Compounds and Culture: Conceptual Blending in Norwegian and Russian*

Tore Nesset and Svetlana Sokolova

Abstract

This study explores compounds from the perspective of conceptual blending (conceptual integration), and argues that the meaning of compounds arises through the interaction of three levels: (i) input spaces established for the head and non-head components, (ii) a blended space involving compression and emergent structure, i.e. elements not imported from the input spaces, and (iii) the language system as a whole and the culture this system is part of. With regard to (iii) we propose the "Culture-to-Compound Hypothesis", according to which compounding can be recruited to represent culturally "novel" content in languages where compounding enjoys a peripheral status in the language system. The examples discussed in the article come from Norwegian (a Germanic language where compounding is a central word-formation mechanism) and Russian (a Slavic language where compounding is more marginal in the language system).

1. Introduction

In cognitive linguistics, it has been suggested that compounds are blends (Benczes, 2006; Nesset, 2016 and 2017a), which entails that the meaning of compounds arises from the interaction of two or more input spaces and a blended space.[1] In this paper,

* We would like thank Laura A. Janda and other members of the CLEAR (Cognitive Linguistics: Empirical Approaches to Russian), as well as two anonymous reviewers and the audience at the International Cognitive Linguistics Conference in Tartu, 2017, for valuable input on earlier versions of this article.

[1] Notice that "blend" is used in two different ways in contemporary linguistics. Throughout this article the term is used in Fauconnier & Turner's (2002) sense about the conceptual integration of information from a number of input spaces into a "blended space". We will not use "blend" as the name of a word-formation mechanism, whereby parts of two words are combined, as in *motor + hotel = motel* and

we provide further evidence for this view, arguing that compounds display important characteristics of blends such as "emergent structure" (structure not present in the input spaces) and "compression" (the transformation of "diffuse and distended structures […] so that they become better suited to human-scale ways of thinking", Turner, 2006, p. 18). However, in addition to this we suggest that the meaning of compounds depends on the language system as a whole and the culture the system is embedded in. In this regard, we propose the "Culture-to-Compound Hypothesis" whereby compounding can be recruited to represent culturally "novel" content in languages such as Russian where compounding has a marginal status in the language system.

Our argument is structured as follows. After a brief discussion of conceptual blending on the basis of Norwegian compounds in section 2, we go on to explore emergent structure and compression in sections 3 and 4. Section 5 introduces the "Culture-to-Compound Hypothesis", which is supported by data from two case studies from Russian, laid out in sections 6 and 7. Section 8 summarizes the contribution of the article.

2. Compounds as blends

One of the hallmarks of Germanic languages is the central role of compounding as a productive word-formation mechanism, whereby speakers combine the stems of two or more words to form complex words (Clark, 1993; Olsen, 2015). Thus, in English the

smoke + fog = smog (see e.g. Bauer, 1983, Plag, 1999, Bauer & Huddleston, 2002, Kemmer, 2003, and Renner et al., 2012). It is worth pointing out that the two uses of the term are related; the meaning of word-formation blends like *motel* and *smog* can be analyzed as conceptual blends in the sense of Fauconnier and Turner (2002).

stems of the words *black* and *bird* can be combined to the compound *blackbird*, whose stem consists of two stems. Norwegian is no exception among the Germanic languages; compounding is very productive (Berkov, 1997; Eiesland, 2015; and Askedal, 2016), and Norwegian compounds have received considerable attention in recent years (Bäcklund, 2007; Grov, 2009; Eiesland, 2008 and 2015; Enger, 1995; Johannessen, 2001; Kristoffersen, 1992; Nesset, 2011, 2016 and 2017a; Sakshaug, 2000).

A pertinent question with a long research history is how language users are able to interpret compounds (see ten Hacken, 2017 for overview). Even if a language user knows the meaning of the components, it is not obvious how s/he arrives at the meaning of the compound as a whole, since a number of different semantic relations may hold between the components. Even in relatively simple examples where the head component is a verbal relational noun, and the non-head is an argument or modifier, it is not always obvious which slot is filled by the non-head.[2] Take the verbal noun *fiske* 'fishing', which is derived through conversion from the verb *fiske* 'to fish'. As pointed out by Nesset (2016, 2017a), the non-head can fill the following roles:

(1) a. *Turistfiske* 'tourist fishing' (*turis* 'tourist' = agent)
    b. *Torskefiske* 'cod fishing' (*torsk* 'cod' = patient)
    c. *Stangfiske* 'rod fishing (*stang* 'rod' = instrument)
    d. *Lofotfiske* 'Lofoten fisheries' (Lofoten archipelago = place)
    e. *Høstfiske* 'fishing in the fall' (*høst* 'fall' = time)
    f. *Sportsfiske* 'sport fishing, recreational fishing' (*sport* 'sport' = manner)

Although world knowledge helps us assign the right role to the non-heads, the choice is not always obvious. For instance, since *torsk* 'cod' in (1b) is a kind of fish, one would

[2] We use the term "relational noun" (as opposed to "sortal" or "non-relational noun") about nouns that involve open slots for arguments or modifiers, e.g. *discovery*, which has open slots for an agent (e.g. *Columbus*) and a patient (e.g. *America*) in *Columbus's discovery of America* (see e.g. Barker, 2011).

naturally expect *cod* to occupy the patient role, and it would be tempting to suggest a general rule whereby all kinds of fish would occupy the patient role. However, this would not work in all cases. As pointed out by Nesset (2017a), *stingsildfiske*, where the non-head is the fish *stingsild* 'three-spined stickleback' (Gasterosteus aculeatus), is ambiguous. While *stingsild* could occupy the patient role, it could also be the instrument, since three-spined stickleback is frequently used as bait. In such cases, the ambiguity may be resolved by the context (see Meyer, 1993, and Olsen, 2012, for discussion).[3]

When the head is a sortal (non-relational) noun, things are more complicated. Eiesland (2015), who investigated a random sample of 2000 Norwegian compounds from eight different semantic fields, proposed a classification with fourteen different relations, based on earlier taxonomies from Downing (1977) and Levi (1978). However, although Eiesland's taxonomy covers 94.8% of her dataset (Eiesland, 2015, p. 171), she points out that the boundaries between her proposed relations often are not clear-cut. A case in point is *piratkikkert* 'pirate binoculars'. Are they binoculars owned by pirates, used by pirates, or designed for pirates (Eiesland, 2015, p. 147)? Several interpretations seem possible.

Complicating the picture further, metaphor and metonymy often interact in the interpretation of compounds (Geeraerts, 2002; and Benczes, 2006). An illustrative

[3] Context is also important in cases where compounds lack a conventionalized meaning. Good illustrations are what Nesset (2017a, 2018) has termed "metaconstructional compounds" like Norwegian *petroleumshimmel* 'petroleum sky'. Such compounds do not have conventionalized meanings, but in a context involving the idiomatic construction *Ikke en sky på himmelen* 'not a cloud in the sky' the compound can be interpreted without problems. The idiom is used about idyllic situations where no danger seems to be awaiting, and *ikke en sky på petroleumshimmelen* 'not a cloud in the petroleum sky' describes a situation where no danger is threatening the petroleum industry.

example from Norwegian is *eksosrype* which is based on the nouns *eksos* 'exhaust' and *rype* 'grouse' (*Lagopus*), a type of wild bird attested in forests and mountains all over Norway. The meaning of the compound is 'female passenger on a motorcycle'. Metonymy is relevant insofar as the exhaust emitted by the motorcycle stands for the motorcycle, thus providing access to the target through a contiguity relation (Peirsman & Geeraerts, 2006; see also Radden & Kövecses, 1999). The exhaust also metonymically indicates the placement of the passenger at the back of the motorcycle. At the same time, metaphor is relevant since *rype* 'grouse' stands for a woman and therefore involves cross-domain mappings between the domains of birds and women in the conceptual system (Lakoff, 1993). The WOMEN ARE BIRDS metaphor appears to be attested in several languages and cultures; in English, *chick* can be used about women much in the same way as *rype* is used in Norwegian, and Kuznetsova (2015, p. 31-68) explores evidence from Russian.

Since the interpretation of compounds is less than straightforward, the question arises as to whether a unified account of compounds is possible. We follow Benczes (2006; see also Nesset, 2016 and 2017a) and suggest that conceptual blending (Fauconnier & Turner, 2002) can accommodate the semantics of compounds in an insightful way. What we propose is that each component (non-head and head) sets up an input space, and that the meaning of the compound as a whole is a blend based on these input spaces, where the blended space incorporates some features from each input space. In the case of *eksosrype* discussed above, the metonymy from exhaust to motorcycle gives rise to the first input space ("the motorcycle space"), whereas the WOMEN ARE BIRDS metaphor prompts a second input space, which we may refer to as

the “chick space”. The blended space accommodates the meaning of the compound as a whole, namely ‘female passenger on a motorbike’.

Compounds attracted the attention of cognitive linguists already in the early stages of the development of Conceptual Integration Theory (e.g., Turner and Fauconnier, 1995 and Fauconnier and Turner, 1996), possibly because compounds juxtapose two words without specifying the relationship between them, thus prompting language users to produce a blend (Schmid, 2011: 220). “In the case of nominal compounds, the formal unit names two elements in two different spaces, and directs the understander to find the rest”, as Fauconnier and Turner (2003: 67) put it. In view of this, it comes as no surprise that a number of scholars have explored the properties of blends on the basis of English compounds such as *boat house* and *house boat* (Fauconnier and Turner, 1996 and 2003), *fake gun* and *stone lion* (Coulson and Fauconnier, 1999, Coulson, 2001: 144-152), and *gun wound* and *caffeine headache* (Coulson, 2001: 126-133). Although Conceptual Integration is particularly useful for complex examples like *eksosrype*, which involve the interaction of metaphor and metonymy, “garden variety” compounds can also be analyzed as blends. As Schmid (2011: 241-242) points out, conceptual blending should be thought of as more than “an appendix to word-formation theory specializing in explaining creative nonce forms”. In a similar vein, Fauconnier and Turner (1996: 66) remark that “noncompositional conceptual integration is just as necessary” for the analysis of “garden variety” compounds, as it is for more complex examples. Even seemingly simple examples such as the compounds involving *fiske* ‘fishing’ in (1) can be analyzed as blends. In the case of *turistfiske* ‘tourist fishing’ in (1a), for instance, the non-head establishes a “tourism input space”, while a “fishing input space” is prompted by

the head. The blended space incorporates elements from both domains. In the following sections, we will review two further arguments for the analysis of compounds as blends.

3. Emergent structure and compounds

The first argument for analyzing compounds as blends comes from emergent structure, one of the hallmarks of conceptual integration networks. When a network of input and blended spaces is set up, the blended space includes novel structure that is not found in the input spaces (Fauconnier & Turner, 2002). By way of a non-linguistic example, consider the mathematical concept of complex numbers explored by Fauconnier & Turner (2002) and Lakoff & Núñez (2000). Complex numbers can be understood as points in a two-dimensional space, in such a way that a certain number is defined by its "distance to the origin […] and a rotation from the horizontal axis to the number-point in the two-dimensional space" (Fauconnier, 2005, p. 525). As pointed out by Fauconnier, this conceptualization of complex numbers involves two input spaces, real numbers on the one hand and two-dimensional space on the other, as well as a blended space that combines information from both input spaces. The blend contains emergent structure that is not present in either input space. First, the blended space involves an "infinity of numbers that were not in the original input mental space of real numbers" (Fauconnier, 2005, p. 526). A second emergent property of the blended space concerns mathematical operations such as multiplication. Multiplication of complex numbers involves the sum of their angles. As pointed out by Fauconnier (2005, p. 526), there are no angles in the input space of real numbers, while there is no multiplication in the two-dimensional input space, since it does not make sense to multiply geometric points.

We suggest that compounds involve emergent structure in the same way as the blend of complex numbers, and that this speaks in favor of analyzing compounds as blends. We have seen that complex metaphorical and metonymical examples like *eksosrype* 'female passenger on a motorcycle' have meanings that are far from obvious from the meanings of the parts, *eksos* 'exhaust' and *rype* 'grouse', so here we are clearly dealing with emergent structure not imported from either input space. However, we argue that emergent structure is found not only in complex examples like *eksosrype*, but is in fact a defining property of *all* compounds. In a nutshell, the interpretation of compounds involves assessing the meanings of the non-head and head (i.e. setting up input spaces) and establishing a semantic relation between the components. This relation does not come from the input spaces, but is emergent structure resulting from setting up a blended space based on the input spaces. In compounds where the head is a relational noun, the emergent structure involves filling a slot provided by the head. As shown by the *stingsildfiske* example discussed in section 2, this is not straightforward, since *stingsildfiske* can have at least two interpretations, viz. 'fishing for three-spined stickleback' (patient) and 'fishing by means of three-spined stickleback' (instrument, where the fish is used as bait). In compounds where the head noun is non-relational, establishing the relation between non-head and head is even less straightforward, as shown by the following examples:

(2) a. *palmeolje* 'palm oil' (Source relation: oil from palm trees)
b. *motorolje* 'motor oil' (Purpose relation: oil for motors)
c. *helårsolje* 'all year oil' (Time relation: oil that can be used year-round, also in winter)

Although world knowledge is useful for establishing the relationship between the non-head and head, the relation is not present in either input space and is therefore a property of the blend. In other words, all compounds involve emergent structure that does not come from the input spaces, and compounds are therefore insightfully analyzed as blends.

4. Compression and compounds

A second argument for analyzing compounds as blends comes from compression, another important characteristic of conceptual integration networks. Turner (2006) defines compression as follows:

(3) "Compression […] refers not specifically to shrinking something along a gradient of space or time, but instead to transforming diffuse and distended conceptual structures that are less congenial to human understanding so that they become more congenial to human understanding, better suited to our human-scale ways of thinking." (Turner, 2006, p. 18)

By way of example, consider the statement "Dinosaurs changed into birds", discussed by Fauconnier (2005, p. 524). This is a way to say that the ancient dinosaurs are the ancestors of present-day birds. However, it is of course not the case that any particular dinosaur was gradually transformed into a bird. What the statement does is to create a blend, where the complex change that took place over a long period of time is presented as the direct transformation of individual dinosaurs into birds. This is compression as defined in (3), insofar as a complex evolution over a vast period of time is presented as one striking image, which makes the theory "better suited to our human-scale ways of thinking", in the words of Turner (2006, p. 18).

How is compression related to compounds? In section 1, we described the meaning of *eksosrype* as 'female passenger on a motorcycle'. While this is correct as far as it goes,

it does not capture important connotations. For native speakers of Norwegian, *eksosrype* gives associations to the kind of women who hang out with bikers. Consider the following passage, which is the beginning of a newspaper story about the actress Reese Witherspoon:

(4) Reese Witherspoon har byttet glitter-klær med lær. […] Fra å spille country-sangerinnen June Carter i «Walk the Line», har Witherspoon nå måttet lære å være en ekte eksosrype.
'Reese Witherspoon has replaced glamorous clothing with leather. […] After having played the country & western singer June Carter in "Walk the Line", Witherspoon has now been forced to learn how to be a real *eksosrype.*'

Wearing the kind of leather outfit bikers wear is here connected to the meaning of *eksosrype.* As pointed out by Nesset (2017a), a five-year old girl with ringlets will hardly qualify as an *eksosrype,* even if the five-year old girl happens to be transported on a motorcycle.

Examples of this type show that compounds can bring together a variety of meanings and compress them into one striking image. However, is compression equally relevant for less "creative" compounds than *eksosrype*? We argue that the answer is "yes". By way of example, consider *lofotfiske* in (1d)*,* which might be paraphrased as 'fishing in Lofoten'. However, this does not quite do justice to the meaning, since the word is not used about any fishing around the Lofoten archipelago, but is reserved for the traditional industrial-scale fisheries in winter. These fisheries have been financially and culturally important for Norway since the Middle Ages, and the compound *lofotfiske* therefore comes with numerous connotations about boats, fishing methods, types of fish, traditional fish dishes, etc. – all of which are compressed into one forceful image. In short, it seems likely that not only metaphorical and metonymical "creative"

compounds, but also "garden variety" compounds involve compression and are therefore insightfully analyzed as blends.

5 The Culture-to-Compound Hypothesis

The previous sections suggest that the meaning of compounds arise through the interaction of input and blended spaces which involve emergent structure and compression. However, is this the whole story? We argue that the answer is "no" and suggest that the language system as a whole and the culture this system is embedded in can be important. Consider the following hypothesis:

(5) The Culture-to-Compound Hypothesis:
In languages where compounding is marginal in the system, compounding or compound-like constructions can be recruited to express "novelty" content.

The idea is that in languages where compounding is a marginal word-formation mechanism, compounds can be used to express content related to changes in the culture – what we for convenience refer to as "novelty" content. The hypothesis involves iconicity insofar as "not normal" (marginal) forms express "not normal" ("novelty") content. Since the hypothesis concerns cultural change and the status of compounding in the language system, the implication is that these factors are relevant for the interpretation of compounds. We will explore relevant evidence in sections 6 and 7, but first three points need to be clarified.

First, we use the somewhat vague term "compound-like construction" in (5), because we wish to include not only prototypical compounds where complete stems are combined, but in addition so-called stub compounds (also known in the literature as "stump compounds", Molinsky, 1973, p. 15; Comrie et al., 1996, p. 140; Spencer, 1991, p. 346; Billings, 1998; Benigni and Masini, 2009, p. 173; and Masini & Benigni, 2012),

which involve the combination of abbreviated stems. An example of a stub compound from Russian is *kolxoz* 'collective farm'.[4] The first part, *kol*, is an abbreviation of the neuter form of the adjective *kollektivnyj* 'collective', while the second part, *xoz*, is short for *xozjajstvo* 'economy, household, farm'.

The second point that requires clarification regards the phrase "can be recruited" in (5). In harmony with fundamental ideas of cognitive linguistics, we do not consider language a deterministic system. The situation we describe in the Culture-to-Compound Hypothesis is not something that has to happen, but something that *may* happen if the cultural situation allows it. The hypothesis describes an option that a speech community can take advantage of under certain conditions.

Finally, it is important to notice that the Culture-to-Compound Hypothesis in (5) does not specify whether the relevant situation occurs rarely or frequently. All the hypothesis says is that the situation in question can arise under certain conditions, so in order to motivate the hypothesis, data from one language are sufficient. The language we have chosen is Russian. In the following sections, we will discuss two Russian constructions that arose at different times in the history of the language, when Russian was influenced by Germanic languages where compounding is a central word-formation mechanism.

6. Case study 1: Stub compounds in post-revolutionary Russian

Although Contemporary Standard Russian has compounds and compounding displays some productivity (Benigni & Masini, 2009; Sokolova & Edberg, 2015, and submitted), compounds enjoy a much more limited status in Russian than in Germanic languages. In a recent study, Nesset (2017b) compares the relative frequency of compounds in data

[4] Throughout this article, all Russian examples are given in transliterated orthography.

from parallel texts, three Norwegian novels translated into Russian and three books of fiction translated from Russian to Norwegian. In this dataset, which comprises approximately 4,500 lemmas, only 4% of the Norwegian compounds correspond to compounds in Russian. It could, of course, be the case that Russian has numerous compounds that do not correspond to compounds in Norwegian, but this seems very unlikely. While the most authoritativehe grammar of Norwegian (Faarlund et al., 1997) devotes about the same amount of pages to compounding and derivation (suffixation and prefixation), the Russian Academy Grammar (Švedova (ed.), 1980) spends only 10 pages out of 788 pages on compound nouns, as opposed to 100 pages on prefixation and suffixation of nouns. In his celebrated 270 page study of Russian word-formation, Townsend (1975) devotes only 7 pages to compound nouns, which he describes as "less important than suffixation" (Townsend, 1975: 201; his chapter on word-formation of nouns occupies 58 pages). In a similar vein, Mathiassen (1996: 66), a leading authority on Norwegian-Russian contrastive grammar, comments that compounding is "less widespread in Russian than derivation" (i.e. suffixation and prefixation) in Russian nouns.[5] In a large-scale empirical contrastive study of word-formation in Russian and Norwegian, Janda (2011: 362) maintains that Norwegian uses derivational affixes to a lesser degree than Russian, but that "Norwegian by contrast […] is more heavily invested in compounding". In view of this, it seems safe to conclude that compounding is relatively marginal in Russian word-formation, at least compared to Norwegian and

[5] This is our translation from Norwegian (TN and SS). The Norwegian original is: "[s]ammensetning er […] mindre utbredt enn avledning".

other Germanic languages. Moreover, compounding must have been even more marginal before Russian was hit by the two waves of compounding we will discuss in the following (see Sokolova, 2016).

The first wave relates to the time around the Russian revolution in 1917. Given the marginal status of compounding, the Culture-to-Compound Hypothesis in (5) leads us to expect that compound-like structures can be recruited to express novelty content. This is exactly what happened when the Russian revolutionaries started using so-called stub compounds to name new institutions and functions related to the revolutionary movement (Seliščev, 1928; Comrie et al., 1996, p. 141):

(6) Stub Compounds:
   a. *agitprop* 'agitation and propaganda' (< *agit*[*acionnaja*] 'agitational (feminine adj) + *propaganda* 'propaganda')
   b. *kolxoz* 'collective farm' (< *kol*[*lektivnoe*] 'collective (neuter adj)' + *xozjajstvo* 'economy, household, farm')
   c. *stengazeta* 'wall newspaper, used in e.g. factories to promote ideological views' (< *sten*[*naja*] 'wall (feminine adj)' + *gazeta* 'newspaper')
   d. *podlodka* 'submarine' (< *pod*[*vodnaja*] 'underwater (feminine adj)' + *lodka* 'boat')

As mentioned in the previous section, stub compounds are compounds in the sense that they result from the combination of two stems, but they differ from prototypical compounds insofar as stub compounds involve abbreviated stems. According to Seliščev (1928), stub compounds were attested sporadically in pre-revolutionary times and during World War 1, but were then adopted by the Bolshevik revolutionaries and became widely used from early Soviet times. Molinsky (1973) describes the early use of stub compounds as follows:

(7) "In an attempt to 'sovietize' the language, to create a new political and social jargon the process of condensing phrases into single nouns to designate new

governmental institutions and functions became extremely widespread."
(Molinsky, 1973, p. 15)

We cannot look inside the minds of Lenin and the other early revolutionaries, so it is not possible to say exactly why they chose to break the rules of Russian grammar and establish the new word-formation pattern of stub compounds. If the Russian revolutionaries had wished to follow the rules of Russian grammar, they could have used a relative adjective followed by a noun, e.g. *agitacionnaja propaganda* instead of the stub compound *agitprop*, to name the relevant concepts. But is seems reasonable that breaking grammatical rules and molding new linguistic patterns were conducive to their cause of creating a new society through revolution. By using linguistically innovative names, the revolutionaries emphasized the novelty of the concepts in question. As pointed out in the previous section, this is an example of iconicity. Novel meaning (new institutions) is expressed by a novel form (the grammatical pattern of stub compounds). The new grammatical pattern not only denoted new institutions and functions, but also gave rise to associations to the new, revolutionary society as a whole – connotations that would be desirable from the perspective of the revolutionaries.

It should be pointed out that innovations of this type are in line with a general theory of language change. As part of his "invisible-hand theory", Keller (1994; see also Haspelmath, 1999, p. 1055) proposes what can be called the "maxim of extravagance":

(8) "Talk in such a way that you are noticed." (Keller, 1994, p. 101)

Keller's idea is that (some) linguistic innovations occur when language users decide not to follow linguistic conventions, but instead break the rules and say things in new ways. The motivation, according to Keller's theory, is to receive attention, which may be

socially advantageous. Haspelmath (2000, p. 795), who uses Keller's theory to explain unidirectionality of grammaticalization, says that "it would be nice to have a way to predict when speakers will make extravagant innovations". We submit that the case of stub compounds in early Soviet times offers a partial answer. In situations of radical societal change such as the Russian revolution, speakers are likely to make extravagant innovations, as the Russian revolutionaries did.

While this brief exposition does not do justice to stub compounds in Russian, it is sufficient to motivate the Culture-to-Compound Hypothesis in (5), since stub compounds were recruited to convey "novelty content" (new institutions in the new Soviet society) in a language where compounding is a marginal word-formation mechanism. This, in turn, brings us back to the main question of the present study, namely how language users interpret compounds. Russian stub compounds show that their meaning does not come from the interaction of the input and blended spaces alone. The novelty meaning of Russian stub compounds can only be understood on the basis of the marginal status of compounding in the Russian language system and the cultural change – the Russian revolution – which gave rise to the use of stub compounds in Russian.

7. Case study 2: Compounds in Post-Soviet Russian

As time went by, the connotations of stub compounds to novelty faded, and stub compounds came to imply a relation to the Soviet establishment and the institutions of the Soviet state. An example is the stub compound *Gosplan*, which was the name of the bureau in charge of the development of the economy in the Soviet Union. The bureau was founded in 1923 and at the time must have represented an innovative approach to

economics. For speakers of Russian in the late Soviet period in the 1970s and 1980s, however, *Gosplan* would hardly arouse associations to innovation. Stub compounds had lost their novelty meaning and had instead become part of the Soviet establishment. The Soviet society was overripe for change, and the change came when the Soviet Union collapsed and capitalism was introduced.

In connection with this radical change in Russian society, the Russian language was hit by a second wave of compounds, this time compounds involving the combination of two complete stems into one stem:

(9) a. *Gorbačev-fond* 'The Gorbachev Foundation' (< *Gorbačev* + *fond* 'foundation')
b. *veb-stranica* 'web page' (< *veb* 'web' + *stranica* 'page')
c. *internet-texnologija* 'Internet technology' (< *Internet* + *texnologija* 'technology')
d. *VIP-zal* 'VIP lounge' (< *VIP* + *zal* 'hall')

While the stub compounds of the early Soviet period may have been inspired by German compounds such as *Parteiarbeiter* 'party worker' (Seliščev, 1928, p. 164-165), the Post-Soviet wave of compounding was based on English compounds (Benigni, 2003, p. 339-340; Benigni & Masini, 2009, p. 192; Kim, 2009, p. 47-54; Marinova, 2010, p. 628-630; Bondarevskij, 2009, p. 8-12 and 2010, p. 137-141; Kapatsinski & Vakareliyska, 2013, p. 74-75; and Gorbov, 2010, p. 26-27).

How do the Post-Soviet English-inspired compounds relate to the Culture-to-Compound Hypothesis in (5)? Do these compounds display "novelty meaning" in a way similar to that of the stub compounds in early Soviet times? We suggest that the answer is "yes". As we saw in the previous section, the novelty of stub compounds concerned both denotation (new institutions) and connotation (associations to the new post-revolutionary society), and the same holds for compounds in Post-Soviet Russia. With

regard to denotation, the compounds are frequently used about new institutions, such as the Gorbachev Foundation, or new phenomena, such as the Internet. When it comes to connotation, the new compounds give associations to the new "internationalist" and "capitalist" society. In short, the Post-Soviet wave of compounds is in line with the Culture-to-Compound Hypothesis, and provides another illustration that the interpretation of compounds depends on the marginal status of compounding in the Russian language system and the dramatic changes in the culture that this language system is embedded in.

For stub compounds, we saw that the "novelty connotations" faded with time as the Soviet institutions they named gradually became part of the establishment. Do we see a similar development for Post-Soviet compounds? It is too early to tell. Yet, it looks like Post-Soviet compounds are developing in two different ways. On the one hand, they were originally introduced as names of institutions and businesses and here they begin to acquire more playful and ironic connotations. By way of illustration, consider the compound *nogti-servis* '(finger)nail service' (discussed by Kapatsinski & Vakareliyska, 2013, p. 72). Here, an everyday word, *nogti* 'finger nails', is combined with the stylistically very different borrowing *servis* (from English *service*), and this combination for some speakers creates jocular or ironic associations. On the other hand, Post-Soviet compounds are often closely connected with the Internet, not only providing terms for relatively new phenomena (such as *veb-stranica* 'web page' and *internet-texnologija* 'Internet technology' mentioned above in (9b) and (9c)) but also serving as a major tool for the language of the Internet. Here compounds are productive and appear to be used without playful or ironic connotations. As Sokolova & Edberg (2015, 2016, and

submitted) show, native speakers of Russian evaluate some previously unattested compounds as appropriate and even natural: *akcioner-obščestvo* 'stock corporation' (instead of *akcioner*[*noe*] *obščestvo* 'joint-stock (neuter adj) corporation/society'), *internacional-sem'ja* 'international family' (instead of *internacional'*[*naja*] *sem'ja* 'international (feminine adj) family'), *valjut-rynok* 'currency market' (instead of *valjut*[*nyj*] *rynok* 'currency (masculine adj) market'). In the examples above, the first element of the compounds looks like a shortened version of the relational adjectives from the standard expressions given in parentheses. However, some of these elements overlap with independent nouns (e.g. *akcioner* 'stockholder'), and can therefore be analyzed as noun-noun compounds (binominal compounds). These compounds present an interesting intermediate case between stub compounds of the Soviet time and Post-Soviet compounds with two complete stems. Non-standard or Internet language might bring the two patterns closer together in the future and create a special niche for compounding in Russian word-formation.

8. Concluding remarks

To summarize our contribution, we have argued that the meaning of compounds arises from the interaction of three levels. First, the meaning of the head and non-head constituents clearly contribute to the meaning of the compound as a whole. Second, in line with other cognitive linguists, we have suggested that compounds are blends involving compression and emergent structure, i.e. structure not found in the input spaces of the blend. Third, we have proposed that the meaning of compounds may also depend on the language system as a whole, as well as the culture that the language system is part of.

In order to clarify the role of the language system and culture, we have advanced the Culture-to-Compound Hypothesis, according to which in languages where compounding is marginal in the system, compounding or compound-like constructions can be recruited to express "novelty" content. We have substantiated this claim through two case studies from the history of Russian, a language where compounding enjoys a relatively marginal status in the word-formation system. In early Soviet times, stub compounds became widely used to name new institutions and phenomena, and after the collapse of the Soviet Union, Russia was hit by a new wave of compounds that were used to describe the new realities of the Post-Soviet society. In both cases, the marginal mechanism of compounding was recruited to convey "novelty meaning". Russian compounds, therefore, cannot be understood without reference to the marginal status of compounding in the Russian language, and the new realities of Soviet and Post-Soviet life that the new compounds describe. While the present study uses data from Norwegian and Russian to motivate the Culture-to-Compound Hypothesis, future work involving other languages is needed in order to assess its empirical adequacy.

References

Askedal, J. O. (2016). Norwegian. In P. O. Müller, I. Ohnheiser, S. Olsen & F. Rainer (Eds.), *Word-Formation - An International Handbook of the Languages of Europe* (pp. 2525-2554). Berlin: de Gruyter.

Bäcklund, E. (2007). *"Da sto jeg der og pølsesvettet": en analyse av 367 nomeninkorporeringer som grammatikkutfordrer norsk*. MA thesis: University of Oslo.

Barker, C. (2011). Possessives and relational nouns. In K. von Heusinger, C. Maienborn, P. Portner (Eds.): *Semantics: An international handbook of Natural Language Meaning*. Volume 2 (pp. 1109-1130). Berlin: De Gruyter Mouton.

Bauer, L. (1983). *English Word-Formation*. Cambridge: Cambridge University Press.

Bauer, L. & Huddleston, R. (2002). Lexical word-formation. In R. Huddleston & G. Pullum (Eds.), *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.

Benczes, R. (2006). *Creative Compounding in English*. Amsterdam/Philadelphia: John Benjamins.
Benigni, V. (2003). Produktivnye modeli v razvitii klassa analitičeskix prilagatel'nyx. In L. P. Krysin (Ed.), *Russkij jazyk segodnja 2: Aktivnye jazykovye processy konca XX veka* (339-342). Moscow: Azbukovnik.
Benigni, V. & Masini, F. (2009). Compounds in Russian. *Lingue e linguaggio, 2*, 171-194.
Berkov, V. P. (1997). *Norsk ordlære*. Oslo: Universitetsforlaget.
Billings, L. A. (1998). Morphology and syntax: delimiting stump compounds in Russian. In G. Booij, A. Ralli & S. Scalise (Eds.), *Proceedings of the First Mediterranean Morphology Meeting, Patras, University of Patras*, 99-110.
Bondarevskij, D. V. (2009). Neizmenjaemost – ključevoe javlenie analitizma, *Vestnik Čeljabinskogo gosudarstvennogo universiteta, 7,* 8-12:
Bondarevskij, D. V. (2010). Vlijanie progressirujuščej analitizacii na formirovanie kategorii neizmenjaemyx prilagatel'nyx, *Vestnik Pjatigorskogo gosudarstvennogo lingvističeskogo universiteta, 1,* 137-141.
Clark, E. V. (1993). *The Lexicon in Acquisition*. Cambridge. University Press.
Comrie, B., Stone, G. & Polinsky, M. (1996). *The Russian language in the twentieth century*. Oxford: Clarendon Press.
Coulson, S. (2001). *Semantic leaps: Frame-shifting and conceptual blending in meaning construction*. Cambridge: Cambridge University Press.
Coulson, S. & Fauconnier, G. (1999). Fake guns and stone lions: conceptual blending and privative adjectives. In B. A. Fox, D. Jurafsky, & L. A. Michaelis (Eds.), *Cognition and function in language*, (pp. 143-158). Stanford: CSLI Publications.
Downing, P. (1977). On the Creation and Use of English Compound Nouns. *Language,* 53 (4), 810-842.
Eiesland, E. A. (2008). "*Skal vi sittedanse?": verb-verb-sammensetninger i norsk*. MA thesis: University of Oslo.
Eiesland, E. A. (2015). *The Semantics of Norwegian Noun-Noun Compounds: A corpus-based study*. PhD dissertation: University of Oslo.
Enger, H.-O. (1995). Har ord hoder? litt om sammensetninger og deres bøying. *LexicoNordica, 2,* 33–42.
Faarlund, J. T., Lie, S. & Vannebo, K. I. (1997). *Norsk referansegrammatikk*. Oslo: Universitetsforlaget.
Fauconnier, G. (2005). Compression and Emergent Structure. *Language and Linguistics, 6 (4),* 523-538.
Fauconnier, G. & Turner, M. (1996). Blending as a central process of grammar. In A. E. Goldberg (Ed.), *Conceptual structure, discourse, and language*, (pp. 113-130). Stanford: Center for the Study of Language and Information (CSLI). (Expanded version available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1293869).
Fauconnier, G. & Turner, M. (2002). *The way we think: conceptual blending and the mind's hidden complexities*. New York: Basic Books.
Fauconnier, G. & Turner, M. (2003). Conceptual blending, form and meaning, *Recherches en communication*, 19, 57-86.

Geeraerts, D. (2002). The interaction of metaphor and metonymy in composite expressions. In R. Dirven & R. Pörings (Eds.), *Metaphor and metonymy in comparison and contrast* (435-465). Berlin: Mouton de Gruyter.

Gorbov, A. A. (2010). Top-metod ekspress-nominacii ekonom-klassa: o russkix imennyx kompositax s atributivnym èlementom v preposicii k veršine, *Voprosy jazykoznanija (6)*, 26-36.

Grov, A. M. (2009). *"For venstrehendte er det dei høgrehendte som er feilhendte": ein studie av uavhendelege samansetjingar i norsk.* MA thesis: University of Oslo.

ten Hacken, P. (2017). Compounding in Morphology. In *Oxford Research Encyclopedia*. DOI: 10.1093/acrefore/9780199384655.013.251

Haspelmath, M. (1999). Why is grammaticalization irreversible? *Linguistics 37 (6),* 1043-1068.

Haspelmath, M. (2000). The relevance of extravagance: a reply to Bart Geurts. *Linguistics*, 38 (4), 789-798

Janda, L. A. (2011). Metonymy in word-formation. *Cognitive Linguistics*, 22 (2), 359-392.

Johannessen, J. B. (2001). Sammensatte ord. *Norsk Lingvistisk Tidsskrift*, 19 (1), 59-91.

Kapatsinski, V. & Vakareliyska, C. M. (2013). [N[N]] compounds in Russian. A growing family of constructions. *Constructions and Frames*, 5 (1), 69-87.

Keller, R. (1994). *Language Change: The Invisible Hand in Language.* London: Routledge.

Kemmer, S. (2003). Schemas and Lexical Blends. In H.Cuyckens, Th. Berg, R. Dirven, & K.-U. Panther (Eds.), *Motivation in Language: Studies in Honor of Günter Radden* (69-97). Amsterdam/Philadelphia: John Benjamins.

Kim, L. A. (2009). Vopros ob analitičeskix prilagatel'nyx v sovremennoj rusistike, *Movoznavstvo*, 15 (3), 47-54: http://www.nbuv.gov.ua/old_jrn/Natural/Vdpu/Movozn/2009_15_3/article/9.pdf

Kristoffersen, G. (1992). Tonelag i sammensatte ord i østnorsk. *Norsk Lingvistisk Tidsskrift*, 10 (2), 39–65.

Kuznetsova, J. (2015). *Linguistic Profiles: Going from Form to Meaning Via Statistics*. Berlin: De Gruyter.

Lakoff, G. (1993). The contemporary theory of metaphor. In A. Ortony (Ed.), *Metaphor and Thought.* Cambridge: Cambridge university Press: 202–51.

Lakoff, G. & Núñez, R. E. (2000). *Where Mathematics Comes From.* New York: Basic Books.

Levi, J. N. (1978). *The syntax and semantics of complex nominals.* New York: Academic Press.

Marinova, E. V. (2010). Vopros ob analitičeskix prilagatel'nyx v otečestvennoj i zarubežnoj lingvistike, *Lingvistika*, 4 (2), 628-630. http://www.unn.ru/pages/issues/vestnik/99999999_West_2010_4(2)/60.pdf

Masini, F. & Benigni, V. (2012). Phrasal lexemes and shortening strategies in Russian: the case for constructions, *Morphology*, 22 (3), 417-451.

Mathiassen, T. (1996). *Russisk grammatikk*. Oslo: Universitetsforlaget.

Meyer, R. (1993). *Compound Comprehension in Isolation and in Context*. Tübingen: Niemeyer.

Molinsky, S. J. (1973). *Patterns of ellipsis in Russian compound noun formations*. The Hague/Paris: Mouton.
Nesset, T. (2011). Metafor og metonymi: personkarakteriserende sammensatte substantiv i norsk. *Maal og Minne*, 1, 32-64.
Nesset, T. (2016). Spøkelsesfiske, makrellfotball og traktoregg: norske sammensetninger og konseptuell integrasjon. *Maal og Minne*, 2, 85-110.
Nesset, T. (2017a). Why Compounds? In A. Makarova, S. Dickey & D. Divjak (Eds.), *Each Venture a New Beginning: Studies in Honor of Laura A. Janda* (pp. 161-172). Bloomington IN: Slavica Publishers.
Nesset, T. (2017b). Compounds in Contrast. Paper presented at the Slavic Cognitive Linguistics Conference, St. Petersburg, Russia, October 12-14, 2017.
Nesset, T. (2018). Metakonstruksjonssammensetninger. To appear in *Maal og Minne,* 1.
Olsen, S. (2015). Composition. In P. O. Müller, I. Ohnheiser, S. Olsen, & F. Rainer (Eds.), *Word Formation. An International Handbook of the Languages of Europe*. Volume 4 (pp. 364-386). Berlin: De Gruyter Mouton.
Peirsman, Y. & Geeraerts, D. (2006). Metonymy as a Prototypical Category. *Cognitive Linguistics*, 17 (3), 269-16.
Plag, I. (1999). *Morphological productivity: Structural constraints in English derivation*. Berlin & New York: Mouton de Gruyter.
Radden, G. & Kövecses, Z. (1999). Towards a Theory of Metonymy. In K.-U. Panther (Ed.), *Metonymy in Language and Thought* (pp. 17-60). Amsterdam/Philadelphia: John Benjamins.
Renner, V., Maniez, F., & Arnaud, P. (2012). Introduction: A bird's-eye view of lexical blending. In V. Renner, F. Maniez & P. Arnaud (Eds.), *Cross-Disciplinary Perspectives on Lexical Blending,* (pp. 1-9). Berlin: De Gruyter Mouton.
Sakshaug, L. (2000). Tonelagstilordning i norske samansetjingar. Ein autoleksikalsk analyse. *Maal og Minne*, 2, 195-212.
Schmid, H.-J. (2011). Conceptual blending, relevance and novel N+N-compounds. In S. Handl & H.-J. Schmid (Eds.), *Windows to the mind: Metaphor, metonymy, and conceptual blending,* (pp. 219-245). Berlin: Mouton de Gruyter.
Seliščev, A. M. (1928). *Jazyk revoljucionnoj èpoxi.* Moscow: Rabotnik prosveščenija.
Sokolova, S. (2016). Fra pionerbevegelse til internasjonal-familie: germansk innflytelse i russisk produktiv sammensetning. Paper presented at *Kognitivt sommerseminar*, University of Bergen, Bergen, June 2016: http://www.uib.no/fg/nordisksprak/92966/kognitivt-sommarseminar-2016
Sokolova, S. & Edberg, B. H. (2015). Are There Analytical Adjectives in Russian? Evidence from a Corpus Study and Experimental Data. Paper presented at *The Fourteenth Annual Conference of the Slavic Cognitive Linguistics Association* (SCLC-14), Universities of Oxford and Sheffield, UK, December 9-13, 2015.
Sokolova, S. & Edberg, B. H. (2016). Čto takoe valjut-rynok? Xarakteristika imennyx kompositov v russkom jazyke po resultatam korpusa i èksperimenta. *Proceedings of the conference New Russia: traditions and innovations in language and language science*. Ural Federal University, Ekaterinburg, September 28-30, 2016,

pp. 178 - 186. ISBN 978-5-7525-3118-7: http://elar.urfu.ru/bitstream/10995/42884/1/nr_2016_19.pdf
Sokolova, S. & Edberg, B. H. (submitted). Are There Analytical Adjectives in Russian? Evidence from a Corpus Study and Experimental Data.
Spencer, A. (1991). *Morphological theory: an introduction to word structure in generative grammar*. Oxford: Basil Blackwell.
Švedova, N. Ju. (ed.) (1980). *Russkaja grammatika* 1. Moscow: Nauka.
Townsend, C. E. (1975). *Russian Word-Formation*. Cambridge, Mass: Slavica Publishers.
Turner, M. (2006). Compression and representation, *Language and Literature*, 15 (1), 17–27.
Turner, M. & Fauconnier, G. (1995). Conceptual Integration and Formal Expression. *Metaphor and Symbolic Activity*, 10 (3): 183-203.

Authors' address

Tore Nesset and Svetlana Sokolova

Department of Language and Culture

UiT The Arctic University of Norway

NO-9037 Tromsø

Norway

About the authors

Tore Nesset is a professor of Russian linguistics at UiT The Arctic University of Norway, where he has taught since 1997. He has published seven monographs and more than seventy scholarly articles on a variety of topics in cognitive and Russian linguistics. Nesset is a member of the research group CLEAR (Cognitive Linguistics: Empirical Approaches to Russian), which he founded together with Laura A. Janda.

Svetlana Sokolova is an associate professor of Russian linguistics at UiT The Arctic University of Norway, where she defended her Ph.D. dissertation in 2013. She is the co-author of one research monograph, and has published a number of scholarly articles in

the field of Russian and cognitive linguistics. Sokolova is a member of the research group CLEAR (Cognitive Linguistics: Empirical Approaches to Russian).