm, deathgasm Expressor – eyegasm, mouthgasm, footgasm Reason – postergasm, bookgasm, ragegasm

The most challenging conceptually and necessarily requiring multistable meaning construal are the gasms in which Reason determines the nature of R (especially when there is a clash or incongruity between the splinter -gasm and the left constituent such as in ragegasm). The challenge of conceptual combinations with Reason can be illustrated with revealing examples. The following three -gasm blends, incorporating Reason, illustrate the required creative effort (or the need for specific shared background knowledge) for understanding gasms as these are recorded in Urban Dictionary (on the use of crowdsourced dictionaries as a source for analyzing word formation phenomena see Cotter and Damaso 2007 and Sajous, Josselin-Leray and Hathout 2018):

#### Postergasm

1. n, A "Discordian" Project / activity involving putting posters and stickers up all over the place. Meme bombs, surreal phrases or images, and Operation: Mindfuck pages are preferable. 2. v, an expression of joy relating to postergasm.

When I realized I wasn't the only one in my neighborhood putting up posters, I had a POSTERGASM. by Cramulus June 4, 2008 (https://www.urbandictionary. com/define.php?term=postergasm)

#### Bookgasm

Getting excited from sneaking Discordian, eccentric, alternative, controversial, pornographic or illegal books or tracts into places they would never be found. Also the act of introducing such books. Books may be brought in or donated, often hidden with other books to hide their true nature. Popular places to place books and tracts are public libraries, jails, prisons, houses of worship, church pews, motels, hotels, book stores, public restrooms, park benches, or almost anywhere in China, Iran or Iraq.

I just snuck The Autobiography of Minnie Rae into the jail in Mad Dog, Texas, and OMG! I'm having a bookgasm! (https://www.urbandictionary.com/define. php?term=BookGASM)

#### Ragegasm

1) A fit of unrestrained [...] anger. One step up from apoplectic rage.; 2) The climax of make-up sex where the 'make-up' issues haven't been completely resolved and one or more of the involved parties are still angry.

My girlfriend threw me out, I stubbed my toe and then dropped my wallet down the grid. I had a complete ragegasm in the middle of the street. by TheNexus May 19, 2011 (https://www.urbandictionary.com/define.php?term=Ra gegasm)

All three examples belong to the EXCITEMENT subschema in the -gasm family. The first two look like the result of saturating the *Topic* role, while the third of the Content one. Their meaning, explained by users in Urban Dictionary, reveals that it is the *Reason* role that is saturated in all of them. All three pose an intellectual challenge (in the sense of Kjellander 2019) for figuring out the fitting interpretation of the multistable meaning construal. The most straightforward interpretation of the concept combination (the reading of R in the composition of the blends) in the first two may be 'seeing a nice poster or reading a nice book causes pleasure'. The lexical meaning of postergasm, different than this straightforward R interpretation, opens a wider script and encodes rich content which may contextually be easily interpretable, although it might require familiarity with the Discordianism movement (variously defined as a counterculture, a religion or social commentary). The same applies to bookgasm, where the excitement is associated with sneaking in books with marked content. The recognition of creativity derives from the complexity of the hidden scenario and the reference to a culturally specific practice. The creativity of ragegasm stems from the clash of the concepts that are combined in the blend. No specific (communally restricted shared) knowledge is necessary, but cognitive effort is required for resolving the incongruous combination of antonyms. Besides, the emotive-affective nature of the concepts combined further enhances emotional engagement and the perception of creativity. The discordancy of the concepts requires resolving the incongruity and computing the meaning of the blend. The semantics of 'excessive degree' in the first sense of the blend is not immediately derivable from the incongruous clash. The need to reconcile the two concepts into a meaningful unity invites an elaborate scenario in which the -gasm part via its association with the source word for the splinter implies an end or highest point and leads to the meaning of excess. The incongruity resolution in the second sense of the blend, which conforms to the PLEASURE frame subschema takes a different route: the pleasure is derived while in a rage. This interpretation does not correspond to the saturation of an immediately recognizable frame slot. The slot that ranks highest in saturation is *Content*. The interpretation requires less cognitive effort as it associates with the initial meaning of the splinter and alludes to the initial inuendo.

A further space for creativity is the possibility for recognizing different source words for the left constituent as in exploragasm (interpreted by Barrena Jurado [2019]) as Experiencer: explorer + -gasm, i.e., whatever an explorer feels when discovering something significant or alternatively it could have been derived from exploration + -gasm and may be interpreted as the enthusiasm for exploration, an attitude to life focused on exploring novel things). Even when the constituents are clear, multiple interpretations are possible due to the indeterminacy of the R link (and the chosen frame slot for saturation), as in Berbagasm, which may be assumed to express the pleasure Berbatov feels when scoring a goal (Experiencer) or it can have a Content interpretation of experiencing pleasure when Berbatov scores in a match or when just watching him play or even have a similative meaning, i.e. someone experiencing feelings imitative of the ones Berbatov has when scoring a goal (which explains the appearance of the Berbgasm lexeme with different saturated frame roles in the list above). It is exactly this pluripotentiality of conceptual combinations that still renders gasm blends creative (non-routinized production of new types or non-conventionalized interpretations), requiring cognitive effort for both creator and comprehender.

The -gasm family expands by left constituents derived from source words fulfilling any of the identified frame constituents and fragments into semantic niches (understood as defined by Hüning (2009: 183). Semantic niches are subgen-

eralized unities of "word-formation processes [which] often show semantic fragmentation: in the course of time, they develop 'semantic niches', i.e., groups of words (subsets of a morphological category) kept together by formal and semantic criteria and extendable via analogy". Such extensions are possible within each subschema via hyponymic relations among the left-hand source words. For example, in the first subschema, there is a whole series of *foodgasms*, which may be generalized into a consumption niche: beergasm, soupgasm, beefgasm, cakegasm flavourgasm, chocogasm, deligasm, beefgasm, Swirlgasm, etc. In the second subschema the generalized schema can be termed the occupation niche: blogasm, bookgasm, astrogasm, yogasm, wordgasm, etc., where the leftmost constituent names an activity with which the Experiencer of the excitement/enthusiasm is dealing (either as permanent occupation, a hobby or a chance activity) and which functions as the Stimulus. The family seems to have developed semi-hyponymic sets, i.e., ones based on metonymy-based frame switches (e.g., Biebergasm, Ga-Gasm/Gagasm, guitargasm, bassgasm, etc.), which testify to reduced creativity and enhancing productivity and routinization. None of the members of the family are recorded in OED (19 August 2023) and varying frequencies in different sources (e.g., COCA, GloWbE, enTenTen, for details see the frequency table in Barrena Jurado 2019 and Bauer et al. 2019, Belieaeva 2019) are reported. All -gasm products are qualified as neologisms (Bauer et al. 2019). Though advanced on the path of routinization, -gasm blends still retain properties that render many of them creative.

Their spontaneous creation and comprehension are aided by the common cognitive and communicative strategies. At the disposal of language users for diverse conceptual-linguistic human behaviors are various recurrent cognitive operations (for the use of cognitive operations in cognitive linguistics for analytical purposes see Anderson 2010; Ruiz de Mendoza 2011; Ruiz de Mendoza and Galera 2014: 92–96). Among these varied cognitive operations, the following have been identified as playing a significant role in establishing and interpreting meaning relations within lexical blends; parameterization (both metonymic and nonmetonymic), generalization, contrast, resemblance, strengthening, expansion, and reduction (Peña-Cervel 2022). In the gasm family most frequently utilized seem to be parametrization, contrast, resemblance and expansion. Their wide application in language processing (Ruiz de Mendoza 2022) aids communicative intercomprehension despite unexpected source word choices for filling the first slot in the intermediate -gasm schema.

# 4 Contextualizing the Case Studies in the **Creativity Debate**

The differentiation between word creation and word formation (see Ronneberger-Sibold 2010, 2015) is temporal in nature and does not involve any qualitative difference between the formal mechanisms and cognitive operations involved. Each lexical item starts as a "product of nonce-formation" (Schmid 2008: 3) associated with a "floating concept" (Ungerer 2003: 563) and (usually) ends up as a conventionalized lexeme encoding a hypostatized concept (Schmid 2008: 3). This interpretation runs parallel to F- and E-creativity, or as the recognition of creativity and routine as the enclosing extremes of a scale. Drawing the parallel allows one to reinterpret word creation and word formation in the same manner as the extreme points of a gradient between nonce-formation and a conventionalized lexeme as fully corresponding to the endpoints encapsulating the complex ontological dynamicity between creativity and routine.

The formal mechanisms are constant and routine-bound, since a condition sine qua non for intercomprehension is a precarious balance between conventionalization (in terms of the product), routinization (in terms of shared behaviours) and creativity whereby effectiveness (mutual understanding) strives to constrain novelty. Most flexible for the hypostatization of new concepts or for naming familiar concepts in novel ways appear to be reanalysis + deaffixation, affixation and blending. The common feature across these processes is conceptual flexibility and formal experimentation.

It remains extremely difficult to discriminate between E and F creativity since "the cumulative production of ever more complex concepts and artifacts is unique to humans" (Roberts et al. 2021: 102). This cumulative effect and the essence of language as an emergent complex adaptive system significantly impede the teasing apart and analytical modeling of contributing factors, interrelated agencies and agents, processes and products, converging forces in creativity in distributed cognition and its inception in micro events (interpersonal communicative acts) with rippling consequences.

It is hard to deny that the "individual speaker is the central factor with regard to all linguistic phenomena" (Koefoed and van Marle 2000: 311), but it takes two to tango and a community of practice to recognize the tango, practice it and appreciate its beauty. Only when the comprehender is able to reverse-engineer the mechanisms employed by the creator of the unexpected product and establish the motivational links can creativity of a linguistic element be recognized and registered. This is a requirement of the effectiveness dimension in the constitution of creativity (at least in the scenario with a targeted balance between originality/novelty and effectiveness as in the standard definition of creativity, see Runco and Jaeger 2012). The aesthetic dimension (positive vs. negative valuation) of the product in an act of creativity imposes another dimension of distinguishing between creative and wrong, which lies entirely within the perception side and may encompass behaviors ranging from genuine creative acts to criminal deeds (see Uhrig 2020).

A 'creative' product or any neologism is not a qualitatively different type of word, rather it is the spatio-temporal uniqueness within the immediate context of co-semiosis in the initial fabrication of a word whose socio-pragmatically determined diffusion will result in varying degrees of entrenchment and conventionalization leading to routinization (for a detailed elaboration of the complex interaction of all agents and dimensions involved see Schmid 2020; Schmid this volume) that is recognized as creative. Such "lexicogenetic' mechanisms [...] involve changes through which a concept, regardless of whether or not it has previously been lexicalized, comes to be expressed by a new or alternative lexical item" (Geeraerts 2010: 26). The sharedness in the execution and perception of creativity between creator and comprehender has been succinctly summarised by de Beaugrande (1978: 9 [emphasis mine]), as "the process whereby we become aware of the present and possible conditions for the organization of cognition, and whereby we enable others to reenact that awareness". Creativity is always embedded in the aesthetics of the specific context and despite the analytically recognized and modeled differences between psychological (individual) creativity vs. societal (historical/linguistic) creativity the mechanisms are the same.

The measurable dimensions of creativity are novelty and added value calculated within the relationship between creator, product and perceiver, which can be modeled analytically in attitudinal studies, psycholinguistic experimentation, computational modeling and corpus-based statistical analyses. The greatest difficulty in studying creativity in word formation arises from the ontological dynamics of creativity and routine as one of perpetual recycling.

The gradient concept of novelty can only be utterly comprehended in the context of the dimensions of conformity, since creativity understood as one of its features, novelty, actually defies some of these dimensions to differing degrees. In the Entrenchment-and-Conventionalization (EC) model of language (Schmid 2015, 2020), the basic forces involved in the maintenance of equilibrium of language, which is in constant flux between stability and change, are in perpetual motion as in a simple Tinguely machine (Schmid 2020: 4). Creativity starts within breaking up routine within entrenchment (individual's linguistic knowledge and habits), introducing novelty and moving away from conformity and via usage expands over into the realm of conventionalization via diffusion (communal usage habits and cognitive knowledge), where the endpoint is a fully established lexeme. Within this model novelty may be measured by degree of violation of a conformity type. The conformity types (Schmid 2020: 298) are: onomasiological conformity, semasiological conformity, syntagmatic conformity, contextual conformity, and community-related conformity. Various kinds of associations (which constitute different levels of associative networks) establish seamless continuity and correlations between the conformity types: symbolic associations, paradigmatic associations, syntagmatic associations and pragmatic associations. Most tightly knit are onomasiological and semasiological conformity, whose relations are supported by symbolic and paradigmatic associations (Schmid 2020: 298). These associations are driven and fed by

- cognitive forces: similarity, contiguity, salience, categorization, gestalt processing;
- pragmatic forces: settings, participants, event types, intentions, goals;
- emotive-affective forces: egocentrism, emotion, need for admiration, fun, empathy;
- social forces: social networks, identity, solidarity, peer-group pressure, prestige (Schmid 2015: 9).

The association types are subservient to entrenchment or the complexity of processes via which language "happens" in an individual's mind (Schmid 2015: 6): "association, routinization and schematization." The conformity types are subservient to the societal (communal) processes of the emergence of language "subsumed under the label conventionalization: innovation, co-adaptation, diffusion and normation" (Schmid 2015: 6). The two are interconnected "by the feedbackloop processes of usualization and diffusion" (Schmid 2020: 298). Extrapolating these to the analysis of creativity in word formation, we can notice that in the creation of a novel lexical item semasiological conformity is violated and a novel onomasiologically driven symbolic association is established, which may or may not get communally propagated via diffusion. The understanding of the novel lexical item necessitates the establishment of a novel syntagmatic association within the individual communicative act, and the initiation of a novel co-textual and contextual links. The novelty gradient (along which change occurs) is postulated to encompass "complete novelty" (under which "creative coining" is subsumed), "salient innovation" (or "highly unconventional variants of variable patterns") and "non-salient innovation" ("new words formed by recourse to a productive word-formation pattern") (Schmid 2020: 310-311). The three case studies that we presented above, showcase "salient innovation" in the novel types of -gasms and "salient innovation" in the tongue-in-cheek poem and the translation of Shakespearean tragedies into Bulgarian), where the novelty results in non-routine recombinance patterns of elements, employing fully productive processes. This leads to the conclusion that for novelty to occur or register routinized linguistic habits (be they individual or societal) have to be creatively (originally and effectively) violated.

Routine is a precondition for creativity as without shared cognitive and communicative routines users cannot achieve mutual comprehension, while creativity has a natural temporal dimension where replications in instances of cosemiosis lead to conventionalization and routinization in the societal dimension, as well as entrenchment from the individual's cognitive perspective.

### 5 Conclusions

The three cases studies suggest that there is no correlation between the separate parameters of perceived or imputed heightened creativity and specific creativity marked strategies for expressing/encoding it linguistically. In relation to word formation phenomena individual creativity, societal creativity, product creativity and conceptual creativity cannot be easily teased apart as they constitute complexly intertwined cogs in the mechanism of language as an emergent, complex adaptive system, since all of them are involved in word formation creativity.

There are no sufficient grounds for ranking the separate word formation processes in terms of creativity as any of the existing ones may be employed creatively under the opportune pragmatic and contextual circumstances. As the analyses of blending indicates, even though it heightens creativity when present, individual conscious and effortful creativity is neither a necessary, nor a sufficient condition. The properties which surface as necessary and uncancellable for the recognition of creativity are the attention-grabbing properties of a lexical item (which involves violation of isomorphic relations or established routine mappings between meaning and form) and the presence of a clash (incongruity) or contrast in the concepts involved in the hypostatization of a novel one. For any of these to operate interactive relations between creator, comprehendor and product in a specified context are minimally necessary.

Interpreting the diverse theoretical notions employed in the analysis of creativity in language (F- and E-creativity, word creation vs. word formation, nonceformation vs. conventionalized (listed) lexeme, etc.) leads to the conclusion that creativity and routine in word formation constitute a temporal scale enclosing the first use of a new type and its full conventionalization, potentially measurable by productivity and type and token frequency.

## **Appendix 1**

soupgasm Swirlgasm

## Glossary of -gasms Arranged into Two Sub-Schemas and Alphabetically within Each Group

#### A) The Pleasure Frame Based Sub-Schema

[Xi gasm<sub>i</sub>]Nk↔[SEMgasm<sub>i</sub> with R physical or sensual pleasure to SEMXi]Nk

bassgasm the pleasure when one hears a bass riff/solo that is awesome beyond belief beefgasm A) the process of having an orgasm while eating an Arby's roast beef sandwich; B) an Arby's roast beef sandwich. beergasm the pleasure of consuming beer cakegasm a mind blowing double orgasm induced by cakes chillgasm an orgasm as a result of being really, really relaxed the pleasure of eating chocolate chocogasm an orgasm that happens while you're doing a core exercise or workout cor(e)gasm deligasm pleasure from eating great pastrami, corned beef sandwiches at a good Jewish, kosher or other kosher-style deli restaurant eargasm a sense of pleasure derived from listening to something, particularly music. A sense of pleasure derived from physical stimulation of the earlobe or ear canal, such as when using a Q-Tip to clean the ear a feeling of pleasure derived from a sight evegasm floorgasm a feeling of excitement from dancing on a dance floor fruitgasm to devour any fruits that's so overfuckingwhelming unbelievable sweet which simulates orgasms quitargasm A) having an orgasm while playing an incredible guitar; playing such a sweet guitar that your fingers feel so good, its almost sexual; B) becoming sexually aroused while listening and or watching someone shred on a guitar a sense of pleasure derived from eating food which tastes good mouthgasm robogasm to have an orgasm with a machine or robot or other sex replicant

pleasure obtained from consuming soup

the pleasure of eating Swirl yogurt

<sup>\*</sup>Any food or drink may become a constituent under this sub-schema and establish hyponymic relations with *foodgasm*.

#### B) The Enthusiams Frame Based Sub-Schema

[Xi gasm<sub>i</sub>]Nk↔[SEMgasm<sub>i</sub> with R excitement or enthusiasm R to SEMXi]Nk

astrogasm is about being and having an explosion of excitement about the stars, cosmos,

and life

stargasm when you see a shooting star you weren't expecting and get excited

the feeling of euphoria or excitement derived from watching football player Berbgasm

Dimitar Berbatov play a good match.

Biebergasm feeling of excitement when listening to music by Canadian singer Justin Bieber the feeling you get when you check your blog stats and you see WAY more visitors blogasm

than you expected.

A) feeling of enthusiasm experienced when reading a book.; B) getting excited bookgasm

> from sneaking Discordian, eccentric, alternative, controversial, pornographic or illegal books or tracts into places they would never be found. Also the act of introducing such books. Books may be brought in or donated, often hidden with other books to hide their true nature. Popular places to place books and tracts are public libraries, jails, prisons, houses of worship, church pews, motels, hotels, book stores, public restrooms, park benches, or almost anywhere in China, Iran or Iraq

a strong feeling of excitement brought on by anything dark or of death, such as

music and art felt by death enthusiasts

the feeling of excitement of an explorer explorgasm

fangasm A) the feeling or action resulting from experiencing a particularly exciting event

> within the canon of a certain fandom, especially an event that has been anticipated for a long period of time, has a particular amount of tension building up to it; B) any extreme outburst of energy related to one's obsession with a fandom or an aspect of the fandom, especially when seen in random unrelated situations; C) to experience a

fangasm

deathgasm

horgasm

laughgasm

when two foods combined create a new never before tasted flavour. flavourgasm Gagasm the act of receiving an orgasm from seeing or hearing lady Gaga perform.

geekgasm a feeling of intense excitement over something geeky

herogasm an annual festival in which most of Vought-American's superheroes meet secretly

> at a remote tropical resort for a company-sponsored orgy; The euphoric feeling after getting 100% on a song on Guitar Hero. Identifiable by high pitched screaming, jumping, and the need to show others one's achievement.

feeling of pleasure or excitement experienced by (Torstein) Horgmo that "ooh" orgasm noise a person makes after a really good laugh

an orgasmic-like feeling of excitement from thoughts mindaasm neologasm excitement form coining or finding a neologism

nerdgasm a feeling of intense excitement felt by someone considered to be a nerd, esp. when

caused by something relating to his or her leisure interests such as a new piece of

technology, computer game, science fiction film, etc.

A) a fit of unrestrained orgiastic anger. One step up from apoplectic rage; B) the ragegasm

climax of make-up sex where the 'make-up' issues haven't been completely

resolved and one or more of the involved parties are still angry

a feeling of excitement form imposing a veto on something or someone vetogasm

A) when one is overwhelmed by the influx of literal ideas; B) a feeling of excitement wordgasm

or enthusiasm when using or reading a word or when reading a text that

somebody has written

the euphoric, orgasmic sensation that you feel as if you've just had an intense yoqasm

moment of intimacy. or similar to the deep love that rocks your body when you

take a bite of belgian dark chocolate

\*No clear tendency for predicting hyponymic elaborations can be detected as almost anything can evoke enthusiasm in a plethora of ways.

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