

## Word-Formation in Mark Boal's *The Hurt Locker*

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The repetition and development of unifying themes, ideas, and images within narratives are long-standing concerns in the literature on screenwriting. Four points of consensus concerning themes are evident: themes are 1) very few 2) are different from—but related to—the plotline 3) are oft-repeated and 4) are implicitly, rather than explicitly, stated. Several areas within the field of linguistics are relevant to these topics. Foremost among them is morphology, specifically word-formation—the rules by which new words are built upon the bases of other words, roots, or stems. This article considers the relationship of several kinds of word formation to thematic repetition in Mark Boal's *The Hurt Locker*, the 2010 Academy-Award winner for best original screenplay. The morphological analysis reveals a pattern of thematic repetition extending to every scene of the screenplay and that encompasses the story's underlying and unifying themes.

**Keywords:** Etymology; Morphology; Screenwriting; Screenplay; Rhetoric; Network Text Analysis; Indo-European Roots

### Introduction

Academics and practitioners of screenwriting have written extensively about the repetition and development of unifying themes, ideas, and images within narratives (e.g. Mehring, 1990; Horton, 2000; Parker, 2002; Dethridge, 2004; Field, 1998, 2005; Snyder, 2005; Norman, 2007). Generalizing about that literature is exceedingly challenging. Firstly, investigations differ according to which elements of a narrative are repeated, where they are repeated, and how often. Secondly, much of the research is case-based and evidence offered in support of preferred explanations is largely anecdotal. And yet, despite the differences, there are several points of consensus about the repetition of themes, particularly within screenplays. Among the most important are that themes are 1) very few in number 2) are related to, but different from, the plot 3) are repeated extensively and 4) are abstract, and thus inferred rather than explicitly stated.

Within the field of linguistic morphology are several concepts relevant to this topic. Of special interest and relevance is the subject of word-formation—the rules by which new words are built upon the bases of other words, roots, or stems. In this article I examine the relationship of several kinds of word-formation—e.g. inflection, derivation, acronyms, and compound words—to thematic repetition in Mark Boal's *The Hurt Locker*, the 2010 Academy-Award winner for best film and best original screenplay. Drawing on concepts from screenwriting and word-formation, I identify a clear pattern of thematic repetition in the narrative, one that extends to every scene of the screenplay and that accounts for the story's underlying and unifying themes, as well as the events and character arcs that dramatize them.

### Literature Review

Despite considerable differences in conceptual vocabulary

and in units of analysis, four points of consensus emerge from my reading of work on the repetition of themes within screenplays. In short, themes are 1) very few in number 2) are related to but distinct from the plot 3) are repeated extensively and 4) are abstract, and thus inferred rather than explicitly stated. Concerning the first of these points, most authorities agree that the number of themes a screenplay contains is three or fewer with one being the preferred number. For example, in *The Screenplay: A Blend of Film Form and Content*, Mehring (1990) finds one—and only one one—theme per screenplay: in *Body and Soul* it's "self-respect", in *Beverly Hills Cop* it's "chutzpah", and in *Rebel without a Cause* it's "responsibility". For Field (2005), the number is sometimes larger than one. In *The Royal Tenenbaums* he identifies three themes—"family, failure, and forgiveness"—but in *Chinatown* and *Pulp Fiction*, the number drops back to one. In the former the theme is "water" and it is, he writes, "an organic thematic thread, woven through the story." In *Pulp Fiction* the single theme is "revenge". In *The Art and Science of Screenwriting*, Parker (2002: p. 91) differentiates between eight broad "theme types" and the narrower "thematic concern" of a particular screenplay. The former include the desire for justice or order, the pursuit of love or pleasure, and the fear of death or the unknown. According to Parker, while broad theme types are useful for classifying entire genres, any given screenplay should have only one. Any more than that and, he asserts, confusion ensues:

In addition, the longer the narrative, the more likely it is—especially one which is story-dominated—for there to be a number of themes competing for attention within the narrative. The real confusion is when one or more stories are focused on themes different from that of the main story. ... one of the most powerful uses of theme in narrative construction is for all the stories in the narrative to reflect the same basic theme (ibid).

In *Writing Your Screenplay*, Dethridge (2004) allows for the possibility of multiple themes yet still draws a distinction between the “central theme” or “premise” of a screenplay and subordinate themes. The former is “the overall concept that governs the story”, while the latter are cast in an important but decidedly supporting role. Specifically, she states that “the strongest stories” are built “around a well-organized set of themes which help to cement the premise and to imbue the story and characters with flavor or attitude”. She illustrates this point with *The Silence of the Lambs*, a film in which “metamorphosis” is the central theme or premise. The three secondary themes each have to do with taking (on) a new life or identity.

Concerning the second point—the relationship between theme and plot—Mehring (1990: p. 222) posits a superior role for the former and a subordinate but vital role for the latter:

...plot is a vehicle for theme. Plot is events. Theme is the glue that holds all of the events together—the principle by which all things are related to each other. Theme is the unifying force. Plot and theme go hand in hand, cannot be separated, but are different. They illuminate parts of the same experience. The theme tells us what the protagonist needs and yearns for—the theme goal. The plot shows us what the protagonist will do to achieve what she needs—the plot goal.

For Mehring it is the theme that makes a story out of otherwise disparate events, that relates events to each other. She states that:

...a theme without plot is not a story. A story without a theme is an empty series of events that may distract but not involve the reader/viewer. It is the theme that... determines the patterns of repetition, and that discovers that connections that relate all of the elements (ibid).

Similarly, in *Essays on Ayn Rand's Fountainhead*, Mayhew (2006: p. 88) recounts Rand's efforts to adapt her novel, *The Fountainhead*, for the screen. Her central concern, Mayhew asserts, was to achieve close integration of theme (the “core” of a story's “abstract meaning”) and plot (“a purposeful progression of logically connected events leading to the resolution of climax”).

Recall that the third point of consensus concerns the extensiveness or ubiquitous repetition of themes. Dethridge (2004) advanced this notion concerning “metamorphosis”, the central theme in *The Silence of the Lambs*, when she wrote that “the audience... may not really ‘see’ the writer's premise on a conscious level.” However, on close examination of the script, it seems clear that the writer includes evidence for his premise *in every scene* (p. 52, emphasis added). Developing this idea further, she offers an intriguing and testable hypothesis when she states that “any scene picked at random from your screenplay can be read as a kind of sample or miniature, scaled-down version of the entire screenplay. That's because *each scene* will reflect the larger tone, mood, premise and themes of the screenplay (p. 150, emphasis added).

Dethridge's discussion of thematic repetition also addresses the fourth broad point of consensus—the abstract and implicit nature of themes:

The premise is the most difficult theoretical element to discuss, as it represents one of the most ethereal aspects of

the writing. The writer must have the patience or the focus to identify a premise in their own work. The premise is often invisible to the audience. Rather than being stated baldly or acted out... (it) works at a subliminal or subconscious level to help convey a strong idea that goes beyond concrete action into the realm of feeling or mood. Think of your premise as the central, most important theme. It's an idea which will be repeated again and again in different ways throughout the script.

Mehring (1990: p. 224) further elaborates the relationship between the invisibility or implied nature of themes and role of the screenwriter:

Almost any theme can be announced in a relatively few sentences—but that is not the function of screenplays. It is the function of screenwriters to seduce, to influence, to affect—to gain understanding and acceptance of their themes through vicarious and emotional experiences. ... It is the domain of the screenwriter to create a journey that elicits feelings and personal insights. The reader/reviewer can announce the theme after experiencing the screenplay—but the screenwriter never does.

On this last point there is a notable dissenting opinion. In his best-selling book on screenwriting intriguingly entitled *Save the Cat!* Snyder (2005: p. 73) sharply rejects the notion that themes remain unstated. Known for having been one of Hollywood's most successful “spec” screenwriters, Snyder maintains that the theme should be stated “loud and clear” on no later than the fifth page of the screenplay. The key consideration is that the *protagonist* who doesn't recognize it:

Somewhere in the first five minutes of a well-structured screenplay, someone (usually *not* the main character) will pose a question or make a statement (usually *to* the main character) that is the theme of the movie. “Be careful what you wish for,” this person will say. Or “Pride goeth before the fall” or “Family is more important than money.” It won't be this obvious, it will be conversational, an off-hand remark that the main character doesn't get at the moment—but will have far-reaching and meaningful impact later. This statement is the movie's **thematic premise**. (Bold and italic emphasis in original).

## The Role of Words in the Repetition of Themes

In all of the works referenced, words—both as dialog and description—are assigned a central role in the repetition of themes. However, detailed explanations and expositions by the authors of *how* words perform this role are exceedingly rare. Rather, generalizations supported by the occasional anecdote are more the norm. Robson's (1983: p. 45) study of the narrative structure of *Grey Gardens* is a case in point. Repetition, he asserts, is essential to four “recurrent themes” that he says characterize the lives of the mother and daughter protagonists—Big Edie and Little Edie:

These recurrent themes may be arranged conveniently as in clusters of antinomies. The first concerns Freedom and Confinement and it includes repeated references to independence and dependence, self-reliance and loneliness, as well as city and country. The second involves Past and Present and it includes youth and age as well as time and

timelessness. The third involves Love and Hate and it includes compassion and contempt, desire and repression, modesty and promiscuity and marriage and divorce. The fourth concerns Order and Disorder and it includes memory and forgetfulness as well as creativity and failure. Each of these oppositions linked with an often elaborate network of visual and verbal references (ibid).

“Elaborate” though the relationships may be, Robson provides only two examples of this “network of visual and verbal references”. The most relevant one concerns how the sub-theme of modesty and promiscuity is underscored by “repeated references to clothing” (ibid, 45). But beyond noting Little Edie’s insistence upon wearing girdles, Robson does not place references to girdles within the context of other references to clothing. Nor does he indicate what relationship those articles have to one another or to the four recurring themes.

I am aware of only one study of films that takes words and their properties into account in its investigation of themes—Grindon’s (1996: p. 66) analysis of the boxing genre. Working from the premise that film “genres trade on the expectations of the viewer (and) promise a particular emotional response” he posits that “the characteristic emotions elicited by the boxing film are nostalgia and pathos.” But unlike prior studies of the boxing genre, Grindon uses etymology to relate these two words to recurring themes. After asserting that “a bittersweet longing for the past finds expression in the boxing film in multiple ways”, Grindon insightfully observes that “nostalgia finds its etymological root in the Greek words for home and pain; pathos has a close relationship, as its Greek etymology is rooted in the word for suffering. Bearing witness to suffering is central to spectatorship in the boxing genre.” To date, no investigations of themes with screenplays have built on Grindon’s implied and more general thesis—that the properties of words are instrumental to identifying recurring themes and the “multiple ways” that they find expression.

### What Is Word-Formation?

In linguistics, the term word-formation describes the process of forming new words through changes in their form (Wisniewski, 2007). Scholars in the field of morphology, the study of rules governing the internal structure of words, have described several types of word-formation (Stekauer, 2000; Plag, 2003, Lieber & Stekauer, 2009). Five of the most widely-recognized forms are applicable to this study—inflection, derivation, compounding, acronyms, and blend words. *The American Heritage Dictionary of the English Language* (AHDEL) defines “inflection” as the “alteration” of the form of a word by the addition of an affix, as in English dogs from dog, or by changing the form of a base, as in English spoke from speak, that indicates grammatical features such as number, person, mood, or tense.

Derivation most typically involves the appending of prefixes and suffixes to a word stem. Compared to inflection, derivation often results in changes to the grammatical class of a stem and typically results in a greater change in meaning. Examples using head as a noun or verb include headless (adjective), headily (adverb), heady (adjective) and header (noun).

Compounding refers to the creation of new words through the combination of old or existing ones. The combined word is very often very different in meaning than the either of the original two, e.g. head, first, and headfirst. Other examples

using head include headroom, headset, headcase, and headcount.

Acronyms are words formed from the initial letters of a name, e.g. NATO from North Atlantic Treaty Organization or by combining the initial letters or parts of a series of words, e.g. radar from radio detecting and range.

Finally, blending involves joining parts of two words. Well-known examples from English include smog from smoke and fog, guesstimate from guess and estimate, brunch from breakfast and lunch and motel from motor and hotel.

### Applying Word-Formation to the Thematic Analysis

Each of the five types of word-formation listed above is applicable to theme-words like those identified by Grindon (1996), i.e. nostalgia and pathos. And they can be applied to at least four different levels or units of analysis: 1) the theme-word itself 2) its etymological root 3) its synonyms and/or homonyms and 4) their etymological roots and/or roots with synonymous definitions. For example, assume the noun “light” were the theme-word in question. The first level would include words such as *lights*, *lighted*, *lit*, *lighting*, *light emitting diode*, *LED*, *light-year* and *light bulb*. At the second level of the analysis, we would begin by recognizing that “light” descends from the Indo-European root *leuk-* which means “light, brightness” (Watkins, 2000: p. 49). Other words descending from that root include *illuminate*, *illustrate*, *lightning*, *lucid*, and *lunar*. In the third level we would include the other sense of “light”, i.e. having little weight. To our list of words associated with the theme-word we would add *lightly*, the adjective *lighter*, and several new compound words, e.g. *lighthearted*, *lightweight*, *light infantry*, and even *light beer*. In the fourth level we would add the derivatives of *legwh-*, the etymological root of this sense of “light” (Watkins, 2000: p. 47). First included in the list would be words such as *relief*, *carnival*, *elevator*, *lever*, and *lung*; all of their inflected and derivative forms; and finally, compounds, blends or acronyms with which they are a part, e.g. *elevator music*, *iron lung*, *pain reliever*, and *leveraged buyout* (LBO).

In the next section of this study I treat both “hurt” and “locker” as theme-words and analyze each in a manner similar to that detailed in the preceding paragraph. The result of doing so is three-fold. Firstly, from the two theme-words I identify several hundred inflections, derivations, compound words, acronyms, and blend words. Secondly, using the etymological roots of the latter three groups, I construct a morpho-etymological map of the screenplay, i.e. a network of verbal associations extending to all of its scenes, events, character arcs, dialog, and description. Finally, through an analysis of the properties of this network I identify an unstated, underlying theme of the screenplay. Before describing that analysis and its results in greater detail, I first provide a synopsis of the story and details about the screenplay and its author.

### Plot Summary & Screenplay Description

*The Hurt Locker* (Boal, 2007) follows a US Army explosive ordnance disposal (EOD) team during the Iraq War. The screenplay was written by Mark Boal, a freelance journalist who embedded with such a team in Iraq in 2004. The film was directed by Kathryn Bigelow and stars Jeremy Renner,

Anthony Mackie, and Brian Geraghty. The story follows three members of an EOD unit over the last six weeks of a year-long tour. The film was shot in Jordan, within miles of the Iraqi border (Wikipedia, 2012).

Starting with its initial screening at the 2008 Venice International Film Festival, *The Hurt Locker* has earned many awards and overwhelmingly positive critical reception. It won in six categories at the 82nd Academy Awards and was nominated in nine, including Best Picture, Best Director, Best Actor, Best Original Screenplay, Best Sound Editing, Best Sound Mixing, and Best Film Editing. Bigelow, the director, became the first woman to win the Best Director award. The film also shined at the 2010 BAFTA Awards, winning best film, director, original screenplay, editing, cinematography and sound. Interestingly, the one place the film succeeded least was at the box office: *The Hurt Locker* is the lowest-grossing movie to ever win the Academy Best Picture award (ibid).

The title takes its name from a colloquial expression for being injured in an explosion. It appears to have originated during the Vietnam War where it was one of several phrases with similar connotations. The setting for the film is the early stages of the post-invasion period in Iraq, circa 2004. The protagonist is Sergeant First Class William James, a battle-tested veteran, who becomes the team leader of a Baghdad-based, EOD unit belonging to the Bravo Company. He draws the assignment after Staff Sergeant Thompson, the previous leader, is killed by a radio-controlled improvised explosive device (IED). Working under James are Sergeant J. T. Sanborn and Specialist Owen Eldridge. Their jobs entail maintaining radio communications with their team leader, James, via the radio inside his state-of-the-art bomb suit, as well as providing him with rifle cover while he examines and defuses IEDs. During their missions of disarming IEDs and engaging insurgents together, James's unorthodox methods lead Sanborn and Eldridge to conclude that he is clearly very talented, but equally reckless. Not surprisingly, tensions rapidly escalate between James and his two team members. During a raid on a warehouse, James discovers a dead body with an unexploded bomb surgically implanted. James believes it to be the body of "Beckham", a young Iraqi merchant and soccer enthusiast that James had previously befriended on the base.

Later, when James orders his team to hunt down two insurgents responsible for a recent spate of bombings, Sanborn protests, insisting that the task be assigned to an infantry unit. James overrules him and during the subsequently botched operation, Eldridge is accidentally shot in the leg. The next morning, James is approached by "Beckham" whom he brusquely ignores. Eldridge, who is being prepared to be airlifted to a hospital, angrily blames James for his shattered leg.

In the final act, after failing in a mission to remove and disarm a time-bomb strapped to an Iraqi civilian's chest, Sanborn breaks down. He tearfully confesses to James that he is overwhelmed by the pressure of serving in an EOD unit. What he looks forward to, he says, is leaving Iraq and starting a family. Soon thereafter, James returns home to his wife and infant son in Tennessee. He is shown dutifully performing the routine tasks of suburban civilian life—shopping in the supermarket, cleaning leaves from the gutter, and helping his wife prepare dinner. One night James quietly confides in his son about his love for his work. The next we see James, he is back in Iraq, beginning a new 365-day rotation as an EOD team leader, this time with the Delta Company.

## Word-Formation Analysis

A PDF formatted copy of *The Hurt Locker* was obtained online (Boal, 2007). The text was removed and pasted into Microsoft Word. After removing spurious characters, the direction "CUT TO:", and page numbers, the screenplay was found to have 19,419 words in 145 scenes ranging in length from one sentence (excluding the slug line) to over four pages.

Recall the basic analytical approach outlined above: five types of word-formation are used to generate a list of words associated with the two theme-words—"hurt" and "locker". The analysis extends to four different levels or units of analysis: 1) the theme-words themselves 2) their etymological roots 3) their synonyms and/or homonyms and 4) their etymological roots.

*Theme-words:* The word "hurt" has several inflections and derivations—*hurts*, *hurting*, *hurtful*, *hurtfully*, and *hurtle*—but is associated with no well-known compounds. Among this set, only the word "hurt" appears in the screenplay and then only three times—once in dialog and twice in description. The word "locker" does not appear at all in the screenplay, nor do inflections, derivations, or compounds based upon it.

*Etymological Roots of the Theme-Words:* According to the AHDEL, the theme-word "hurt" descends from the Middle English *hurten*. No additional words-forms are identified with the roots beyond those in step one, above. Again according to the AHDEL, the word "locker" descends from the Old English *loc-* meaning "bolt, fastening, enclosure." Six inflections, derivations, and compounds of it appear eleven times in the screenplay—*lock*, *locked*, *locking*, *locks*, *unlocks*, and *padlocks*. Notably, the word "locker" is not among them. Equally notable is the fact that the first half of the only compound, *padlock*, is of unknown origin.

*Synonyms and Homonyms of the Theme-Words:* The third step involves consideration of synonyms and homonyms of the two theme-words. I used *Rogel's 21st Century Thesaurus* to identify 23 synonyms of "hurt" as a verb and adjective and of "locker" as a noun. Fifteen inflections, derivatives, and compounds of these synonyms appear in the screenplay are found in the screenplay—*pain*, *unharmd*, *harmless*, *wound*, *wounds*, *wounded*, *exit wound*, *burn*, *burner*, *burns*, *burning*, *bruises*, *bruising*, *chest*, and *trunk*. These words appear a total of forty-four times over seventeen different scenes.

*Etymological Roots of Synonym & Synonymous Roots:* In the third column of **Table 1**, below, are listed the twenty-eight etymological roots of the twenty-three synonyms of "hurt" and "locker". The fourth column lists the inflections and derivations of the synonyms of "hurt" and "locker" that appear in the screenplay. The fifth column contains all compounds, acronyms, and blend words appearing in the screenplay that are associated with the roots listed in column three. The sixth column lists the "new" etymological roots, i.e. the roots of the other words forming the compound word, acronym, or blend word.

Several patterns in the table are noteworthy. First of all, word-forms associated with most synonyms are found in the screenplay. The only six synonyms not represented are afflict, injure, ache, scratch, sore, and cabinet. Interestingly, not one of these descends from an Indo-European root. Secondly, all synonyms associated with three or more word-forms in the screenplay have Indo-European roots. The synonyms associated with the greatest number of word-forms in the screenplay are burn, suffer, and nick—all synonyms of "hurt"—and trunk,

**Table 1.**  
Synonyms of “hurt” and “locker” and their etymological roots and word-forms.

Theme-word	Synonym	root (definition) <sup>1</sup>	Inflections and derivations (of synonyms) that appear in the screenplay	Compounds, acronyms, and blend words (related to synonyms) that appear in the screenplay	New roots
hurt	abuse	<i>usen</i> (use)	use, used, uses		
hurt	burn	<i>gwher-</i> (to heat, warm)*	brand, brands, burn, burned, burning, burns, burnt	still-burning	
hurt	sting	<i>stegh-</i> (to stick, prick; pointed)*	extinguisher	fire-extinguisher	<i>paw</i> (fire)*
hurt	torment	<i>terkw</i> (to twist)*	torch, tormentor	blowtorch	<i>bhle</i> (to blow)*
hurt	torture	<i>terkw</i> (to twist)*	torch, tormentor	blowtorch	<i>bhle</i> (to blow)*
hurt	wound	<i>wen-2</i> (to beat, wound)*	wound, wounded, wounds	exit-wound	<i>ei</i> (to go)*
hurt	afflict	<i>fligere</i> (to cast down, to strike)			
hurt	injure	<i>yewes</i> (law)*			
hurt	ache	<i>aken</i> (ache)			
hurt	harm	<i>harm</i> (harm)	harmless, unharmed		
Hurt	distress	<i>streig-</i> (to stroke, rub, press)*	constrained, strains, stress, strikes		
hurt	pain	<i>kwei</i> (to pay, atone, compensate)*	punishing		
hurt	scratch	<i>scracchen</i> (scratch)			
hurt	sore	<i>sar</i> (sore)			
hurt	suffer	<i>bher-1</i> (to carry; to bear children)*	bear, birth, confer, differences, different, offers, prefer, referring		
hurt	wound	<i>wen-2</i> (to beat, wound)*	wound, wounded, wounds	exit-wound	<i>ei</i> (to go)*
hurt	bruise	<i>brysan</i> (to crush)	bruises, bruising		
hurt	nick	<i>sed-</i> (to sit)*	assessment, cathedral, chair(s), nest, nestled, obsessing, possessed, possesses, possessions	headset	<i>kaput</i> (head)*
locker	cabinet	<i>cabane</i> (small house)			
locker	chest	<i>cest</i> (box)	chest		
locker	closet	<i>clos</i> (enclosure)	close, closed, closer, closes, enclosed		
locker	trunk	<i>tere-2</i> (to cross over, pass through)*	through, transfixed, transitions, translator, transport, trunk		
locker	cupboard	<i>cuppe</i> (drinking vessel)	cups		
locker	cupboard	<i>bord</i> (board)	board	circuit board	<i>ei</i> (to go)*
locker	wardrobe	<i>wer-3</i> (to perceive, watch out for)*	Awkward(ly), forward, guard, toward(s), wares	warehouse	<i>hous</i> (house)*
locker	wardrobe	<i>reup</i> (to snatch)*	erupt, erupts, interrupts, ripping, rips, routine		
locker	cold storage	<i>gel</i> (cold, to freeze)*	chill, cool		
locker	cold storage	<i>sta-</i> (to stand)*	circumstance, consists, distance, instant(ly), instead, resistance, resists, restore, rests, stable, stall(s), stand, standard, standing, stands, state, static, stay, stud, system, understand(s)	standard issue, state-of-the-art, goal post, still-burning, steering wheel	<i>gol</i> (boundary), <i>ar-</i> (to fit together)*, <i>kwel-1</i> (to revolve)*

Note: <sup>1</sup> indicates an Indo-European root found in the *American Heritage Dictionary of Indo-European Roots* (Watkins, 2000).

wardrobe, and (cold) storage—all synonyms of “locker”. The word storage descends from the Indo-European root *sta-* which means “to stand” (Watkins, 2000: p. 84). The twenty-two inflections and derivations and the seven compounds associated with that root are greater, by far, than the number associated with any other root. Third, it is worth noting that in every instance, the number of compound words is smaller than the

number of inflections and derivations associated with a root. Also, in no instance is a root associated with a compound and not an inflection or derivative. Finally, the eleven compound words generate eight additional etymological. Six of these eight roots are Indo-European roots as indicated in the *American Heritage Dictionary of Indo-European Roots* (Watkins, 2000)—*paw-* (fire), *ei-* (to go), *bhle-* (to blow), *kaput-* (head), *ar-* (to fit

together), and *kwel-1* (to revolve, move around) and two are Old or Middle English—*hous* (house), *gol* (boundary). Those roots, along with their definitions, are listed in the rightmost column of **Table 1**.

One fact not apparent from the **Table 1** concerns the number of listed inflections, derivations, and compounds and their frequency of appearance in the screenplay. The table contains a total of 126 word associated with the 23 synonyms. Together they appear 379 times in the screenplay. That is nearly 90 times as many words as the inflections, derivations, and compounds of “hurt” and “locker” alone.

As for roots with synonymous meanings, only one is evident among the Indo-European roots listed in the *American Heritage Dictionary of Indo-European Roots* (AHDIER)—*pei* which means “to hurt” (Watkins, 2000: p. 62). In that dictionary, six words are shown to descend from that root—fiend, passible, passion, impassive, and patient. Only one of them is found in the screenplay—the word *impassive*, which appears once. No Indo-European roots contain the word lock or connote any of its variant forms.

### A Further Extension

In the first column of **Table 2**, below, are the eight roots previously placed in the rightmost column of **Table 1**. In the second column of **Table 2** are the fifty inflections, derivations, and compounds associated with these eight roots. Another twenty-two compound words and one acronym are listed in the third column. They are associated with nine additional etymological roots—*bodi* (body), *plaudere* (to clap), *radius* (radius), *zona* (zone), *cappe* (cap), *leuk-* (light), *kwetwer-* (four), and *gwhen-* (to strike, kill)—all of which are listed in the rightmost (fourth) column. This process was repeated several times. That is to say, newly introduced roots (shown in the rightmost column) became the roots appearing in the first column of another “table”. These roots, in turn, gave rise to another set of inflections, derivations, and compounds. This process had to be repeated over twenty times before no new compound words and roots were identified. At the conclusion of this process over 122 etymological roots were identified. Excluding spelled numbers (e.g. thirty-eight, six, and thirteen), references to the time of day (e.g. 9 o’clock) and words included on lists of the 100 most common in the English language (e.g. of, new, and see), a

total of 651 inflections, derivations, compounds, acronyms, and blends associated with these roots were found in the screenplay. In all, these 651 words appear 2335 times in the 19,419-word screenplay. That is equivalent to 12% or nearly one in every eight words. Given that the 100 most common words account for just under 40% of the total, these 651 words account for just under 20%, or one in every five, of the remaining words in the screenplay.

### Network Mapping

Of the 651 words identified above, 105 were compounds, blends, or acronyms, excluding compound pronouns (somebody, anybody, and someone) and pseudo-compounds such as supermarket, overhead, forearm, and uphill. Shown below, **Figure 1** presents a morpho-etymological network mapping of the 105 compounds, blends, and acronyms. Like all network maps, it is comprised of nodes and ties. In this case, the nodes are etymological roots. Each pair of nodes is linked by a tie which in this case is the compound, acronym, or blend word associated with the two nodes. For example, in the **Figure 1** the tie labeled “body armor” connects a node labeled *bodi-*, which means “body”, and the node labeled *ar-* which means “to fit together”. Similarly, a tie labeled “gunfire” connects a node labeled *paw-* which means “fire” and another node labeled *gwhen-* which means “to strike, kill” (Watkins, 2000).

Several features of each map are noteworthy. Before discussing them in detail it should be noted that the nodes of the network appear in two colors. Recall that in **Table 1** were listed twenty-three synonyms of hurt and locker and that twenty-six etymological roots were associated with them. Among these roots, eight had compound words associated with them. The roots are *sed-* (to sit), *sta-* (to stand), *gwher-* (to heat, warm), *wen-2* (to beat, wound), *bord* (board), *terkw-* (to twist), *stegh-* (to stick, prick, pointed), and *wer-3* (to perceive, watch out for). The nodes in the network associated with these roots are unfilled, i.e. white. All other nodes are “filled” and appear in black.

The large node near the center of **Figure 1** is the Latin *plaudere-* which means “to clap.” This root is associated with several compounds and acronyms appearing in the screenplay—*improvised explosive device* (IED), *explosive ordnance disposal* (EOD), *plastic explosives*, and *explosives disposal*

**Table 2.**  
Eight additional etymological roots associated with synonyms of *Hurt* and *Locker*.

Root (definition)	Compounds & Acronyms in Screenplay	New Roots
<i>ar</i> (to fit together)*	army-issue, body armor, explosive ordnance disposal (EOD), state-of-the-art, Explosives Disposal Range	<i>bodi</i> (body), <i>plaudere</i> (to clap)
<i>bhle</i> (to blow)*	blast radius, blast zone, blasting cap(s), blowtorch,	<i>radius</i> (radius), <i>zona</i> (zone), <i>cappe</i> (cap)
<i>ei</i> (to go)*	army issue, circuit board, exit wound, standard issue,	
<i>gol</i> (goal)	goal post	
<i>hous</i> (house)	warehouse	
<i>kaput</i> (head)*	headlights, headlock, headquarters, headset	<i>leuk</i> (light), <i>kwetwer</i> (four)
<i>kwel-1</i> (to revolve)*	steering wheel	
<i>paw</i> (fire)*	fire extinguisher, fireball, gunfire	<i>gwhen</i> (to strike, pull)



*range* (EDR). There is one, long, closed loop comprised of nine nodes and nine connecting ties. The roots assigned to those nine nodes are **bombe-** (bomb), **bodi-** (body), **ar-** (to fit together), **apo-** (off, away), **sker-2** (to cut), **fallen** (to fall), **ped-** (foot), **bhel-2** (to blow, swell), and **sekw-1** (to follow). The compounds and acronyms associated with these nine nodes are *body bomb*, *body parts*, *body armor*, *army-issue*, *state-of-the-art*, *EOD*, *plastic explosives*, *explosives disposal range*, *ridge-ravine*, *downrange*, *crestfallen*, *footfalls*, *tripod-mounted*, *football*, *bullhorn*, *bullshit*, *fireball*, *full-bore*, *soccer ball*, *play time*, and *bomb suit*.

Extending in the other direction is a long chain of compounds connecting **plaudere** to the Indo-European (IE) root **newn** in the bottom right corner. Specifically, a string of two compound words and acronyms connect these two nodes—*improvised explosive device* (IED), *one-story*, *one-finger salute*, *middle finger*, *middle class*, *first class*, *faraway*, *half-way*, *windshield*, *window(s)*, *daisy chain*, and *noon day*.

Across the entire network, five nodes have five or more ties—**plaudere** (to clap), **per-1** (forward, through), **bhel-2** (to blow, swell), **sta-** (to stand), **skel-1** (to cut). The former is the root of all compounds and acronyms associated with explosives—*improvised explosive device* (IED), *explosives ordnance disposal* (EOD), *explosives disposal range*, and *plastic explosives*. The second node gives rise to a numerically-larger and semantically-broader set of compounds—*pride of place*, *back and forth*, *faraway*, *face first*, *first-person*, and *first-class*. The third root, **sta-** (to stand), has five ties and gives rise to five compounds—*standard issue*, *state-of-the-art*, *still-burning*, *standard issue*, and *goal post*.

The root **bhel-2** (to blow, swell) has six ties, five of which represent these compounds—*fireball*, *full-bore*, *soccer ball*, *football*, and the expletive *bullshit*. The sixth tie is one of only two in the entire network that has arrows at both ends. This tie is unlabeled because it represents presence of a homonym. The node to which the tie extends is **gwel-** (to throw, reach, pierce). Among its derivatives are the words *kill*, *devil*, *embolism*, *parole*, *symbol*, *quell*, *ballet*, *ballad*, and *ball*. The latter is a homonym of the word “ball” that descends from **bhel-2**. But *ball* descending from **gwel-** refers to a “formal gather for social dancing” or “an extremely enjoyable time or experience”. This relationship is extremely significant to the network. Through it an otherwise disconnected branch of the network is included. That branch includes the compounds seven nodes and eight compound words—*blow torch*, *blasting cap(s)*, *blast radius*, *blast zone*, *kill zone*, *Green Zone*, and *crab grass*.

The root **skel-1** (to cut) also has six ties. The five corresponding compounds are *halfway*, *half-destroyed*, *half-empty*, *shell-shocked*, and *windshield*. Like **bhel-2**, the sixth tie signifies a homonym. This time it is the word “school”, one sense of which descends from **skel-1** and the other from **segh** (to hold). The context of the use of the word is in a description of one of the three lead characters, Sergeant J. T. Sanborn. He is described as a “type-A jock, high school football star, cocky, outgoing, ready with a smile and quick with a joke... or, if you prefer, a jab on the chin. Think Muhammad Ali with a rifle.” The *school* that descends from **skel-1** does not refer to an institution of instruction. Rather it refers to a grouping of aquatic animals, e.g. fish, swimming together. Though clearly not the sense intended, it does allow the compounds *high school* and *high-value* and their corresponding roots to be connected to the rest of the network. The establishment of this connection is

especially significant when we consider the phrase “high school football star”. Here we see a key element of character articulated by combining words from widely-separated roots and nodes in the network.

Notably, the 105 compounds appear in two-thirds of the scenes (98 of 145 = 67%). When the other 546 inflections and derivations are included, then coverage extends to all 145 scenes. That is to say, the 105 compounds and the 546 inflections and derivations of the associated roots appear one or more times *in every scene of the screenplay*. As noted earlier, these words comprise one in every five of words not counted among the most common in the English language (WorldEnglish.org, 2010). Taken together, this suggests that these words form the building blocks of the passages of description and individual lines of dialog in the screenplay. If further suggests that one view of the plot or narrative structure is as a temporal or linear ordering of the words contained in the semantic network (Mayhew, 2007).

## The Underlying Theme

Recall the four characteristics of underlying themes articulated earlier: they are 1) few in number 2) related to, but different from, the plot 3) repeated throughout the screenplay and 4) abstract, and thus inferred rather than explicitly stated. Nominally, *The Hurt Locker* is a story about an explosives ordnance disposal (EOD) unit. Interestingly, the network map reflects this fact: the etymological root of explosives, the Latin **plaudere**, is one of the most centrally-placed nodes—if not the most central. It is also one of the most central as measured by the number of ties. But explosiveness is not the underlying theme: according to all accounts themes are never this obvious. Rather, they must be inferred. As such, the root **sta-**, which means “to stand”, is a leading candidate.

In **Table 3**, below, are listed the eight etymological roots associated with the highest number of words found in the screenplay. Together they account for just over one-fourth of all the word identified in the preceding analysis (597/2365 = 25.2%). The root **sta-** is among them and it differs from the other seven others in several important ways. Firstly, it has the largest number of inflections and derivations of any of the roots—twenty six in all. Secondly, their distribution in the screenplay is much less concentrated. In every other instance, one word accounts for a large percentage of appearances of words associated with the etymological root. For example, the word *headset* appears 28 times in the screenplay. That one word comprises 42% of all appearances of words associated with the root **sed-** (to sit). Similarly, the words *soldier* and *soldiers* account for 89% of the word associated with the root **sol-** (whole). In contrast, the most frequent word associated with **sta-** is *stay*. It appears only ten times or just 14% of the total. Third, the root **sta-** also has the largest number of compounds—five—of any of the eight roots—*goal post*, *standard issue*, *state-of-the-art*, *steering wheel*, and *still-burning*. Thus it is linked to a greater number of other words.

These five compounds possess very important links to the two theme-words, “hurt” and “locker.” For example, the word “burn” is one of the synonyms of “hurt.” Thus, by way of the compound *still-burning*, the root **sta-** is linked directly to both theme-words. That’s an interesting choice given the central role of explosives in the film. Recall further the linkage to “locker” that was discussed earlier: the word *storage*, which descends

**Table 3.**  
Eight etymological roots with the most appearances of word-forms in the screenplay.

Root (definition)	Inflections & Derivations (# of appearances)	Acronyms, Blends, & Compounds (# of appearances)	Total Appearances	Most Frequently Appearing Word-Form (% of total appearances)
<i>sed</i> (to sit)*	18 (39)	1 (28)	67	headset (42%)
<i>sta</i> (to stand)*	26 (66)	5 (5)	71	stay (14%)
<i>wegh</i> (to go, transport in a vehicle)*	10 (69)	3 (4)	73	away (41%)
<i>sol</i> (whole)*	7 (73)	2 (2)	75	soldiers (58%)
<i>kaput</i> (head)*	6 (51)	4 (31)	81	head (43%),
<i>sker-2</i> (to cut)*	12 (81)	3 (3)	84	downrange (30%)
<i>apo</i> (off, away)*	13 (75)	2 (10)	85	off (49%)
<i>dheue</i> (to close, finish, come full circle)*	1 (87)	2 (2)	89	down (98%)

from *sta-*, is a synonym of “locker”. This root is the only of the eight that is linked to both theme-words. It is also worth recalling that among the eight roots associated with synonyms of “hurt” and “locker” (Table 1), *sta-* is the only one with more than one compound. Finally, it is important to note that *sta-* is the closest of the eight roots to the central node of the network, *plaudere*. The significance of this is two-fold. The root *plaudere* is not only the centrally placed within the network, it and its word-forms are topical heart of the screenplay—the trials and tribulations of an explosives ordnance disposal team. In the network, only one node comes between these two concepts—the root *ar-* which means “to fit together” and from which descend words such as *army*, *armor*, and *disarming*. Thus, the position of *sta-* is without question, unique and significant—it is one step removed from the physical and topic center of the network and is the only node linked to synonyms of “hurt” and “locker”.

The root *sta-* is also the only one of the roots whose compounds forms an antinomy like those described by Robson (1983). Two compounds in particular—*standard issue* and *state-of-the-art*—form a metaphorically-rich and highly-salient dichotomy. The former refers to generic, undifferentiated objects, to basic and/or mandatory items. In the armed services this presumably refers to standard items given to each soldier—helmets, firearms, boots, binoculars, and the like. In the screenplay the term is found in the ninth scene. It is employed in the screenplay in reference to soldier’s housing, specifically a “darkened *standard-issue* military trailer” where music by the American industrial metal band Ministry is “BLASTING, rattling the walls” (Boal, 2007). It is here that Sgt. Sanborn (“cocky, outgoing, ready with a smile and quick with a joke”) first meets his new boss, the protagonist, Sgt. First Class William James (“fit and good looking”, “markedly self-absorbed”, and lacking “some of the ability and most of the need to connect to other people”).

The compound *state-of-the-art* is defined in the AHDEL as “the highest level of development, as of a device, technique, or scientific field, achieved at a particular time.” In the screenplay that word is used in scene 6 where Sanborn helps James’ predecessor, Thompson, put on his protective suit.

Sanborn unpacks “THE SUIT”. A *state-of-the-art* contraption that looks like an astronaut suit and helmet crossed with the Michelin Man. Because of its weight and

complexity it takes two men to put it on—or one Sanborn. Sanborn kneels down and guides Thompson’s feet into the suit’s black boots, then lashes up a series of Velcro straps to secure the armor, like a squire working on a knight. Thompson twists to get his chest protector on. Eyes tight, brow furrowed, squints into the far *distance*.

At the conclusion of this lengthy scene, Thompson is killed by the bomb he was attempting to defuse. After he is buried, Sanborn goes to the trailer to meet James and very soon thereafter it becomes apparent that the man, as well as the suit, can be state-of-the-art.

Notably, two nodes or roots are adjacent to *standard issue* and *state-of-the-art*—*ei-* (to go) and *ar-* (to fit together). They are associated with six compounds—*army issue*, *body armor*, *exit wound*, *circuit board*, and *explosive ordnance disposal* (EOD)—and several other words in the screenplay including *initiator*, *suddenly*, *armaments*, *armor*, *army*, *armored*, *arms*, *disarm*, *disarmed*, *disarming*, *disorderly*, and *orders*.

Derivatives of the root *sta-* appear in sixty-two of the screenplay’s 145 scenes. They are found in references to *state-of-the-art* shrapnel-resistant suits, tense *standoffs*, cultural *misunderstandings*, shower *stalls*, *still-burning* cigarettes, *standard-issue* accommodations, the inability of people and structures to *withstand* the force of blasts, soldiers referring to one another as “*stud*”, *stable* medical condition, primitive early-warning *systems*, the *restoring* of order on streets, soldiers in conflict *standing* face-to-face, the exchange of long-*distance* fire with snipers, hostile and curious *bystanders*, the ever-present prospect of *instantaneous* death, and demands for armed adversaries to “*stand down*”.

There are also dozens of other verbal references consistent with the many and varied definitions of ‘stand’ but which do not use the word itself. In the AHDEL these definitions include “a mental position from which things are viewed”, to “hold one’s ground; maintain a position; be steadfast or upright”; to “occupy a place or location” either physically or figuratively; to “have or maintain a position on an issue”; to “put up with something or somebody unpleasant”, a table or “booth where articles are displayed for sale”, and finally determined and/or defensive efforts, as when it is said that an army made its (last) stand at a particular place. Examples of these references include the repeated descriptions of positions where people stand, particularly soldiers and their armed adversaries, and positions

from which they are viewed. For example, the acronym POV for “point of view” appears seventeen times in reference to robot cameras, a sniper’s hideouts, and from the protagonist’s spotting scope. There are also references to soldiers attempting to withstand unpleasantness of service in Iraq and Afghanistan, as well as the army more broadly. Also, one of the subplots concerns two vendors—a boy of about twelve and adult male—who hawk DVDs from a stand inside the military camp. These many and varied references to standing also have several individual and contextual analogs.

On an individual level, a stand can refer to a mental position from which things are viewed, i.e. an individual’s point of view. The screenplay goes to great lengths to demonstrate not only that James possesses a unique point of view, but also that his “stand” on operational and personal matters has tremendous repercussions for those around him, both positive and not. On the contextual level the soldiers and their interactions in their immediate environment are a microcosm of the occupation by an entire army of a much larger place, the entire country of Iraq. The question of where they, as individuals, stand on the Iraq war or the broader Global War on Terror is not directly addressed. Instead, the focus remains squarely on their steadfastness in the fulfillment of duty and in the face of numerous obstacles.

### Conclusion

I began this paper with the observation that repetition within narrative is and has been an important concern for academic and professionals in the field of screenwriting. I noted that while there was a consensus on several points concerning the repetition of themes within narrative, i.e. that they are few in number, different from but related to the plot, repeated extensively, and abstract. I also noted that most support offered in support of these points was case-based and anecdotal. With this study I undertook to demonstrate how word-formation could be applied to the study of thematic repetition within screenplays. I applied five types of word-formation to two theme-words—“hurt” and “locker”. Through an iterative method I identified over 651 words associated with the two theme-words. Among these were just over 100 compound words and a few acronyms—e.g. *IED* and *EOD*—and one blend word—*medivac*. These words, along with their corresponding Old English, Latin, Greek, and Indo-European roots, formed the backbone of a network, which brought all 651 words into relation with one another.

Interestingly, the 105 compounds, acronyms, and blends themselves were found in 98 of the screenplay’s 145 scenes, just over two-thirds of the total (68%). When combined with the remaining 546 the inflections and derivatives, this subset of words was found in all 145 scenes. Even more importantly, the morpho-etymological network provided insight and direction on how to identify the underlying theme of the screenplay—*standing*.

That said, it is important to recognize that this study has several limitations, many of which are common to the literature reviewed earlier. In this study I applied techniques of linguistic morphology to a contemporary screenplay. Although the process entails the use of methods that are fairly uncontroversial, the approach involves a mixture of qualitative and quantitative methods. The definitions and etymologies of the words identified in this analysis are easily verified, but I did exercise choice in the selection of synonyms of the theme-words. This means

that the results here are not entirely replicable. Still, the general approach could certainly be used on other screenplays.

A second and related consideration concerns the starting point of our analysis—the title. Obviously, it would prove challenging to apply this method to movies with titles such as *WALL-E*, *The Big Lebowski*, *Fargo*, or *Thelma and Louise*. However, in the case of the latter, the word “outlaw” might serve the same purpose. Regardless of the starting point, the method outlined here relies ultimately on the application of word-formation processes and the explicit recognition of the network of words generated thereby. Future research should draw on research in social networks (Lopes, 2012) to examine whether and to what degree the structural properties of such these morpho-etymological networks are related to measures of the screenplay quality.

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