# Stages in an online review genre*

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*Abstract*

*Genre, from the systemic functional linguistics point of view, refers to the orga-
nization of any speech activity in stages, determined by the overall purpose of
the genre and by social conventions. In this paper, the SFL approach to genre
and register is applied to the genre of online movie reviews. A corpus analysis
shows specific stages in the genre: Descriptive stages (in turn, Subject Matter,
Plot, Characters, and Background) and an obligatory Evaluation stage. Each
stage is described in detail, in particular its characteristics and placement in
the texts. We then turn to lexicogrammatical characteristics of the two main
stages, showing that Description and Evaluation can be distinguished from
each other using two features: evaluative words and connectives. Evaluation
stages contain significantly more evaluative words. In terms of connectives,
Description was shown to contain more temporal markers than Evaluation,
whereas Evaluation contains more causal markers, indicating a basic distinc-
tion between narration (which tends to necessitate more temporal relations)
and comment (which makes more use of cause, result, concession, condition,
and contrast relations).*

*Keywords:    genre; register; systemic functional linguistics; movie reviews;
            discourse markers.*

## 1.    The genre of movie reviews

Most of us are adept at recognizing what a piece of text is about, where it might
have been uttered or printed, and who the likely speaker/writer and hearer/
reader are. This knowledge is knowledge of different genres, which we use in
everyday life. My purpose in this paper is to investigate what characteristics of
a particular text readers use in order to identify the text's genre. The first step
in that investigation is to define genre, a definition that I present in Section 2,

based on research in systemic functional linguistics. Section 3 presents the corpus used in this study, and the general genre of online movie reviews, which is analyzed in terms of component stages in Section 4. The study focuses on reviews written by amateurs and posted online, on Web sites devoted to reviews. The genre differs, in formality and structural characteristics, from that of critical reviews written by professional movie critics, of the type that one can find in a newspaper. The generic analysis is supported by the analysis of two lexicogrammatical properties that were found to help distinguish stages in this genre: evaluative words and connectives (Section 5). Finally, Section 6 provides concluding remarks.

## 2.   Defining genre

Most definitions of genre establish a connection with Mikhail Bahktin's work. For Bakhtin (1986), language is realized through individual concrete utterances by participants in the various areas of human activity:

> Each separate utterance is individual, of course, but each sphere in which language is used develops its own relatively stable types of these utterances. These we may call speech genres. (Bakhtin 1986: 60)

In the Hallidayan tradition, this relationship between human activity and language is portrayed as one between context and text. The idea of a relationship between context and text was first formalized in the concept of *register*. Halliday, MacIntosh, and Strevens used register to refer to "a variety according to use in the sense that each speaker has a range of varieties and chooses between them at different times" (Halliday et al. 1964: 77).

A register is constituted by the linguistic features which are typically associated with a configuration of situational features, classified in values of the field, mode, and tenor of the text's context of situation. *Field* refers to what is going on; the area of operation of the language activity. It describes the inherent features of the situation and the event taking place, with an emphasis on institutional areas of activity. *Tenor* refers to the relations among the participants, to the extent that they affect and determine features of the language. In the category of tenor we include degrees of formality, the roles played by the participants and the focus of the activity. *Mode* of discourse is the function of the text in the event. Mode typically describes the channel of communication (spoken or written), the degree of spontaneity between extempore and prepared, together with the amount and type of feedback possible.

In summary, register captures aspects of the language that are defined by the situation—what is taking place, who is taking part, and what part the language is playing—along with the words and structures used in the realization of

those meanings. The three elements that realize context are linked to the linguistic system in the Hallidayan model. Field, tenor, and mode have direct realizations through the metafunctions of language: ideational, interpersonal, and textual. Thus, field is realized through the ideational metafunction, tenor through the interpersonal metafunction, and mode through the textual metafunction (Halliday 1994; Halliday and Hasan 1976; Halliday et al. 1964).

Register places emphasis on the context of situation, as defined by the field, tenor, and mode variables. It does not account for the relationship of language to the context of culture, which is the realm of genre. The widely quoted definition by Martin (1984: 25) is that genre is "a staged, goal-oriented, purposeful activity in which speakers engage as members of our culture."

The study of genre within systemic functional linguistics has concentrated on structural characterizations through genre staging. Stages are the constitutive elements of a genre, which follow each other in a predetermined fashion, specific to each genre. The most basic structure of a genre is its division into beginning, middle, and end (Eggins 1994; Stenström 1994). Eggins (1994: 37) characterizes the staging, or schematic structure of a genre, as a description of the parts that form the whole, and how the parts relate to each other. This is achieved following both formal and functional criteria.

The definition of genre that I follow here is one where genre is primarily a structurally determining characteristic of texts. A given text is perceived as belonging to a genre because of its structural characteristics, that is, its staging. For that recognition to happen there must be established consensus that certain texts develop in a certain series of stages. The staging appropriate for a text is a result of the function of the text in a given situation. The broad term "function" encompasses two different aspects: the communicative purpose of the text and its social function. This is not a novel definition, nor a groundbreaking reformulation of the concept, but an operational definition, which has proven useful in the analysis of task-oriented dialogues (Taboada 2003, 2004a; Taboada and Lavid 2003) and of posts in electronic bulletin boards (Taboada 2004b).

The relationship between the genre (organization) and the register (tenor, field, and mode) in a text can be characterized in different ways. Figure 1, taken from Taboada (2004a), represents my own conceptualization of the relationship of genre and register to linguistic realization. Genre is a separate layer of context above everything else, but with elements that percolate into the language through the gap that separates them. The language is composed of a contextual level and a purely linguistic level. The contextual level of register is subdivided in values of field, tenor, and mode. These values are realized linguistically in the three metafunctions of the language.

Martin and others in the systemic functional tradition have represented this relationship of metafunctions, register, and genre as concentric circles (Eggins
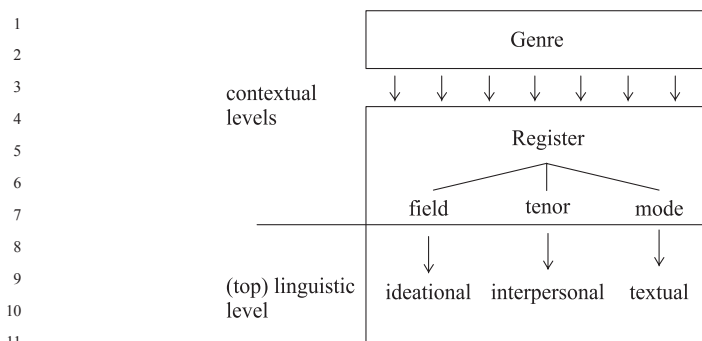
Figure 1.   *Relationship of genre, register, and language*

and Martin 1997; Martin 1992; Martin and Rose 2008). The representation proposed here is not fundamentally different. It only advances a looser connection between genre and register than the one between register and metafunctions.

As we see in Figure 1, genre and register have an influence in the lexico-grammatical choices that speakers make. Genre has an influence on the type of choices that speakers make for one particular genre, as opposed to other related genres. But each of the stages in a genre tends to have its own lexicogrammatical characteristics. Rothery and Stenglin (1997), for instance, show different transitivity structures in the different stages of story genres.

It is these two aspects of genre, the staging and the lexicogrammatical characteristics of stages, that I will explore in this paper. I first provide a characterization of the stages in the movie review genre, which arise as a result of the specific functions of this particular genre: inform and entertain at the same time, combined with a desire to share personal experiences that is pervasive in the current use of new Internet technologies (blogs, review sites, Facebook, etc.). At the same time, I study some of the lexicogrammatical properties of each stage. Lexicogrammatical characteristics explored are the numbers of evaluative words and the proportion of temporal versus causal connectives. Other examples of genre analysis following this model have explored Theme–Rheme relations, rhetorical relations, and cohesion (Taboada 2000, 2004a; Taboada and Lavid 2003).

## 3.   The movie review genre and the corpus

To illustrate the framework for genre analysis described above, I carried out an analysis of movie reviews posted online. The review genre is well established

in the form of literary reviews, traditionally published in print. Once movies became popular, many of the conventions of the literary review genre were adopted by the movie review genre, still appearing in print, and written by professional movie critics. More recently, a slightly different version of the genre has appeared online. The online movie review is typically written by a non-professional, with the intention of providing information to an audience presumably made up of peers. The reviews can be found in a number of sites, among them RottenTomatoes or Epinions.[1]

This type of movie review is also related to reviews of different types and mediums of art, including literature, film, and other forms of visual art. Baud (2003) considers movie reviews in newspapers as a subgenre of reviews, in turn part of the broad newspaper discourse. Critical reviews, however, are common outside of newspapers. School-age children are often asked to provide some form of critique of stories or books that they have read. These critiques tend to have a strong personal content, containing high levels of affective reaction to the story. Martin and Rose (2008: 93–94), following Rothery and Stenglin (1997), characterize the school-based review as consisting of three main stages: Context of the story, Description, and Judgment.

In the construction of the online movie review genre, then, it is likely that all these other review genres are brought to bear. The characteristics of this particular movie review genre are that it is produced for an audience of peers and with the intention of being helpful. The latter is probably also true of reviews in newspapers and magazines. The difference lies in the audience: whereas a newspaper critic is considered a professional, and therefore different and distant from his or her readers, online authors write for each other, and emotional content and personal experience play an important role, just as they do in school-based reviews. A major difference with professionally written reviews is the spontaneity of the writing. Whereas reviews in the printed media are typically checked by a copy editor, and revised by the author himself or herself, online reviews are likely produced without revisions, and posted without mediation.

The corpus described in this paper consists of 50 reviews posted on the Epinions site and collected between the end of 2003 and the beginning of 2004. They are part of a larger corpus collected to develop a system to analyze opinion automatically (Taboada et al. 2006; Taboada and Grieve 2004). Reviewers in Epinions always provide a final recommendation on the product ("recommended" or "not recommended"), plus a value in a 5-star system. Movies may range between 1 and 5 stars in the reviewer's opinion. For the corpus, we collected 25 "recommended" reviews, and 25 "not recommended." Movies discussed include those recently released at the time: *Bad Santa, Calendar Girls, The Cat in the Hat, Elf, Gothika, The Haunted Mansion, The Last of the Samurai,* and *Mona Lisa Smile.*

The reviews contain several fields that reveal their online origin. They all have a title, a posting date, an author (typically only the user name on Epinions), and a star rating. In that sense, they are similar to bulletin-board posts, which I describe as a genre in Taboada (2004b). In this paper, I concentrate on the body of the review itself.

The reviews vary in length from 55 words to 2,139, with an average of 660 words per review. The corpus contains, in total, 33,005 words. Negative reviews are slightly shorter: They have an average length of 638.84 words, whereas positive reviews are 681.36 words long on average. This is, of course, a very small corpus to analyze an entire genre, but I hope to provide a preliminary overview of the genre and its characteristics. The next section describes the analysis in terms of genre and the stages found in the reviews.

## 4.   Stages in movie reviews

Movie reviews in general are not overly complicated in structure. Leggett (2005: 5) claims that "[t]he movie review is clearly one of the least complex forms of description and evaluation." They tend to describe and evaluate a movie along predictable lines: plot, director, character, and other characteristics (cinematography, sets, sound). Hsu and Podolny (2004), in a survey of movie reviews from *The New York Times* and *Variety*, found that three dimensions were most frequently described by professional reviewers: plot, screenplay, and subject matter.

An analysis of the 50 reviews reveals that they tend to contain two obligatory stages: a general summary of the plot and an evaluation. The general plot summary could be sometimes described as the movie's subject matter, in Hsu and Podolny's (2004) description, although here I will make a distinction between detailed descriptions of the plot and a more general account of the subject matter.

Only three of the reviews consisted of a single stage: an overall evaluation of the movie. These three reviews were also among the shortest of the 50, one of them a mere 55 words, reproduced below.[2] Although the review contains some information about the movie's subject matter, it is difficult to separate plot description from evaluation, and I classified the entire text as consisting of a single evaluation stage.

(1)   This movie portrays the the children's story "The Cat in the Hat" in a very colorful and original manner. The children are adorable and the cat is very amusing. I especially enjoyed thing one and thing two, with their over the wall antics. This is a truly original movie, which brings a cartoon to life.

Before we explore how stages are ordered, and which ones are obligatory and optional, I provide below a description of the stages found in a typical review. In addition to Subject matter, Plot, and Evaluation described above, two other stages are frequent. The first one is a description of the Characters, and maybe of the actors that portray them (without evaluation; that is, merely description). The other stage commonly found is Background, an explanation of facts or events outside the movie proper that help interpret the current movie.

## 4.1.   *Subject matter*

The Subject Matter stage is a general summary of the movie's content. It is different from the Plot stage in that it paints a very general outline, and does not necessarily follow a temporal sequence in the description of events. Sometimes it also serves a classification function, pegging the movie into a particular genre (action, comedy, children's, etc.). In example (2), we see the beginning of a review, which starts with a Subject Matter stage. In square brackets, I include my own classification of stages. The reviewer has, in addition, provided his or her own heading ("Synopsis").[3] In most cases, the Subject Matter stage can indeed be classified as a synopsis, or is described by the authors themselves as the movie's premise. This was distinct from a more extended, chronological description of the plot.

(2)   [Subject matter]
      Synopsis: Sally and Conrad learn to set limits on their misadventure, with a little help from Dr Seuss' (Theodor S. Geisel) Cat in the Hat (1957).

The Subject Matter stage is sometimes similar to an Orientation stage, present in most types of stories or recounts (Labov and Waletsky 1967; Rothery and Stenglin 1997), which Rothery and Stenglin describe as a contextualizing stage, one that creates "a context for understanding what is to follow in the subsequent stages of the genre" (Rothery and Stenglin 1997: 236), besides providing an introduction to characters and establishing a physical setting. Gerot and Wignell (1994) also propose an Orientation stage for reviews. In the movie reviews, this stage is more specific than a general orientation, in that it provides a very general summary of the content, and maybe a genre classification (thriller, action, romantic comedy, etc.).

   Of the 50 reviews, 5 positive and 7 negative reviews contained a Subject Matter stage. In all but two cases, Subject Matter is presented after an initial overall Evaluation stage. In the other two cases where Subject Matter does not follow Evaluation, Subject Matter is the first stage of the review, as in example (2) above.

## 4.2.   *Plot*

The plot description is typically the longest stage in reviews, although it is not present in all of them. It provides a chronological summary of the events in the movie. The chronology corresponds to the timeline in which events are portrayed in the movie, not necessarily the chronology in actual order of occurrence in the world of the movie. The description is sometimes brief, but it can extend to a few paragraphs when all the events are described in detail. In example (3), the author outlines the events in the movie, including at the same time some comparison with other movies (and how the plot owes much to them).

(3)   You probably have a good guess at the story based on the comparisons
        I've made, and you can't be far off. Captain Nathan Algren (Tom Cruise),
        veteran of the Civil War, and many skirmishes with Indians, is hired to go
        to Japan and train an army. He learns that he is there to put down a certain
        Samurai, Katsumoto (Ken Watanabe), and his followers. Pressured to
        lead his new troops before they're ready, he is captured by Katsumoto in
        the eventual miserable rout his 'army' suffers. He spends a long winter
        with Katsumoto and his family in a small village, because Katsumoto
        wants to 'know his enemy'. Once we get beyond how Algren finds his
        way into the Samurai world, 'Shogun' takes over, complete with a Japa-
        nese woman he can grow to love, and surprise night attack by Ninja.
        From here we mix equal parts 'Dances' and 'Shogun', choosing those
        elements that best serve the scenario we've created, and we have our plot.

Plot descriptions can be found in 25 of the 50 movie reviews (14 in positive reviews, and 11 in negative ones).[4] It is surprising that not all reviewers thought it necessary to provide a summary of the plot. The 25 reviews that do not contain Plot description may contain a Subject Matter or Background stage, but, in most cases, they consist entirely of Evaluation. In this sense, the online movie review genre is different than the more formal newspaper reviews. The online writers see it as their mission to provide opinion, and not always to provide detailed information.

    Plot stages tend to be the second stage in the review, after either a Background or Evaluation stage. In some cases, they appear after Background, Evaluation, and Character description.

## 4.3.   *Characters*

Descriptions of characters can be found in the Plot stage, but they may also be a stage on their own. These often occur after the main plot has been presented, and add further information about what characters do and why they do it. Such

is the case in example (4), where the Characters stage follows a description of the plot (not shown here). In the Characters stage, each character is analyzed in detail, mixing in some evaluation of the actors themselves (which would be a different stage, as we will see below).

(4)   [Characters]
  But her students, four of whom we focus on in particular, have their own stories. Joan could get accepted to Yale, but she's not sure she wants to put off the "home life" where tradition would have her be. Betty gets married right away, and starts to miss classes, but things only get worse at home too. Giselle lives with a torrid past. And Constance is just trying to make friends.
  Julia Stiles (Joan) is easy on the eyes, even if she does act 10 years older than she is. Her accent was not too shabby. Meanwhile, the "other" Julia (Roberts) struts her usual stuff. She's not terrific, but not terrible either. I think she may just be having a little too much fun playing miserable roles (falling on the ice comes to mind) when in real life, she is anything but. But enough about that. Ginnifer Goodwin (Constance) was just a cute girl playing a cute sideplot.
  Kirsten Dunst (Betty) is just too damn pretty to be defiant. You don't want to see her upset, 'cause then you get upset yourself. She actually did a decent job b!tchin' it up here. I kinda liked her hair too. Speaking of hair, who knew Maggie Gyllenhaal (Giselle) had so much of it? I thought that stuff was gonna avalanche right out into the auditorium.

Only six of the 50 reviews contained a pure Character description stage (in other cases, the character description is mixed with appraisal of the actors' performance, which was classified as Evaluation). As with plot, the reviewers do not see it as their mission to provide description of all aspects of the movie, including characters.

### 4.4.  *Background*

This stage takes on many different forms, but in all of them the purpose is to provide information that the author deems necessary to understand either the movie or the review. The information may be about the reviewer himself or herself. For example, a reviewer explains that he has seen the cartoon version of *The Cat in the Hat* numerous times. This is presumably necessary to understand why he is qualified to evaluate the movie version. In (5), the reviewer seems to present a caveat: He didn't find *Gothika*, the movie under review, scary, and the reason could be either that he is jaded, or that horror movies tend to be too similar to each other.

(5)　One of these days I'm going to learn that ghost movies just don't scare
　　 me like they used to, and I should stop wasting my time on them in the
　　 theatres. I'm not sure if I just got over them, or if it's just because they are
　　 all the same. The Ring creeped me out, but lost me towards the end.
　　 [ . . . ]

The Background stage is most commonly found at the beginning of the review
(in 24 of the 30 cases where a Background stage is present), but it may appear
elsewhere, if the author decides to provide background information about par-
ticular aspects as they are discussed, or prefers to start out the review with
some facts about the movie.

### 4.5.　*Evaluation*

The Evaluation stage is the main point of the reviews, and all of them con-
tained some Evaluation, in varying lengths. Since it is such an important stage,
I classified the different aspects of the movie that can undergo evaluation:
overall (of the movie as a whole), script, director, actors, and other. The "other"
category includes all other aspects of the production, from cinematography and
sound track to costumes, art direction, and production.

　　 The overall evaluation of a movie tends to be short and to the point: The
reviewer either did or did not like it. A few reasons may be offered, but, typi-
cally, when reasons are presented, overall evaluation changes into an evalua-
tion of specific aspects of the movie. Example (6) presents the whole text of a
review, which is composed entirely of Evaluation (that is, there is no descrip-
tion of subject matter, plot, or characters). The evaluation starts with a general
valuation ("overwrought and overdone"), and a justification for it, continues
with an assessment of the art direction (which is assessed positively), and
moves onto the script, the worst part of the movie, in the reviewer's opinion.
Finally, a summary of the quality of the movie in general is presented, classify-
ing it as a good candidate for a rental.

(6)　[Evaluation (overall)]
　　 The movie is overwrought and overdone. The plot is not the book's. I
　　 know that movies are not supposed to be fully like the book but when
　　 practically every child (as well as adult) in America has read the Dr. Seuss
　　 books, this is unforgivable. The movies don't need to be fleshed out with
　　 over analytical information about why the Cat is who he is or with the
　　 history of their lives, but give it a rest.

　　 [Evaluation (other)]
　　 The good stuff . . . the visual production itself with its ultra-stylized
　　 appearance. It looks nice, but did the budget of a third world nation need
　　 to be spent to create this film?

[Evaluation (script)]
The plot has added a bunch of new things to it . . . and who cares. This is a short book which should have remained a cartoon classic on tv. [Evaluation (other)] With the holidays upon us and the mass merchandising, the movie is sure to be a hit . . . too bad as there are some other films that deserve to be seen.

   At less than 90 minutes, this movie is definitely too long. You'll probably have screaming kids who want to see this film . . . it is on steroids the way it runs all over the place but they may be entertained. Parents have two choices: lie and say the theatre went out of business. Or give in to the children and put up with their disappointment. Stale popcorn would be better than this movie.

[Evaluation (overall)]
Somehow I think this movie will be better on video as seeing it on the smaller screen may make it appear to be less over produced.

Every single review in the corpus contained a clearly identifiable Evaluation stage. Half of the 50 reviews started with an overall evaluation (the other half open with a Background or Subject Matter stage, but contain evaluation later on).

4.6.   *Schematic structure for movie reviews*

A summary of the observations on each of the stages above can be presented in the form of a schematic structure, the sequencing of stages. The idea of analyzing genres as consisting of stages (potential or realized) goes back to work by Hasan (Halliday and Hasan 1985; Hasan 1984) and has been elaborated on by Martin, Eggins, and others (Eggins and Martin 1997; Eggins and Slade 1997; Martin 1985). The schematic structure for a genre is an outline of the obligatory and optional stages, plus their ordering, which is both derived from instances of existing texts and applicable to new texts in the genre. In the present case, the schematic structure for movie review is derived from the texts analyzed, and the prediction is that most texts in this genre can be accounted for with the following formula, where the caret sign indicates sequence, and the brackets optionality.

(7)   (Subject matter) ^ (Background)/Evaluation ^ (Subject matter)/(Plot)/
       (Background) ^ Evaluation ^ (Characters) ^ Evaluation

There are three possible placements for Evaluation in the formula, but not all texts have three different Evaluation stages. The formula merely indicates that an Evaluation stage is obligatory, and it can be present in one or more of those three positions.

Table 1.    *Number and placement of stages*

|                | Beginning | Middle | End | Total |
|----------------|-----------|--------|-----|-------|
| Subject matter | 3         | 9      | 0   | 12    |
| Plot           | 1         | 26     | 0   | 27    |
| Characters     | 0         | 6      | 0   | 6     |
| Background     | 24        | 10     | 0   | 34    |
| Evaluation     | 23        | 12     | 43  | 78    |

Table 1 summarizes the numbers for each stage, and their typical placement. The beginning and end positions represent the very first and last stages in the text. The middle position is more broad, and it can be the second stage (for instance, Background after Subject Matter) or the third or fourth stage in a multiple-stage text. The table helps interpret the schematic structure formula in (7). The initial stages may be Subject Matter, Plot, Background, or Evaluation, but they are all optional as initial stages. The final stage (sometimes the only one) is always an Evaluation.

In broader terms, the genre can be summarized in two stages, which can be labeled as Evaluation versus Description, or Comment versus Describe stages, as Bieler et al. (2007) do for German movie reviews and Taboada et al. (2009) for English. The Evaluation stage is obligatory and presents an assessment of the movie. The Description stages are optional and present factual information about various aspects of the film, the reviewer, or the film's background.

Using the basic distinction between Evaluation and Description, the next section presents some of the lexicogrammatical differences across the two general types of stages.

## 5.    Lexicogrammatical evidence for stages

Studies in genre analysis often couple structural characteristics with lexicogrammatical aspects, to provide a full characterization of how genre and lexicogrammar go hand in hand. Stages often determine the types of lexical organization and grammatical structures that will occur in each of the stages, and lexical and grammatical information can also serve as factors to identify stages and their boundaries. For instance, in Taboada (2000), I show how stages in task-oriented conversation can be identified by tracking lexical chains across the conversation: A new lexical chain signals the beginning of a new stage. This two-way dependency between stages and lexicogrammar has often been noted in systemic functional analyses of genre, but is also part of a long tradition in genre studies in other frameworks as well. The classic Labov and Waletsky (1967) paper on narrative includes observations on the lexical and grammatical

structures to be found in different stages of narratives, such as the presence of distal deictics (*that, there, those*) in the Coda part or stage of the narrative.

Register characteristics of particular genres have a bearing on the lexico-grammar. The informal nature of online reviews (low interpersonal distance) results in use of informal vocabulary across the entire review (*it rips off other great films, the good stuff, a bunch of new things*). Within stages, however, the most informal and emotionally laden characterizations tend to occur in the Evaluation stages.

In this section, I discuss two aspects of the reviews that distinguish Evaluation stages from the other stages (Subject Matter, Plot, Characters, and Background), which can all be characterized as Description stages. First of all, I examine the proportion of evaluative words to all other words, showing that Evaluation stages contain more evaluative and subjective words. The second aspect concerns temporal and causal connectives, where the results show that Description stages contain more temporal connectives, whereas Evaluation stages contain more causal-type connectives (including conditional and concessive connectives).

## 5.1.  *Evaluative words in Description and Evaluation stages*

It is fair to assume that Evaluation stages in the reviews would contain more evaluative or subjective words and expressions than what I have characterized as Description stages, i.e., all other stages that describe the content of the movie, the plot, the characters, or the background within which the review's author thinks the movie should be interpreted. To test whether this assumption is correct, I counted the numbers of evaluative words and phrases in the two types of stages, and indeed conclude that the assumption holds. In this section, I describe how evaluative words were identified, and the method to test levels of significance across the two types of stages.

Research in content analysis, sentiment extraction, and appraisal theory has established both that individual words carry evaluative content, and that the evaluative content of individual words needs to be established in context. As part of a project on automatic extraction of sentiment (the positive or negative opinion in a text), we have created a series of dictionaries for each open part of speech (adjectives, nouns, verbs, and adverbs). Using those dictionaries as starting points, we have developed a system, the Semantic Orientation CALculator (SO-CAL), that determines the polarity of a text. A full explanation of the workings of SO-CAL can be found elsewhere (Brooke et al. 2009; Taboada et al. 2006, forthcoming). In addition to individual words, SO-CAL also takes a narrow form of context into account, searching for negation of the words in question, and a few forms of intensification.[5] The following are some of the words and phrases extracted from the corpus being analyzed.

Table 2. *Evaluative words and phrases in different stages (raw counts)*

|  | Description | Evaluation |
|---|---|---|
| Adjectives/AdjPs | 501 | 1,062 |
| Nouns/NPs | 240 | 455 |
| Verbs/VPs | 186 | 333 |
| Adverbs/AdvPs | 79 | 165 |
| Total evaluative words | 1,006 | 2,015 |
| Total words | 12,321 | 20,634 |
| Sentences | 683 | 1,232 |

(8)  Adjectives/AdjPs: *terrible, consistently believable, not scary*
Nouns/NPs: *masterpiece, plot holes, not have a problem*[6]
Verbs/VPs: *sparkles, completely enjoyed, not detract*
Adverbs/AdvPs: *peculiarly, rather well, not enough*

SO-CAL's dictionaries contain, in their current version, 2,257 adjectives, 1,142 nouns, 903 verbs, and 745 adverbs, plus a dictionary of negation terms and a list of 177 intensifying words and phrases. The dictionaries were built first automatically (extracting all adjectives from a 400-text review corpus), then enhanced with words from other subjective dictionaries, revised by a human expert, and finally checked for accuracy and consistency by a committee of three linguistics experts.

In order to determine how many of these evaluative words and phrases were present in the two types of stages, Descriptive and Evaluative stages for the entire corpus were collected into two separate files. Then SO-CAL analysis was performed on each of the two files. The results are shown in Table 2. Total number of words was calculated using the statistics feature in Microsoft Word. Sentence counts are approximate and are based on SO-CAL's pre-processing.

The first thing to note in Table 2 is the fact that there are more words and sentences in Evaluation stages than in Description. In other words, the reviews contain more evaluation than anything else: About twice as many sentences (but not quite twice the number of words) can be found in Evaluation stages.

From a quick inspection of the numbers, it does seem that evaluative words are more frequent in Evaluation stages: 501 adjectives (out of 12,312 words) in Description versus 1,062 (out of 20,634) in Evaluation. To adjust for the differences in number of words, log-likelihood ratios were calculated for different aspects of the corpus. Log-likelihood provides information on whether a particular aspect (often a word) is more frequent than expected in one corpus than in another. In this case, the calculations referred to number of words which have subjective content. For the calculations, Paul Rayson's excellent Web site
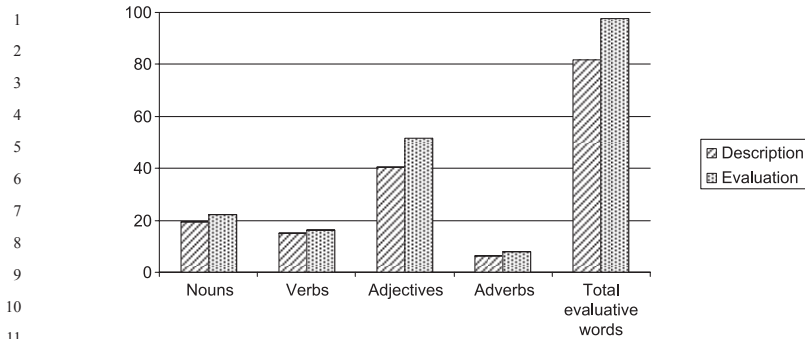
Figure 2.   *Evaluative words per 1,000 words in Description and Evaluation stages*

was used (see also Dunning 1993; Rayson and Garside 2000; Sokal and Rohlf 1995).[7] Results of log-likelihood ratio tests (the $G^2$ statistic) show that Description and Evaluation are indeed different with respect to the total number of evaluative words present in the two types of stages ($G^2 = 21.91$; $P < 0.0001$).

To narrow down the contribution of evaluative words and phrases by part of speech, I calculated log-likelihood ratios for each, showing that adjectives are the main contributors to the difference ($G^2 = 19.41$; $P < 0.0001$). That is, Evaluation can be distinguished from Description because the former contains more evaluative words in general, and significantly more evaluative adjectives.

Figure 2 summarizes the differences between Description and Evaluation from the point of view of evaluative words (presented in words per 1,000 words). Nouns, Verbs, etc. labels refer to both the part of speech and the corresponding phrase (i.e., both nouns and noun phrases).

5.2.   *Temporal and causal connectives in Description and Evaluation stages*

Another lexicogrammatical aspect that distinguishes Description from Evaluation stages is the types of relations most commonly found. Since Description stages tend to narrate a sequence of events (especially the plot description stage), they contain more temporal relations. Evaluation stages, given that they are more argumentative in nature, will tend to contain more relations of a causal type, including cause, result, purpose, condition, and concession relations. As a cover term, I am using the label "causal" for the latter type. This includes two main types under Quirk et al.'s (1985) classification: "Condition, concession, and contrast" on the one hand, and "Reason" on the other. The two-way classification is in line with Martin's (1992) distinction between

Table 3. *Temporal and causal connectives*

| Temporal | Causal |
| --- | --- |
| *after, all the while, as, as soon as, before, by the time, meanwhile, now (that), since, then, till, until, when, whenever, while, whilst* | *after all, albeit, although, as, as long as, as if, as though, because, but, cause, considering (that), despite (the fact that), even if, even though, even when, however, if, if ever, in order to, lest, nevertheless, on the other hand, only if, or else, otherwise, since, so, so that, still, then, therefore, though, thus, unless, whether, while, whilst, yet* |

consequential and temporal relations (in addition to additive and comparative, which are not of interest here). The papers in Couper-Kuhlen and Kortmann (2000) also suggest a grouping of cause, condition, concession (and contrast, not included here), and discuss the role of such relations in indicating viewpoint, subjectivity, and epistemic stance. The hypothesis, then, was that the Evaluation stages, given their heavier subjective load, would contain higher numbers of the broadly defined causal relations, whereas the Description stages, given their emphasis on temporal description of plot, would contain more temporal relations.

A full analysis of all the relations found in the stages is beyond the scope of this paper. As an approximation, I counted the number of temporal and causal connectives in the two types of stages. This type of analysis, relating stages and coherence relations, has already been illustrated in previous work (Taboada 2004a; Taboada and Lavid 2003).[8]

It has been shown in previous research that connectives and discourse markers are but one of the many ways in which coherence relations are signaled (Taboada 2006, 2009). Even at the sentence level, where marking of relations is more common, it is still the case that many adverbial clauses have no subordinating marker. Biber et al. (1999, section 10.2.8) note that non-finite adverbial clauses are more commonly used without subordinators. On the other hand, there is no evidence to suggest that the level of marking is different for the two types of relations considered here (temporal versus causal). Thus, counting markers will likely give an overall indication of how frequent the relations are in the respective stages, even if the frequency is an underestimate of the total number of relations.

Full lists of connectives were compiled from different sources, including Knott and Dale's taxonomy (Knott 1996; Knott and Dale 1994) and standard grammars of English (Biber et al. 1999; Quirk et al. 1985). The lists in Table 3 show those that were found in the corpus.

I conducted a search through the texts, using the words in Table 3. To make sure that the connectives were used as relational markers (and not sentence-

Table 4.   *Frequency of temporal and causal markers in stages*

|                            | Description | Evaluation |
| -------------------------- | ----------- | ---------- |
| Temporal, total            | 119         | 98         |
| Temporal, per 1,000 words  | 9.66        | 4.75       |
| Causal, total              | 165         | 364        |
| Causal, per 1,000 words    | 13.39       | 17.64      |
| Total words in the stages  | 12,321      | 20,634     |

internal adverbs), I examined every instance that was extracted. This also al-
lowed the categorization of connectives that are ambiguous between temporal
and causal uses (such as *since*). For connectives such as *after* or *before,* which
may introduce both adverbial clauses and prepositional phrases, the connective
was only considered as such when it introduced a clause, whether non-finite or
not (*after he's died; after getting over their initial fears*), but disregarded when
it introduced a prepositional phrase (*after years of not fitting in*).

The results show that there are clear differences in the use of temporal and
causal connectives in the corpus. In Table 4, we can see that there are more
temporal markers (per 1,000 words) in Description than in Evaluation stages.
Conversely, there are more causal-type markers, both overall and per 1,000
words, in Evaluation stages. (Full lists of connectives and their frequencies are
included in the appendix.) Log-likelihood calculations indicate that the differ-
ences are statistically significant for both; temporal markers have an over-
representation in Description stages ($G^2 = 27.13$; $P < 0.0001$), whereas causal
markers are over-represented in Evaluation stages ($G^2 = 8.90$; $P < 0.01$).

In summary, the second lexicogrammatical characteristic that we observed,
the types of markers present in each stage, also helps differentiate stages that
contain mostly description from those that are evaluative in nature. These dif-
ferences are related to small differences in register aspects across stages. Al-
though tenor and mode are constant across the two main types of stages, there
is a small change in the field, if we consider field in a narrow sense as a change
in the topic, from describing content to evaluating impact.

## 6.   Conclusion

This study of online movie reviews started with an overview of genre in gen-
eral, and the steps involved in analyzing any instance of language as a genre.
Taking the perspective of systemic functional linguistics, I have outlined the
main aspects of a genre-based analysis. In the second part of the paper, I exam-
ine in detail a particular type of genre, that of movie reviews posted in online

forums or Web portals. Using a corpus of 50 movie reviews, I show that they can be characterized in terms of a few stages. All of the reviews in the corpus contained an obligatory Evaluation stage. The other stages present in the corpus can be characterized, overall, as Description. They are either a summary of the movie's subject matter (an equivalent to the Orientation found in narratives and other genres), a description of the plot and characters, or background information that would help the reader understand the author's opinion of the movie.

The stages are defined from a functional point of view, that is, I classified them according to the main purpose of each stage. There are, in addition, linguistic aspects that distinguish one genre from another, and stages within one genre from each other. In the paper, I focused on two aspects: the frequency of evaluative words, and the frequency of temporal versus causal connectives.

For the first characteristic, I counted the number of evaluative words (adjectives, nouns, verbs and adverbs, including both individual words and entire phrases or groups) and calculated their frequency per 1,000 words. The results of a log-likelihood analysis show a statistically significant difference between Description and Evaluation stages, with the latter containing more evaluative words and phrases, in particular adjectives.

For the other aspect, the analysis of temporal versus causal markers in the stages, I analyzed the frequency of temporal markers, as indicators of temporal relations, which were hypothesized to be more frequent in the Description stages. The cover term "causal markers" refers to markers of cause, result, condition, concession, and contrast, hypothesized to be more frequent in Evaluation stages, due to their argumentative nature. The analysis shows that, indeed, temporal markers are significantly overrepresented in Description, and causal markers in Evaluation.

The analysis presented here is but one of the possibilities offered once we have classified the genre in terms of its stages. We could extend the same types of analyses to the individual Description stages, and we would probably find differences among those. The higher frequency of temporal markers in Description overall is probably due to their presence in the Plot description stage, for instance. Another type of analysis could consider differences between reviews that express a positive or a negative opinion toward the movie being reviewed. Work in progress is combining the genre analysis with an analysis of the texts following appraisal theory (Martin and White 2005).

There are many applications of the analysis in terms of genres and lexicogrammatical characteristics of stages. One that we are exploring is the automatic extraction of opinion from texts. In such a context, most analyses focus on extracting positive and negative words and averaging them across the corpus. This leads to wrong results when the positive or negative words refer to, for instance, the characters or the plot, but not the movie itself. Being able to

distinguish the descriptive stages, which do contain evaluative words, but may not contribute to the overall opinion that the text conveys, from evaluative stages, will naturally help such a system. We show a preliminary implementation of this idea in Taboada et al. (2009).

In summary, the paper shows how genre can be characterized, how the concept is applied to corpus analysis, and how stages can be shown to be distinctive in terms of the lexical or grammatical structures that they contain.

## Appendix: Frequency of connectives

*Temporal connectives in Description and Evaluation*

|  | Description | Evaluation |
|---|---|---|
| *after* | 13 | 7 |
| *all the while* | 0 | 1 |
| *as* | 13 | 5 |
| *as soon as* | 1 | 2 |
| *before* | 7 | 5 |
| *by the time* | 1 | 1 |
| *meanwhile* | 5 | 1 |
| *now* | 2 | 1 |
| *now that* | 1 | 2 |
| *once* | 1 | 1 |
| *since* | 4 | 1 |
| *then* | 18 | 7 |
| *till* | 0 | 1 |
| *until* | 7 | 5 |
| *when* | 38 | 47 |
| *whenever* | 1 | 0 |
| *while* | 7 | 10 |
| *whilst* | 0 | 1 |
| Total | 119 | 98 |
| Total per 1,000 words | 9.66 | 4.75 |

*Causal connectives in Description and Evaluation*

| | Description | Evaluation |
|---|---|---|
| after all | 2 | 1 |
| albeit | 0 | 1 |
| although | 3 | 16 |
| as | 11 | 12 |
| as long as | 1 | 1 |
| as if | 1 | 2 |
| as though | 0 | 1 |
| because | 15 | 27 |
| but | 52 | 146 |
| cause | 1 | 0 |
| considering (that) | 0 | 2 |
| despite (the fact that) | 1 | 2 |
| even if | 2 | 5 |
| even though | 2 | 2 |
| even when | 0 | 1 |
| however | 11 | 12 |
| if | 17 | 54 |
| if ever | 1 | 0 |
| in order to | 3 | 2 |
| lest | 0 | 1 |
| nevertheless | 1 | 1 |
| on the other hand | 0 | 2 |
| only if | 0 | 1 |
| or else | 1 | 0 |
| otherwise | 1 | 1 |
| since | 5 | 10 |
| so | 15 | 16 |
| so that | 3 | 0 |
| still | 0 | 3 |
| then | 0 | 2 |
| therefore | 1 | 0 |
| though | 1 | 12 |
| thus | 1 | 1 |
| unless | 2 | 2 |
| whether | 2 | 1 |
| while | 7 | 14 |
| whilst | 1 | 2 |
| yet | 1 | 8 |
| Total | 165 | 364 |
| Total per 1,000 words | 13.39 | 17.64 |

## Notes

1. www.rottentomatoes.com, www.epinions.com.
2. The examples are reproduced verbatim, including any typos and spelling mistakes.
3. Although some reviewers provide a link to their own Web pages in their profile, from which gender information can be extracted, I assume we do not know their gender.
4. There are a total of 27 plot stages in the corpus (see Table 1), because two of the reviews contained multiple plot stages.
5. Current research aims at further exploring the contribution of the wider context (Taboada et al. 2009).
6. *not have a problem* is properly a verb phrase. It is listed as a noun phrase because the word in question is *problem*, which is negated by the *not* that accompanies *have.*
7. http://lingo.lancs.ac.uk/llwizard.html. Last accessed on 29 November 2010.
8. I owe the idea of contrasting temporal and causal relations in the two types of stages to Manfred Stede.

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