Premodification in idioms was examined in a large American corpus and two major types have been found: external modifiers have the whole expression in their scope, denoting the domain, location or time of the event, while internal modifiers modify the nominal component of the idiom. The literal meaning of this noun in most cases corresponds to some (more) abstract concept, thus the noun contributes its independent meaning to the expression. Conjunctive modification and Stathi’s (2007) internal type rarely occur.

Keywords: idioms, variation, decomposability, modification

1 Introduction

The widespread use of computers and corpus linguistic methods enable linguists to look upon language from a quantitative viewpoint. At the same time, the study of natural language data contributes to our understanding of not only the quantity and proportion of various linguistic units and constructions but also the use and function of the same linguistic entities. The aim of this study is to contribute to current research into idiom variation by examining the premodifiers that are inserted into V + NP idioms. The idiomatic expressions are taken from previous studies, one of which is a corpus-based work and the others are psycholinguistic studies based on native speakers’ intuitive judgements. Langlotz (2006a, 2006b) explored variant forms of idiomatic expressions in the BNC, a 100-million-word collection of authentic texts of British English, while Gibbs and his co-researchers (Gibbs and Nayak 1989, Gibbs, Nayak and Cutting 1989, Gibbs, Nayak, Bolton and Keppel 1989, Hamblin and Gibbs 1999) used native speakers’ responses to assess decomposability and its role in lexicogrammatical variation and idiom comprehension. The complete list of expressions is shown below.

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1 This research was funded by a Fulbright Research Grant (Grant Number 1207202), which was administered by the Bureau of Educational and Cultural Affairs, U.S. Department of State (ECA) with the cooperation of the Hungarian-American Commission for Educational Exchange (Fulbright Commission) in Hungary and the Council for International Exchange of Scholars (CIES) in the United States.
Table 1. List of idioms

<table>
<thead>
<tr>
<th>Gibbs et al.</th>
<th>Langlotz</th>
</tr>
</thead>
<tbody>
<tr>
<td>button one’s lip</td>
<td>bite the dust</td>
</tr>
<tr>
<td>chew the fat</td>
<td>buy the farm</td>
</tr>
<tr>
<td>grease the wheels</td>
<td>catch the wave</td>
</tr>
<tr>
<td>hold the fort</td>
<td>chew the fat</td>
</tr>
<tr>
<td>lose one’s grip</td>
<td>come a cropper</td>
</tr>
<tr>
<td>miss the boat</td>
<td>drag one’s feet</td>
</tr>
<tr>
<td>pack a punch</td>
<td>grease the wheels</td>
</tr>
<tr>
<td>pass the buck</td>
<td>make headway</td>
</tr>
<tr>
<td>pull sb’s leg</td>
<td>miss the boat</td>
</tr>
<tr>
<td>rack one’s brain</td>
<td>prick the bubble</td>
</tr>
<tr>
<td>rock the boat</td>
<td>prime the pump</td>
</tr>
<tr>
<td>steal sb’s thunder</td>
<td>rock the boat</td>
</tr>
<tr>
<td></td>
<td>swallow a bitter pill</td>
</tr>
<tr>
<td></td>
<td>tread water</td>
</tr>
<tr>
<td></td>
<td>upset the applecart</td>
</tr>
<tr>
<td></td>
<td>weather the storm</td>
</tr>
</tbody>
</table>

I used WordSmith (version 5.0) to perform queries in the North American News Text Corpus (1995), consisting of approximately 350 million running words of journalism and distributed by the Linguistic Data Consortium. The texts were searched for the nominal idiom component within 10 words to the left or right of the verbal constituent. Before a detailed look at the results, some of the previous research into modifiers will be summarized.

2 Previous studies

2.1 Akimoto (1983)

The first corpus-based studies were concerned with how common adjective insertion was, especially in the light of the then dominant view of idioms as frozen expressions. Akimoto (1983) tried to establish degrees of idiomaticity by manually collecting examples of variant idioms as well as eliciting responses from native informants. He observes the widest discrepancy between elicited and attested variants in examples of adjective insertion (Akimoto 1983: 270). He reports that 19% of the idioms permit adjective insertions, as judged by his informants, while in 47% of the idioms speakers reject this transformation (Akimoto 1983: 61). In the rest of the expressions (32%), speakers’ disagreement did not allow any conclusions to be made (Akimoto 1983: 61).

Interestingly, Akimoto provides no statistical summary of his corpus data, but the calculations can easily be made by the reader. One of the expressions (hang one’s head) remained untested in the corpus, resulting in a total of 261 phrases subjected to corpus searches. No adjective insertion was found in 68.6% (179) of the idioms, whereas at least one token of adjective insertion occurred in 31.4% (82) of the expressions. We must note that the absence of a variant does not necessarily entail the ungrammaticality of the given variation.
Manual data gathering is especially time-consuming and serendipity plays a significant role. The absence of adjectives in the occurrences of an idiom may simply mean that the researcher was unable to find any. On the other hand, a single token of a transformation is not convincing enough for a linguist to accept the given variation. It is impossible to calculate the size of Akimoto’s corpus, which contained an undisclosed amount of written material, 385000 running words of Survey of English Usage spoken English and three hours of spoken recordings (Akimoto 1983: 23). In the absence of reliable estimates, the significance of one token cannot be determined.

Akimoto (1983: 26-27, 268) himself also identifies some factors that may have biased his results. Informants’ uncertainty or rejection of examples may be due to their inability to contextualize the variant, but “there occur many examples in the corpus which the informants rejected as unacceptable” (Akimoto 1983: 27). The above discussion leads us to conclude that the discrepancy between the intuition and corpus figures might be smaller, if more rigorous elicitation tests were applied or a more efficient corpus search was made.

Akimoto (1983) found 4995 idiom tokens, of which 21.1% (1052) occurred with an adjective inserted before the noun. Three idioms (11.5%) were attested only with adjectives attached to the nominal component (cut capers, make strides, play the game), whereas 117 expressions (44.8%) never occurred with attached adjectives. The rest of the phrases varied in terms of how frequently they were found with inserted adjectives. Some expressions are frequently expanded with and adjective (rock the boat, stand a chance), others rarely take them (make one’s mark, take measures).

2.2 Ernst (1980)

Ernst (1980) also studied naturally occurring sentences, though his data gathering was not systematic. His examples come from journalism, fiction and the television and radio.

He distinguishes three types of modification: external, internal and conjunction (Ernst 1980: 51-53).

(1) Carter doesn’t have an **economic** leg to stand on.

(2) In spite of its conservatism, many people were eager to jump on the **horse-drawn** Reagan bandwagon.

(3) Malvolio deserves **almost** everything he gets, but...there is that little stab of shame we feel at the end for having had such fun pulling his **cross-gartered** leg for so long [emphasis in the original].

The adjective in (1) functions as a domain delimiter, modifying the meaning of the whole idiom. External modifiers can often be paraphrased with a sentence adverb: ‘Economically, Carter doesn’t have a leg to stand on.’ Internal modifiers have in their scope only the noun, as can be seen in (2). **Horse-drawn** modifies **bandwagon**. The third type (3) is called conjunction modification, because the adjective modifies the noun taken in its literal sense, but the literal referent of the noun is independent of the idiomatic meaning (Ernst 1980: 52). **Cross-gartered** cannot be integrated into the idiom; instead, it applies to the body part leg. A formalized meaning representation, therefore, includes the meaning of the idiom in addition to the literal interpretation of the adjective and noun.
Ernst (1980) is primarily concerned with finding a formula that is broad enough to serve as a formalized representation capable of handling all three types of modifiers, but he also makes insightful observations on the adjectives. He notes that internal modifiers may be literal, such as *rudimentary* in (4), or figurative, such as *well-muscled* in (5) (Ernst 1980: 55-56). Furthermore, he draws attention to the widespread ambiguity of the adjective, claiming that internal and external modifiers are cognitively synonymous (Ernst 1980: 63).

(4) He put the new machine through its *rudimentary* paces.

(5) The federal agency decided to take the project under its *well-muscled* wing.

### 2.3 Stathi (2007)

Ernst’s (1980) taxonomy is revised and expanded by Stathi (2007), who studied idiomatic expressions in a corpus of German. She confines the use of the term “internal modification” to cases where the modified noun has a literal reading.

(6) Mit einer Füllle von Argumenten nimmt Krugman in dieser Aufsatzsammlung den “Pop-Ökonomen den Wind aus den aufgeblähten Segeln.” Pop-Ökonomen sind die Vulgarökonomien, die das populäre Schlagwort Globalisierung ohne tiefere ökonomische Kenntnisse verbreiten. [With a lot of arguments, Krugman weakens the ‘pop economists’ (lit. ‘takes the wind out of the *inflated* sails’) in this essay collection. ‘Pop economists’ are those vulgar economists who spread the popular catchword globalization without any deeper knowledge of economics.] Süddeutsche Zeitung, 08.04.1999, p. M/F28

Stathi (2007: 89) claims that internal modifiers evoke the source domain, and the adjective and noun sequence is mapped onto the target domain as a whole, the adjective often denoting simply intensity at the figurative level. The inflated sails in (6) mean that the wind is strong and the boat is sailing faster, and in the target domain this corresponds to somebody proceeding fast in an activity (Stathi 2007: 87). In contrast, where the adjective is interpretable only in the target domain, the noun is modified in its abstract, figurative sense, as can be seen below (Stathi 2007: 96).

(7) Es zeugt von einer gewissen Naivität, wenn Montazeri heute den maroden Karren der islamischen Revolution mit dem Hinweis auf deren ursprüngliche Ziele aus dem Dreck ziehen will. [It is evidence to a certain naivety if Montazeri wants today to drag the *rotten* cart of the Islamic Revolution out of the mud by pointing to its original goals.] die tageszeitung, 30.03.1989, p. 6

Modifiers such as *maroden* ‘rotten’ are labelled “intermediate modification” by Stathi (2007: 96). To avoid terminological confusion, I will adopt her labels temporarily, using “internal modification” in the sense of ‘literal-only modification’, while “intermediate modification” will be synonymous with ‘figurative-only modification’. “Literal” and “figurative” refer to the

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2 The translations of German examples in this paper are Stathi’s (2007).
interpretation of the modified noun, not that of the modifier itself.

Stathi (2007) shares Ernst’s (1980) views on external and conjunction modification, and she adds a new category to the existing typology by introducing metalinguistic modifiers (8) (Stathi 2007: 102).

(8) Heuchler werden es abstreiten, doch wahrscheinlich waren auch sie mit Genuss dabei, wenn etwa bei Karl May fünfzig, sechzig Indianer ins sprichwörtliche Gras beißen mussten, nur weil ihr böswilliger Häuptling kein Einsehen in die durch Old Shatterhand repräsentierte Weltordnung hatte. [Hypocrites will deny it, but probably they, too, were enjoying it when in Karl May’s books fifty or sixty Indians had to die only because their malicious chief didn’t understand the world order as represented by Old Shatterhand (lit. ‘had to bite into the proverbial grass’).] Süddeutsche Zeitung, 03.12.1999, p. M/F1

Her research findings are summarized in a table, reproduced below in a somewhat modified form. AM stands for adjectival modification.

Table 2. Types of premodification (based on Stathi 2007: 103)

<table>
<thead>
<tr>
<th>Type of AM</th>
<th>Formal properties of Adj</th>
<th>Function of AM</th>
<th>Prototypical idioms</th>
<th>Examples</th>
</tr>
</thead>
</table>
| Internal   | participles, deverbal adjectives | activation of metaphor | transparent metaphorical idioms | jmd. tritt in bereitstehende Fettnapfchen  
   jmd. zieht den verfahrenen Karren aus dem Dreck  
   jmd. setzt sich zwischen alle verfügbare Stühle  
   jmd. nimmt jmdm./etw. den Wind aus den aufgeblähten Segeln |
| Intermediate level | dimensional adjectives, ordinal numerals | modification of noun | idioms with cranberry constituents | jmd. liest jmdm. die letzte Leviten |
| External   | denominational adjectives, (abstract concepts) | adverbial domain delimiters | opaque idioms | jmd. beißt ins heimatliche Gras  
   jmd. bringt jmdn. auf die sozialpolitische Palme |
### 3 Premodifiers in the North American News Text Corpus

#### 3.1 Types of premodifiers

It has been explained above that the syntactic modifier of an idiomatic noun may semantically modify the whole expression. *Martian* is such an external modifier in (9), denoting the location of the hypothetical failure of the mission, and thus semantically equivalent to a place adverbial.

(9) In the process, the Pathfinder team has blindsided space veterans and some independent analysts who, members say, warned them repeatedly that the relatively high-risk, low-budget Pathfinder would bite the *Martian* dust at an early stage.

As the above table shows, Stathi (2007: 89-96) found that external modifiers may denote not only the domain to which the action is restricted, but also location, time or cause. Most of these types also occur in the corpus. *Martian* refers to location in (9), *political* functions as a domain delimiter in (10), and *November* denotes time in (11).

(10) Twenty years ago, there were just a handful of political talk shows on the air; now there are at least 30...largely devoted to chewing the *political* fat.

(11) A lot of good horses bit the *November* dust at Aqueduct while the outsiders were scoring their successes...

In addition to external modifiers, there are inserted modifiers that semantically modify the

<table>
<thead>
<tr>
<th>Conjunction</th>
<th>context-embedding of idiom</th>
<th>textual coherence</th>
<th>idioms with body-part terms</th>
<th>jmd. fällt auf die vorlaute Schnauze</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>jmd. fährt jmdm. über den schon halb geöffneten Mund/über sein unverschämtes Maul</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>jmd. nimmt jmdn. auf den schlenkernden Arm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metalinguistic</th>
<th>metalinguistic comment</th>
<th>all types</th>
</tr>
</thead>
</table>

---

**Table:**

- **time, etc.**
- **Conjunction**
- **context-embedding of idiom**
- **textual coherence**
- **idioms with body-part terms**
- **jmd. fällt auf die vorlaute Schnauze**
- **jmd. fährt jmdm. über den schon halb geöffneten Mund/über sein unverschämtes Maul**
- **jmd. nimmt jmdn. auf den schlenkernden Arm**

---
noun. They may be compatible with only the literal meaning of the modified noun (12), with the figurative meaning alone (13) or with both (14).

(12) Fortner had to call Lacy twice. The first time Lacy thought someone was pulling one of her massive, long legs.

(13) California school officials caught the school uniform wave after several public school children were shot for their designer jackets and shoes.

(14) Higher doses of a new type of drug pack a stronger punch against the AIDS-causing virus, HIV, with little increase in toxic side effects, according to a study released Monday.

*Massive, long* exemplify conjunction modification in (12). This is the only clear instance in the corpus. The variant form of the idiom denotes two concepts simultaneously: the idiomatic meaning (*pull sb’s leg*) at the figurative level and a property of the referent (*massive, long legs*) at the literal level. It has a humorous, punning effect. The assignment of the following to this type is probably more debatable:

(15) Patrick McEnroe – the one with curls, a buttoned lip and a two-handed firearm of a backhand – carried the United States doubles team to an indefatigable 7-6 (9-7), 6-4, 6-3 victory over Mexico...

Typically, conjunction modifiers collocate with the literal sense of the noun without being integrated into the idiomatic meaning. Yet, both Ernst (1980: 60) and Stathi (2007: 100-102) allow figurativity in conjunction modification, though their examples are slightly different from (15). Ernst’s (1980: 60) (*Oil companies are having to*) tighten their Gucci belts has a modified noun that is interpreted metonymically: having Gucci belts stands for being rich. In Stathi’s (2007: 100-102) German examples, the body-part noun is interpreted metonymically, because the adjective denotes a property of the bearer of the body part: *Er habe nicht übel Lust [...] dem Herrn über sein unverschämtes Maul zu fahren* [he felt like cutting the man short (literally driving the man across his brazen mouth)] and [...] *fiel aber mit bedeutungslosen, ja lächerlichen Filmchen wie [...] böse auf die vorlaute Schnautze* [but failed due to meaningless, even ridiculous little films like [...] ], literally *he fell badly on the loud mouth*. (15) is based on conceptual blending, not metonymy, though the body-part noun is interpreted metonymically. *Buttoned* evokes the domain of clothing, which blends with the domain of speaking. Within the latter, *lips* stands for speech.

Conjunction modification, like external modification, does not presuppose the semantic autonomy of the noun, while intermediate (figurative-only) modification is a sign of the noun having an independent sense. “Independent” means that the idiom component contributes its (figurative) meaning to the expression, but this meaning may not occur outside the given idiom. *School uniform* in (13) is not unlike *maroden* ‘rotten’ in (7), since both modifiers make sense only when the noun has a figurative reading (figurative-only (intermediate) modification). *Stronger* in (14), however, cannot be classified as internal modification in Stathi’s (2007) terminology, since these internal modifier + noun sequences are analyzable only in the source domain, whereas they are holistically integrated into the figurative meaning, because the noun has no referent at the figurative level (Stathi 2007: 86-89). However, *punch*
does have the figurative sense ‘effect’, and stronger can also be interpreted at the figurative level as ‘more powerful’. The examples below are the only ones in the corpus that come close to internal (literal-only) modification.

(16) **U.S. WATER POLO TEAM TREADS IN MURKY WATER**

(17) Sunday’s defeat was their eighth in a row at the “Shark Tank,” where lately they have been unable to tread even frozen water.

Both (16) and (17) are found in sports context. (16) is the headline of an article that discusses why the American water-polo team is making no progress. The article begins with a report about the loss of US to Russia in a swimming pool where the quality of water left something to be desired. The idiom in (17) is used with reference to an ice-hockey team who has suffered loss after loss. Murky in (16) is far from straightforward: while it collocates with literal water, it can also be regarded as having a figurative sense at the idiomatic level, denoting the low quality of the state/situation (water) water polo continues to find itself in (tread in). Therefore, both the adjective and the noun contribute their own senses, rather than being interpreted as a whole. This suggests that many literally interpreted modifiers and nouns, such as murky waters or stronger punch, can separately map their literal (source-domain) senses onto corresponding figurative (target domain) concepts, without forming a semantic unit at the figurative level. This category of literal-and-figurative modification is missing from Stathi’s (2007) classification. A close scrutiny of her literal-only modification is necessary at this point. Her examples are summarized below (Stathi 2007:88).

Table 3. Stathi’s (2007) examples of internal modification

| jmd. setzt sich zwischen alle ADJ [durchgesessene/bereitgestellte/gebotene/verfügbare/vorhandene] Stühle | ‘sb throws away all opportunities’, literally ‘sb. sits down between all ADJ [sat through/provided/offered/available/existing] chairs’ |
| jmd. tritt ins ADJ [aufgestellte/bereitstehende/erreichbare/selbstausgelegte/verfügbare/erste] Fettmäpfchen | ‘sb makes a gaffe/faux pas, sb misbehaves’, literally ‘sb steps into the ADJ [positioned/available/accessible/laid out by oneself/available/first] grease pot’ |
Note that three of these four idioms are also used to illustrate figurative-only modification, when the adjective and the semantically autonomous noun separately contribute to the figurative meaning. As Stathi (2007: 96) explains, *Karren* ‘cart’ in (7) stands for revolution, and it typically stands for an institution or organization. Other examples of the same idioms used with figurative-only modification include *jmd./etw. nimmt jmdm./etw. den ADJ [scharfen ‘sharp’/frischen ‘fresh’/provokativen ‘provocative’/pathetischen ‘pathetic’] Wind aus den Segeln*, *jmd. tritt ins ADJ [große ‘big’/erdenkliche ‘imaginable’/diverse (plural) ‘various’/beliebte ‘popular’] Fettnäpfchen* (Stathi 2007: 96-99).

(18) *Nicht jeder Kunstparte fällt es so leicht wie der Popmusik, den Zwischenruf in die dargebotene Show zu integrieren und ihm dadurch den provokativen Wind aus den Segeln zu nehmen.* [Not every branch of arts can integrate an interruption of the show as easily as pop music and can thereby weaken its provocative character (lit. ‘take the provocative wind out of the sails’).] *Neuer Zurcher Zeitung*, 10.03.1998, p. 52

In contexts such as (18), “*Wind* ‘wind’ and *Segel* ‘sail’ have a degree of semantic autonomy and correspond to more abstract entities”, *Wind*, for example, stands for character (Stathi 2007: 97-98). *Fettnäpfchen* can correspond to gaffe, faux pas (Stathi 2007: 98). Furthermore, Stathi (2007: 98) also points out that some variants may be ambiguous, and an intermediate interpretation is plausible for some cases that were initially classified as internal, or vice versa. Thus, *erstes Fettnäpfchen* and *großes Fettnäpfchen* can have both literal and figurative readings. In fact, many of the literal-only examples above can be re-classified as figurative. *Stühle* ‘chairs’ can be assigned the figurative meaning ‘opportunities’, while *setzt sich zwischen* ‘sit down between’ corresponds to ‘missing, failing to take’. Adjectives which are regular collocational partners of the noun in the literal sense can be assigned corresponding figurative senses in the target domain. The modifiers *bereitgestellte/gebotene/verfügbare/vorhandene* seem to be easily interpretable in the target domain, while *durchgesessene* might denote that the opportunities have been taken many times before (by others), but the specific meaning is context-dependent. Likewise, if *Fettnäpfchen* means ‘gaffe, faux pas’, the adjectives also have their own figurative senses. *Selbstausgelegtes*, for example, conveys the idea that the social error was caused by the agent. In *Mit einer Fülle von Argumenten nimmt Krugman in dieser Aufsatzsammlung den “Pop-Ökonomen den Wind aus den aufgeblähten Segeln.”* [With a lot of arguments, Krugman weakens the ‘pop economists’ (lit. ‘takes the wind out of the inflated sails’) in this essay collection.] (cf. Stathi 2007: 86), *Wind* refers to abstract entities such as arguments, ideas, features that cause the pop-economists to have a lot of (aufgeblähten) energy or force (Segeln). *Tiefen Dreck* can be mapped onto deep trouble with the cart (*Karren*) corresponding to an organization, institution, or abstract complex system such as economy. The modifiers *verfahrenen/festgefahrenen/abgestellten* could have the target-domain sense ‘badly managed/stuck/halted’, but again the context may further specify the sense. Returning now to the variants of *tread water*, only *frozen* in (17) can be regarded as literal-only (internal in Stathi’s (2007) sense) modification with an intensifying function at the idiomatic level (*even frozen ‘even’ + tread water ‘stagnate’*). Thus, internal modification typically means that the noun has its own sense at both the literal and figurative levels. Exceptionally, some examples may occur of literal nouns that have no figurative senses independent of their adjective. They seem to denote intensification of the idiomatic meaning.

There is broad agreement among researchers that the interpretation of modifiers is
frequently ambiguous and depends on the decomposability of the idiom (Ernst 1980: 61-64, Langlotz 2006a: 268-271, Gustawsson 2006: 94-97, Stathi 2007: 98-99). Martian in (9) is an uncontroversial example of an external modifier, not only because it can be paraphrased with an adverbial, but also because dust does not have an independent figurative sense that could be modified. Words that typically function as external modifiers may have an internal (literal-and-figurative) interpretation when inserted into analyzable idioms. Thus, economic is ambiguous in (19): ‘be twice as powerful economically’ or ‘have twice the economic force’.

(19) He called the situation not yet “serious” but could become so since the Fed estimates long-term rates to pack twice the economic punch as short-term rates.

The external interpretation is more likely, since the context refers to market processes, bonds and stocks. However, the internal interpretation is not excluded and it is even more likely in (20), where politics is contrasted with art and culture.

(20) The French view is that, ‘la civilisation, c'est la France,' you know, and cultural values and art are political. They pack a political punch.

Since decisions concerning the type of premodifier are often hard to make, many contexts allowing both internal and external interpretations, no statistics will be provided.

One type not exemplified above is metalinguistic modification, whereby idiom use is signalled in the text by a word such as proverbial (Stathi 2007: 102). Interestingly, no metalinguistic modifiers were found in the American corpus.

### 3.2 Premodifiers and the semantic autonomy of the noun

The table below shows what percentage of the tokens have noncanonical premodifiers (adjectives or nouns) in the North American News Text Corpus.

**Table 4. Premodifier variation (number and percentage of variant tokens)**

<table>
<thead>
<tr>
<th>Idiom</th>
<th>Variant</th>
<th>Total</th>
<th>Variant %</th>
</tr>
</thead>
<tbody>
<tr>
<td>prick the bubble</td>
<td>15</td>
<td>20</td>
<td>75</td>
</tr>
<tr>
<td>pack a punch</td>
<td>100</td>
<td>181</td>
<td>55.2</td>
</tr>
<tr>
<td>catch the wave</td>
<td>53</td>
<td>134</td>
<td>39.6</td>
</tr>
<tr>
<td>swallow a bitter pill</td>
<td>42</td>
<td>111</td>
<td>37.8</td>
</tr>
<tr>
<td>weather the storm</td>
<td>67</td>
<td>291</td>
<td>23</td>
</tr>
<tr>
<td>upset the applecart</td>
<td>12</td>
<td>63</td>
<td>19</td>
</tr>
<tr>
<td>grease the wheels</td>
<td>9</td>
<td>58</td>
<td>15.5</td>
</tr>
<tr>
<td>lose one’s grip</td>
<td>35</td>
<td>236</td>
<td>14.8</td>
</tr>
<tr>
<td>make headway</td>
<td>140</td>
<td>1072</td>
<td>13</td>
</tr>
<tr>
<td>prime the pump</td>
<td>13</td>
<td>122</td>
<td>10.7</td>
</tr>
<tr>
<td>buy the farm</td>
<td>1</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>steal sb’s thunder</td>
<td>22</td>
<td>248</td>
<td>8.9</td>
</tr>
<tr>
<td>rock the boat</td>
<td>16</td>
<td>229</td>
<td>7</td>
</tr>
</tbody>
</table>
Debreceni Egyetemi Kiadó (Debrecen)

chew the fat 2 31 6.5
button one’s lip 1 20 5
pass the buck 6 135 4.4
pull sb’s leg 2 47 4.3
miss the boat 9 216 4.2
come a cropper 1 32 3.1
hold the fort 1 56 1.8
tread water 4 237 1.7
bite the dust 2 141 1.4
drag one’s feet 1 975 0.1
rack one’s brain 0 34 0

Direct comparison with Akimoto’s (1983: 99-191) corpus findings is impossible, given the differences between the two corpora, language varieties (British versus American) and search methods. Nevertheless a comparative table is provided below, including only the expressions that both studies examine.

Table 5. Number and percentage of variant tokens: Akimoto (1983) and the present study

<table>
<thead>
<tr>
<th>Idiom</th>
<th>Akimoto’s (1983) corpus</th>
<th>North American News Text</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Variant</td>
<td>Total</td>
</tr>
<tr>
<td>prick the bubble</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>make headway</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>steal sb’s thunder</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>rock the boat</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>pass the buck</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>pull sb’s leg</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>miss the boat</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>bite the dust</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>drag one’s feet</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>rack one’s brain</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

A computerized search is capable of finding many more examples than a simple manual search, though Akimoto’s corpus is also probably much smaller. Where both corpora provide evidence for adjective insertion, Akimoto’s (1983) percentages are much higher. This is likely to be due to the relatively low number of tokens, rather than any big difference between the language varieties or corpus composition.

Premodifiers are commonly attested in the North American News Text Corpus with expressions that are not usually thought to contain semantically autonomous nouns (in order of percentage: grease the wheels, prime the pump, buy the farm, chew the fat, pull sb’s leg, come a cropper, tread water, bite the dust, drag one’s feet). Some of these idioms may turn out to be analyzable. Wheels and pump may have semantic autonomy if they are metaphoronymically mapped onto abstract concepts. The premodifier is often interpreted as equivalent to an appositive that clarifies the meaning of the idiom component.
Money, after all, is what greases the economic wheel.

In (21), *economic* helps the reader to identify the source domain vehicle with target domain economy (‘stimulates economy’). Similarly, the sense of the premodifier can be assigned to the nominal component in *merger wheels*, *takeover wheels*, *money wheel*, *spending pump*, *research pump*, *political money pump*, *narrative pump*, *economic pump*, *creative pump*, *financial pump*, *Pocahontas pump*, *underdog pump* and *home-building pump*. Where the modifier is an adjective, the related nominal sense is attached to the noun. In (22) *creative pump* denotes ‘(spell of) creativity’.

Appositive modifiers also occur in analyzable idioms (*miss the Super Bowl boat*). Modifiers other than appositive are also found, such as *creaky wheels*, *squeaky wheels*, *an important pump*. *Tread water* may similarly be treated as analyzable in some contexts such as *The market's going to have to tread some heavy water*, where *water* corresponds to the financial circumstances that affect the market. The example *U.S. water polo team treads in murky water* was discussed above (16). The rest of the instances are listed below in the form of concordance lines.

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(23) “Table Talk” section where readers chew the cultural fat. One recent pos

(24) launched Saturday) largely devoted to chewing the political fat. The exalte

(25) of defense against buying the Martian farm? Air bags. They seem a little ou

(26) was pulling one of her massive, long legs. The second time, Lacy said she

(27) TTER-WRITING JOKESTERS PULL CORPORATE LEGS &QL; &UR; By JO

(28) e Outcasts.”) And PC comes a complete cropper in „A Guy Like You,” one of t

(29) t year or be lucky to tread financial water at current pay levels. Here's w

(30) have been unable to tread even frozen water. The Kings can empathize but wo

(31) get Pathfinder would bite the Martian dust at an early stage. “We took a l

(32) A lot of good horses bit the November dust at Aqueduct while the outsiders

(33) said. When CBS dragged its collective feet and didn't schedule “Under One

(26) was identified above as conjunction modification, (30) was classified as a special case of internal modifier with the noun having no separate figurative sense independent of the adjective (literal-only modification), while external modifiers occur in (23), (24), (25), (28), (31) and (32). (29) is ambiguous, but an internal interpretation is possible (‘cope with financial problems/tasks’). Modifiers in idioms without autonomous nouns can be accounted for if we assume contextual decomposability or external modification. The former option tends to be chosen in motivated idioms, while the latter solution is preferred in opaque expressions. Without detailed psycholinguistic testing, however, it is premature to exclude decomposability in opaque idioms. Thus, some speakers might attach the sense ‘discussion topic’ to fat, and ‘talk’ to chew in some contexts. Similarly, cropper could mean ‘failure’ and come could then convey something like ‘experience’. On the other hand, the variant forms in (23), (24) and (28) could be traced back to entrenched patterns such as [come a intensifier/adjective of extent cropper], as Langlotz (2006a: 292) suggests.

(27) and (33) contain modifiers that tell us something about the discourse participant. They share this feature with conjunction modification, but the modifiers corporate and collective
are more integrated into the idiom semantically than typical conjunction modifiers. Corporate is equivalent to a determiner in the genitive case, the meaning is synonymous with ‘pull companies’/corporations’ legs’, while collective can be regarded as an external modifier: ‘CBS, as a group, was reluctant’ or ‘CBS was reluctant collectively’.

4 Conclusion
Premodification is extremely common in idioms, occurring not only with semantically autonomous nouns. It has been found that external modifiers have the whole expression in their scope, denoting the domain, location or time of the event, while internal modifiers modify the nominal component of the idiom. The literal meaning of this noun in most cases corresponds to some (more) abstract concept, thus the noun contributes its independent meaning to the expression. In some cases, the modifier serves to intensify the idiomatic meaning and the noun has no independent figurative sense. An interesting type of modification is conjunctive modification, whereby the adjective is not interpretable at the figurative level and denotes a property of a body part or person. The majority of premodifiers are internal or external. Stathi’s (2007) internal modification has been shown to be much less common. Premodifiers can also function as appositives to the nouns or as equivalents of possessive determiners.

References
