Critics and audiences: a detailed look into the relationship between critical evaluation and commercial performance in the Dutch motion picture industry

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Abstract

This thesis looks at the relationship between critical evaluation and commercial performance of movies in the Dutch motion picture industry. It addresses the question to what extent there is a different relationship between critical evaluation and commercial performance, following the distinction between art house and mainstream movies, and differences in the target audience of the media outlets in which critical evaluation is published. Two newspapers, one targeting a cultural elite audience, and one targeting a mainstream audience have been used for the analysis. The sample consists of all movies that have been released in the Netherlands in 2013. Means of review salience and valence of the two newspapers have been compared. The direct relationships have been investigated and compared using hierarchical regression and comparison of correlation coefficients. Results show that there is a difference in the reviewing behavior between the two newspapers, indicating a preference for art house movies over mainstream movies for the newspaper that targets the cultural elite, and vice versa for the newspaper that targets a mass audience. Results also show that there is a difference in the predictive power of critical evaluation on commercial performance between the newspapers, although some of these differences are contrary to what was hypothesized. For example, the newspaper targeting a mass audience turns out to be a better predictor of the commercial performance of art house movies. The results are discussed, and indicate that existing theories and mechanisms can have surprising implications. Limitations and directions for future research are provided.

1. Introduction

Worldwide, the creative industries account for billions of dollars of revenue every year. In fact, the global box office revenue of the film industry alone amounts to \$38 billion in 2014 (Statista, 2014). An interesting aspect of the creative industries is that the value of its products is mostly derived from their content and form and the actual experience of consuming them, rather than their function, as is the case in other more traditional industries (Hirsch, 1972: 641-642).

The movie industry in particular is an interesting field to study. Movies are creative products that are delivered to the consumer in a variety of ways (through cinemas, DVDs, streaming, etc.). Reaching consumers is not the only goal of moviemakers, however. The movie *production* industry, for example, is characterized by a clearly defined selection system in the financing phase with expert selectors, peer selectors and market selectors. Expert selectors are people or organizations that are neither producers nor consumers, but who do have the relevant expertise and knowledge to judge these products. Peer selectors are producers of the same type of product, and market selectors are consumers (Ebbers & Wijnberg, 2012).

One particularly interesting type of expert selectors are movie critics. Critics have been studied widely in the context of the creative industries in general, and in the context of the movie industry in particular. Critics are an important part of the movie industry, and moviemakers put a lot of energy in reaching and convincing them, whether it is for commercial reasons or for artistic recognition (Debenedetti, 2006). This has led to many studies investigating the effect of critical evaluation on the box-office performance of movies. In addition to looking at this effect, however, it would also be interesting to look at movie criticism *itself* as the unit of analysis. Identifying the factors that influence or predict success in the expert selection system could be of great value for practice, because it tells us more about the dynamics within that particular 'gatekeeping' mechanism. Combining insights about differences in movie criticism and insights about the effect of criticism on movie performance covers important dynamics in different stages of a movie's lifecycle. It provides valuable insights about what influences criticism, and extends this dynamic to the performance of movies. This provides a deeper understanding of the underlying mechanisms (including the gatekeeping mechanism) that constitute movie performance than previous studies have provided. In other words, it is interesting to look at the step(s) *before* the effect of movie criticism on movie performance, for example by taking into account the preferences of the audiences that the movie reviews reach.

In particular, there is a lack of research on the influence of the target audience of a media outlet on its reviewing behavior. By looking at differences between reviews that are 'targeted' at different audiences, interesting insights can be gained about movie criticism as a gatekeeping mechanism in terms of connecting market segmentation to movie criticism. This study will therefore look at the differences in critical evaluation between two newspapers with different audiences. This is a relevant subject, because the target audience of a media outlet could also be understood as market segments of the market for the cultural products that are being reviewed. Moreover, this addresses the gateway from expert selection to market selection, by incorporating the market selectors (target audience of the media outlet) in the behavior of the expert selectors (critical evaluators).

Another important part of the movie industry is classification. Movies can be divided into different categories, each with particular audiences. For example, in the movie industry, often a distinction is made between art house and mainstream movies. It is interesting, then, considering the relevance of market segmentation, to look at the relationship between movie criticism and differences in classification. For example, Gemser et al. (2007) have studied whether there are differences in the effect of critical evaluation on movie performance between art house movies and mainstream movies, and have found that art house movie reviews influence performance, whereas mainstream movie reviews merely predict movie performance. This subject should be studied in more detail, however, by distinguishing the reviews *themselves* beyond the distinction between art house and mainstream, in terms of the *audience* that these reviews reach, as was mentioned earlier. Therefore, this thesis explores the relationship between reviews and commercial performance more deeply, by making particular distinctions: the distinction between art house movies and mainstream movies, but also the differences in the *audiences* that are exposed to the reviews for these types of movies. This way, it can be more adequately verified whether there are different review effects for mainstream movies and art house movies.

This leads to a research question that addresses differences in the target audiences of media outlets that publish reviews, and the relationship between those reviews and commercial performance for art house and mainstream movies. The question can be formulated as follows: "To what extent is there a different relationship between critical evaluation and commercial performance of movies, according to the distinction between art house and mainstream and differences in the target audience of the media outlets in which critical evaluation is published?"

The question aims to investigate several things. Firstly, it looks at the role of the audience of media outlets in their reviewing behavior. The question looks at whether the behavior of expert selectors is influenced by the composition of the market selectors (consumers) that they reach, effectively taking into account market segmentation in critical evaluation. Secondly, it looks at the role of critical evaluation in terms of classification. Classification is an important aspect of the cultural industries, in particular as a signal and screening device for consumers (Kim & Jensen, 2014). It is interesting, then, to look at evaluative preferences in terms of categorization. An answer to this question could lead to conclusions about and implications for the PR and marketing strategies of movies within a

particular category. Thirdly, relating this to commercial success tells us more about the influence of reviews in general, but from a different angle than the existing research that has been done on this topic so far, because it explicitly looks at this relationship related to differences in expert selectors with different audiences as market selectors.

In sum, this thesis will look at three central aspects of the creative industries in general, and the motion picture industry in particular; (1) expert selection, gatekeeping and critical evaluation, (2) classification, and (3) commercial performance. All of these subjects have a unique way to manifest themselves in the movie industry. Commercial success, for example, can be at odds with the pursuit of artistic excellence and recognition in the movie industry (Holbrook & Addis, 2008). Combining these subjects, and studying the relationships between them in a novel way can provide fresh insights into the fascinating world of motion pictures.

Firstly, a literature review is provided, discussing the subjects mentioned in the previous paragraph, followed by the formulation of the hypotheses. After that, the data and research design are discussed. This is followed by the results of the quantitative data analysis and hypotheses testing, after which it will be concluded that there is indeed a difference in the reviewing behavior between newspapers targeting different audiences, which is also the case for the direct relationship between critical evaluation and commercial performance. Research into the interaction effects of genres yielded no significant results. The thesis ends with implications for science and management, most important of which is the suggestion that theories about the role of critical evaluation for art house movies also has implications for mainstream movies, as well as limitations and directions for future research.

2. Literature Review

This section discusses the state of scientific research on different topics within the study of the creative industries to present the gaps in the literature that have led to the central research question of this thesis. Firstly, gatekeeping in the form of critical evaluation and its implications for commercial performance will be discussed. Secondly, literature on classification in general, and the distinction between art house and mainstream in particular will be discussed. Finally, a combination of these subjects and the way they relate to each other leads to a set of hypotheses that help answer the central research question.

2.1 Gatekeeping

Gatekeeping refers to a "system [...] to reduce the number of products reaching the market" (Peltoniemi, 2015: 46). Gatekeepers are part of a filtering system that determines whether a product will eventually reach consumers (ibidem). Gatekeepers can exist within the value system of a certain product, but they can also play a role as an external entity which influences to what extent and how the product is exposed to the market (Kwon & Easton, 2010).

Kwon and Easton (2010) have developed a conceptual model that highlights the importance of external evaluators as gatekeepers in the creative industries. They argue that, "under certain conditions [...] the capacity to evaluate can become concentrated in the hands of an actor that is external to the primary evaluator" (Kwon & Easton, 2010: 124). This situation arises when market actors (i.e. consumers) rely on the information from an external actor when evaluating their choices. This means that there is a 'gatekeeper' that helps the primary evaluator (the consumer) evaluate the product and make consumer decisions. The external evaluator (the critic) is then essentially a gatekeeper providing signals that consumers can use as a screening device, by which they can determine which products to select. Kwon and Easton (2010) argue that 'experiential' markets, such as the creative industries, are often

evaluator dominated (i.e. heavy reliance on external evaluators), because the quality of products can often only be evaluated 'post-hoc' in such industries, which means that the product can only be evaluated *after* consumption (Kwon & Easton, 2010: 127). For consumers this means that they must have some other way to evaluate the product before they 'consume' it, which can be done by looking at reviews. Hence, Kwon and Easton (2010) propose a conceptual framework with two elements. Firstly, there is a primary market in which products move from producers to consumers via intermediaries and in which the payment for products moves from consumers to producers - sometimes via intermediaries, such as distributors and retailers. In the case of the motion picture industry, the products are movies, that 'move' to consumers through cinemas and retail stores selling DVDs, for example. Secondly, and most important for this thesis, there are external evaluators, outside the primary market, influencing this primary market with their evaluations in the form of reviews, awards and rankings and such.

Peltoniemi (2015) makes the distinction between upstream and downstream selectors in the creative industries, both of which are part of the gatekeeping mechanism. Upstream selectors are the companies that are essential actors in the process of having a creative product reach completion. These can take the form of investors, producers, and retailers, for example. Downstream selectors are the actors that determine whether such a completed product reaches an audience; i.e. critics, award committees, etc. (Peltoniemi, 2015: 46). Applying this distinction to the conceptual model of Kwon & Easton (2010), it becomes clear that upstream selectors are part of the primary market, and that downstream selectors are part of the evaluation market. Thus, critics are important actors in the evaluation market that act as upstream selectors in the creative industries (Peltoniemi, 2015: 46). In this context, critics are often referred to as influencers or predictors of commercial performance (Eliashberg & Shugan, 1997; Gemser, Van Oostrum, & Leenders, 2007; Shrum, 1991), and empirical evidence pointing towards one or the other is mixed.

Debenedetti (2006) wrote an article about the role of media critics in the cultural industries, analyzing "the critics positioning as a strategic intermediary between artists, managers, and the public" (Debenedetti, 2006: 30). By providing a review of the most important literature on media critics, Debenedetti shows that critics play different roles in the behavior of different actors within a cultural field. Critics can influence audiences, legitimize artists, and even regulate innovation (Debenedetti, 2006). He shows that empirical evidence on the influencing power of critics on audiences is mixed. There have been many studies confirming the positive correlation between critical evaluation and commercial performance, but with different explanations for this correlation. Some argue that this relationship is particularly strong for movies that do not have clear signaling properties that can signal the quality or appeal of the movie, such as having reputable actors appear in the movie (Debenedetti, 2006: 35). For example, if movies can rely on the signaling power of other signaling properties, such as 'super stars', critical evaluations may carry less weight (ibidem; Levin, Levin, & Heath, 1997; Lampel & Shamsie, 2000).

In short, research investigating whether consumers base their choices on reviews or other 'signals' when deciding whether to consume a creative good is abundant. In contrast, the behavior of upstream selectors (i.e. critics) *themselves* has largely been neglected. One cannot deny that critics themselves are also influenced by certain factors in their review decisions, so further research in this area would benefit the scientific literature on the topic of critics in creative industries.

In this regard, Hsu (2006 II) has done research on the attention that critics pay to certain movies. She assessed whether products in categories (genres) that conform to the evaluative schemas of critics receive more critical attention. The evaluative schema of a critic

is developed over the course of time. As the critic reviews more movies of the same 'type', he/she develops an evaluative schema with particular criteria, geared towards those types of movies, by which these movies are evaluated. This means that movies that belong to a category for which critics have a consistent evaluative schema receive more attention from those critics than those who do not. For example, if a critic has mostly reviewed horror movies throughout his/her career, he/she will have developed an evaluative schema, with particular criteria by which to evaluate a movie, which is geared towards the evaluation of horror movies. More broadly, Hsu (2006 II: 489) suggests that this leads to more attention and legitimacy from consumers in a mediated market (i.e. a market in which there is a mediator in the form of a critic), by which she means that the movies that receive attention in reviews reach the consumer market better. She has also found that particular genres receive more attention than others. For example, New York Times critics show a preference for reviewing drama movies compared to horror movies (ibidem: 486). The author does not give an explanation for this, but the evaluative schemas may explain these 'genre effects.' In short, she demonstrates that the reviewing behavior of critics (in terms of attention) is influenced by the extent to which critics have consistent evaluative schemas for different categories.

There is a need for more detailed research on the dynamics that influence the behavior of critics as evaluative gatekeepers. For one, although there has been research on factors that influence the *attention* that critics pay to cultural products (Hsu, 2006 II), which could be referred to as 'salience', the way evaluative judgments of critics in terms of the rating they give to movies, which could be referred to as 'valence', are influenced in this context has received less attention. In addition, research could be conducted on how different aspects of the critic's organization (i.e. the newspaper) explain this effect she has found. For example, the target audience (or market segment) of the media outlet could influence the attention critics pay to different movies. In particular, keeping the importance of classification as a signal in mind, it would be interesting to look at whether different *categories* receive more critical attention from particular media outlets with particular audiences. This would mean comparing different media outlets.

It is also interesting to look at the implications of preference, in terms of both valence and salience, of evaluative gatekeepers for the commercial success of creative products. When it comes to the relationship between critical attention and commercial performance, Zuckerman and Kim (2003) have done research on the effect of critics classifying movies as 'major' or 'independent' by reviewing from their expertise as critics of major or independent movies on the box office success of these movies in their respective markets. They show that movies were more successful when they were reviewed by critics specialized in major movies. In other words, they have demonstrated some effect of attention from evaluative gatekeepers on commercial success. This suggests that certain critical evaluations may have more 'power' than others, which would be an interesting direction for more empirical research.

2.2 Classification

Classification refers to the act of distinguishing between different classes or categories (Classify, 2015). In the creative industries categories often manifest themselves as genres. In the music industry, for example, the supply of music, bands, and artists is often divided or categorized in genres such as Rock, Blues, R&B, Pop, etc., each appealing to a particular set of audiences. Consumers use these categories to identify and assess which products might be able to satisfy their needs (Waguespack & Sorenson, 2011). Categories in the creative industries are derived from differences in form, whereas categories in more regular industries are derived from particular function attributes or price range (DiMaggio, 1987: 441). This

peculiarity of the creative industries makes research on classification and genres a relevant endeavor.

According to DiMaggio (1987), classification into genres in the creative industries happens along four different dimensions; differentiation, hierarchy, universality, and boundary strength. Genres can simply be differentiated from each other, they can be part of a certain hierarchy (some genres are considered 'higher' than others, which will be discussed further in the section on the distinction between art house and mainstream), and classification systems can have more or less universal salience, meaning that the classifications are considered more or less important across the entire field in which these classifications are made. Also, the intensity of classification can vary depending on how intensively the boundaries of genres are (ritually) defended. Some genres are more exclusive, whereas others can overlap. In other words, if a certain category is more exclusive, it becomes 'harder' to be part of that category because the criteria are more strict. One could argue that the distinction between mainstream and art house movies – which will be discussed more extensively later in this thesis – is related to the dimension of hierarchy.

Consumers rely on certain signals as screening devices about the content, quality and appeal of creative products in their decision-making process about whether to consume that creative product (Kim & Jensen, 2014). In the case of movies, this means that producers use signals to provide consumers with information about a particular movie, and that consumers screen these signals to process information on the basis of which they make their decisions (Kim & Jensen, 2014: 1360). A lot of research on genres is about genres as an independent variable predicting certain aspects of a creative industry, implying this signaling 'effect' of genres.

For example, Gazley, Clark, and Sinha (2011) show that genre affects consumer preferences for motion pictures. They hypothesize that genre is a movie attribute that influences purchase intent of consumers. Their research shows that this relationship exists for particular genres (comedy, drama, and horror). They demonstrate that the effect of genre on consumer preference is significant for those particular genres. While Gazley, Clark and Sinha (2011) study the *direct* effect of genre on consumer preferences (in the sense that some genres are more popular than others), Desai & Basuroy (2005) have studied the *interactive* effects of different signaling attributes of movies. They have shown that, depending on certain genre characteristics, other signals (such as star power) have a different effect on box office performance of movies. For example, for more familiar genres (genres that are more widely released, such as action and comedy), the signals of star power and critical evaluation are less important than for less familiar genres. This shows that certain signals. For example, the effect of star power on box-office performance can be different for different genres. Lee (2006) came up with similar findings, showing that differences in genre affect the predictive power of domestic success of American movies (as a signal of quality) on the box office success of those movies in an international market.

Hsu (2006) did research on how category spanning – the extent to which something is part of multiple categories/genres – influences the appeal of movies to audiences. She found that movies that belong to multiple genres attract more people, but at the same time satisfy those audiences less than movies that belong to fewer genres. In other words, movies that 'span' categories (generalists) are likely more popular than movies that do not (specialists). This shows that genre – as an independent variable – has an effect on the performance of a creative product. Strategically, this implies that producers that want to target a large audience should produce movies that span multiple genres, whereas producers that want to please the audience (and get high ratings) should be more specific about the genre of their movies. This has to do with the so-called 'marketability' and 'playability' of movies. Marketability refers to the extent to which a movie can attract an audience at the beginning of a movie's life cycle (i.e. before the movie is released). Playability refers to the extent to which a movie can sustain or even grow its audience over time (Krider & Weinberg, 1998: 2). Applying this to the study by Hsu (2006), this would mean that generalists have greater marketability, whereas specialists have greater playability. Generalists attract a larger audience in the beginning, because they span genres, but run the risk of displeasing audiences once they have seen the movie, which reduces their playability.

These studies underpin the notion that genre can function as a signal that consumers screen in their decision-making process, both in a direct manner and as a moderator or mediator affecting the direct effect of other signals. In other words, it is well established that classification can affect the preferences and behavior of consumers. It is important, therefore to look at how different categorizations (genres) interact with the relationship between critical evaluation and commercial performance. In addition, it is also important to look at the role of classification in the preferences and behavior of certain gatekeepers within the creative industries, because these gatekeepers often represent the channels through which consumers perceive signals and screen alternatives. It may be expected, for example, that some critical evaluators prefer art house movies to mainstream movies. This distinction will be discussed in the next section.

2.3 Art house versus mainstream

In terms of classification the motion picture industry a dichotomous distinction can be made between mainstream and art house movies (Gemser et al., 2007). While these distinctions can be seen as being based on the way movies come to existence (produced by an independent film maker or by a major studio, or budget, for example) or on the size of the audience it attracts, one could also argue that this distinction is a matter of form. Some genres and themes lend themselves better for mainstream movies than others. For example, some scholars consider the genre 'drama' as more "art movies" and genres such as 'action' and 'comedy' more "event movies", i.e. mainstream movies (Reinstein & Snyder: 2005: 29).

Gemser et al (2007) have shown that the relationship between critical evaluation and commercial performance is different for art house movies and mainstream movies. Reviews of art house movies have an influencer effect, meaning that reviews influence consumer behavior. In contrast, reviews for mainstream movies have a predictor effect, meaning that reviews merely reflect the tastes of the audience, and therefore predict consumer behavior. An explanation for this can be that audiences of mainstream movies base their decisions more on other signals such as the appearance of famous movie stars, or marketing efforts.

Zuckerman and Tim (2003) make the distinction between major and independent movies, which they argue are 'market identities.' Major movies are produced by major or Hollywood studios and distributed by major distributors, whereas independent movies are not. In their study, they argue that this identity is implied by which critics review the movie. If critics that specialize in 'major' movies review a certain movie, this movie is likely to be perceived as a movie catered towards the mass market. Indeed, Zuckerman and Tim (2003) demonstrated that movies that were reviewed by critics of major movies attracted larger audiences. However, this also meant that these movies were less likely to penetrate the art house market. This shows that identities (in this case in terms of major or independent) have implications for the commercial performance of movies in different market segments.

The difference in preference between high-art and popular art can be attributed to differences in social class. DiMaggio's study (1987) investigates the relationships between social class (and cultural capital) and tastes for different forms of art. DiMaggio (1987: 443) argues that taste is "a form of ritual identification and a means of constructing social relationships." Consumption of high art, then, is a marker of status and a means by which

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'like-minded' people can converse with each other about culture (ibidem). In the study by Dimaggio and Useem (1978) the relationship between social class and consumption for highart is confirmed. In terms of the distinction between art house and mainstream movies, this could mean that art house movies are more popular among people with higher social class. This could also have implications for the role of critical evaluation by media outlets that target people with higher social class.

Most research on the difference between art house and mainstream (or major and independent, if you will) focuses on this distinction with the 'movie' as the unit of analysis. However, such a distinction in terms of *reviews* has largely been neglected. Granted, Zuckerman and Tim (2003) make a distinction between reviewers of 'major' movies and reviewers of independent movies, but it would be even more interesting to make a distinction in terms of the *audience* that these reviews reach. That way, particular market segments (in terms of mass-market/mainstream and art house) are taken into account already when looking at critical evaluation itself.

2.4 Research Question

The literature discussed so far, and the identified gaps in the literature, form the foundation on which the central research question and the relationships that are investigated in this thesis are based. To summarize, research is needed on the extent to which differences in media outlets may result in differences in critical evaluation, and what this means for commercial performance. In addition, it is of academic and managerial importance to look at the role of classification in terms of these relationships. For example, the relationship between critical evaluation and commercial performance may be different for different media outlets and different types of movies. Therefore, the following research question is formulated:

"To what extent is there a different relationship between critical evaluation and commercial performance of movies, according to the distinction between art house and mainstream and differences in the target audience of the media outlets in which critical evaluation is published?"

One of the goals of this research is to investigate whether media outlets with different types of audiences pay more or less attention to different types of movies, and evaluate different types of movies differently. For example, it could be expected that newspapers that target the cultural elite evaluate art house movies differently than newspapers that target a mass audience. In addition, this research aims to investigate whether relationship between critical evaluation and commercial performance differs for different media outlets (with different audiences). In other words, it is investigated to what extent reviews on art house movies published in a media outlet with a more cultural elite audience have a stronger relationship with the performance of art house movies than reviews of art house movies published in a media outlet with a mainstream audience. To formulate it in an illustrative question using two important Dutch newspapers, provided that de Volkskrant targets the cultural elite and de Telegraaf targets a mainstream audience (Gemser et al., 2007); are reviews on art house movies from *de Volkskrant* a better predictor of art house performance than reviews on art house movies from *de Telegraaf*? And the other way around, are reviews of mainstream movies from *de Telegraaf* a better predictor for mainstream movie performance than reviews on mainstream movies from *de Volkskrant?* For movie producers, this could have important implications. For example, it would mean that in order to gauge reactions to a particular art house movie to predict its performance, it would be best to look at reviews published in media outlets with a more high-brow audience.

Because this research looks explicitly at the distinction between art house and mainstream movies, two separate models can be developed (see figure 1 and 2), one for art house movies, and one for mainstream movies, each investigating the direct relationship between critical evaluation and commercial performance, as well as the interaction effects of particular genres. The reasoning behind the particular relationships will be explained in more detail when the hypotheses are formulated.

The research question and the corresponding conceptual models address a very simple (and widely studied) relationship in a new and interesting way. The relationship that is being studied is the relationship between critical evaluation and commercial performance. However, a distinction between art house movies and mainstream movies is added. In addition, and most interestingly, the distinction between two different critical evaluators is added, in the form of one media outlet that has a more high-brow audience, and one media outlet that has a more mainstream audience. This provides the essential (and missing in the literature) connection between differences in audiences (market segments) for movies, and differences in audiences that read reviews for those movies.

2.5 Hypotheses

2.5.1. Differences in media outlets

As was discussed earlier in this thesis, there has been research on particular factors that might influence the preference of certain reviewers for certain types of movies. Hsu (2006 II) has found that critics prefer to review movies that belong to a category for which they have a well-developed evaluative schema. This demonstrates that there are factors that influence a critic's preference in movies.

Some interesting insights can be drawn from the explanations that researchers give for the correlations they find between critical evaluation and box-office performance of movies.

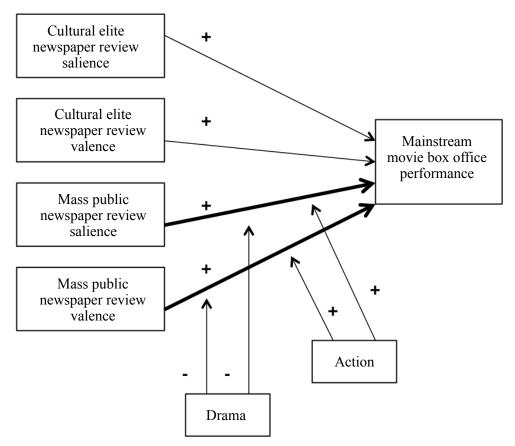
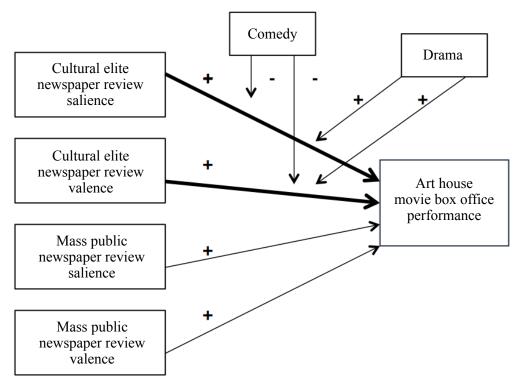


Figure 1





Some research suggest an 'influencer effect', while others find evidence for a 'predictor effect'. In explaining the correlation as a predictor effect, it is argued that movie critics simply reflect the tastes of the movie audience, and that the media outlet in which the reviews are published selects its reviewers to match their own audience (Eliashberg & Shugan, 1997: 72). The explanation here is that the selection of reviewers employed by a media outlet will be filtered in order to reflect the opinions of its readers. Based on this argument, one could expect that the reviews in a media outlet that targets the cultural elite will show a preference towards more high-brow (art house) types of movies.

In his study on critical reviews, Lang (1958) also discusses the relationship of the reviewer with the publication in which his or her reviews are published. As he puts it, "each publication has a slant to which every contributor adapts himself" (Lang, 1958: 13). In fact, he shows that there are differences in the style of the reviews in mass audience publications and more critical publications. In addition, he discusses the role of the perception that the media outlet has of its own audience, arguing that a media outlet is likely to recommend cultural products in its reviews that would interest its own readers (Lang, 1958: 16-17). In his paper, he makes the distinction between class publications and mass publications, each with its own type of reviewers and reviews, both in terms of the attention that is paid to particular cultural products in the reviews (i.e. salience), as well as the way these products are reviewed (i.e. valence).

Shrum (1991: 354-355) presents a perspective which states that class differences contribute to the distinction between popular art and 'high' art, meaning that people with a higher class prefer higher art. According to this view, classifications can be seen as socially constructed elements that are part of a socially constructed system. This also has implications for the critical evaluation of different types of art. He argues that this means that reviewers, depending on the nature of the cultural product they are evaluating (low or high art) perform

different functions. In case of movie reviews in Dutch research papers, this may imply that newspapers that target an audience with a higher social class have a different reviewing 'policy' than papers that target a more 'low-brow' audience.

As a first empirical indication, in their analysis on the effect of reviews on the box office performance of art house and mainstream movies, Gemser et al. (2007: 61) have shown that reviews for art house movies in *de Volkskrant* (a newspaper the authors argue targets the 'cultural elite') are significantly larger than reviews for mainstream movies in terms of the amount of cm² they occupied in the newspaper. On the other hand, reviews for *mainstream* movies in *de Telegraaf* (which the authors argue targets a mass audience) are significantly larger than reviews for art house movies (ibidem). The implication of this finding may be that the social class of the audience of a movie outlet might indeed influence the preference for certain movies in terms of the salience of reviews. To take this further, it would be interesting to look at differences in critical evaluation *between* these two newspapers, rather than only looking at differences in critical evaluation between art house and mainstream movies *within* the same newspaper. In this regard, it could be expected that *de Volkskrant* pays more attention to art house movies compared to *de Telegraaf*, for example.

The arguments, explanations and findings in the previously discussed studies about differences in reviewing behavior and differences between different categories lead to the following hypotheses. In these hypotheses and the hypotheses that follow, salience refers to the attention that is paid to movies in critical evaluation, in terms of the number of words that are used in each review of a particular movie. Valence refers to the score that is given to the move in the form of 'stars' ranging from 1 to 5.

H1a: The salience of reviews for art house movies in a newspaper that targets the cultural elite is higher than in a newspaper that targets a mainstream audience

H1b: The valence of reviews for art house movies in a newspaper that targets the cultural elite is higher than in a newspaper that targets a mainstream audience

H1c: The salience of reviews for mainstream movies in a newspaper that targets the cultural elite is lower than in a newspaper that targets a mainstream audience.

H1d: The valence of reviews for mainstream movies in a newspaper that targets the cultural elite is lower than in a newspaper that targets a mainstream audience.

H1e: The valence of reviews from a newspaper that targets the mainstream will be higher for mainstream movies than for art house movies.

H1f: The salience of reviews from a newspaper that targets the mainstream will be higher for mainstream movies than for art house movies.

H1g: The valence of reviews from a newspaper that targets the cultural elite will be lower for mainstream movies than for art house movies.

H1h: The valence of reviews from a newspaper that targets the cultural elite will be lower for mainstream movies than for art house movies.

2.5.2. The relationship between critical evaluation and box office performance

There have been many studies on the effect of reviews on the box office performance of movies. The results are mixed. One important factor brought forward in the literature is the distinction between art house and mainstream movies. Some argue that, depending on the nature of the art piece ('high' or 'low', 'art house' or 'mainstream') critical evaluation performs a different function. Shrum (1991: 356) identifies two different perspectives on this matter: the cultural capital reasoning, and the cultural convergence hypothesis.

According to the logic of cultural capital, reviews for high forms of creative production are associated with performance, whereas this is to a lesser extent the case for reviews for lower forms. The argument behind this is that consumers of more serious work are more likely to read reviews and base their decisions on those reviews. Consumers of more mainstream work base their decisions on more superficial signals. However, according to the cultural convergence hypothesis, arguing that the distinction between 'high' and 'low' art is not as important anymore, there should be no difference in the mediating force of critical evaluation for different categories (high or popular) (Shrum, 1991: 356).

Several studies have put these and other hypotheses to the test. Hennig-Thurau, Marchand, and Hiller (2012) provide an overview of different studies on the relationship between reviews and commercial success. They note that some studies make a distinction between opening weekend results and long-term box office results to distinguish between the influencer and the predictor effect. For example, Eliashberg and Shugan (1997) argue that a correlation between reviews and long-term box office success indicates a predictor effect, whereas a stronger correlation between reviews and opening weekend results indicates an influencer effect. The argument behind this is that the influencing effect of critical evaluation is expected to diminish over time, as other signals (such as word-of-mouth) become more important.

Scholars have also investigated differences in the relationship between reviews and movie performance according to the distinction between art house and mainstream movies. For example, Gemser et al (2007) made a distinction between art house and mainstream movies, and found that for art house movies there is an influencer effect of movie reviews, whereas for mainstream movies the relationship is predictive of nature. This is in accordance with the cultural capital view, presented by Lang (1958).

As discussed earlier, scholars have argued that the influencer perspective is stronger for art house movies than for mainstream movies. Scholars have hypothesized and confirmed this by making the distinction between art house and mainstream movies in terms of commercial performance and reviews. However, the assumption behind this is problematic. The assumption is made that art house and mainstream movies each have *separate* audiences, whereas these are more likely to overlap. It would be academically interesting to take this further, by looking at the specific audiences of the reviews themselves, which can be both audiences of mainstream movies as well as art house movies.

In the traditional studies on differences between art house movies and mainstream movies in terms of the relationship between critical evaluation and box office performance, the reviews of art house movies are combined and averaged, as well as the reviews of mainstream movies. It would be better if a distinction were made in the reviews of each type of movie in terms of the audience that the reviews reach. This would mean categorizing the reviews of art house in terms of the audience composition of the newspaper in which they are published, which will be done in this thesis. The same will be done for mainstream movies. That way, it can be assessed whether *particular* reviews of art house movies (published in newspapers with a more cultural elite audience) are a better predictor of commercial success

than other reviews of art house movies (published in newspapers with a mass audience). The same, then, will be assessed with regard to mainstream movies.

Since it is expected that audiences of higher forms of art base their decisions more on reviews than audiences of lower forms of art (hypothesized by the cultural capital view from Lang (1958), and confirmed by studies such as Gemser et al. (2007), among others), it could be hypothesized that the higher the social class of the audience in which the reviews are published, the greater the relationship is between art house movie reviews and art house movie performance. Approached from the predictor perspective, one could formulate the same hypothesis. The logic behind this, is that reviews that are published in newspapers that target an audience that is similar to the target audience of the movies it reviews is likely to be a better reflection of the taste of that audience. Therefore, reviews of art house movies published in a newspaper that targets the cultural elite are likely to be a better reflection of the target audience of those movies, than reviews of art house movies published a newspaper that targets a mass audience. Applying the same logic to mainstream movies, it could be expected that reviews of mainstream movies published in a newspaper that targets a mass audience and the sum and and the sum and the sum and the same hypothesis at the target at the reviews of mainstream movies published in a newspaper that targets a mass audience.

This line of thought can be summarized in the following hypotheses:

H2a: The relationship between salience of reviews and mainstream movie performance is smaller for reviews published in a newspaper that targets the cultural elite than for reviews published in a newspaper that targets a mainstream audience. H2b: The relationship between valence of reviews and mainstream movie performance is smaller for reviews published in a newspaper that targets the cultural elite than for reviews published in a newspaper that targets a mainstream audience.

H2c: The relationship between valence of reviews and art house movie performance is greater for reviews published in a newspaper that targets the cultural elite than for reviews published in a newspaper that targets a mainstream audience.

H2d: The relationship between **salience** of reviews and **art house** movie performance is **greater** for reviews published in a newspaper that targets the **cultural elite** than for reviews published in a newspaper that targets a mainstream audience.

2.5.3. Interaction effects of genres

Classification is an important aspect of the motion picture industry. So far, this thesis has looked at the distinction between art house and mainstream movies. Genres, however, are also important classifications. As previous research has shown, genre classifications can influence the behavior of audiences, because genres can function as a signal to the consumer about the 'quality', and therefore the appeal, of the movie. It is therefore important to look at how these 'genre effects' influence the relationship between critical evaluation and commercial performance.

Gazley et al. (2011) demonstrate these 'signaling effects' of movie genres in their research. They hypothesize that consumers' preferences differ for different genres (Gazley et al., 2011: 855). They identify seven different types of genres, and find significant results for

three of them (comedy, drama, and horror), demonstrating that comedy is most popular, while horror is least popular (ibidem: 859). This confirms that there are differences in preference for between different genres.

Desai and Basuroy (2005) investigated the interaction effects of genre, showing that other signaling effects (such as star power) are less important for particular genres. More specifically, for more familiar genres, the signaling power of traits such as star power and critical evaluation are less powerful. Genre familiarity is in this case an important construct, that is operationalized along the number of movies in a particular genre are released. The higher this number, the higher the genre familiarity. In other words, 'popular' and more mainstream genres are more familiar, and reduce the signaling power of other signals. This is an interesting finding for this thesis, particularly the diminishing effect of critical evaluation on commercial performance for popular genres.

Reinstein and Snyder (2005) also find that critical evaluation carries more weight for dramas, which they argue is a more art house category. This is in accordance with the findings from Desai and Basuroy (2005), because narrowly released movies could constitute less familiar genres. It confirms the notion that less popular movies/genres rely more on critical evaluation and other signals than more familiar and popular movies/genres.

In terms of the model of this thesis, this would mean that for certain genres, the relationship between critical evaluation and commercial performance is stronger or weaker. Incorporating the difference in media outlets in which critical evaluation is published, this could lead to some interesting hypotheses. Considering the expectation that the relationship between critical evaluation and commercial performance for mainstream movies in the newspaper that targets a mass audience is stronger than in a newspaper that targets the cultural elite, one could expect that the interaction effect of certain genres in that particular relationship is stronger, in the sense that it diminishes the strength of that relationship. When

regarding certain genres as more mainstream genres (action and comedy) and the drama genre as a less mainstream genre (Reinstein & Snyder, 2005), the following hypotheses can be formulized.

H3a: The relationship between review valence and performance of mainstream movies in newspapers that target the mainstream is stronger for movies in the action genre compared to other genres.

H3b: The relationship between review salience and performance of mainstream movies in newspapers that target the mainstream is stronger for movies in the action genre compared to other genres.

H3c: The relationship between review valence and performance of mainstream movies in newspapers that target the mainstream is weaker for movies in the drama genre compared to other genres.

H3d: The relationship between review salience and performance of mainstream movies in newspapers that target the mainstream is weaker for movies in the drama genre compared to other genres.

H3e: The relationship between review valence and performance of **art house** movies in newspapers that target the **cultural elite** is **stronger** for movies in the **drama** genre compared to other genres.

H3f: The relationship between review salience and performance of **art house** movies in newspapers that target the **cultural elite** is **stronger** for movies in the **drama** genre compared to other genres.

H3g: The relationship between review valence and performance of **art house** movies in newspapers that target the **cultural elite** is **weaker** for movies in the **comedy** genre compared to other genres.

H3h: The relationship between review salience and performance of **art house** movies in newspapers that target the **cultural elite** is **weaker** for movies in the **comedy** genre compared to other genres.

3. Research Design

The central research question is based on the conceptual model presented in the previous section that describes the relationships between different concepts. The question implies the existence of correlational relationships, and the corresponding hypotheses will be tested accordingly. The goal of this thesis is to explain certain dynamics in the movie industry. This is done by quantitatively testing the hypotheses, which are geared towards answering the central research question.

3.1 Empirical setting and research goal

The empirical setting of this thesis is the Dutch motion picture industry. The goal is to assess the relationship between critical evaluation and commercial performance for different types of movies (art house and mainstream) and different 'types' of reviews (published in two newspapers, each with different audiences). In addition, this thesis will look at the interaction effects of different genres on these relationships. This thesis will do so by using a crosssectional research design.

3.2 Sample and data collection

The data used in this thesis will come from different sources, which will be combined in one custom database. The sample consists of every movie that has been released in the Netherlands in the year 2013 (n = 402) (FilmVandaag, 2015). This sample is appropriate for several reasons. First, it consists of the most recent data for which sales information is available. Second, the data is exhaustive for the year 2013 – no movies are left out, because of the high reach of the NVB. Third, by limiting the data to a single year, the feasibility of the study is preserved.

The data will be split into two different categories, mainstream movies and art house movies. This will be done by looking at the amount of copies of a particular movie that are distributed to theaters, based on information from the Dutch Association of Exhibitors (NVB, 2013), using 30 copies as the cut-off point between art house and mainstream movies (based on the notion that mainstream movies will likely be distributed more widely than art house movies). To account for potential bias as a result of this rather rough distinction, exceptions were taken into account by looking at the 'type' of cinemas the movies of which it was expected that they were an exception were displayed in. In other words, movies that seemed suspicious, such as movies that had a very large budget, but were still qualified as art house movies (or the other way around), were put under scrutiny by checking whether these movies were screened in independent or 'chain' cinemas. If movies that were categorized as mainstream movies turned out to be played only in independent theaters, these would be reclassified as art house movies, and vice versa. Needed information was gathered from www.indebioscoop.com. Gemser et al (2007: 50) categorized movies into mainstream or art house by looking at the 'market role' of the theaters in which they were shown. Assuming independent theaters base their choices for which movies to show on the form and content of these movies, taking this into account when making the distinction between art house and mainstream is appropriate.

3.3 Dependent variable

The dependent variable in this study is the commercial performance of each movie released in 2013 in the Netherlands, which will be measured by looking at the cumulative box office revenue for the year 2013. Cumulative box office revenue refers to the revenue from ticket sales throughout the entire theatrical run of the movie. In addition, although the hypothesis will be tested for cumulative box office revenue, data on opening weekend box office revenue has also been collected, which has been used for additional analyses. Opening weekend revenue refers to revenue gathered from ticket sales in the first weekend (Thursday, Friday,

Saturday, and Sunday) of the release of the movie (Gemser et al., 2007). Cumulative box office performance was used for the main analyses because it provides the most complete picture of a movie's total commercial success. Data on box office revenues has been collected from the NVB, using the MACCsbox database from Cinema Bridge, which registers the sales of movie tickets at cinemas that are registered at the NVB. All data was converted to the euro currency, by taking the average conversion rate of the particular currencies with the euro for the years 2012 en 2013. The year 2012 was also taken into account because production likely took place in that year as well in some cases. The distribution of the variable was positively skewed, which was resolved by performing a log transformation for the regression analyses.

3.4 Independent variable

The independent variable is critical evaluation, which consists of two different elements. First, *salience* refers to the amount of words in the review of a movie. Second, *valence* refers to the score (on a scale of one to five) that is given to the movie in a review. This way, both attention and evaluative judgment is covered. This study will collect reviews from two different media outlets; one newspaper that is geared towards a more cultural elite audience (*de Volkskrant*), and one newspaper that is geared towards a more mainstream audience (*De Telegraaf*) (Gemser et al., 2007). This leads to four variables: salience from newspaper 1, valence from newspaper 1, salience from newspaper 2, and valence from newspaper 2. Data on critical evaluation has been collected from the digital archives of each newspaper. At *de Telegraaf* an empty search was done in the *Films & Uitgaan* section for the year 2013, scanning for all the reviews published in the year 2013. At *de Volkskrant* searches for all reviewers employed by *de Volkskrant* were done for the year 2013, in order to identify all movie reviews published in the year 2013.

3.5 Control variables

Budget. Production budget is expected to influence box office performance (Basuroy, Desai, & Talukdar, 2006). Information about budgets has been collected from imdb.com, thenumbers.com and Wikipedia.org. If no budget information was available from these sources, an extensive internet search was performed in order to find budget information. For some movies, for example, budget information could be derived from interviews with producers or directors of those movies. For the movies for which there was still no budget information, I contacted the production company by e-mail requesting information about the production budget. After data was collected, the data was transformed to account for the disproportionate budgets from Hollywood movies. Three mutually exclusive categories were developed (which were also used as control variables): movies from the USA/UK, Dutch movies, and foreign movies, based on information from the NVB. For each of these categories the average budget was calculated. After that, each score was divided by the average of the category to which it belonged. That way, high budgets of Dutch movies would score similar to high budgets of American or British movies, reducing the bias caused by the huge budgets of some Hollywood movies, that still generate a box office revenue similar to Dutch movies or small budget movies, simply because of the relatively small market of the Netherlands.

Star Power. Star power (the extent to which the movie has famous and reputable movie stars in it) can also influence the dependent variable (Desai & Basuroy, 2005; Hennig-Thurau et al., 2012). Data on Star Power has been collected from IMDB Pro at imdb.com. More specifically, the STARmeter score of each actor and director in each movie was used. STARmeter is an indicator of popularity on imdb.com (based on clicks and views from users), in which a lower score means a higher popularity. Therefore, this measure is based on actual popularity among movie going audiences. Two variables were created, StarPower1000 and StarPower500, which indicated, respectively, how many actors/directors had a score below

1000 and below 500 in the period *before* the release of the movie. It is important to look at the period before the release, because the release of a movie *itself* can cause a rise in popularity, which could make the data unreliable. In order to account for the lack of famous Dutch/Belgian actors and directors that score below 1000 or 500 on STARMeter, a different threshold was used for Dutch and Belgian actors, namely a STARMeter score of 50000 to compare to 1000 and of 25000 to compare to 500. This number is roughly based on the amount of Dutch and Belgian actors on IMDB compared to the total number of actors. A simple check confirmed that most Dutch and Belgian famous actors fell into that category, whereas few not well-known actors were included.

Copies. Finally, the number of cinemas in which a movie is shown is, logically, a predictor of commercial performance (Neelamegham & Chintagunta, 1999). Information about number of screens is based on the number of copies that have been distributed to cinemas throughout the Netherlands. Information on this variable has been collected from the NVB (NVB & NVF, 2013).

3.6 Moderating variable

As is reflected in the conceptual model, genre is considered a moderator in the relationship between critical evaluation and box office performance. Some genres may be more popular than other genres, which could influence the box office performance of movies (Desai & Basuroy, 2005). Information about the genre of each has been collected from imdb.com. Dummy variables were made for the most important genres (drama, comedy, and action), in order to prepare the data for statistical analysis with interaction effects. Some movies had multiple genres. Since the drama-genre is attached to the majority of movies, I only applied a positive score for the dummy variable of the drama genre if the information on imdb.com *only* indicated the Drama genre, or if the drama genre was combined with a genre that was *not* one of the other important genres. Movies with both comedy and drama genres were coded as comedy. The same strategy was applied for the other genres. This allowed for the creation of mutually exclusive dummies, and prevented the majority of movies from being classified as drama, which would render the interaction analyses meaningless. These dummies were also used as control variables in the regression analyses.

3.7 Method

This study uses two models for two different samples. Each model studies the same relationships between the dependent variable and the independent variables with the same control variables. However, they differ in their samples. One model studies the relationships for art house for mainstream movies, whereas the other model studies the relationships for art house movies. Also, in the mainstream sample, the action genre is used as an interaction variable, but in the art house sample, the comedy genre is used. This is because there are virtually no action movies in the art house sample. Hierarchical regression analysis has been performed to study the effect of critical evaluation (salience and valence) on commercial performance for reviews from two different newspapers, controlling for the aforementioned control variables. After these relationships are established, this thesis will look at differences between the two different newspapers in terms of these relationships, by comparing and testing the differences of partial correlations, taking into account the same control variables that were used in the regression models. Interaction effects of genre (part three of the hypotheses) have also been analyzed by statistical methods, using model 1 of the Process macro for SPSS developed by Hayes (Hayes, 2012).

4. Results

4.1 Descriptive results

The split between art house and mainstream movies resulted in two samples: art house (n = 200) and mainstream (n = 202). However, because of missing variables, exclusion of cases resulted in smaller sample sizes (depending on the type of analysis), particularly for the art house dataset. Table 1 reports the means and standard deviations and Pearson correlations of all variables (not yet after any transformations) for mainstream movies. Table 2 does the same for art house movies. As can be seen, some variables have standard deviations that are larger than the mean, indicating non-normal distributions.

				Featsol	i Correlatio	ns - Mainst	ream						
Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
63,1	46,67	1											
3,11	2,36	,283"	1										
2,17	1,92	,199 ^{**}	,875	1									
34.321.810	42.598.692	,539"	,378"	,433"	1								
1,11	1,1	,606"	,336"	,328"	,928"	1							
292.853	357.660	,638**	,470"	,425"	,669"	,680"	1						
212.365	276.413	,592"	,485	,438"	,652"	,664"	,987"	1					
1.110.326	1.590.474	,755"	,358"	,297"	,517	,561	,835"	,809"	1				
3,12	0,69	,171 [°]	,095	,114	,189 [°]	,167 [°]	,088	,091	,231"	1			
213,77	54,78	,175 [°]	,257"	,200"	,186 [°]	,240"	,322"	,324"	,256"	,283"	1		
2,61	0,94	-,049	,047	,087	,047	,057	,045	,053	,109	,511	,207"	1	
280,04	134,52	,089	,152 [*]	,145	,173 [°]	,236"	,207"	,198 ^{**}	,192 [°]	,355"	,450"	,556"	1
	63,1 3,11 2,17 34.321.810 1,11 292.853 212.365 1.110.326 3,12 213,77 2,61 280,04	63,1 46,67 3,11 2,36 2,17 1,92 34.321.810 42.598.692 1,11 1,1 292.853 357.660 212.365 276.413 1.110.326 1.590.474 3,12 0,69 213,77 54,78 2,61 0,94 280,04 134,52	63,1 46,67 1 3,11 2,36 ,283" 2,17 1,92 ,199" 34.321.810 42.598.692 ,539" 1,11 1,1 ,606" 292.853 357.660 ,638" 212.365 276.413 ,592" 1,110.326 1.590.474 ,755" 3,12 0,69 ,171" 213,77 54,78 ,175" 2,61 0,94 -,049	63,1 46,67 1 3,11 2,36 ,283" 1 2,17 1,92 ,199" ,875" 34.321.810 42.598.692 ,539" ,378" 1,11 1,1 ,606" ,336" 292.853 357.660 ,638" ,470" 212.365 276.413 ,592" ,485" 1.110.326 1.590.474 ,755" ,358" 3,12 0,69 ,171' ,095 213,77 54,78 ,175' ,257" 2,61 0,94 -,049 ,047 280,04 134,52 ,089 ,152'	63,1 46,67 1 3,11 2,36 ,283" 1 2,17 1,92 ,199" ,875" 1 34.321.810 42.598.692 ,539" ,378" ,433" 1,11 1,1 ,606" ,336" ,328" 292.853 357.660 ,638" ,470" ,425" 212.365 276.413 ,592" ,485" ,438" 1.110.326 1.590.474 ,755" ,358" ,297" 3,12 0,69 ,171" ,095 ,114 213,77 54,78 ,175" ,257" ,200" 2,61 0,94 -,049 ,047 ,087 280,04 134,52 ,089 ,152' ,145	63,1 46,67 1 3,11 2,36 ,283" 1 2,17 1,92 ,199" ,875" 1 34.321.810 42.598.692 ,539" ,378" ,433" 1 1,11 1,1 ,606" ,336" ,328" ,928" 292.853 357.660 ,638" ,470" ,425" ,669" 212.365 276.413 ,592" ,485" ,438" ,652" 1.110.326 1.590.474 ,755" ,358" ,297" ,517" 3,12 0,69 ,171' ,095 ,114 ,189' 2,61 0,94 -,049 ,047 ,087 ,047 280,04 134,52 ,089 ,152' ,145 ,173'	63,1 46,67 1 3,11 2,36 ,283" 1 2,17 1,92 ,199" ,875" 1 34.321.810 42.598.692 ,539" ,378" ,433" 1 1,11 1,1 ,606" ,336" ,328" ,928" 1 292.853 357.660 ,638" ,470" ,425" ,669" ,680" 212.365 276.413 ,592" ,485" ,438" ,652" ,664" 1.110.326 1.590.474 ,755" ,358" ,297" ,517" ,561" 3,12 0,69 ,171' ,095 ,114 ,189' ,167' 2,61 0,94 -,049 ,047 ,087 ,047 ,057 280,04 134,52 ,089 ,152' ,145 ,173' ,236"	63,1 46,67 1 3,11 2,36 ,283" 1 2,17 1,92 ,199" ,875" 1 34.321.810 42.598.692 ,539" ,378" ,433" 1 1,11 1,1 ,606" ,336" ,328" ,928" 1 292.853 357.660 ,638" ,470" ,425" ,669" ,680" 1 212.365 276.413 ,592" ,485" ,438" ,652" ,664" ,987" 1.110.326 1.590.474 ,755" ,358" ,297" ,517" ,561" ,835" 3,12 0,69 ,171' ,095 ,114 ,189' ,167' ,088 213,77 54,78 ,175' ,257" ,200" ,186' ,240" ,322" 2,61 0,94 ,047 ,087 ,047 ,057 ,045 280,04 134,52 ,089 ,152' ,145 ,173' ,236" ,207"	63,1 46,67 1 3,11 2,36 ,283" 1 2,17 1,92 ,199" ,875" 1 34.321.810 42.598.692 ,539" ,378" ,433" 1 1,11 1,1 ,606" ,336" ,328" ,928" 1 292.853 357.660 ,638" ,470" ,425" ,669" ,660" 1 212.365 276.413 ,592" ,485" ,438" ,652" ,664" ,987" 1 1.110.326 1.590.474 ,755" ,358" ,297" ,517" ,561" ,835" ,809" 3,12 0,69 ,171' ,095 ,114 ,189' ,167' ,088 ,091 213,77 54,78 ,175' ,257" ,200" ,186' ,240" ,322" ,324" 2,61 0,94 -,049 ,047 ,087 ,047 ,057 ,045 ,053 280,04 134,52 ,089 ,152' ,145 ,173' ,236" ,207" ,198"	63,1 46,67 1 3,11 2,36 ,283" 1 2,17 1,92 ,199" ,875" 1 34.321.810 42.598.692 ,539" ,378" ,433" 1 1,11 1,1 ,606" ,336" ,328" ,928" 1 292.853 357.600 ,638" ,470" ,425" ,669" ,680" 1 1.110.326 1.590.474 ,755" ,358" ,297" ,517" ,561" ,835" ,809" 1 1.110.326 1.590.474 ,755" ,358" ,297" ,517" ,561" ,835" ,809" 1 3,12 0,69 ,171' ,095 ,114 ,189' ,167' ,088 ,091 ,231" 2,61 0,94 ,047 ,087 ,047 ,057 ,045 ,053 ,109 280,04 134,52 ,089 ,152' ,145 ,173' ,236" ,207" ,198" ,192'	63,146,6713,112,36,283"12,171,92,199",875"134.321.81042.598.692,539",378",433"11,111,1,606",336",328",928"1292.853357.660,638",470",425",669",680"1212.365276.413,592",485",438",652",664",987"11.110.3261.590.474,755",358",297",517",561",835",809"1213.7754.78,175',257",200",186',240",322",324",256",283"2,610,94-,049,047,087,047,057,045,053,109,511"280,04134,52,089,152',145,173',236",207",198",192',355"	63,1 46,67 1 3,11 2,36 ,283" 1 2,17 1,92 ,199" ,875" 1 34.321.810 42.598.692 ,539" ,378" ,433" 1 1,11 1,1 ,606" ,336" ,328" ,928" 1 292.853 357.660 ,638" ,470" ,425" ,669" ,680" 1 1,110 1,1 ,592" ,485" ,438" ,652" ,664" ,987" 1 1,110.326 1.590.474 ,755" ,358" ,297" ,517" ,561" ,835" ,809" 1 3,12 0,69 ,171' ,095 ,114 ,189' ,167' ,088 ,091 ,231" 1 2,61 0,94 ,047 ,087 ,047 ,057 ,045 ,053 ,109 ,511" ,207" 280,04 134,52 ,089 ,152' ,145 ,173' ,236" ,207" ,198" ,192' ,355" ,450"	63,146,6713,112,36,283"12,171,92,199",875"134.321.81042.598.692,539",378",433"11,111,1,606",336",328",928"1292.853357.660,638",470",425",669",680"1212.365276.413,592",485",438",652",664",987"11.110.3261.590.474,755",358",297",517",561",835",809"1213.7754,78,175',257",200",186',240",322",324",256",283"1280,04134,52,089,152',145,173',236",207",198",192',355",450",556"

*. Correlation is significant at the 0.05 level (2-tailed).

Table 1: correlations mainstream sample

					Pearso	on Correlati	ons - Art ho	DUSO						
	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Copies	9,63	7,28	1											
2. SP1000	0,48	1,09	,267"	1										
3. SP500	0,23	0,623	,123	,829"	1									
4. Budget	3.787.108	4.391.978	,326	,158	,144	1								
5. Adjusted Budget	0,38	0,55	,364"	,183 [*]	,153	,579 ^{**}	1							
6. Opening Week	16.432	24.574	,808**	,212	,124	,358"	,351 ^{°°}	1						
7. Opening Weekend	11.082	16.624	,809 ^{**}	,223"	,111	,352	,373 ^{**}	,993"	1					
8. Cumulative	82.418	182.203	,623"	,172 [*]	,086	,175	,374"	,843"	,835"	1				
9. TG_valence	3,32	0,69	,101	-,101	-,125	,085	-,138	,274"	,244"	,246"	1			
10. TG_salience	204,51	51,7	,348"	,235	,015	,149	,239	,433	,421	,343"	,165	1		
11. VK_valence	3,31	0,83	,177 [°]	-,177 [*]	-,255"	-,009	,095	,247"	,259"	,259"	,227 [*]	,138	1	
12. VK_salience	335,8	129,19	,378	,090	-,050	,184	,255 [°]	,390"	,416"	,319"	,126	,326"	,645"	1

**. Correlation is significant at the 0.01 level (2-tailed)
*. Correlation is significant at the 0.05 level (2-tailed).

Table 2: correlations art house sample

As a first indication, it seems that the valence of reviews from *de Volkskrant* for mainstream movies is lower than the valence of *de Telegraaf*. There seems to be no such difference in the case of art house movies. Also, *de Volkskrant* appears to pay more attention to art house movies than to mainstream movies on average (salience for art house movies is higher than salience for mainstream movies). In addition, reviews from *de Volkskrant* seem to have a higher salience in general than reviews from *de Telegraaf*. Finally, it is interesting that the salience of reviews from *de Volkskrant* is higher for art house movies, whereas this is the other way around for reviews from *de Telegraaf*.

4.2 Testing hypotheses – differences

H1a: The salience of reviews for art house movies in a newspaper that targets the cultural elite is higher than in a newspaper that targets a mainstream audience

A paired samples t-test was done in order to test the significant of the difference of review valence of art house movies between *de Telegraaf* and *de Volkskrant*. On average, the salience of reviews of art house movies from *de Volkskrant* is significantly higher (M =

350.50, SE = 12.19) than the salience of reviews for art house movies from *de Telegraaf* (M = 205.35, SE = 4,92), t(108) = -12.56, p < 0.001. Therefore, hypothesis H1a is supported.

H1b: The valence of reviews for art house movies in a newspaper that targets the cultural elite is higher than in a newspaper that targets a mainstream audience

The paired samples t-test indicated that, on average, the difference in means between salience of reviews for art house movies from *de Volkskrant* (M = 3.35, SE = 0.08) and salience of reviews for art house movies from *de Telegraaf* (M = 3.33, SE = 0.07) is not significant, t(108) = -0.251, p = 0.802. Therefore, hypothesis H1b is not supported.

H1c: The salience of reviews for mainstream movies in a newspaper that targets the cultural elite is lower than in a newspaper that targets a mainstream audience.

The paired samples t-test indicated that, on average, the salience of reviews of mainstream movies from *de Volkskrant* is significantly higher (M = 288,37, SE = 10.57) than the salience of reviews of mainstream movies from *de Telegraaf* (M = 216.13, SE = 4.48), t(155) = -7.65, p < 0.001. This is contrary (but significant) to what was hypothesized. Therefore, H1c is not supported.

H1d: The valence of reviews for mainstream movies in a newspaper that targets the cultural elite is **lower** than in a newspaper that targets a mainstream audience.

The paired samples t-test indicated that, on average, the valence of reviews of mainstream movies from *de Volkskrant* is significantly lower (M = 2.64, SE = 0.08) than the valence of reviews of mainstream movies from *de Telegraaf* (M = 3.17, SE = 0.06), t(155) = 7.82, p < 0.001. Therefore, hypothesis H1d is supported.

H1e: The valence of reviews from a newspaper that targets the mainstream will be higher for mainstream movies than for art house movies.

An independent t-test was conducted, comparing the variable of review valence from *de Telegraaf* between art house movies and mainstream movies. On average, art house movies were judged higher (M = 3.32, SE = 0.06) than mainstream movies (M = 3.12, SE = 0.05), which is contrary to what was hypothesized. This difference is significant t(288) = 2.364, p < 0.05. Since this is the exact opposite to what was hypothesized, the hypothesis is not supported.

H1f: The salience of reviews from a newspaper that targets the mainstream will be higher for mainstream movies than for art house movies.

An independent t-test was conducted, comparing the variable of review salience from *de Telegraaf* between art house movies and mainstream movies. On average, salience of reviews is higher for mainstream movies (M = 213.77, SE = 4.13) than for art house movies (M = 204.51, SE = 4.82). However, this difference is not significant t(289) = -1.441, p = 0.151. Therefore, hypothesis 1e is not supported.

H1g: The valence of reviews from a newspaper that targets the cultural elite will be lower for mainstream movies than for art house movies.

An independent t-test was conducted, comparing the variable of review valence from *de Volkskrant* between art house movies and mainstream movies. On average, art house movies were judged higher (M = 3.31, SE = 0.07) than mainstream movies (M = 2.61, SE = 0.07). This difference is significant t(303) = 6.838, p < 0.001. Therefore, hypothesis 1f is supported.

H1h: The salience of reviews from a newspaper that targets the cultural elite will be lower for mainstream movies than for art house movies.

An independent t-test was conducted, comparing the variable of review salience from *de Volkskrant* between art house movies and mainstream movies. On average, review salience is higher for art house movies (M = 335.80, SE = 11.08) than for mainstream movies (M = 280.04, SE = 10.38). This difference is significant t(302) = 3.66, p < 0.001. Therefore, hypothesis 1g is supported.

Summary

De Volkskrant had higher salience of reviews of art house movies than *de Telegraaf*. ¹This was not significant for valence. Salience of reviews of mainstream movies was also higher for *de Volkskrant*. The valence of reviews for mainstream movies was higher for *de Telegraaf*. Within newspapers, the results indicate that *de Volkskrant* shows a preference (in terms of both valence and salience) for art house movies. *De Telegraaf* prefers mainstream movies over art house movies in terms of salience, and prefers art house movies in terms of valence. Results are summarized in Table 3.

¹ Note: reported means for hypotheses 1a through 1d are slightly different from means in table 1 and table 2. This is because the N for paired samples t-test is lower, because of pairwise exclusion. Some movies were not reviewed by *both* newspapers, and were therefore left out of the analysis.

Hypothesis	relationship	result	comments
H1a	Salience Arthouse in VK > salience art house in TG	supported	
H1b	valence art house in VK > salience art house in TG	not supported	not significant
H1c	salience mainstream in VK < salience mainstream in TG	not supported	opposite relationship is supported
H1d	valence mainstream in VK < valence mainstream in TG	supported	
Hle	valence mainstream in TG > valence arthouse in TG	not supported	opposite relationship is supported
H1f	salience mainstream in TG > salience arthouse in TG	not supported	not significant
H1g	valence art house in VK > valence mainstream in VK	supported	
H1h	salience art house in VK > salience mainstream in VK	supported	

Table 3

4.3 Testing hypotheses – direct effects and correlations *Mainstream*

In order to prepare the data for robust regression analysis, a logarithmic transformation was performed on the positively skewed variables (the dependent variable and all the non-dummy control variables). For star power, a log transformation of StarPower1000 resulted in a better reduction of skewness than of StarPower500. Therefore, this measure of star power was used for the analyses. Cases for which there was no review from either *de Volkskrant* or *de Telegraaf* were excluded from the analysis, reducing the sample size to 188. Cook's distance, Mahalanobis, and leverage scores indicated no outliers. General regression indicated a normal distribution of residuals. Collinearity statistics indicated no issues, as VIF scores did not exceed 4.

H2a: The relationship between valence of reviews and mainstream movie performance is smaller for reviews published in a newspaper that targets the cultural elite than for reviews published in a newspaper that targets a mainstream audience.

Hierarchical regression was used with the logged cumulative box-office as the dependent variable. The first model, with the logged and dummy control variables, was significant: F(8), 160) = 73.32, p < 0.001, R^2 = 0.786. Adding the valence of *de Telegraaf* (mainstream audience) to the first model increased the R^2 by 0.004 in Model 2: F(9, 159) = 66.48, p < 0.001, $R^2 = 0.790$. This change was not significant (p = 0,071). Doing the same for the valence of *de Volkskrant* (cultural elite audience) significantly increased the R^2 by 0.024 (p < 0.001) in Model 3: F(9, 151) = 71.35, p < 0.001, $R^2 = 0.810$). Looking at the individual standardized Betas, the model shows that valence from de Telegraaf has a non-significant (p = 0.071) positive effect of 0.072, whereas valence from *de Volkskrant* has a significant (p < 10000.01) positive effect of 0.163. To test the significance of this difference, a Fisher r-to-z transformation was used to compute the z-statistic of the difference between the partial correlations (taking into account the control variables) (Jaussi & Randel, 2014: 405; Steiger, 1980), using online software (Lee & Preacher, 2013). Partial correlations show a significant positive partial correlation (0.334, p < 0.01) between valence from *de Volkskrant* and cumulative box-office performance, and a non-significant positive partial correlation (0.143, p = 0.071) for the valence from *de Telegraaf*, which is the opposite of what was hypothesized in H2a. The z-statistic of the difference between these correlations is significant (z = -2.453, p < $(0.05)^2$. This is opposite to what was hypothesized. Therefore, hypothesis 3d is not supported.

² Note: pairwise exclusion was used, which resulted in different sample sizes for each correlation. To determine the z-score, the amount of degrees of freedom, based on the correlation with the *smallest* sample size, was used.

H2b: The relationship between **salience** of reviews and **mainstream** movie performance is smaller for reviews published in a newspaper that targets the **cultural elite** than for reviews published in a newspaper that targets a mainstream audience.

The same procedure was used to test H2b. Adding salience of reviews from *de Telegraaf* significantly increased the R² by 0.007 (p < 0.05) in Model 4: F(9, 159) = 67.70, p < 0.001, $R^2 = 0.793$). Doing the same for salience of reviews from *de Volkskrant* increased the R² by 0.018 (p < 0.01) in Model 5: F(9, 151) = 68.56, p < 0.001, $R^2 = 0.803$. Individual Betas for *de Telegraaf* and *de Volkskrant* were 0.096 (p < 0.05) and 0.151 (p < 0.01), respectively. This appears to be opposite to what was hypothesized. Partial correlations between salience and cumulative box office performance of *de Telegraaf* and *de Volkskrant*, respectively, are 0.186 (p < 0.05) and 0.288 (p < 0.01), which is also opposite to what was hypothesized. The z-statistic of this difference between correlations is not significant (z = -1.172, p = 0.241). Hypothesis 2b is not supported.

Arthouse

Positively skewed variables (dependent variable and the non-dummy control variables) were also logarithmically transformed in the art house dataset. However, in the case of art house movies, it was not possible to reduce the skewness of Star Power sufficiently, probably because movies with zero star power were too overrepresented in the art house movie sample. The logged variable was added anyway, however, because the transformation did reduce skewness, and because leaving out star power would mean excluding a theoretically and empirically important control variable. Cases, for which there was no review from either *de Volkskrant* or *de Telegraaf*, were excluded from the analysis, reducing the sample size to 142. Based on Cook's distance, Mahalanobis and leverage scores, two more cases were excluded

			Mains	stream		
		Depende	nt variable: Cu	mulative box o	ffice (LG)	
Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Controls						
Copies (LG)	0,764**	0,758**	0,787**	0,758**	0,784**	0,788**
StarPower1000 (LG)	-0,019	-0,031	-0,056	-0,042	-0,057	-0,075
Budget (LG)	0,136*	0,126*	0,128*	0,118*	0,103^	0,108*
Drama Dummy	0,043	0,036	0,04	0,029	0,016	0,023
Comedy Dummy	0,045	0,061	0,081	0,057	0,078	0,091*
Action Dummy	-0,008	0,008	0,031	-0,005	0,021	0,036
Dutch Dummy	0,187**	0,192**	0,199**	0,175**	0,159*	0,177**
USA/UK Dummy	0,274**	0,271**	0,287**	0,269**	0,270**	0,281**
TG valence		0,072				-0,015
VK valence		-)	0,163**			0,131**
TG salience			,	0,096*		0,055
VK_salience					0,151**	0,062
R2	0,786**	0,79**	0,81**	0,781**	0,792**	0,816**
R2 change		0,004	0,024**	0,007*	0,018**	0,030**

** Significant at the 0.01 level (2-tailed).
* Significant at the 0.05 level (2-tailed).
^ Marginally significant at the 0.1 level (2-tailed)

Table 4

			Mains	stream		
		Dependent v	ariable: Openi	ng Weekend bo	x office (LG)	
Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Controls						
Copies (LG)	0,650**	0,648**	0,670**	0,641**	0,676**	0,682**
StarPower1000 (LG)	0,034	0,031	0,000	-0,001	-0,017	-0,033
Budget (LG)	0,157**	0,155**	0,150**	0,131*	0,113*	0,118*
Drama Dummy	0,062	0,060	0,059	0,040	0,026	0,031
Comedy Dummy	0,136**	0,140**	0,169**	0,155**	0,180**	0,182**
Action Dummy	0,110*	0,113*	0,144**	0,121**	0,147**	0,148**
Dutch Dummy	0,218**	0,219**	0,228**	0,199**	0,180**	0,184**
USA/UK Dummy	0,444**	0,444**	0,457**	0,437**	0,439**	0,448**
TG valence		0,016				-0,081
VK valence		,	0,146**			0,098*
TG_salience			,	0,144**		0,106*
VK_salience					0,200**	0,127*
R2	0,770**	0,770**	0,789**	0,787**	0,801**	0,814**
R2 change	~	0,000	0,019**	0,017**	0,031**	0,044**

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

^ Marginally significant at the 0.1 level (2-tailed)

Table 5

			Arth	ouse				
	Dependent variable: Cumulative box office (LG)							
Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6		
Controls								
Copies (LG)	0,860**	0,834**	0,842**	0,836**	0,814**	0,796**		
StarPower1000 (LG)	-0,012	0,047	0,016	-0,007	0,006	0,050		
Budget (LG)	0,102	0,089	0,093	0,062	0,080	0,061		
Drama Dummy	0,060	0,001	0,048	0,038	0,033	-0,021		
Comedy Dummy	0,037	0,031	0,038	0,025	0,033	0,024		
Action Dummy	-0,041	-0,069	-0,035	-0,041	-0,047	-0,073		
Dutch Dummy	-0,040	-0,013	-0,044	-0,043	-0,054	-0,026		
USA/UK Dummy	0,032	-0,034	0,037	0,017	0,040	-0,030		
TG valence		0,242**				0,227**		
VK valence		,	0,085			0,033		
TG_salience			,	0,098		-0,028		
VK_salience					0,122*	0,101		
R2	0,790**	0,841**	0,796**	0,797**	0,801**	0,847**		
R2 change		0,051**	0,006	0,007	0,011*	0,057**		

** Significant at the 0.01 level (2-tailed).
* Significant at the 0.05 level (2-tailed).
^ Marginally significant at the 0.1 level (2-tailed)

Table 6

			Arth	ouse		
		Dependent v	ariable: Openi	ng Weekend bo	ox office (LG)	
Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Controls						
Copies (LG)	0,841**	0,824**	0,816**	0,812**	0,764**	0,742**
StarPower1000 (LG)	0,014	0,053	0,052	0,020	0,043	0,066
Budget (LG)	0,009	0,000	-0,004	-0,039	-0,029	-0,060
Drama Dummy	0,071	0,031	0,054	0,044	0,026	-0,016
Comedy Dummy	0,039	0,035	0,040	0,025	0,033	0,021
Action Dummy	0,015	-0,003	0,023	0,016	0,006	-0,010
Dutch Dummy	0,028	-0,046	0,024	0,024	0,006	0,020
USA/UK Dummy	0,032	-0,012	0,039	0,014	0,045	-0,003
TG valence		0,162*				0,126^
VK_valence		,	0,116^			0,072
TG salience			,	0,117^		-0,031
VK_salience					0,202**	0,197*
R2	0,721**	0,743**	0,732**	0,731**	0,750**	0,770**
R2 change	,	0,023*	0,011^	0,010^	0,029**	0,050**

** Significant at the 0.01 level (2-tailed).
* Significant at the 0.05 level (2-tailed).
^ Marginally significant at the 0.1 level (2-tailed)

Table 7

from the analysis, leading to n=140. General regression indicated a normal distribution of residuals. Collinearity statistics indicated no issues, as VIF scores did not exceed 3.

H2c: The relationship between **valence** of reviews and **art house** movie performance is greater for reviews published in a newspaper that targets the **cultural elite** than for reviews published in a newspaper that targets a mainstream audience.

Model 1 (including only the control variables) was significant: F(8, 74) = 34.80, p < 0.001, $R^2 = 0.79$. Adding valence of reviews from *de Telegraaf* increased R² by 0,051 (p < 0.001) in Model 2: F(9, 73) = 42.99, p < 0.001, $R^2 = 0.841$. Doing the same for *de Volkskrant* yielded a non-significant increase of R² of 0.006 (p = 0.125) in Model 3: $F(9, 83 = 35.96, p < 0.001, R^2 = 0.796)$. Individual Betas for valence of *de Telegraaf* and *de Volkskrant* were 0.242 (p < 0.01) and 0.085 (not significant), respectively. Only the Beta of *de Telegraaf* was significant. This is contrary to what was hypothesized. Partial correlations between valence of reviews and cumulative box office for *de Volkskrant* and *de Telegraaf*, respectively, are 0.492 (p < 0.01) and 0.177 (p = 0.107). This difference is significant (z = 2.562, p < 0.05). However, this is opposite to what was hypothesized, because the relationship is stronger for valence of reviews from *de Telegraaf*, than of reviews from *de Volkskrant*. Therefore, hypothesis 2c is not supported.

H2d: The relationship between **salience** of reviews and **art house** movie performance is **greater** for reviews published in a newspaper that targets the **cultural elite** than for reviews published in a newspaper that targets a mainstream audience.

Adding salience of *de Telegraaf* to the first model increased R^2 by 0.007 (not significant, p = 0.109) in Model 4: F(9, 74) = 32.32, p < 0.001, $R^2 = 0.797$). Doing the same for *de Volkskrant* increased R^2 by 0.011 (p < 0.05) in Model 5: F(9, 82) = 36.61, p < 0.001, $R^2 = 0.801$.

Individual Beta coefficients for salience of *de Telegraaf* and the *Volkskrant* were 0.098 (p = 0.108) and 0.122 (p < 0.05), respectively, indicating possible support for hypothesis 3d. Partial correlations between salience of reviews and cumulative box office from *de Telegraaf* and *de Volkskrant* are 0.176 (p = 0.129) and 0.245 (p < 0.05), respectively. The difference between these correlations is not significant, therefore not supporting hypothesis 3d. However, because the regression coefficient (and partial correlation) for salience of reviews from *de Telegraaf* is not significant, whereas these *are* significant for *de Volkskrant*, one could argue that hypothesis 3d is supported.

Summary

Beta coefficients and R² numbers are summarized in tables 4 and 6. For valence of reviews of mainstream movies, the opposite of what was hypothesized is supported, both on the basis of the significance and value of the individual betas, as well as on the basis of the difference between the partial correlations. The difference between the effects of salience of reviews from both newspapers is not significant. When it comes to the valence of reviews for art house movies, again the opposite of what was hypothesized was supported. For valence, based on the significance of the beta coefficients, one could conclude that hypothesis 2d is supported. However, testing the difference of the partial correlations did not yield significant results. The tests of significance of the Beta coefficients in the models in which all predictors were added at once (models 6). A summary of the hypotheses and results can be found in table 8.

Additional analyses

Additional analyses were performed, investigating the same relationships, but with opening weekend box office revenue, rather than cumulative box office revenue as the dependent

variable (see tables 5 and 7). This way, it is possible to look more deeply into the distinction between the prediction effect and the influencer effect of critical evaluation, although this distinction was not formally part of the hypotheses for this thesis. Eliasberg & Shugan (1997), among others (Basuroy, Chatterjee, & Ravid, 2003; Gemser et al., 2007), argue that if the relationship between critical evaluation and opening weekend box office revenue is greater than the relationship between critical evaluation. The reasoning behind this is that if reviews are an important signal that influences audience behavior, this is most likely to manifest itself in the opening weekend, because over the long run, other factors (such as word-of-mouth) come into play. If there is an effect of critical evaluation on the long run, it is likely just a reflection of audience preferences.

The results show that the relationships are roughly the same for opening weekend box office revenue as for cumulative box office revenue, in the sense that comparing the two newspapers shows the same differences. The beta of salience of *de Volkskrant* is larger than the beta of salience of *de Telegraaf* for mainstream movies, which is also the case for cumulative box office revenue. The *size* of the betas with opening weekend box office revenue compared to the betas of the models with cumulative box office revenue *do* seem to differ, however. For mainstream movies, the betas of salience seem to be larger with opening weekend box office revenue than for cumulative box office revenue. For valence this is the other way around. In addition, genre seems to be a significant control variable, whereas this is not the case for the models with cumulative box office as the dependent variable. The beta of *copies*, the most important control variable, is smaller in the models with opening weekend box office performance as the dependent variable.

Roughly the same differences apply to art house movies. Comparing different newspapers within the models, show no big differences between the models with opening

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weekend box office revenue as the dependent variable and the models with cumulative box office revenue as the dependent variable. For example, the beta of valence from *de Telegraaf* is in both cases larger than the beta of valence from *de Volkskrant*.

Note that this thesis is focused on differences between different media outlets, and the implication of these differences for the relationship between critical evaluation and box office performance of art house and mainstream movies. Formal tests for the distinction between prediction and influence by comparing opening weekend box office revenue with total box office revenue was beyond the scope of this thesis, because it would involve analyzing data on *individual* box office weeks (Basuroy et al., 2003; Eliashberg & Shugan, 1997), which is not part of the dataset, but mainly because it would draw away attention from the central subject of this thesis: the notion that there can be a distinction between critics based to the audience that they have, which also tells us more about prediction versus influence.

Hypothesis	Relationship	Result	Comments
H2a	effect of valence on mainstream performance in VK < effect of valence on mainstream in TG	not supported	opposite is supported
H2b	effect of salience on mainstream performance in VK < effect of salience on mainstream in TG	not supported	not significant difference in correlations
H2c	effect of valence on arthouse performance in VK > effect of valence on arthouse in TG	not supported	opposite is supported
H2d	effect of salience on arthouse performance in VK > effect of salience on arthouse in TG	partially supported	not supported based on comparison of correlation, supported based on significance of beta coefficients

4.4 Testing hypothesis – interaction effects of genres

To analyze the interaction effects of different genres, model 1 from the PROCESS macro by Andrew Hayes is used (Hayes, 2012), with the logged cumulative box office performance as the outcome variable, the valence and salience scores of both newspapers as the predictor, the dummy variables for the different genres as dichotomous moderators, and the logged control variables for budget, copies and star power, and the dummies for genre and country of origin as covariates. This model automatically tests for an interaction effect of a moderation variable, and centers the interaction around zero.

The positive effect of review valence (H3a) and salience (H3b) on performance of mainstream movies in newspapers that target the mainstream is stronger for movies in the action genre compared to other genres.

For these hypotheses, the dummy variable for the action genre was used, where 1 indicates that a movie fits the action movie genre, and a 0 indicates otherwise. Valence and salience of reviews from *de Telegraaf* were used (in different models) as the predictors of the logged cumulative box officer performance, with the usual control variables. The interaction variable represents the variable for the action genre multiplied by the predictor in each model. The analyses show that the models are significant: F(10, 158) = 60.3, p < 0.0001, $R^2 = 0.79$, and F(10, 158) = 61.82, p < 0.0001, $R^2 = 0.80$, with valence and salience as the predictors, respectively. The interaction effects were not significant. However, looking at the conditional effects, results show that the positive effect of valence is marginally significant (p < 0.1) for non-action movies, whereas this is not the case for action movies, which is the opposite to what was hypothesized. This is also the case for the effect of review salience. However, since the interaction effects themselves were not significant, it is concluded that hypotheses 3a and 3b are not supported.

The positive effect of review valence (H3c) and salience (H3d) on performance of mainstream movies in a newspaper that targets the mainstream is weaker for movies in the drama genre compared to other genres.

For these hypotheses, the dummy variable for the drama genre was used, where 1 indicates that a movie fits the drama movie genre, and a 0 indicates otherwise. Valence and salience of reviews from *de Telegraaf* were used (in different models) as the predictors of the logged cumulative box officer performance, with the usual control variables. The interaction variable represents the variable for the drama genre multiplied by the predictor in each model. The analysis shows that the models are significant: F(10, 158) = 60.10, p < 0.001, $R^2 = 0.79$, and F(10, 158) = 61.76, p < 0.001, $R^2 = 0.80$ with valence and salience as predictors, respectively. The interaction effects were not significant. Therefore, hypotheses 3c and 3d are not supported.

The positive effect of review valence (H3e) and salience (H3f) on performance of arthouse movies in newspapers that target the cultural elite is stronger for movies in the drama genre compared to other genres.

For this hypothesis, the dummy variable for the drama genre was used, where 1 indicates that a movie fits the drama movie genre, and a 0 indicates otnerwise. Valence and salience of reviews from *de Volkskrant* were used (in different models) as predictors of the logged cumulative box office performance, with the usual control variables. The interaction variable represents the variable for the drama genre multiplied by the predictor in each model. The analyses show that the models are significant: F(10, 80) = 28.209, p < 0.001, $R^2 = 0.78$, and F(10, 80) = 28.87, p < 0.001, $R^2 = 0.79$, with valence and salience as the predictors, respectively. The interaction effects are not significant. However, the results show that the effect of valence on cumulative box office is marginally significant for the drama genre (p < 0.1), whereas this is not the case for non-drama movies (p = 0.85). This is also the case for the model with salience as the predictor. The effect is significant (p < 0.05) for movies with the drama genre, and not significant (p = 0.37) for non-drama movies. This may indicate support for the hypothesis. However, since the interaction effects themselves are not significant, one has to be cautious to conclude support for the hypotheses.

The positive effect of review valence (H3g) and salience (H3h) on performance of arthouse movies in newspapers that target the cultural elite is weaker for movies in the comedy genre compared to other genres.

For this hypothesis, the dummy variable for the comedy genre was used, where 1 indicates that a movie fits the drama movie genre, and a 0 indicates otherwise. Valence and salience of reviews from *de Volkskrant* were used (in different models) as predictors of the logged cumulative box office performance, with the usual control variables. The interaction variable represents the variable for the comedy genre multiplied by the predictor in each model. The analyses show that the models are significant: F(10, 80) = 28.14, p < 0.001, $R^2 = 0.78$, and F(10, 80) = 28.91, p < 0.001, $R^2 = 0.79$, with valence and salience as the predictors, respectively. The interaction effects are not significant. However, the results show that the effect of valence on cumulative box office is marginally significant for non-comedy movies (p < 0.1), but not for comedies (p = 0.86). This is also the case for the model with salience as the predictor. The effect is significant (p < 0.05) for non-comedies, and not significant (p = 0.19) for comedies. This may indicate support for the hypotheses. However, since the interaction effects *themselves* are not significant, one has to be cautious to conclude support for the hypotheses.

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		Mains	Mainstream				Arthouse	ouse	
	Depend	Dependent variable: Cumulative box office	Cumulative bu	ox office		Depena	Dependent variable: Cumulative box office	Cumulative $b\alpha$	эх office
Variable	Model I	Model 2	Model 3	Model 4	Variable	Model I	Model 2	Model 3	Model 4
Controls					Controls				
Copies	1,429**	$1,406^{**}$	$1,422^{**}$	$1,405^{**}$	Copies	$1,608^{**}$	$1,562^{**}$	$1,615^{**}$	$1,564^{**}$
Star Power1000	-0,056	-0,098	-0,039	-0,079	Star Power1000	-0,113	-0,124	-0,085	-0,085
Budget	0,137*	$0,136^{\wedge}$	0,142*	$0,129^{\wedge}$	Budget	$0,204^{**}$	0,180*	0,192*	$0,168^{*}$
Drama Dummy	0,055	0,040	0,040	0,036	Drama Dummy	0,100	0,080	0,075	0,073
Comedy Dummy	0,089	0,084	0,073	0,079	Comedy Dummy	0,111	0,116	0,084	0,131
Action Dummy	-0,012	-0,016	-0,011	-0,016	Action Dummy	-0,267	-0,306	-0,273	-0,310
Dutch Dummy	0,223	0,193	0,212	0,187	Dutch Dummy	-0,195^	-0,219*	-0,204^	-0,226*
USA/UK Dummy	0,291*	0,292*	0,279*	0,284*	USA/UK Dummy	-0,149	0,139	0,130	0,136
TG_valence TG_salience	0,048	0,001*	0,053	0,001*	VK_valence VK_salience	0,066	0,001*	0,069	0,001*
Int_Action Int_Drama	-0,105	-0,006	0,081	0,000	Int_Drama Int_Comedy	0,069	0,000	-0,060	0,000
		++0			1				
K2 R2 change	0,79** 0,002	0,000	0,001	0,800 0,000	R2 R2 change	0,78** 0.001	0,79** 0,000	0,78** $0,001$	0,79** 0,001
 ** Significant at the 0.01 level (2-tailed). * Significant at the 0.05 level (2-tailed). * Marginally significant at the 0.1 level (2-tailed) note: interaction variables represent the genre dummy multiplied by the predictor used in the model note: coefficients are unstandardized, because the PROCESS macro does not provide standardized Betas note: R2 change represents change due to interaction).01 level (2-1 05 level (2-ta ant at the 0.1 lbles represen nodel unstandardize zed Betas sents change	tailed). uiled). level (2-tailed) it the genre du ad, because the due to interac) mmy multipli e PROCESS r tion	ied by the macro does	** Significant at the 0.01 level (2-tailed). * Significant at the 0.05 level (2-tailed). ^ Marginally significant at the 0.1 level (2-tailed) note: interaction variables represent the genre dummy multiplied by the predictor used in the model note: coefficients are unstandardized, because the PROCESS macro does not provide standardized Betas note: R2 change represents change due to interaction Table 10	0.01 level (2-1 05 level (2-ta of the 0.1 bles represen nodel mstandardize fed Betas sents change	ailed). iled). level (2-tailed) it the genre du ad, because the due to interac	process not provide the second	ed by the nacro does

Summary

None of the hypotheses was fully supported. None of the interactions were significant. However, for some hypotheses, there was a difference in significance under the different conditions of the interaction. Results are summarized in table 11.

Hypothesis	Relationship	Result	Comments
H3a	positive interaction of action genre on effect of TG_valence on mainstream box office	not supported	partial support for opposite relationship
H3b	positive interaction of action genre on effect of TG_salience on mainstream box office	not supported	partial support for opposite relationship
НЗс	negative interaction of drama genre on effect of TG_valence on mainstream box office	not supported	
H3d	negative interaction of drama genre on effect of TG_salience on mainstream box office	not supported	
НЗе	positive interaction of drama genre on effect of VK_valence on art house box office	partially supported*	
H3f	positive interaction of drama genre on effect of VK_salience on art house box office	partially supported*	
H3g	negative interaction of comedy genre on effect of VK_valence on art house box office	partially supported*	
H3h	negative interaction of comedy genre on effect of VK_salience on art house box office	partially supported*	

* partial support is based on difference in significance of between the direct effects under the different conditions of the moderator. Since none of the actual interaction effects were significant, supporting the hypotheses on this basis is questionable. Further research (perhaps with larger samples) is needed to confirm these suspected relationships.

Table 11

5. Discussion and implications

This thesis investigated the central question by testing several hypotheses. As a first analysis of the hypothesized differences, several means were compared. The results showed that *de Volkskrant* devoted more attention (i.e. had higher salience in its reviews) to both art house and mainstream movies compared to *de Telegraaf*. According to some scholars (Gemser et al., 2007), the art house audiences are expected to rely more on reviews than mainstream audiences. This could explain why *de Volkskrant*, a newspaper that targets the cultural elite, devoted significantly more attention to movies in general. This is the case for *both* mainstream movies and art house movies. Since it is expected that media outlets may reflect or take into account the preferences of their audience (Eliashberg, Elberse, & Leenders, 2006), it is expected that *de Volkskrant* would give more attention to movies in terms of reviews, because its audience (the cultural elite), by the same logic, is more likely to rely on those reviews. Therefore, these results lend support for the theory that reviews are more important for art house audiences than for mainstream audiences.

When it comes to valence, however, the results are different. For art house movies, there is no difference between the valence of reviews of *de Volkskrant* and *de Telegraaf*. For mainstream movies, valence of reviews from *de Telegraaf* is higher than valence of reviews from *de Volkskrant*, which confirms what was hypothesized. This confirms the notion that media outlets reflect the preferences of their audiences, as formulated by Lang (1958), and presented as an explanation for the results of research by Eliashberg & Shugan (1997). Assuming the cultural elite is more critical of mainstream movies, this is reflected in the review 'behavior' of *de Volkskrant*.

Differences between reviews of art house movies and mainstream movies *within* one newspaper were also investigated. Results show that for *de Telegraaf* results were either not significant (results indicate that salience is not significantly higher for mainstream movies than for art house movies) or opposite (results indicate that valence is significantly lower for

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mainstream movies than for art house movies) to what was hypothesized. This suggests that art house movies are simply judged qualitatively better by professional critics in general. This would also explain the lack of support for hypothesis 1b, which expected the valence of art house in *de Volkskrant* to be higher than valence of art house in *de Telegraaf*. For *de Volkskrant* the hypotheses were confirmed. *De Volkskrant* valued art house movies higher than mainstream movies, and gave more attention to art house movies in its reviews. This shows that a newspaper that targets the cultural elite shows a preference towards art house movies, which may be interpreted as a reflection of the preferences of its audience. It also lends support for the findings by Hsu (2006 II), which suggests that reviewers that have developed certain evaluative schema for particular types of movies, are likely to show a preference for those types of movies in terms of salience. Assuming that the evaluative schema of reviewers of *de Telegraaf* are more catered towards mainstream movies than for art house movies, and vice versa for *de Volkskrant*, it is logical that *de Telegraaf* pays more attention (i.e. higher salience) to mainstream movies than art house movies, and *de Volkskrant* pays more attention to art house movies.

Next, the direct relationships between critical evaluation (in the form of valence and salience of reviews) and actual box office performance were investigated. These analyses yielded some surprising and interesting results. For example, results showed that valence of reviews of mainstream movies from *de Volkskrant* was a better predictor of box office performance, than valence of reviews from *de Telegraaf*, which is opposite to what was hypothesized in H2a. This was also the case for valence of reviews of art house movies (Hypothesis 2c). The relationship turned out to be stronger for *de Telegraaf* than for *de Volkskrant*. There are several explanations for this.

First, one has to consider the circulation of both newspapers. The circulation of *de Telegraaf* is about twice as big as the circulation of *de Volkskrant* (NOM, 2013). That means

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if reviews have an influencer effect (Eliashberg & Shugan, 1997), de Telegraaf is a lot more likely to mobilize an audience that is large enough to influence box-office performance. This could explain why the relationship between review valence and box office performance for art house movies is larger for *de Telegraaf* than for *de Volkskrant*. In fact, it is in accordance with the perspective that argues that for art house movies there is likely to be an influencer effect, whereas for mainstream movies there is expected to be a predictor effect (Eliashberg & Shugan, 1997). In addition, Zuckerman & Tim (2003) have argued that movies that are reviewed by critics that specialize in 'major' movies will be perceived as movies catered towards the mass market, leading to higher box-office. Assuming critics of de Telegraaf specialize in mainstream ('major') movies, this would mean that if critics from de Telegraaf review art house movies, these movies receive a more 'mainstream identity', which leads to more people going to see that movie, according to the study by Zuckerman and Tim (2003). This explains why review valence from *de Telegraaf* is a better predictor of art house movie performance than review valence from *de Volkskrant*, because it induces the mainstream audience to go to art house movies. Therefore, the unexpected results of this thesis might actually confirm theories from and findings from Zuckerman & Tim (2003). As mentioned earlier, however, it is tricky to draw definitive conclusions about an influencer effect, because the audiences of the critical evaluation investigated in this thesis, do not represent the full audience of the movies that constitute the box office revenues.

To explain why this relationship for mainstream movies is greater for *de Volkskrant* than for *de Telegraaf*, one could look at research by Elberse (2008). She showed that audiences of more obscure creative products (movies and music) are overrepresented in the audience of blockbusters. In other words, people that consume less popular (art house) movies, often also consume mainstream titles. This implies that audiences of art house movies are actually the ones that influence the success of mainstream movies. Mainstream audiences

consume mainstream movies anyway. It is when *art house audiences* decide to consume *mainstream* movies, that the commercial performance of these movies increases significantly. This could mean that (assuming the influencer effect applies to art house audiences), if *de Volkskrant* evaluates a mainstream movie highly, art house audiences are inclined to go see that movie adding to the mainstream audience that would see that movie anyway. This would explain why the relationship between critical evaluation and art house movie performance is stronger for *de Volkskrant* than *de Telegraaf*. Thus, the surprising results of this thesis may actually be explained by the findings by Elberse (2003).

It is also important to take into account the fact that *de Volkskrant* consistently judges art house movies more highly than mainstream movies, more so than de Telegraaf does. It could therefore be speculated that *de Volkskrant* 'overjudges' art house movies, consciously or unconsciously reflecting (overrepresenting) the preferences of its audience, which apparently do not reflect the preferences of the total art house movie going public, reducing the strength of the relationship between valence and box office performance. This shows that there may be a difference between audiences of reviews and audiences of movies. In other words, the readers of reviews by de Volkskrant do not represent the total movie going audience in the Netherlands. By the same logic, it could be speculated that de Telegraaf 'overjudges' mainstream movies, by consciously or unconsciously reflecting the preferences of its audience, reducing the strength of that relationship. According to this argument, the theory that media outlets are inclined to reflect the preferences of their audiences in critical evaluation (Lang, 1958; Eliashberg & Shugan, 1997) actually helps explain the surprising findings. The box office performance measured in this thesis reflects the 'taste' of the total movie going audience, whereas the reviews from de Telegraaf and de Volkskrant each reflect the taste of only a portion of the total movie going audience. This shows that the distinction

between different reviews based on the audience of those reviews that was made in this thesis, is an important one that should be incorporated in other research on this subject as well.

Looking at the direct effects of review salience resulted in no significant differences between *de Telegraaf* and *de Volkskrant*. It is remarkable that the effects of review salience were significant for mainstream movies, but not significant for art house movies. This may indicate that for mainstream movies, evaluative judgments are not as important as for art house movies. This is in accordance with the notion that mainstream movies can rely more on other 'signals' of quality (such as simple attention in media) than critical evaluation.

The interaction effect of genres was also investigated. The analyses did not show any significant effects for the interactions. Genres do not significantly influence the relationship between critical evaluation and box office performance. This result could be due to the sample size, and the amount of control variables that were used. The logic behind the hypotheses was that for movies with genres that are more 'mainstream' (comedy and action) the relationship between critical evaluation and box office performance of mainstream movies would be greater, and vice versa for art house movies. The problem, however, is the fact that the categorical value of genre had to be converted into dummies. This means that, when testing the interaction effect of the action genre (assumed to be a more mainstream genre), action movies would be compared to non-action movies, which also includes other 'mainstream genres', such as comedy. The solution could be to just create a dummy – based on genres – for art house versus mainstream. However, this has effectively already be done by splitting the data set up into art house and mainstream movies. The results may indicate that distinguishing between genres, and selecting genres for analysis based on their 'mainstreamness' is not effective when the distinction between art house and mainstream is already taken into account. A larger sample size would allow for more variance between genres (i.e. larger frequencies of particular genres), which could make the analysis more robust.

Another reason for the lack of significant results in the analysis of the interaction effects, is the fact that some of the relationships/effects that particular genres were hypothesized to interact with, were not significant in the first place, as was indicated by the results from the second part of the hypotheses.

However, the results do show some partial support for some hypotheses. This is based on the fact that some direct relationships under the specific conditions of the moderator show a difference in significance. The results indicate that for art house movies, the relationship between critical evaluation (both valence and salience) and box office performance is indeed significant for drama movies, but not for non-drama movies, and vice versa for comedy movies. However, because the actual interaction effects, which represent these conditional relationships, were not significant, supporting the hypotheses on this basis is questionable. It does, however, suggest support, and further research (perhaps with lager samples) is definitely warranted.

Finally, as an extra analysis the direct relationships were also investigated with opening weekend as the dependent variable, to assess the difference between the predictor effect and the influencer effect. Results showed that the differences are roughly the same (i.e. the relationship between review valence and box office performance of art house movies seem to be greater for *de Telegraaf* than for *de Volkskrant* for both cumulative and opening weekend box office). The sizes of the coefficients do seem to differ, however. The effect of review salience of art house movies seems to be higher on opening weekend than on cumulative box office performance, indicating a potential influencer effect. It is also noteworthy that for mainstream movies, genre is a significant control variable for opening weekend box office, but not for cumulative box office (this is not the case for art house

movies). This is in accordance with the expectation that such signals are more important for mainstream movies and for opening weekend ticket sales (Debenedetti, 2006; Levin et al., 1997).

One must be cautious, however, to draw definitive conclusions based on these additional results. The dependent variables represent revenue of the total movie going audience, and are therefore not split the same way as the variables for critical evaluation have been. This makes it difficult to confirm an influencer effect in general, because the critical evaluation that has been measured and analyzed is directed to particular market segments, that are only a part of the total market for the movie ticket sales that has been analyzed. It is therefore hard to separate causation from correlation. However, the results do indicate that there might be an influencer effect for review salience, and not for review valence, which is an interesting finding that has not been addressed in earlier research. Drawing definitive conclusions and testing specific hypothesis on this subject unfortunately was beyond the scope of this thesis, also because it would involve comparing separate individual weeks of revenue for each movie (Basuroy et al., 2003; Eliashberg & Shugan, 1997). The focus of this thesis was to look in more detail into distinctions in critical evaluation, for which it has yielded valuable and insightful results. Further research could and should look at distinctions in box office revenue in more detail, taking into account the importance of the distinctions between different types of critical evaluators that was demonstrated in this thesis.

This thesis has provided valuable insights about the relationship between critical evaluation and commercial performance in the motion picture industry, contributing to the existing literature in several ways. First, it has addressed a gap in the literature, by looking at reviews (the 'independent variable') more closely, rather than only looking closely at movies themselves and the distinctions that can be made there. A distinction was made between reviews by distinguishing between different types of audiences of those reviews. This way,

the distinction between art house and mainstream was expanded, and could be investigated more closely. Splitting up movies into art house and mainstream, and the audience into mainstream and cultural elite, allowed for a more detailed investigation of the relationship(s) between critical evaluation and commercial performance.

Second, this thesis supports the notion that media outlets tend to reflect the preferences of their audiences in their critical evaluation of (cultural) products (Debenedetti, 2006: 39; Eliashberg & Shugan, 1997; Lang, 1958) Indeed, *de Volkskrant* (targeting the cultural elite) was shown to 'prefer' art house movies over mainstream movies. Moreover, *de Volkskrant* was shown to pay more attention in movies in general; their reviews had significantly more words than those written by *de Telegraaf*. In addition, *de Telegraaf* (targeting the mainstream) rated mainstream movies significantly higher than *de Volkskrant*.

Third, this thesis has contributed to the literature about gatekeeping in creative industries. It has shown that gatekeepers may indeed play a role in the success of different types of movies. This thesis has extended the literature by exposing the differences between different gatekeepers, which paints a more nuanced picture about gatekeeping mechanisms. Not all gatekeepers are created equal. They are not objective evaluators; they each have their own preferences and tastes. This thesis shows that this should be taken into account when investigating the role of evaluative gatekeepers.

Most importantly, however, this thesis suggests that existing theories may have different empirical implications than previously thought. The widespread belief that art house movie audiences rely more on reviews than mainstream audiences remains valid, but its implications are different. The argumentation behind this was always grounded on the level of the *movie* (art house movies cannot rely on other signals, and therefore must rely more on critical evaluation). However, looking at the level of the *review*, this thesis suggests that reviews of *mainstream* movies targeted at *art house* audiences may actually influence mainstream movie performance. *Thus, the theory of influencer effect of critical evaluation for art house movies actually has implications for mainstream movies.* Art house audiences may be stimulated (or discouraged) to go to mainstream movies, through the same (theoretical) mechanisms that influence their behavior for art house movies. This is a very surprising and interesting finding. It demonstrates that it is important to conduct research in more detail on the level of the critical evaluators, taking into account the audiences of these evaluators, rather than treating critical evaluation in general as a single and simple entity or variable.

Finally, one could argue that the relationships investigated in this thesis and the distinctions that underlie them, also apply to other creative industries, such as the music industry. The findings of this thesis, then, could be used as the basis for more detailed research in those industries, even though this thesis has looked specifically at the motion picture industry.

These findings have implications for practice as well. Movie producers producing a particular type of movie (art house or mainstream) could target newspapers in their PR-activities more specifically. For example, *de Volkskrant* pays significantly more attention to individual art house movies than to individual mainstream movies. As for the direct relationships between critical evaluation and commercial performance, the results indicate that producers of mainstream movies, for example, should gauge the valence of the reviews of their movies in *de Volkskrant*, because that is shown to have the strongest relationship with box office performance. This is especially interesting, because this thesis has taken into account market segmentation of reviews in addition to market segmentation of movies. Unfortunately, this thesis has not provided significant results about the moderating role of different genres in these relationships.

6. Conclusion

This thesis, in an attempt to address certain gaps in the literature about the relationship between critical evaluation and commercial performance in the motion picture industry, investigated the following central research question: "To what extent is there a different relationship between critical evaluation and commercial performance of movies, according to the distinction between art house and mainstream and differences in the target audience of the media outlets in which critical evaluation is published?". A distinction was made between art house and mainstream in terms of movies. In addition, a distinction was made between mainstream and cultural elite in terms of the audience of the reviews of those movies. These distinctions yielded several potential relationships, which were analyzed and compared through hierarchical regression and correlation. First, however, a simple comparison of different means was conducted. This showed that a newspaper targeting the cultural elite shows a preference for art house movies over mainstream in their critical evaluation (both in terms of valence, as well as salience). This was also the case compared to a newspaper targeting the mainstream.

Investigating and comparing the direct relationships yielded some unexpected results, that were contrary to what was hypothesized, and provided interesting extensions to the existing literature on the subject. Reviews from *de Volkskrant* turned out to be a better predictor of mainstream movie performance than *de Telegraaf*. Also, valence of reviews from *de Telegraaf* is a better predictor of art house movie performance than *de Volkskrant*. These surprising findings warrant the need to look more deeply into the dynamics of review behavior by major media outlets. It adds interesting insights to the notion that people that go to art house movies (in this case readers of *de Volkskrant*) are more influenced by reviews than audiences of mainstream movies, but also indicates insightful implications of this notion for mainstream movies.

Movie producers could use these findings to develop an effective marketing and PRstrategy for the promotion of their movies. In addition, this thesis has provided some clarity on the importance of different types of reviews when assessing the potential success of their movies.

Overall, this thesis has expanded the growing body of literature on the relationship between critical evaluation and commercial performance, and has shown that these relationships are more nuanced than one would think, warranting the need for further research on this subject. Most importantly, it has shown that theories (and the empirical research supporting them) specifically about art house movies, may actually have implications for mainstream movies, and vice versa. I would encourage future and current students of the creative industries to dive more deeply in this interesting matter.

7. Limitations and directions for future research

This thesis has some limitations. First, only two newspapers were used, assuming these newspapers have distinct audiences. One should consider that these audiences may overlap. However, the specific newspapers were chosen, because they are known in the Netherlands to have a different style, content, strategy and editorial oversight. Future research on this subject could take into account more newspapers.

Second, this thesis has looked only at the *Dutch* movie industry. It is not certain that the same mechanics would apply in other contexts, such as the United States. However, I do believe that the findings are still interesting and useful, because they touch upon important distinctions in terms of audiences that could be made in other countries/cultures as well. Future research could, for example, try to replicate this thesis in other countries, or across multiple countries.

Third, while this thesis has looked at the performance of movies in Dutch theaters, foreign movies (from Hollywood to Turkey, but that were released in the Netherlands) were also included in the analysis. This introduced a bias, because there is of course a large discrepancy between some control variables of Hollywood blockbusters and Dutch blockbusters. I have attempted to address these biases, by making the variables comparable across different contexts, but bias could still exist. This is, however, hard to avoid in the particular empirical context in which this research was conducted. This does not mean that the results are not insightful or useful. Future research could look at a single specific empirical setting (such as *only* Dutch movies in *only* Dutch theaters) to avoid this bias. This would mean a larger period should be included to generate a large enough sample size.

In addition, research could be conducted on these same relationships, but instead of distinguishing between art house and mainstream, making a distinction between different genres. For this, a larger sample would be needed, because the dataset would be cut into multiple smaller samples for each genre. It would be interesting, because some genres are

expected to draw specific audiences. Also, looking at differences in audience in terms of ticket sales would be insightful, and could really contribute to the findings of this thesis. Unfortunately, it is hard to gather demographic information about the visitors of movie theaters.

Also, as was discussed earlier, researchers could investigate the dynamics and relationships in this thesis in more detail by comparing different types of box office revenues (opening weekend, cumulative, and individual weeks) to look at the distinction between prediction and influence in even more detail.

Finally, future research could look into these specific relationships and distinctions for reviews published in different media outlets (such as weblogs or rating sites such as imdb) than newspapers. This thesis has provided a detailed look at how differences in traditional media outlets lead to differences in critical evaluation, and the implications this has for box office revenues. This could form the basis of research on these dynamics in other types of media outlets.

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APPENDIX: list of movies in the sample (before exclusions and division between art house and mainstream)

&ME 2 Guns 21 And Over 28 Hotel Rooms 3 (Tres) 47 Ronin About Time After Earth Alceste à bicyclette Amazonia (3D) Any Day Now APP Apres Mai Aqui y alla Arbitrage As I Lay Dying Avant L'Hiver Awakening, The Battle of the Year (3D) **Beautiful Creatures** Beaux Jours, Les Before Midnight Behind The Candelabra Behzat C. Ankara Yaniyor Bekas **Bellas Mariposas** Benin Dunyam Berberian Sound Studio Besharam Big Wedding, The Blackbird Blancanieves Bling Ring, The Blood Ties Blue Jasmine Bobby En De Geestenjagers **Bombay Talkies** Borgman Boven is het stil Breakfast at Tiffany's (nieuw) Bro's Before Ho's Broken

Broken City Bullet To The Head Butler, The **Byzantium** Call Girl Camilla Läckberg's Oorlogskind Camille Claudel 1915 **Captain Philips** Carrie Catch 44 Celal Ile Ceren Cheerful Weather For The Wedding Chennai Express **Cherchez Hortense** Chevaux de Dieu, Les Chez Nous Child's Pose Cinquième Saison, La Club van Sinterklaas en de Pietenschool, De Cnakkale Yolun Sonu Coeur Ouvert. À Commando - A One Man Army Company You Keep, The Conjuring, The Counselor, The Croods, De (3D) Dabbe: Cin Carpmasi Daglicht Dark Skies Dead Body Welcome Dead Man Down Deep. The Despicable Me 2 (3D OV) Después de Lucía Dhoom 3 Diana Diner. Het Disconnect Django Unchained Do Not Disturb Doctor Zhivago Don Jon Dugun Dernek Dunderklumpen (NL) Eat Sleep Die Ecume des Jours, L'

Elefante Blanco Elle S'en Va Elysium **Empire State** Epic (3D NL) Escape Plan Evil Dead **Facing Mirrors** Fast & Furious 6 Feuten: Het Feestje Fifth Estate, The Fill the Void Fille Du Puisatier, La Finding Nemo 3D (NL) Finn Flight Forget me not Foxfire Frances Ha Free Birds Freier Fall Frits & Franky Frozen 3D (NL) Frozen Ground, The **FUKREY** G.I. Joe: Retaliation (3D) Gabrielle Gambit Gangs of Wasseypur Gangster Squad Gayby Geheim van Mariënburg, Het Ginger & Rosa Girl Most Likely Gloria Go Goa Gone Good Day To Die Hard, A Grand Central Grand Soir, Le Grande Belezza, La Grandmaster, The Gravity (3D) Great Expectations Great Gatsby, The (3D) Greetings From Tim Buckley Grown Ups 2

Hangover 3, The Hannah Arendt Hansel & Gretel: Witch Hunters (3D) Hauted House, A Heat, The Hello, I Must Be Going Hemel op Aarde Himmatwala Hitchcock Hobbit, The: The Desolation of Smaug Hoe Duur Was De Suiker Homefront Hors les Murs Host, The How To Describe A Cloud Hükümet Kadin Hukumet Kadin 2 Humming Bird Hunger Games: Catching Fire, The Hyde Park on Hudson Hypnotist, The I Give It A Year I, Anna Ice Dragon Iceman, The **Identity Thief** Il Futuro Impossible, The In Another Country In Bloom In Darkness In the Fog Inch'Allah Infancia Clandestina Inside Llewyn Davis Insidious: Chapter 2 Internship, The Io e Te [Ik en Jij] Io sono Li Iron Man 3 3D Jack The Giant Slayer Jackass Presents: Bad Grandpa Jadoo Jasper & Julia En de Dappere Ridders 3D Javne Mansfield's Car Jeune & Jolie

Jimmy P. Jobs Jour de Fête (Tati-toer 2013) Juan of the dead Jurassic Park 3D Just The Wind Kai Po Che! Kapringen Kelebegin Ruyasi Kick-Ass 2 Kid Kill List Kirikou en de mannen en de vrouwen (NL) Kon-Tiki Krekel, De (NL) Krrish 3 Last Elvis, The Last Exorcism: God Asks. The Devil Commands. Mortal Instruments: City of Bones, The Last Sentence, The Last Stand, The Last Vegas Late Ouartet, A Lay the Favourite Leve Boerenliefde Like Father, Like Son Like Someone in Love Lilet never Happened Lincoln Lone Ranger, The Long Story, A Look of Love, The Lootera Lore Los Amantes Pasajeros Love & Fungi Love and Honor Lovelace Lunchbox, The Machete Kills Make Your Move 3D Making Of Asha Bosle, The Malavita Mama Man Of Steel (3D) Man With The Iron Fists, the Mandela: Long Walk To Freedom

Maniac Mannenharten Mannetje Van De Maan, Het Mariage A Mendoza Master. The Matterhorn Mees Kees Op Kamp Meisje met negen pruiken Metallica: Through The Never 3D Metéora Michael Kohlhaas Midden in de Winternacht Midnight's Children Miserables, Les Modern Times Mon Oncle (tati-toer 2013) Monsters University 3D (NL) Movie 43 Mr. Morgan's Last Love Mud Museum Hours Night Train To Lisbon Nijntje De Film Niks Aan De Hand NO Now You See Me Nymphomaniac (I) Oblivion Offline Oh Boy Oldboy Olympus Has Fallen Omar Ongekend Verlangen **Only God Forgives** Ontmaagding van Eva van End, De Other Side of Sleep, The Otto Is Een Neushoorn (NL) OZ: The Great And Powerful 3D Pacific Rim (3D) Pain & Gain Parade (tati-toer 2013) Paradies: Glaube Paradies: Hoffnung Paradies: Liebe

Paranoia Parker Passé. Le Passion Patience Stone. The Percy Jackson: Sea Of Monsters (3D) Perfect Ending, A Phata Poster Nikhla Hero Pieta Pistola en Cada Mano, Una **Pitch Perfect** Place Beyond The Pines, The Planes 3D (NL) Playtime (tatie-toer 2013) Post Tenebras Lux Prince Avalanche Prinses Lillifee En De Kleine Eenhoorn (NL) Prisoners Promised Land (2013) Purge, The Quartet Raanjhanaa Race 2 Ram Leela Ramaiyya Vastavaiyya Reality Red 2 Religieuse, La Repentant, The Rhino Season Riddick Road North Romantik Komedi 2 Runner, Runner Rush Safe Haven Safety Not Guaranteed Sapphires, The Saving Mr. Banks Scabbard Samurai Scary Movie 5 Selam Sessions, The Shokuzai Shootout At Wadala Short Term 12

Side Effects Sightseers Silent Hill: Revelation (3D) Silver Linings Playbook Sinterklaas En De Pepernoten Chaos Smoorverliefd Smurfen 2, De (3D NL) Snabba Cash II Sneeuwkoningin, De (3D) Snitch Song For Marion Soof Special 26 Spijt! Spring Breakers Stand Up Guys Star Trek into Darkness (3D) Stateless Things Steekspel Still Mine Stip & Vlek (NL) Stoker Stolen Su Ve Ates Sweeney, The Symbol Tabu Tamam Miyiz Tanta Agua Tarzan Ted & De Schat Van De Mummie 3D (NL) Tendresse, La Texax Chainsaw 3D Thanks For Sharing The Haunting in Connecticut 2: Ghosts of Georgia Thérèse Desqueyroux This is 40 This is the End Thor: The Dark World 3D To The Wonder Toegetakeld door de Liefde **Touring Talkies** Trafic (tati-toer 2013) Trance Trois mondes

Tula: The Revolt Turbo (3D NL) **Twilight Portrait** Two Mothers Ugly Unconditional Une Vie Meilleure Ushi Must Marry Vacances de Mr. Hulot; Les (tati-toer 2013) Valentino Vampierzusjes Verliefd op Ibiza Vie d'Adèle chapitres 1 & 2, La Waar is Knoester? Wadjda Walking With Dinosaurs 3D Wallander: De Gekwelde Man Wand, Die Warm Boedies We're The Millers Wederopstanding van een Klootzak, De Welcome To The Punch Welt, Die What Maisie Knew White House Down Wolf Wolverine, The (3D) Workers World War Z (3D) World's End, The Yeh Jawaani Hai Deewani Yeralti YOKO Yossi You're Next Young And Prodigious Spivet, The Zambezia: De Verborgen Vogelstad (3D) Zarafa Zero Dark Thirty