THOUGHTFULNESS AND ENJOYMENT AS RESPONSES TO MORAL AMBIGUITY IN FICTIONAL CHARACTERS

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Claudia Alejandra Barriga
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THOUGHTFULNESS AND ENJOYMENT AS RESPONSES TO MORAL AMBIGUITY IN FICTIONAL CHARACTERS

Claudia Alejandra Barriga, Ph. D.
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This dissertation examines the possibility that cognitive engagement with fictional movies, stemming from either individual motivations for movie viewing or from moral ambiguity as a characteristic of story protagonists, may result in increased thoughtfulness about moral themes, real world issues and movie authors. After responding an online survey to determine their motivations to watch movies, 154 college-aged participants saw clips edited from feature films in which protagonists were portrayed as either unambiguously bad, or morally ambiguous. Participants then rated their enjoyment of the movie, the characters, the movie authors, and suggested topics they would like to discuss with friends after watching each clip. Participants also rated their interest in reading more information about the movie and the movie authors. Participants seeking affective gratifications from movies (hedonic) were more likely than those seeking cognitive motivations (eudaimonic) to suggest moral issues as topics of conversation when characters were ambiguous. Participants seeking cognitive gratifications from movies (eudaimonic) were significantly more likely than hedonic viewers to propose movie authors and real world issues as topics of conversation, but, contrary to expectations, they were not more likely than others to connect these issues to the self. Viewers who had a dual orientation to movies (high in both hedonic and eudaimonic motivations) were more likely than other groups to
judge movie authors as technically competent, and to like unambiguously bad movies and bad characters. Different patterns of thoughtfulness and enjoyment between hedonically and eudaimonically motivated groups may indicate that they process ambiguity through different cognitive schemas. Results regarding thoughtfulness about morality and real world issues are discussed in terms of movies’ potential to foster individual and social change. The results regarding thoughts about authors are discussed in terms of their relevance to the theoretical debate on fiction as a sophisticated form of communicative exchange between authors and audiences.
BIOGRAPHICAL SKETCH

Claudia A. Barriga grew up in Santiago, Chile. She obtained her undergraduate degree in Psychology at the Universidad Diego Portales. She worked in Santiago as a counselor and a school psychologist, but found herself more interested in her work as a teaching assistant and instructor of Psychology of Communication, under the guidance of her academic mentor and friend, Eduardo Llanos Melussa. Her interest in Communication as a field led her to pursue graduate studies at Cornell University, where she obtained an M.S. in Communication in 2007, under the guidance of Dr. Michael A. Shapiro. While at Cornell, she has conducted research on audiences’ perceived realism and appropriateness of women’s body images, processing of science information in movies, and processing of moral ambiguity in fiction.
To my favorite doctors: my father, Tracy and Ryan,

with growing respect, love and gratitude
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TABLE OF CONTENTS

Biographical Sketch iii
Dedication iv
Acknowledgments v
Table of Contents vi
List of Figures viii
List of Tables ix
Chapter 1 Introduction 1

Chapter 2 Enjoyment and Character Liking 4
  Moral Evaluations and Movie Enjoyment 4
  Hedonic and Eudaimonic Movie Enjoyment Orientations 9

Chapter 3 Moral and Extra-Narrative Thoughts 14
  Ambiguity and Moral Thoughts 14
  Extra-Narrative Thoughts, the Self and the Real World 16

Chapter 4 Fiction and Author Thoughts 20
  Processing of Fiction Authors as a Communication Phenomenon 20
  Audiences’ Representations of Narrators and Authors 22
  Author Thoughts, Moral Evaluations and Ambiguity 25
  Author Thoughts and Enjoyment Orientations 26

Chapter 5 Method 32
  Design 32
  Stimuli Material 32
  Participants 33
  Procedure 33
  Measurement of Hedonic and Eudaimonic Orientations 35
  Covariate 37
  Thought List Coding 38
  Dependent Measures 44

Chapter 6 Results 48
  Manipulation Checks 48
  Hypotheses Testing for Enjoyment and Character Liking 50
  Hypotheses Testing for Moral and Extra-Narrative Thoughts 54
<table>
<thead>
<tr>
<th>Hypotheses Testing for Author Engagement</th>
<th>58</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 7 Discussion of Results</td>
<td>62</td>
</tr>
<tr>
<td>Character Liking and Movie Enjoyment</td>
<td>62</td>
</tr>
<tr>
<td>Extra-Narrative Thoughts: Self and the Real World</td>
<td>65</td>
</tr>
<tr>
<td>Thinking about Authors</td>
<td>67</td>
</tr>
<tr>
<td>Interest in Authors</td>
<td>68</td>
</tr>
<tr>
<td>Moral Thoughts and Other Results</td>
<td>70</td>
</tr>
<tr>
<td>Role of Tolerance to Ambiguity</td>
<td>71</td>
</tr>
<tr>
<td>Summary of Moral Ambiguity Effects</td>
<td>72</td>
</tr>
<tr>
<td>Summary of Movie Enjoyment Orientation Effects</td>
<td>74</td>
</tr>
<tr>
<td>Chapter 8 Conclusions and Future Directions</td>
<td>76</td>
</tr>
<tr>
<td>Advantages and Disadvantages of the Design</td>
<td>76</td>
</tr>
<tr>
<td>Practical Implications</td>
<td>78</td>
</tr>
<tr>
<td>Implications for the Communicative Dimension of Narratives</td>
<td>79</td>
</tr>
<tr>
<td>Future Directions in Research</td>
<td>81</td>
</tr>
<tr>
<td>References</td>
<td>85</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure 1. Proportion of Moral Thoughts by Ambiguity and Movie Orientation 56
Figure 2. Proportion of Author Thoughts by Ambiguity and Movie Orientation 59
<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Coding Criteria for Moral/Non-Moral Thoughts</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>Coding Criteria for Emotion Thoughts</td>
<td>41</td>
</tr>
<tr>
<td>3</td>
<td>Coding Criteria for Thought Valence</td>
<td>42</td>
</tr>
<tr>
<td>4</td>
<td>Coding Criteria for Narrative/Extra-Narrative Thoughts</td>
<td>43</td>
</tr>
<tr>
<td>5</td>
<td>Coding Criteria for Interrogative Thoughts</td>
<td>44</td>
</tr>
<tr>
<td>6</td>
<td>Means of Movie, Character and Author Ratings</td>
<td>52</td>
</tr>
<tr>
<td>7</td>
<td>Means of Extra-Narrative Thoughts</td>
<td>58</td>
</tr>
<tr>
<td>8</td>
<td>Comparison Table of Hypotheses and Findings</td>
<td>64</td>
</tr>
</tbody>
</table>
CHAPTER 1

INTRODUCTION

When processing fictional stories, audiences often make moral evaluations of characters. These evaluations are known to drive liking for the characters and overall enjoyment of the story, especially when characters are unambiguously good and their antagonists are unambiguously evil (Raney, 2004, 2005; Raney & Bryant, 2002; Zillmann, 1994, 2000; Zillmann & Bryant, 1975, 1986). Recent research on the processing of morally ambiguous characters shows that although they are liked less than unambiguously good characters, they are still enjoyed by audiences, because they offer the possibility of cognitive engagement and thoughtfulness, which is increasingly being acknowledged as a motivation to enjoy fiction (Nabi & Krcmar, 2004, Krcmar & Renfro, 2008, Oliver & Raney, 2008). The study presented here examines the possibility that audiences high in motivation to appreciate fiction thoughtfully—known as “eudaimonically” oriented to fiction (Oliver & Raney, 2008), are likely to respond to character morality, especially moral ambiguity, differently than those who are motivated to appreciate a story “hedonically” —this is, to obtain from fiction mostly positive affective gratification and pleasure. In particular, this study explores the possibility that cognitive engagement, stemming from either individual motivations to movie enjoyment or from moral ambiguity as a characteristic of protagonists, may result in increased thoughtfulness about moral themes, real world issues, and movie authors.

Participants in this study were shown movies that had either ambiguous characters who engaged in some good and some bad actions, or unambiguously bad characters who only engaged in morally bad actions. After watching each movie, participants quantitatively rated their affective and cognitive liking of the characters, and their overall enjoyment of the movie—a set of measures intended to extend our growing understanding of movie enjoyment. The study also examined extra-narrative responses; this is, the ways in which audiences respond to fiction by connecting it to non-fictional dimensions, such as the self, the real world, and the
story’s authors. Participants had the opportunity to list thoughts about the movie that they would be interested in discussing, and they quantitatively rated their likelihood to read further information about the authors and authorial intentions.

Extra-narrative responses, and in particular responses to story authors, are a form of audience response that has been neglected in traditional communication research on fiction processing. Research on audience’s representations of fictional authors is scarce, probably because in many instances authors are expected to be self-effacing, and audiences are expected to be absorbed exclusively in the story world. Some theorists have gone as far as arguing that there is no communicative intention in fiction, inasmuch as authors are not attempting to engage in a back and forth dialogue with audiences (Dixon & Bortolussi, 2001). Critics of this idea note that such a stance is based on a limited “conversational” understanding of communication (Gerrig & Horton, 2001), which would require readers and audiences to talk back to authors for communication to be present, a notion of communication which is basic and at odds with more complex understandings of the process (Gibbs, 2001). There surely are instances in which fiction is consumed by audiences without even thoughts of authors, and these instances are still communicative in a broad sense. But there are also instances of thoughts about authors arising in audiences, for example when audiences are willing to engage with author information or ponder authorial intention. What these thoughts mean as part of a more traditionally defined communication process, is a relevant question, as well as an empirically unexplored one (Bortolussi & Dixon, 2003; Gibbs, 2001).

Chapter 2 below presents a more detailed account of the relationship between moral evaluations of characters, liking of characters, and enjoyment of movies. It presents an overview of extant research on the effects that the moral standing of characters have on character liking, and on enjoyment. The chapter introduces in more detail the concepts of eudaimonic and hedonic orientations to fictional movie enjoyment, and the relationship these orientations have to character liking and movie enjoyment. The chapter also introduces the
distinction between affective forms of character liking and cognitive forms of character liking.

Throughout the chapter, predictions about the study’s results are presented when relevant, in the form of hypotheses or research questions. This chapter includes all hypotheses about character liking (cognitive and affective), and movie enjoyment.

Chapter 3 summarizes research on the ways in which movies prompt (or not) thoughtfulness about morality in audiences, particularly the effect of moral ambiguity of stories on peoples’ likelihood to engage in general moral thoughtfulness. The study introduces hypotheses on the possible effects that moral ambiguity and movie enjoyment orientation are predicted to have on emergence of morality as a topic of discussion. The chapter also introduces the idea of extra-narrative thoughts: viewer responses that are unrelated to the character and the plot, including responses that connect movie content to the self and to real world issues.

Chapter 4 focuses on one particular kind of extra-narrative thought: thoughts about authors. Thoughts about authors are connected to a key interest in this study – the issue of fictional narratives as communication. Particular interest is paid to viewer responses that imply awareness and interest in movie authors and author intentions. Throughout this chapter, predictive hypotheses are introduced when relevant. This chapter includes all hypotheses regarding author thought responses (offered by participants as topics of interest for discussion), technical evaluations of authors, and interest in author information.

Chapter 5 presents the methodological structure of the study, a multiple message experiment with one manipulated independent variable (character ambiguity: ambiguous, unambiguously bad) and one measured independent variable (movie enjoyment orientation: dual, exclusively eudaimonic, exclusively hedonic, low). The study provides a detailed account of all dependent measures used, the constructions of measurement scales, and the coding scheme used to categorize and analyze participants’ open ended thought list of discussion topics.
Chapter 6 presents the analysis of the data collected, including an analysis of the manipulation’s success, and hypotheses testing for the dependent variables of interest. Results are organized by dependent measure.

Chapter 7 discusses the results in the light of the predictions made, the theoretical background, and unexpected patterns of response that emerged.

Finally, Chapter 8 considers some implications of the study’s findings for current topics of interest in the processing of narratives, and suggests future avenues of research.
CHAPTER 2
ENJOYMENT AND CHARACTER LIKING

Moral evaluations and movie enjoyment

Making moral evaluations about movie characters has long been recognized as essential to understanding and enjoying narratives. Making judgments of characters' moral standing is often an automatic response to fictional stories (Zillmann, 1994, 2000). Moral evaluation of a character seems to be a piece of information that is key for readers to both understand and enjoy a story, because it provides necessary cues as to which characters should be liked (Raney, 2004). Affective Disposition Theory (ADT) – a robust and far-reaching theory to explain media enjoyment, is grounded on a long standing body of evidence that shows that people enjoy media stories to the extent that the characters perceived as “bad” come to negative outcomes and the ones perceived as “good” come to happy endings (Raney, 2002, 2004, 2005; A. A. Raney & Bryant, 2002; Zillmann, 1994, 2000; Zillmann & Bryant, 1975, 1986).

Recent formulations of ADT conceive of moral evaluations as an element of a cognitive schema that people use to approach narratives (Raney, 2004). A cognitive schema acts as a framework of expectations and knowledge used to evaluate and respond to a given situation, or in this case, a story. When confronted with a fictional drama, audiences activate dramatic story schema. This schema, built from previous experiences with the genre, indicates that a useful way to make sense of and enjoy the story is to identify good and bad guys, side with the good ones, and root for them to have a happy ending. This idea is not new; it goes all the way back to Aristotle’s Poetics, who prescribes this schema as the ideal dramatic construction. To this extent, it is reasonable to define this schema as a traditional narrative schema for drama stories, and ADT research shows that audiences are savvy in adhering to it when processing stories.
However, not all stories are constructed in this way. Increasingly popular stories present characters that portray a mix of moral and immoral traits (morally ambiguous characters) or even characters that, even if predominantly immoral, are the protagonists of the story (anti-hero characters). In the last years, research on fictional entertainment has begun to address how people process and enjoy narratives in which none of the protagonists are morally good.

Current research on ADT suggests that these narratives may be considered by audiences to be a different genre and may be processed through a different schema. Antihero narratives, for example, can be enjoyed if audiences are told, before seeing the movie, that the protagonist is an “antihero” (Raney, Schmid, Niemann, & Ellensohn, 2009). That bit of information seems to activate a different set of expectations and a processing schema different to the traditional narrative schema described by ADT. In the case of the antihero narrative, alignment with exclusively “good” characters would lead to frustration and minimize enjoyment. Respondents in the Raney et al. (2009) study enjoyed a character whose immoral actions were not justified as much as a morally justified character. Since they were told a priori that the unjustified character was an “antihero,” a different schema appears to have been activated and guided liking for the character and enjoyment of the movie.

Another possibility is that cues provided within the narrative are used by audiences to determine what kind of engagement with the story will lead to most enjoyment. For example, there is evidence that people are able to disengage from moral evaluations if this is necessary to enjoy a violent video game (Klimmt, Schmid, Nosper, Hartmann, & Vorderer, 2006), and that movie viewers can use moral disengagement cues provided in the narrative itself to be able to enjoy antihero narratives, where the antihero commits violent or cruel acts (Shafer, 2008). In both these cases, the participants are not told a priori that they should expect an anti-hero, but the prevalence of immoral actions (in this case, violence and extreme cruelty) indicates to viewers that seeking to like characters or avatars because of goodness would be a
waste of time, and ultimately frustrating. In the case of the Shafer (2008) study, moral disengagement cues appeared in the form of justification for violent acts in several ways, for example, dehumanization or euphemistic labeling of the victim, attribution of blame, etc. (Bandura, 1990, 1991; Bandura, Barbaranelli, Caprara, & Pastorelli, 1996). These processes strip the victims of their standing as objects of moral protection such that, in the eyes of the viewers, the violent acts are not really problematic, making the movie more enjoyable and the moral evaluations of the antihero perpetrator more lenient or non-existent.

A different approach shows that morally flawed characters can be enjoyed even in the absence of a justification for their moral transgression or of cues for an antihero schema, as long as there are other –non moral, dimensions that produce involvement with the character, such as beauty, realism, or relevance to the self (Konijn & Hoorn, 2005). If a movie emphasizes beauty or achievement as the characteristic that makes the protagonist worthy of interest, moral considerations may stop driving liking and movie enjoyment.

In the study reported on here, participants were exposed to either ambiguous moral characters –who did both bad and good things, or unambiguous characters who did only bad things. The clips were open ended, such that there was no sense of whether the characters were rewarded or punished in the end. Overall, however, the mood of the clips was rather grim, so in no case were happy endings implied. Traditional ADT predictions would depend on the relationship between the perceived morality of characters and their outcomes, with enjoyment stemming from happy endings for good characters and unhappy endings for bad ones. However endings were uncertain at best and grim at worst. According to one ADT rationale, unambiguous movies would be enjoyed better than ambiguous ones, because characters go unrewarded, which may be enjoyable if the character is bad, but not so enjoyable of the character is somewhat good, as in the ambiguous version. A second option is that participants may want an unambiguously bad character to be punished more severely than by a vaguely grim and open ending, and may consider uncertainty and openness an appropriate
ending for an ambiguous character but not an unambiguously evil one. In this case, ADT would suggest that the ambiguous movie would be enjoyed more. There is some evidence (Raney, 2005) that audiences prefer extreme (even disproportionate) punishments for morally bad characters. A vaguely sad ending for a bad character may not be enough punishment, whereas a somewhat hopeful ending for a character that is able to evoke at least some positive affect may be appropriate. Thus the prediction for effect of character morality follows the second option:

\[ H1: \text{Participants will enjoy movies with morally ambiguous movie protagonists more than movies with unambiguously bad movie protagonists. (Main effect of moral ambiguity on movie enjoyment)} \]

The hypothesis above is based on the ADT notion that to the extent that a character is good the character is liked, and to the extent that the character is liked, his or her success is enjoyed. The notion of “character liking” implicit in that theory is affective. Morally good characters have been found to be enjoyed because they evoke positive affect and facilitate identification and empathy, whereas morally ambiguous and morally bad characters are less likely to elicit these feelings. Viewers are said to feel a positive affective connection to a character, similar to the affect that they may feel for people they know in real life (Zillmann, 1994). In this study, this kind of affective liking is measured by asking audiences whether they would like to know the character or someone like them in real life.

On the other hand, morally ambiguous and morally bad characters have recently been found to be enjoyable as well, because they are as transporting, suspenseful and cognitively engaging as morally good ones (Krakowiak & Oliver, 2009). Morally ambiguous and morally bad characters, despite their moral failings, are just as likely to make audiences absorbed into the story world (transportation) and to keep audiences interested in the development of the plot (suspense and cognitive engagement). Indeed, Krakowiak (2009) finds that narratives portraying morally ambiguous characters are enjoyed just as much as the ones portraying good
or bad characters. In her study, much of the enjoyment of morally ambiguous characters comes from them being “cognitively engaging”. Cognitive engagement with characters may create a path towards enjoyment that does not necessarily depend on moral goodness and subsequent affective disposition. In this study, we measure cognitive liking of characters (evaluations of the character as fascinating, interesting, engaging) separately from affective liking, in an attempt to check for these different pathways to enjoyment for morally flawed characters (ambiguous and bad).

The ambiguous characters in the current experiment do some good things, which fosters affective liking, and are more complex (they do good and bad things, instead of only bad things), which we predict fosters cognitive liking. This leads to hypotheses 2 and 3, regarding main effects of moral ambiguity of affective liking and cognitive liking.

**H2:** *Movies with morally ambiguous characters will be more likely than movies with morally unambiguous characters to elicit affective liking for the character. (Main effect of moral ambiguity on affective liking)*

**H3:** *Movies with morally ambiguous characters will be more likely than movies with morally unambiguous characters to elicit cognitive liking for the character. (Main effect of moral ambiguity on cognitive liking)*

Both hypotheses predict higher levels of liking (affective and cognitive) for ambiguous characters than for unambiguously bad characters, shedding little light on the distinct pathways towards movie enjoyment. The distinction is expected to emerge more clearly when moral characteristics of the protagonist are examined in conjunction with the other independent variable in this study: hedonic and eudaimonic movie enjoyment orientations.

**Hedonic and eudaimonic movie enjoyment orientations**

Audiences vary in the motivations they have for consuming fiction and the gratifications they take away from it. Traditionally, measurements of media preferences,
enjoyment and liking have used general statements gauging whether people “enjoy” media content. Generally, such measurements focus on positive affective dispositions and experiences with a message. More recently, there have been some efforts to distinguish the dimensionality of the enjoyment construct, mostly recognizing that there are both cognitive and affective dimensions to enjoyment, although the definitions of what each dimension entails are not completely consistent.

The affective dimension of enjoyment has been conceptualized as being placed in an elevated mood, having empathy for a character, or simply having a sense of affective liking for a character (Zillmann, 1991, 2003). The cognitive dimension has been traditionally considered to refer to evaluations viewers make about characters, including moral judgments (Raney, 2002; Raney & Bryant, 2002), and social comparison between characters (Mares & Cantor, 1992). In all these cases, both affect and cognition are linked to the character evaluations, rather than to more global evaluations that audiences may have of their experiences and expectations from fiction.

A more fruitful approach in this regard may be the construct of hedonic and eudaimonic orientations to fiction enjoyment as individual differences between fiction consumers (Oliver & Raney, 2008). Audiences motivated hedonically seek pleasure and positive affect from their experience with stories, and enjoy narratives to the extent that they get these gratifications. Audiences motivated eudaimonically seek meaningfulness, insight and poignancy (Oliver, 2008), and enjoy stories that can provide that. Research using test-retest scale analysis shows that these motivations can be quite stable preferences, and can indeed be considered individual differences (Oliver & Raney, 2008), although the authors also consider it possible that an individual is motivated to hedonic enjoyment in some occasions and eudaimonic enjoyment in others. A third option, not mentioned in the scale development, is that some audiences might be motivated dually, seeking both pleasure and meaning from their fiction. Likewise, a group of audiences might be seeking neither pleasure nor meaning from
fiction (most likely, a group of people that does not actively seek fiction). In this study we use Oliver’s Eudaimonic and Hedonic enjoyment motivation scales to create a four-category variable of movie enjoyment orientations: Dual, Eudaimonic, Hedonic and Low. Dual oriented participants would rate high in both the hedonic and eudaimonic scales, indicating that they seek both pleasure and meaningfulness from fiction. This group probably will represent participants that can foresee enjoying different kinds of movies at different times—an idea consistent with Oliver’s intuitions, but for which no data currently exist. Eudaimonically oriented viewers seek mostly meaningfulness and rate low in hedonic orientations. Hedonically oriented viewers seek pleasure and positive affect from films, and rate low in eudaimonic motivations. Finally, “low” motivated participants rate low in both forms of gratification. Extant research only reports differences between exclusively eudaimonic and hedonically oriented fiction consumers, but we consider that the difference between viewers oriented exclusively to one enjoyment goal (eudaimonics and hedonics) and viewers who claim they would get satisfaction in both hedonic and eudaimonic ways is worthy of exploration. Dual oriented viewers may represent a specific kind of audience that is more flexible in its approach and expectations about movies, such that both affective and cognitive gratifications are satisfying to them, at either different times or maybe even simultaneously.

As will become clear below, most hypotheses regarding movie enjoyment orientation are stated in terms of high eudaimonicity or hedonicity, as suggested by existing research in the area. Full support for these hypotheses would, in general, indicate that audiences behave following either a eudaimonic or a hedonic approach to enjoyment. However, the inclusion of a dual (and low) motivated group allows us to explore possibly different patterns in these participants.

Overall, audiences motivated hedonically rate higher in optimism, spontaneity and humor scales, whereas those motivated eudaimonically rate higher in need for cognition, reflectiveness and search for life meaning scales. The two groups also recall different
reactions to their “favorite movie”. Those motivated hedonically recall feeling more upbeat responses, whereas those motivated eudaimonically recall feeling more contemplative, emotional and somewhat disturbed (Oliver & Raney, 2008). It also seems to be true that people who are in tender emotional states are more likely to be interested in watching drama, films that are sad and films that explore human connections (Oliver, 2008), a result that counters affective mood management theories, which predict that audiences will seek to get out of negative moods by choosing content that distract them from their stressful experiences (Zillmann & Bryant, 1986).

Audiences oriented hedonically prefer genres such as comedy and action (Oliver & Raney, 2008). These two genres are less likely than drama to produce in viewers a “lasting impression”, measured by items such as “I continue to think about this movie” and “I don’t imagine I will remember this movie for too long” (Bartsch & Oliver, 2008). In short, audiences with hedonic orientations do not prefer films that will require them to ponder on them after viewing them. Hedonic enjoyment seems oriented towards experiencing transportation into a narrative world – the feeling of being lost or completely immersed in a story world, to the point that the real world is forgotten (Gerrig, 1993; Green & Brock, 2002; Green, Garst, & Brock, 2004). On the other hand, eudaimonic viewers prefer thought provoking movie genres like drama (Oliver & Raney, 2008; Bartsch & Oliver, 2008), that are likely to spur thoughts about connections with real world issues. Eudaimonic orientation also correlates highly with Need for Cognition (Cacioppo, Petty & Kao, 1984), a scale that measures the extent to which people engage in and enjoy cognitive and thoughtful activities (Cacioppo, Petty, Fenstein & Jarvis, 1996).

Hypotheses 2 and 3 formulated earlier predict that participants in this experiment will affectively and cognitively like morally ambiguous characters better than unambiguously bad characters. However, because eudaimonically oriented viewers like being thoughtful about
movies and characters, they may be more likely than hedonically oriented viewers to like characters cognitively

**H4:** Viewers high in eudaimonic orientation (dual and eudaimonic) will be more likely than viewers low in eudaimonic orientation (hedonic and low) to cognitively like characters (Main effect of movie enjoyment orientation on cognitive liking)

Moreover, movie enjoyment orientation may make a difference in the way moral ambiguity affects cognitive and affective liking. As we reported in the previous section, Krakowiak found that morally bad and morally ambiguous characters were enjoyed because they were cognitively challenging (Krakowiak & Oliver, 2009). It is likely that morally ambiguous characters are more cognitively challenging than exclusively bad ones, and we would expect eudaimonically motivated viewers to be more interested and engaged by these cognitive challenges than exclusively hedonically motivated viewers, who may affectively appreciate the “goodness” in the ambiguous characters, but be cognitively turned off by their complexity. Viewers high in eudaimonicity may be more likely to cognitively like the ambiguous characters, and, through that cognitive path, to enjoy the morally ambiguous movies.

**H5:** Viewers high in eudaimonic orientation (Dual and Eudaimonic groups) will be more likely than viewers low in eudaimonic orientation (Hedonic and Low) to cognitively like ambiguous characters. (Interaction effect of movie enjoyment orientation and moral ambiguity on cognitive liking)

**H6:** Viewers high in eudaimonic orientation (Dual and Eudaimonic groups) will be more likely than viewers low in eudaimonic orientation (Hedonic and Low) to enjoy movies with morally ambiguous characters. (Interaction effect of movie enjoyment orientation and moral ambiguity on movie enjoyment)
CHAPTER 3
MORAL AND EXTRA-NARRATIVE THOUGHTS

Eudaimonic orientations towards movie enjoyment indicate that experiences had during watching a movie are not the only driving force behind movie processing. At least a subset of movie viewers desires to be thoughtful about movies even after they have ended. In this study, participants were asked to list topics that they would discuss with others if they were to talk about each movie clip. The next two chapters focus on thoughts and attitudes that viewers may have about movies, beyond the movie experience.

Ambiguity and Moral Thoughts

One effect that moral ambiguity can have on thoughts about movies is to increase thoughts about morality. A content analysis of informal movie reviews online (Barriga & Shapiro, 2007) showed that viewers were more likely to refer to moral themes in a movie review if the movie had morally ambiguous characters than if it had morally unambiguous characters, a sign that ambiguity prompts people to continue pondering the unresolved moral stances presented.

In that study, morally unambiguous movies were likely to be processed with the perspective of an unambiguously good character in mind (the protagonist), whereas in this study the unambiguous character is exclusively bad. If it is moral ambiguity that fosters thoughts of moral themes, we would expect the previous pattern to repeat itself, regardless of the differences on unambiguous characters. On the other hand, if moral thoughts are prompted by the presence of extreme moral violations (exclusive moral badness), we would expect a reverse pattern in this study, such that the morally ambiguous characters elicit less moral thoughts than the morally unambiguous (bad) characters. Thus, we have competing hypotheses regarding the emergence of moral thoughts in response to the movies.

H7a: Morally ambiguous clips will be more likely to elicit moral thoughts than morally unambiguous clips. (Moral thoughts are elicited by ambiguity).
H7b: Morally unambiguous clips will be more likely to elicit moral thoughts than morally ambiguous clips. (Moral thoughts are elicited by unpunished moral violations).

In the 2007 study, moral thoughts were overall scarce. The scarcity of moral thoughts is maybe explained by a variety of challenges involved in recognizing moral issues. The process of recognizing the moral relevance of a situation –moral or ethical sensitivity, involves perception, appraisal and interpretation of unstructured stimuli or situations (Rest, 1984). It requires affective processes in the form of empathy for characters, which activates moral principles, and acts as a cue for moral relevance (Hoffman, 1991; Pizarro, 2000). Moral sensitivity also requires cognitive activation, in the form of an awareness of alternative moral options, possible consequences of moral or immoral actions, and recognition of how different people (characters) might be affected by a certain course of action. (Bebeau, 2002). Indeed, people in general are not particularly good at detecting moral elements of news stories if these are not made salient (Lind, 1997; Lind & Rarick, 1999; Lind, Swenson-Lepper, & Rarick, 1998). However, some individual differences in viewers may increase the likelihood of detecting and reflecting on moral issues. The ability to detect the moral implications of a situation may be higher for ‘moral chronics’, people for whom moral thought is chronically activated in the form of an available cognitive schema (Lapsley & Narvaez, 2004; Narvaez, Lapsley, Hagele & Lasky, 2006), and people whose reading goal is “studying” have higher levels of reading comprehension and interpretation of moral issues than those whose goal is entertainment (Narvaez, van den Broek, & Ruiz, 1999). In summary, although moral thoughts are likely to be scarce, it is possible that viewers who are motivated to be thoughtful and motivated by cognitive rather than entertainment goals are more likely to propose moral issues as topics of movie discussion. Viewers high in eudaimonicity are the most likely to respond to this cognitive challenge in general, which supports the prediction below:
**H8: Viewers high in eudaimonic orientation will be more likely than viewers low in eudaimonic orientation to express moral thoughts. (Main effect of movie enjoyment orientation on moral thoughts)**

**Extra-narrative thoughts, the self and the real world**

Moral thoughts are, of course, not the only thoughts likely to emerge in response to movies. There is some evidence that in the presence of moral ambiguity in a story, audiences are particularly likely to turn to reflection on extra-narrative elements, that is, elements that go beyond the characters, the plot and the story world (Hakemulder, 2000). Extra-narrative thoughts include thoughts about the self, and the “real world” (and thoughts about authors, which are treated separately in Chapter 4). Wilson and Busselle (2004) found that the majority of thoughts produced in immediate response to a movie were narrative thoughts – this is, thoughts focused on the movie’s plot and characters. In contrast, Barriga and Shapiro (2007) found that most thoughts expressed in online movie reviews (expected to have been crafted with some delay to movie viewing) were extra-narrative thoughts. The lapse in time between movie viewing and responses may contribute to thoughts that connect movie content with non-movie content. Since the present study asks for immediate responses we would expect to find a pattern more consistent with the Wilson study, with an overall higher proportion of narrative thoughts, given that plot and characters are still quite fresh in the participants’ memory. However, it is also possible that groups high in eudaimonicity produce more extra-narrative thoughts because their motivation towards meaningfulness includes an explicit interest in “the human condition” and “the world” (see Methods section for the detailed description of the Eudaimonicity scale), and because the question asked in this study specifically asks for thoughts that will be discussed “later” with friends or others. Thus,
**H9:** Viewers high in eudaimonicity (eudaimonic, dual) will be more likely than viewers low in eudaimonicity (hedonic, low) to produce extra-narrative thoughts in response to the movie clips.

One subset of extra-narrative thoughts are thoughts that connect movie content with the self. There is some evidence that in a situation of character moral ambiguity, audiences engage in comparisons between their own moral beliefs and norms and those of the characters, imagining how they would act in similar moral situations, and evaluating how morally acceptable the behaviors portrayed would be for them (Hakemulder, 2000), a scenario compatible with Bebeau’s (2000) description of an ability to compare different courses of moral action. Audiences can use their own sense of morality and their experience to decide whether the moral behavior of the character is acceptable or not. Hakemulder (2000) interprets his findings in the context of literature as a “moral laboratory”, an environment in which readers can consider the impact of morally conflictive decisions on the self, by safely taking the role of the characters, without the risk of hurting others or being affected by the consequences of the characters’ actions. His perspective is parallel to Oatley's (1994) and Tan's (1996) understanding of stories as “emotion simulation machines”, where people can experience emotions safely. The comparison of movies’ consequences to moral actions and the self imagined in those scenarios might be likely to emerge as a topic for movie discussion.

In the case of the study presented here, Hakemulder’s results would be supported if ambiguous movie clips elicited more thoughts about the self than unambiguous movie clips. However, it is also possible that only viewers high in eudaimonicity connect movie content with the self. Since one of their explicit motivations for movie watching is finding relevant meaning, they might be higher in thoughts about the self than those low in eudaimonicity, regardless of moral ambiguity conditions. They could, for example, focus as much on
emotional as on moral thoughts about the self. Thus, there are two predictions for unprompted thoughts about the self.

**H10:** Morally ambiguous movie clips will be more likely than morally unambiguous movie clips to elicit thoughts about the self in participants. (Main effect of ambiguity on self thoughts)

**H11:** Viewers high in eudaimonicity (eudaimonics, dual) will be more likely than those low in eudaimonicity (hedonics, low) to express thoughts about the self after watching the movie clip.

Despite Hakemulder’s claim, the mass media storytelling environment may not always be experienced as “safe”. Audiences may worry about the effects of a movie on society at large. When audiences, for example, evaluate news media that is perceived to have broad reach, they are more likely to perceive the messages in the media as hostile to their own values (Gunther & Liebhart, 2007). People process messages in mass media venues not only from the perspective of themselves, but with a concern for others that might be reached by the message, its themes and the way those themes are addressed. It is likely that moral uncertainties or ambiguities are perceived as hostile to one’s own values, leading to thoughtfulness about the real world issues addressed in the message, and the beliefs, attitudes and values held about those issues. Thoughts about “real world issues” prompted by movie content are another form of extra-narrative thought. They emerge when a viewer stops thinking of an issue in terms of the movie plot (e.g. “I wonder why Monty decided to become a drug dealer”) and starts thinking of it in terms of an exemplar of the world beyond the narrative (“The movie shows the damage that even small time drug trafficking brings to everyone involved”). As with extra-narrative thoughts in general, participants high in eudaimonicity are more likely than those low in eudaimonicity to ponder the connection of the movie to the real world as part of their response to the viewing experience.
**H12:** Viewers high in eudaimonicity (eudaimonic, dual) will be more likely than viewers low in eudaimonicity (hedonic, low) to express thoughts about the real world in response to the movie clips. *(Main effect of movie enjoyment orientation on real world thoughts)*

A third kind of extra-narrative thoughts are thoughts about authors and others involved in making the movie. Thoughts about authors reflect audience’s awareness of stories as created messages, and they merit especial consideration in this study, because of their implications to our exploration of fictional narratives as communication. The relevance of fiction as communication, and this study’s hypotheses regarding the relationship between movie ambiguity, movie enjoyment orientation and interest in story authors, are examined in the following chapter.
CHAPTER 4

FICTION, AUTHORS AND EXTRA-NARRATIVE THOUGHTS

Processing of fiction authors as a communication phenomenon

Some theories addressing the psychological processing of narrative directly reject the notion of narratives as communication between authors and audiences (Dixon & Bortolussi, 2001). Other theories of narrative enjoyment and appreciation -most notably Transportation Theory (Gerrig, 1993; Green, Garst & Brock, 2004) and Affective Disposition Theory (Zillmann & Bryant, 1975; Zillmann, 1994; 2000) do not address communication between authors and audiences as part of their models. Readers of fiction are conceived not as addressees in acts of communication, but as side participants who observe and are transported into a story world, temporarily losing access to real world facts (Gerrig, 1993). There seems to be a commonly shared notion that fictional stories are not communication or, at least, that their intent is not communicative in the sense of creating a relationship between senders and receivers (Gerrig, 1993; Dixon & Bortolussi, 2001). There is indeed evidence that fictional narratives may be engaging enough to completely transport audiences into the story world and disengage them from evaluations of arguments and their sources at least while they are reading the story (Green, Garst & Brock, 2004; Green & Brock, 2002). Being transported or absorbed into a story hinders the possibility of making inferences about author intentions online, a phenomenon consistent with theories of fiction that claim that authors of narrative are low in salience or even 'invisible' (Gerrig, 1993; Duchan, Bruder & Hewitt, 1995).

A milder version of this claim might be that audiences of fiction are not just “observing bystanders” but rather communicative addressees that understand that the 'purpose' of a fictional story is limited to passing entertainment achieved by absorption into the story. By a pragmatic account of communication, if both the author and the addressee of the story agree on this one purpose as the only goal of the fiction exchange, no extra communicative devices or exchanges are necessary, and the common ground necessary for a successful
exchange is achieved (Clark, 1996), an exchange that is already communicative in nature. It may well be that entertainment through fiction requires, as a rule for the game or element of a cognitive schema, that the author self-efface and the audience pretend there is no author. Authors are, in this framework, ideally invisible manufacturers of artifacts then consumed for enjoyment (see Bordwell, 1985 for examples of how this applies to Classic Hollywood filmmaking). Audiences, in this framework, know that authors are likely to self-efface, and might even react negatively to excessive cues about authors within the story, but in no way can the initial communicative act be denied.

The question still remains on whether communication through fiction can take different and more complex forms. The acknowledgment that author invisibility is a useful assumption when trying to achieve entertainment through fiction, and that it already fulfills a communicative function, should not lead to the conclusion that studying instances of more intense authorial visibility is irrelevant or unnecessary. Narratological traditions have long argued about the relevance of real authors to comprehension and interpretations of narratives. There is a recognition that audiences have some kind of author representation, but whether that representation is understood to be part of a fictional or real world is up to discussion and acknowledged as an empirically unexplored question (Bortolussi & Dixon, 2003). Other more radical traditions within narratology and literary criticism, insist that attempting to determine authorial intentions is a wrong way to deal with a text, and contributes nothing to literary interpretation (Wimsatt & Beardsley, 1954).

The notion that fiction is either not communicative, or communicative only in a very restricted sense, may make sense within narratology and literary criticism, but it has been strongly contested with several arguments within the field of communication. Some have argued that saying that fiction is not communicative assumes a limited understanding of communication, as existing only when there is a possibility of direct dialogue and exchange, that does not correspond with the variety of communicative contexts we know (Gerrig &
Horton, 2001). Gibbs (1999, 2001) claims that the possibility of fiction being communication, particularly statements regarding audience’s interpretations of authorial intentions, should be studied empirically. He provides a list of empirically unanswered questions in this area. Of specific interest to the proposal here, he suggests researching whether there are differences between online (while exposed to the story) and offline (after story exposure) processing of fiction, in the understanding that offline processing may be more likely to produce reflection on author’s intentions; and exploring individual differences that readers may bring to incorporating author reflections when making meaning of texts (Gibbs, 2001).

Indeed, offline processing of fictional content is likely to be the instance in which a number of relevant thoughts occur. When online, audiences are likely to be transported into the story world, which probably limits their affective and cognitive responses to story-world elements: plot, characters and setting. Once offline, audiences may be more likely (and able) to process overall meaning of the story to the self and others, ponder connections of movie topics to real world issues, and reflect on authorial intentions. It is only when offline, too, that viewers have an actual possibility to enact communicative responses to the story, ranging from information seeking about the story to discussion of the story with others, and critical analyses or reviews of the story. In this study, participants were asked to list topics they would be likely to discuss with others after watching the film, and attempt to assess this offline form of thoughtfulness. This study also explores individual differences in the specific form of audiences’ orientations towards movies.

**Audiences’ representations of narrators and authors**

Researchers have recently begun to investigate how readers construct mental representations of the narrators of stories. Although empirical research on the salience and role of pragmatic agents (such as narrators and authors) to readers is very scarce (Graesser, Bowers, Olde & Pomeroy, 1999), there is some evidence that non-character narrators are not completely invisible to fiction readers. Results of these studies show that information that is
marked by the narrator as important facilitates comprehension of the text and correct inferences about story outcomes (Mullins & Dixon, 2007), and that readers do keep track of story world information that is provided solely by an external narrator, (as opposed to by a story world character) even when the story is told in the third person (Graesser, Bowers, Olde & Pomeroy, 1999). This indicates that readers have, at least, a marginal awareness of even third person narrators, and that they are able to retrieve from memory the difference between story information provided by narrators and story information provided by characters. The evidence also shows that readers make some links between the story world and the producer of that story-world. One may speculate that, unless there is a voice-over, the hypothesis of zero memory for a narrator may hold when the story is in film format, where the author/narrator can become completely invisible (the illusion that we are observing events by ourselves), but there is no empirical research about this.

Besides being able to track authors as sources of story information, readers are able to make links between fiction authors and the real-world. Readers can make technical inferences about authors; for example, that they withhold information for suspense purposes, or that they overemphasize bits of information to confuse the reader temporarily by planting red herrings that make the story more challenging and enjoyable (Mullins & Dixon, 2007). Readers also show awareness of some ways authors blur distinctions between story worlds and the real world, for artistic reasons. A survey of fiction consumers shows that they agree with the statement that authors may invent facts that are inconsistent with the real world with the intention of enhancing their plots (Prentice & Gerrig, 1999; emphasis added). Although this result comes from a survey of only 29 undergraduate students, it shows an interesting understanding of how real-world facts, fictional facts, and authorial intentions are connected, and it is one of very few measurements of perceived author intention found in the empirically based literature. According to Prentice, this awareness should have effects on processing of fiction. Readers, inferring the intentions of authors (aesthetic/functional rather than persuasive
or informative), will process information less systematically, since it is not supposed to connect to the real world. In the empirical test of this notion, readers of narratives did process factual stories more systematically than fictional ones, as evidenced by the stories labeled as factual having less of an impact on their real world beliefs than the ones labeled as fictional (Prentice & Bailis, 1995).

This body of research labors under the assumption that just as readers create models of space, time and causality within the story world, they create mental representations of narrators' knowledge, perspective and goals, and that readers “cooperate with the narrator interpreting characters and events in the story world in a way that makes the narrator's stance rational and justified” (Dixon & Bortolussi, 1996, p.405). However, as is the case with all the mental model research, these studies explore solely how narrator cues help readers construct more accurate representations of the story world (Do they help readers solve the mystery in the story? Do they help them know what character knows more or less information?), or choose an appropriate attitude towards the story (tolerate momentary uncertainty, tolerate ambiguity). This research does not address whether or how readers make inferences about the author’s having a purpose or message that transcends the story world and may be connected to the real world. Thus, although this research extends our knowledge of author representations by addressing the effects of narrator cues on online story processing, it still lies within the paradigm of research in cognitive processing of narratives, a paradigm that identifies an accurate representation of the story world as the sole relevant goal of the narrative viewing/reading experience.

From a narratological perspective (Herman & Vervaek, 2001), the research reported above deals with the level of the story, or story world (plot, setting, characters) and/or with the level of the narrative structure (order of presentation of events, focus of attention, characterization). However, they neglect the level of the narration, this is, the level that addresses the fact that the story is told by someone in a certain context, most likely with a
certain purpose. The level of narration explores the ways in which authors appear (or not) to the audience, what are the purposes of the storytelling, what stance they take—if any, towards the story’s events, and what are the limits between the story world and the author’s world. An analysis of the narration level examines, for example, under what conditions a character’s words may be considered to represent opinions of the author (an issue known as the problem of voicing, originally addressed by Russian literary critic Bakhtin in 1929). Finally, the narration level deals with the way in which the authorial purpose in telling a story is—or not—perceived by the audience, or achieved. As I have indicated earlier, this level of storytelling is empirically under-researched.

Author thoughts, moral evaluations and ambiguity

There is some evidence that viewers do have spontaneous thoughts about fiction authors. For example, when asked to list the thoughts they were having while watching an episode of crime drama, although the majority of thoughts were about the story-world itself, viewers still produced a considerable amount of thoughts about actors and producers of the show (Wilson & Busselle, 2004). In a content analysis of people’s informal reviews of films online, utterances about authors made the plurality (43%) of thoughts coded (Barriga & Shapiro, 2007). Many of these comments were technical in nature (i.e. “The director does not know how to use flashbacks properly”), which is consistent with an aesthetic/functional perception of author intent and its relations with the story as artifact. However, there were also a number of thoughts about the relationship between moral content in the movie and moral attributions to the authors. Of all the thoughts regarding moral issues, 31% were about authors (directors and producers), and these mostly consisted of evaluations (positive or negative) about the way in which the authors dealt with morality, many times involving judgments of intentions (i.e. “this film attempts to act as this leftist critique on capital punishment”) and sometimes even contrasting authorial intentions with effectiveness (i.e. “This film cleverly tries, and in my opinion succeeds, to make a statement about the moralities and faults of
corporal punishment”; “If the filmmakers wanted to underscore the danger of a system that puts to death innocent people...then the film...fails to deliver”). Thus, there is at least some evidence that people can think about author intentions and their accomplishment, and that such thoughts are not particularly infrequent when the domain of the discussion is moral and when audiences are thinking about a story offline.

One would expect such offline thoughts about a story to appear especially when the way in which the story is told is unexpected, since the reader or viewer needs to elaborate an inference as to why the author would not be clearer (Clarke, 1996, in line with the Gricean principle of cooperation), or, in the specific case of narrative, why the author would break the traditional narrative schema. Ambiguity, especially unresolved one, is disliked by audiences (Comisky & Bryant, 1982) and it may make audiences more likely to engage in thoughts about authors, whether it is to criticize their craftsmanship, or to question their intentions. Moral ambiguity in stories can be enjoyable but requires more cognitive engagement from audiences, and it is possible that this engagement leads to more thoughts about authors, especially if the story –like a film, is expected to reach a large audience, a factor that, as we have seen, sensitizes people to hostile viewpoints and concern for the real world effects of fiction. Thus, our hypothesis

**H13**: Film clips with morally ambiguous characters will be more likely than those with morally unambiguous characters to elicit thoughts about the authors.

**H14**: Participants who watch morally ambiguous movie clips will be more likely than those who watch morally unambiguous clips to want to seek author related information.

**Author thoughts and enjoyment orientations**

Affective and cognitive processing occur not only in response to the story world’s plot and characters, but also in response to the formal features of the narrative. (Oatley, 2004), proposes that some emotions associated with reading stories are unrelated to the plot or
characters, and should be considered as “external” to the text, such as the pleasure produced by reading, curiosity, and surprise at unfamiliar elements\(^1\). Such emotional responses to formal features of a story have been labeled “artifact emotions”, both in the case of written text (Kneepens & Zwaan, 1994) and film (Tan, 1994, 1996), and they include interest, wonder, and enjoyment at the completion of formal patterns. Although the authors do not discuss them in terms of cognition and affect, it seems clear that these gratifying affective responses arise from cognitive engagement with the artifact (i.e., curiosity, puzzle solving, and completion of patterns). Aesthetic feelings have been found to appear specifically in response to formal features of text (Miall & Kuiken, 1994), and, in those cases, reading time is slowed (another sign of cognitive engagement) and readers report higher levels of uncertainty about story content. Readers tend to stop the activity of merely “decoding text” when they come across a particularly well crafted or stylish passage, and this stopping moment leads then to reflection, introspection and interpretation (da Costa Fialho, 2007).

Eudaimonic motivation may have a key role in producing appreciation of fiction as an artifact, since artifact emotions and cognitions are highly likely to require audiences to continue processing a narrative after the viewing/reading experience is over. Artifact emotions have been proposed and shown to prompt complex cognitive responses, such as reflection on and re-structuration of the schemata for stories. (Miall, 1989), finds that, for literary narratives, readers use affective and emotional responses to decide which elements in the text are important to interpretation and which are not, but they do this only in a second reading of the story. Readers attributed importance to sentences that appeared as superfluous background or ornate artsy detail at first, because the overall affective mood of the story indicated that those sentences had symbolic or foreboding value. However, this shift only occurred in a

\(^1\) A reader, for example, could be surprised to find explanatory footnotes throughout a fictional novel of the fantasy genre, such as “Jonathan Strange & Mr. Norrell”, by Susanna Clarke, or many of Jorge Luis Borges’s short stories.
second reading of the story. In his study he used a literary text (a story by Virginia Wolff) that presented levels of uncertainty and vagueness that are not typical of the traditional story schema, such as multiple, indeterminate, and even conflictive goals for one character. When the schematic expectations that readers have about stories are thus violated, artifact emotions, such as curiosity and surprise lead the reader to engage in re-structuration of the story schema, which includes incorporating new information about the genre of the story, and the possible ways of engaging with it and enjoying it. This task, that involves arousal and relief, creates its own kind of pleasure for the reader, even while producing longer reading times and temporary uncertainty. To the extent that audiences are engaged not only with the story world, but also with elements of the narrative structures, they can be considered to be engaging in thoughtful extra-narrative processing, this is, the kind of processing necessary to engage in thoughts or representations of story authors. In this study, thoughts about story structure and genre are considered a form of authorial thought as well, because they imply awareness of the story as a crafted message.

In order to engage in processing about a story’s author, audience members necessarily have to go beyond the limits of the story world, and present what Zwaan (1992) calls a “literary attitude” -a readiness to construct the goals of the narrator and the point of the text when these are not self evident. A literary attitude requires some cognitive effort that goes beyond the usual processing necessary to comprehend a text while reading, and it is reasonable to expect that audiences oriented to thoughtful eudaimonic appreciation be more likely to engage in it than those oriented to hedonic gratification.

Hedonically oriented audiences are unlikely to engage in thoughts about authors because, if they were to occur online, they would bring them out of a state of transportation, which is key to hedonic enjoyment; and, on the other hand, hedonically oriented audiences are not motivated to offline processing of movies. According to (Oatley, 2004), transportation is at one pole of the spectrum of roles for stories, offering escape, a pleasurable use of time, and
no ambiguities in story structure—the other pole being a transformative, reflective function. Transportation is characterized by complete submersion into the story world, to the extent that audiences forget the world around them (Green et al., 2004), become less critical and process information in the story less systematically (Green & Brock, 2000, 2002) and have no access to the voice of authors of the story (Gerrig, 1993). Indeed, a self-effacing author is often listed as one of the characteristics of traditional and enjoyable fictional story-telling (Bordwell, 1985; Richard Gerrig, 1993; Tan, 1996), serving to maintain the reader within the realm of the story world. For example, because readers who are fully transported into the story are less aware of authorial intentions, they process messages at face value (M. D. Slater, 2002; M. D. Slater & Rouner, 2003) and are more persuadable because they feel their free will less threatened by a potentially manipulative sender (Burgoon, Alvaro, Grandpre, & Voulodakis, 2002; Worchel & Brehm, 1970). Even for some controversial ideologically and morally charged issues, narrative drama can minimize processing of the story as intentionally persuasive discourse (M. Slater, Rouner, & Long, 2006), although this only held true for death penalty as an issue, not for gay marriage. It would seem that unless an issue is really salient ideologically, transported audiences will fail to engage in a critical approach to authorial intention.

Engaging in thoughts about a story’s author requires that the audience member either disengage from complete absorption in the story world while processing the story, and engage in thoughts about the author (online processing), or be transported into the story world while viewing, but engage in thoughts about the author after he/she is done processing the story (offline processing). As we have seen, the first option is difficult, and it is more likely that thoughtful processing of authors occurs offline, if ever. This prediction would also be consistent with results showing that foregrounding of style and authorship are likely to make people engage in interpretation and reflection on second reading of a story (Miall, 1989)—this is, once it is clear to the reader that clarifications or disambiguations are not provided at the
story's closure. For this reason, in this study measurement of author thoughts will be focused on offline processing.

In both cases, however, audiences oriented eudaimonically are more likely than audiences oriented hedonically to engage in any kind of thoughtful process, including thoughts about authorial intentions and authorial technical accomplishments or failings (judgments of the success of assumed technical intentions). Hedonically oriented audiences are not likely to engage in effortful thinking that distracts from movie enjoyment, or in thoughts that require them to remember and/or revisit the movie. Thus we predict a main effect of movie enjoyment orientation on author thoughts, such that participants high in eudaemonic orientation will be more likely to express unprompted author thoughts than those high in hedonic orientations. In this case, the hypothesis only refers to the single orientation groups (Eudaimonic and Hedonic). There is no previous research that can support a hypothesis for the way dual oriented participants may behave: their eudaimonic motivation might lead to more author thoughts, but their hedonic motivation might discourage them from abandoning the pleasurable effect of transportation.

**H15:** Exclusively eudaimonically oriented viewers (Eudaimonic) will be more likely than exclusively hedonically oriented viewers (Hedonic) to report thoughts about film authors. *(Main effect of movie enjoyment orientation on author thoughts)*

It is also likely that the differences between eudaemonic and hedonic responses to fiction appear more clearly when the movie clip is ambiguous, as eudaimonics may be more motivated to respond to the cognitive challenge offered by moral uncertainty whereas hedonics may be more likely to respond reluctantly to the challenge.

**H16:** The difference between eudaimonically oriented viewers (Eudaimonic) and hedonically oriented viewers (Hedonic) in thoughts about authors will be larger when movies are ambiguous than when they are unambiguous. *(Interaction effect of moral ambiguity and movie enjoyment orientation on author thoughts)*
These expected differences in spontaneous expression of author thoughts are likely to be even greater if participants are directly asked whether they are interested or willing to seek further information about authors regarding their intent in producing the movie. Again, we would expect high eudaimonic to be more willing to seek and explore author information than high hedonic, and we would expect this willingness to engage with author information to be the highest when the movie is ambiguous. Thus, we predict the same pattern.

**H17: Exclusively eudaimonically oriented viewers (Eudaimonic) will be more willing than exclusively hedonically oriented viewers (Hedonic) to want to seek author related information. (Main effect of movie enjoyment orientation on willingness to explore author information).**

**H18: The difference between eudaimonically oriented viewers (Eudaimonic) and hedonically oriented viewers (Hedonic) in willingness to explore author information will be larger when movies are ambiguous than when they are unambiguous. (Interaction effect of moral ambiguity and movie enjoyment orientation on willingness to explore author information)**
CHAPTER 5

METHOD

Design

The study is structured as a multiple message (4 movie clips) between-subjects quasi-experimental design, with one manipulated independent variable (Morality: Ambiguous/Unambiguous) and one measured independent variable (Movie Enjoyment Orientation: Dual/Hedonic/Eudaimonic/Low). Tolerance for ambiguity is used as a covariate in final analyses.

Stimuli Material

The fictional narratives were presented as four 6 to 7 minute long video clips that summarize full length feature films. The four movies used were House of Sand and Fog (HSF), 21 grams (TOG), 25th Hour (TFH) and We don’t live here anymore (WDL). Each of the four selected movies focused on a male character’s actions, whose behavior could be edited into the two experimental versions. In the unambiguous version, the clip was constructed so that the target character was consistently bad – he was only shown engaging in morally reprehensible actions. In the ambiguous version, the target character is portrayed doing exactly the same bad things but he is also shown engaging in morally desirable behaviors. This manipulation created ambiguous versions that were longer than the unambiguous versions. This problem was ameliorated by introducing some neutral content in the unambiguous versions – for example, a scene where a character rides away in a bike would have a longer section of him riding into the distance, or a scene that takes place in a forest would have longer initial pan of the forest setting without any actions taking place. These alterations were minimal in terms of each scene in the clip, and are not likely to have made one version significantly slower paced, or more boring than the other.

Each film addressed different kinds of immoral behaviors, including violence towards women, emotional abuse, greed, violent behavior, drug dealing, encouragement of sex with
minors, racism, homicide, breaking of medical privacy laws, infidelity. Positive moral behaviors in the ambiguous version included caring and protection of family members, forgiveness, restraint in the use of violence, charity towards strangers, helping adversaries, recognizing flaws, sincere apologizing, and good parenting.

**Participants**

Participants were 154 undergraduates at a large northeastern university who agreed to receive credit in their classes in exchange for their participation in the study. Students were recruited for the study using SUSAN, an online automated system that offers a variety of opportunities for students to participate in campus social science research. The announcement of the study in the SUSAN website indicated that it was a study in which people would have to answer a brief questionnaire about their movie preferences online, and attend a lab session at a later time, where they would watch brief movies and answer questions about them.

Participants included 122 women and 32 men. Ages ranged from 18 to 25, with 20 years being the average age. Since sex of the participant was not a variable of interest in any of the study’s hypotheses, no special effort was made to obtain a more balanced gender distribution.

**Procedure**

The study took place in two separate sessions. In the first session, which took place online, participants were directed to an online survey website (Checkbox, Cornell University’s secure preferred online survey system at the time) in which they reviewed and accepted a consent form, and then responded to a 12 item questionnaire regarding their movie preferences. Participants were then instructed to sign up for a lab session to take place at least two days after their participation in the online survey. Ideally, students would have participated in the second session two to three days after responding the online survey. In reality, because of student scheduling and rescheduling issues, time between the online survey and the lab session varied more broadly, but most participants (82%) completed the lab
session between two to four days after taking the online survey. 8% of the students attended the lab session the day after completing the survey, and the rest of the participants took more than four days between the survey and the lab session. No student was allowed to participate in the lab session the same day as they had completed the survey. Since the goal of the delay between both was only to discourage participants from evaluating movies in agreement with their memory of survey preferences, longer intervals of delay were not considered particularly problematic.

For the second session, participants were randomly assigned to watch movies in either the ambiguous versions (characters did good and bad actions) or the unambiguous versions (characters did only bad things). Participants were also randomly assigned to one of four orders of presentation of the films (a Latin square was used to create four orders such that no movie was preceded by the same other movie in any order). Participants were then directed to a computer station. The computer presented participants with all of the study’s instructions, video stimuli and questionnaires, through MediaLab software interface (Empirisoft, 2008). After reading the instructions, participants proceeded to watch the first of four 6-8 minute long movie clips. After each movie clip, participants were asked to evaluate their experience with the clip in several ways. First, they listed thoughts regarding issues they would discuss with friends if they were to talk about the movie they just saw. Next, participants evaluated the movie they had just seen using Likert scale items and Semantic Differential items. After completing these questions, participants proceeded to the next movie clip and went through the process again. This sequence was repeated until participants had watched all four movie clips and responded to four sets of Thought Listing, Likert Scale items and Semantic Differential Items.

After watching all four target clips, participants went on to the next stage in the study. At this stage, participants answered, for each movie clip they had seen, a series of questions intended to measure their interest in knowing more about the movie’s authors, and their moral
and technical evaluations of the authors of each clip. Throughout this stage, participants were shown a head shot of the target character as a reminder of each clip.

In the third and final stage of the study, participants responded to a series of items unrelated to the movies they had seen. These items corresponded to two scales: an Abstract Thinking scale, to test for differences in abstract thinking that the movies might have prompted, and a Tolerance for Ambiguity scale (Budner, 1960), to measure individual differences in tolerance to ambiguity that might have an effect on participants’ responses to the moral ambiguity in the clip. After finishing this stage, participants responded a few last demographic questions (sex, age), and read a short debriefing statement summarizing the goals of the study. They were then thanked for their participation, offered the opportunity to ask further questions about the study, and let go.

**Measurement of Hedonic and Eudaimonic Orientations**

The questionnaire that participants answered online was a 12 item scale (Oliver & Raney, 2008) used to assess participants’ orientations towards movie enjoyment. The items are in the form of statements that participants rate in a 7 point Likert scale ranging from 1 = Strongly Disagree, to 7 = Strongly Agree. Six of the items measure hedonic motivations (“It is important to me that I have fun when watching a movie”; “Movies that make me laugh are among my favorite”; “I find that even simple movies can be enjoyable as long as they are fun”; “I like movies that may be considered silly or shallow if they can make me laugh and have a good time”; “For me, the best movies are the ones that are entertaining”; “My favorite kind of movies are happy and positive”). The other six statements detect eudaimonic motivations (“I like movies that challenge my way of seeing the world”; “I like movies that make me more reflective”, “I like movies that focus on meaningful human conditions”; “I am very moved by movies that are about people’s search for greater understanding in life”; “My favorite kinds of movies are ones that make me think”; “I like movies that have profound meaning or messages to convey”).
A principal components analysis of the 12 items using a VARIMAX rotation initially identified 3 components with Eigenvalues above 1. The first component (Eigenvalue = 3.94) corresponded exactly to the 6 eudaimonic orientation items taken from Oliver & Raney (2008), with item loadings ranging from .56 to .82. This component accounted for 32% of variance in the scores. The second component (Eigenvalue = 2.14) grouped two items of the expected hedonic set (loads of .68 and .77), explaining 17.8% of score variance, and the third component (Eigenvalue = 1.15) grouped the remaining four expected hedonic items (loadings range from .51 to .78), explaining 9.8% of the variance. An examination of the items in components 2 and 3 did not provide an easy interpretation for the distinct components; in fact, some of the items had similar loadings in both components. The six expected items in the hedonic group were finally grouped as one single scale for a number of reasons. First, it corresponded to theoretical expectations whereas there was no good distinct interpretation of components 2 and 3. Second, the Eigenvalue for component 3 (1.15) indicates that this third factor adds little variance over what would be explained by single items. Third, an examination of the scree plot, an alternative criterion that can be used to determine the appropriate number of factors to accept, indicates a leveling beginning at the point of the third component, indicating that a two component solution is appropriate.

As confirmation, a principal component analysis of the 12 items was run forcing two factors. The solution indicates that the first component comprises the items expected to measure Eudaimonic Orientation, with loadings ranging from .66 to .82, whereas the second component comprises the items expected to measure Hedonic Orientation, with loadings ranging from .48 to .72. Total variance explained by these two components is 50.7%.

The mean of each group of 6 items was used to produce two continuous scales measuring ‘Eudaimonic Orientation’ and ‘Hedonic Orientation’. Reliability measures for both scales are good (Cronbach’s α .83 for the Eudaimonic scale and .75 for the Hedonic scale). The median of these scales (Eudaimonic = 5.42, Hedonic = 5.50) was used to create another
pair of measures, dividing the participants in “High” and “Low” Eudaimonic and Hedonic orientations. Finally, a measure of overall enjoyment orientations combined these two groups into four categories of movie enjoyment orientations: dual orientation (high hedonic, high eudaimonic: 31 participants); eudaimonic orientation (high eudaimonic, low hedonic: 46 participants); hedonic orientation (high hedonic, low eudaimonic: 45 participants) and low (low hedonic, low eudaimonic: 32 participants). The distribution of participants in the groups is consistent with the idea that hedonic and eudaimonic motivations are distinct: the two largest groups were high in only one of the measures. However, more than 40 percent of the participants fell into the dual or low groups, which may indicate that the presence of combined patterns of motivations towards movie enjoyment are common. This four-category variable for movie enjoyment orientation is the one used in the hypotheses testing models. Using the categorized version of the continuous variables allowed a more direct way to enter and interpret of the variables in the repeated measures ANOVA model required by the design. Use of the two scales (and their interaction term) as covariates in the model could have increased statistical power, but it also would have made interpretation of the results more cumbersome. When statistical tests were run using the continuous variables (and their interaction term) as covariates in the model, the pattern of results regarding the variables of interest was essentially the same.

**Covariate**

Overall tolerance for ambiguity was measured with a 16 item scale (Budner, 1962), with the items operationalizing tolerance to ambiguity in three ways: tolerance to novel information, complexity and insolubility. Although the literature provides a number of scales that measure intolerance to ambiguity, the Budner scale is the most used in social science research to date (Grenier, Barrette, & Ladouceur, 2005), even though its internal reliability tends to be lower than desirable, as is the case in this instance as well. Cronbach’s $\alpha$ was .62, a measure of reliability that could not be increased by eliminating items from the scale. This
scale was used as a covariate in hypotheses testing, to control for the effect of individual differences in tolerance to ambiguity on enjoyment and evaluation of the film clips.

**Thought List Coding**

The first question that participants faced after viewing each movie clip was “Please think for a moment about the clip you just saw. Imagine a situation where you are talking to some friends about this movie. What kinds of things do you think you would talk about?” Participants were offered the possibility to write down five separate thoughts per movie, but were not forced to fill all five slots. Thus, the maximum number of thoughts that could be obtained per movie was 770. The actual number of thoughts produced was 617 for *House of Sand and Fog*, 593 for *25th Hour*, 617 for *21 Grams* and 588 for *We Don’t Live Here Anymore*. Total number of thoughts recorded was 2415.

The thought list provides a measure of issues that participants spontaneously (undirected by questions) considered worthy of discussion. These thoughts were coded by the experimenter and an assistant coder unacquainted with the study’s hypotheses. Thoughts were coded into categories of interest to the study’s hypotheses, as listed below, and for some categories for which there were no hypotheses, but that could provide relevant information for post-hoc results interpretation. A randomly selected subset of 520 thoughts (21.5% of all thoughts) was coded by both the experimenter and the assistant coder in order to obtain measures of inter-coder agreement. The variables and categories that thoughts were coded for and their respective inter-coder agreement statistics are reported below.

*Morality.* Each thought was coded for presence or absence of moral themes. To be coded as moral, a thought had to refer explicitly to at least one of a set of morally charged words (ethical/unethical, justice/injustice, fair/unfair, right/wrong, values, care, compassion, morality/immorality, good/bad, should/shouldn’t). The coding criterion for moral presence was strict, and it was intended to bias the coding of moral presence towards thoughts that were explicit in their reference to morality, guaranteeing that the participant was considering the
issue from a moral perspective. Thus, some thoughts that at first sight seem to clearly imply a moral dimension (i.e. “racism”, “violence against women”) are not coded as moral, unless accompanied by an explicit moral indicator as listed above. A participant, when saying “the movie was about racism” may be only descriptive, and may not be engaging in a moral perspective. Table 1 below provides the criteria used in the coding of this variable, with characteristic examples taken from the data set. Inter-coder percent agreement on this variable using Krippendorff’s α, a conservative measure for inter-coder agreement which accounts for agreement by chance, was .78. Typical recommendations for alpha levels indicate that levels above .67 can be used to draw tentative conclusions, and those above .80 can be relied on (Krippendorff, 2004). Morality and emotion (see below) can be difficult variables to code, and the reliability levels achieved are not completely reliable, but they are good enough to use for tentative conclusions.

*Emotion thoughts*. Thoughts were coded for presence or absence of reference to emotions. References to emotional states of the viewer, the characters or others were coded as thoughts referring to emotion (see Table 2 below for coding criteria and examples). Inter-coder agreement for presence of emotion was Krippendorff’s α = .70.

*Valence*. Valence of thoughts was coded as positive, negative or neutral. It is important to clarify that valence does not correspond exactly to emotional valence. For example, a thought such as “the scene with the cops was badly written” was coded as negative, as it clearly implies a negative evaluation of the movie. It does not, however, convey any emotion. This variable gives a sense of positive or negative reactions across a spectrum of dimensions, not only an affective dimension. Krippendorff’s α for this variable was .79.
Table 1. *Coding criteria for moral/non-moral thoughts*

<table>
<thead>
<tr>
<th>Categories</th>
<th>Criteria</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moral</td>
<td>Explicit reference to morality. Includes explicit reference to any of</td>
<td>“That was so unfair”</td>
</tr>
<tr>
<td></td>
<td>the following concepts:</td>
<td>“He should have sold the house back instead of being so greedy”</td>
</tr>
<tr>
<td></td>
<td>Right/wrong</td>
<td>“The movie is about our changing values as a culture”</td>
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<tr>
<td></td>
<td>Ethical/Unethical</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Justice/Injustice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fair/Unfair</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Values</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Compassion/Care</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Morality/Immorality</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Good/Bad actions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Good/Bad people</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“Should do/Should have done”</td>
<td></td>
</tr>
<tr>
<td>Non-moral</td>
<td>Statements not including the criteria above.</td>
<td>“I liked this movie even though it made me cry”</td>
</tr>
<tr>
<td></td>
<td>Specifically, issues that may have moral implications or connotations</td>
<td>“The movie is about racism in our society”</td>
</tr>
<tr>
<td></td>
<td>(i.e. Racism, domestic violence, infidelity, stereotypes), but are not</td>
<td>“X is such a good actor”</td>
</tr>
<tr>
<td></td>
<td>explicit in their moral frame.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statements that use “good/bad” or any other of the above terms in a</td>
<td>“She was using the wrong dress for her body type”</td>
</tr>
<tr>
<td></td>
<td>clearly non moral way.</td>
<td></td>
</tr>
</tbody>
</table>
Table 2. Coding criteria for emotion thoughts

<table>
<thead>
<tr>
<th>Variable Categories</th>
<th>Criteria</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotion</td>
<td>Consideration of character’s emotions</td>
<td>“She must have been really angry at losing her house like that.”</td>
</tr>
<tr>
<td></td>
<td>Expression of emotional reactions to the story</td>
<td>“I was sad when I saw those poor children.”</td>
</tr>
<tr>
<td></td>
<td>-Expressions of empathy, sympathy, understanding.</td>
<td>“I can see how it would feel to meet the love of your life after you are married.”</td>
</tr>
<tr>
<td></td>
<td>-Comments on the emotional impact of the film on the viewer, level of emotional involvement achieved, emotional interjections.</td>
<td>“Oh, no!”</td>
</tr>
<tr>
<td></td>
<td>“Depressing”</td>
<td></td>
</tr>
<tr>
<td>Non-emotion</td>
<td>Any comment that does not express emotion</td>
<td>“That was slow and boring”</td>
</tr>
<tr>
<td></td>
<td>Comments regarding boredom or entertainment levels.</td>
<td>“I really liked this movie clip, I would recommend it to my friends”</td>
</tr>
<tr>
<td></td>
<td>Comments evaluating the quality of the movie only.</td>
<td></td>
</tr>
</tbody>
</table>
Table 3. *Coding criteria for thought valence*

<table>
<thead>
<tr>
<th>Variable Categories</th>
<th>Criteria</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>An explicit or implicit positive evaluation, opinion, judgment or emotion.</td>
<td>“This movie was great”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I liked the way in which he portrayed the female characters”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I was happy when the character was nice to the dog”</td>
</tr>
<tr>
<td>Negative</td>
<td>An explicit or implicit negative evaluation, opinion, judgment or emotion.</td>
<td>“I don’t think the film captures the real dynamics of drug dealing”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“It was boring”.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“So sad”</td>
</tr>
<tr>
<td>Neutral</td>
<td>A neutrally valenced statement.</td>
<td>“The colonel wanted to sell the house for four times the value he bought it for.”</td>
</tr>
<tr>
<td></td>
<td>A question or statement in which a final judgment of valence is undetermined.</td>
<td>&quot;I couldn’t decide if I loved or hated the character”</td>
</tr>
</tbody>
</table>

*Narrative and Extra-narrative thoughts.* Thoughts were coded for reference to the story plot and characters (narrative thoughts) vs. thoughts for extra-narrative dimensions. There were four categories of extra-narrative thoughts: thoughts about the movie actors (*actor thoughts*), thoughts about the participant themselves and people they might discuss the movie with (*self thoughts*) thoughts about movie topics and themes but without reference to the movie plot or characters (*world thoughts*), and thoughts about movie authors, directors and writers (*author thoughts*). Krippendorff’s $\alpha$ for this variable was .98.
Table 4. Coding Criteria for Narrative/Extra-narrative thoughts

<table>
<thead>
<tr>
<th>Variable Categories</th>
<th>Criteria</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narrative Narrative</td>
<td>Refers to movie’s plot, setting, characters.</td>
<td>“I wondered if he was going to choose the woman or stay with the children.”</td>
</tr>
<tr>
<td>Extra-narrative Self</td>
<td>Refers to the commenter him/herself, or others associated to him/her in the situation of the movie, or regarding movie themes.</td>
<td>“We would discuss whether we would do the same in that situation”</td>
</tr>
<tr>
<td>Actors</td>
<td>Refers to movie’s actors.</td>
<td>“Edward Norton is awesome.”</td>
</tr>
<tr>
<td>World</td>
<td>Refers to movie’s themes, taking them beyond the limits of the movie plot, considering them as “real world” issues.</td>
<td>“Racism and Prejudice”</td>
</tr>
<tr>
<td>Author</td>
<td>Explicit or implicit references to the writers, directors, creators of the movie. Technical descriptions or evaluations of the movie’s features, including its genre.</td>
<td>“The scene with the DEA cops was badly written.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I am not sure what was the point of this movie.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“It’s just another typical melodrama.”</td>
</tr>
</tbody>
</table>

**Interrogative thoughts.** Thoughts were also coded for presence or absence of interrogative intent. Thoughts that explicitly asked questions or expressed uncertainty or curiosity were coded as manifesting an interrogative intent. Intercoder agreement for this variable was Krippendorff’s α = .92.
Table 5. Coding criteria for interrogative thoughts

<table>
<thead>
<tr>
<th>Variable Categories</th>
<th>Criteria</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interrogative</td>
<td>Questions, presence of question mark</td>
<td>“Why would he not give back the house?”</td>
</tr>
<tr>
<td></td>
<td>Expression of uncertainty, curiosity, indecisiveness about a character or issue.</td>
<td>“I did not understand why she would commit suicide over that problem”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I am not sure you are allowed to check for the origin of a transplant organ”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I wonder what happened to the kids”</td>
</tr>
<tr>
<td>Non-interrogative</td>
<td>Statements, descriptions, evaluations, judgments.</td>
<td>“That was slow and boring”</td>
</tr>
<tr>
<td></td>
<td>Single words</td>
<td>“Sadness”</td>
</tr>
<tr>
<td></td>
<td>Expressions of emotion, shock.</td>
<td>“Oh no!”</td>
</tr>
</tbody>
</table>

Dependent Measures

Movie Clip Evaluations. Participants evaluated the movie clips by stating their level of agreement with five statements on a 6-point scale (1= Strongly Disagree, 6 = Strongly Agree). These statements were created avoiding phrasing that would correspond to clearly hedonic or eudaimonic orientations, and they act as a measure of general preference or liking for the clips. The items are: I liked this movie clip; This is the kind of movie I tend to prefer over others; This is the kind of movie I often watch; I
would like to watch more of this movie; If this movie were based on a book, I would like to read it.

These statements were presented to the participants after the viewing of each movie clip. In order to determine if the five statements constitute a reliable scale based on a single factor, four separate principal component analyses and four separate reliability analyses were run (one per movie). Results of these analyses showed a similar pattern in all four cases. The Principal Component Analyses using Varimax rotations resulted in one component solutions for all four cases. Variance explained by this one component was, by movie: HSF = 76.5%; TOG = 75.8%; TFH = 70.7%; WDL = 73.5%. Reliability was high for the 5 item scales across all movies (Cronbach’s α HSF = .92; TOG = .92; TFH = .89; WDL = .91).

The mean of the 5 items was used to create a ‘Movie Evaluation’ scale for each of the movie clips, in which high values correspond to positive movie evaluations. This is the measure used in the analyses reported below.

Character Evaluations. Participants evaluated characters in several ways. A set of thirteen 6-point Likert scale items, some of them adapted from Raney (2002) and others created ad hoc for this study, asked participants to evaluate the characters. This set of questions intended to address several forms of evaluation: a cognitive evaluation, related to the interest that the character elicits, an affective evaluation, measuring whether the character would be likeable in “real life”, and a moral evaluation, intended to be used as a manipulation check.

The 4 items intended to measure cognitive liking were I find the main character fascinating; I am interested in the main character; I would like to know more about the main character; The main character is engaging to watch. Internal reliability for this scale was consistently high across the four movies (Cronbach’s α
The mean of the four items was used to create a “cognitive liking” scale for each of the movies.

The 3 items intended to measure affective evaluations of the character were *I would enjoy talking to the main character; I would like to know someone like the main character; I would like to be friends with the main character*”. Again, reliability for these scales was high across all movies (Cronbach’s α HSF = .88, TOG = .85, TFH = .82, WDL = .84). The mean of the three items was used to create an “affective liking” scale for each of the four movies.

The 4 items measuring moral evaluations were: *I think the character is a good person; I think the character is immoral* (reverse coded); *I think the character is likely to do the right thing in the future; I would trust the character*. Internal reliability for this scale was overall lower than those in the other two scales, but still acceptable (Cronbach’s α HSF = .89, TOG = .82, TFH = .76, WDL = .75). The mean of the four items was used to create a “moral evaluation” scale for each of the movies, intended to check the morality manipulation.

Two extra items were included in the character evaluation set. One of them “*I like the main character*” acts as an overall measure of liking. Another item “*I think the main character is complex*” acts as an additional manipulation check for ambiguity of the character.

**Author Evaluations.** A different set of Likert scale items was presented to participants after they had watched all movie clips. This set of 13 items measured evaluations of the movie’s authors rather than the characters.

A set of 4 items measured whether participants thought the film authors were technically good at their craft (*I think the writer of this film is good at his/her job; I think the director of this film is good at his/her job; I think the actors in this film are good at their job; I think this film is technically good*). Internal reliability for this scale
was high across all four movies (Cronbach’s α HSF = .92, TOG = .88, TFH = .86, WDL = .90). The mean of the four items was used to create a measure of “technical evaluation” of movie authors.

A set of 4 items measured whether participants were interested in engaging or seeking information about the movie authors (I would like to read an article about the writers’ and director’s intentions in making this movie; I would like to read an article about the actor’s experience while shooting this film; I would like to read an interview to the main actor focusing on this film; I would like to read an interview of the film’s director). Internal reliability for this scale was high across all four movies (Cronbach’s α HSF = .85, TOG = .89, TFH = .83, WDL = .88). The mean of the four items was used to create a measure of participants’ “author engagement”.

CHAPTER 6
RESULTS

Manipulation Checks

Because of the repeated measures design, checking the manipulation for moral ambiguity was challenging. Asking participants directly whether they thought the characters behaved in morally ambiguous ways would have very clearly directed them to think in terms of the manipulation, at a time when they still had to be exposed to more stimulus messages. It was decided not to ask directly about moral ambiguity, but to inquire about the morality of the character in the context of other character evaluation items (presented in random order), and, in addition, to ask whether the character was perceived as “complex”. Because ambiguity was manipulated by making one set of characters engage only in bad actions, and the other in both good and bad actions, we would expect the moral evaluations for the ambiguous versions to be higher than the ones in the unambiguous versions. This is evidence that the good actions presented only in the ambiguous clips were perceived. Additionally, characters that do both good and bad things are expected to be perceived as more “complex” than characters that do only bad things. Thus, the manipulation check for complexity is a second indication that a difference in moral character was perceived. Together, both manipulation checks give a sense of whether participants perceived the moral ambiguity distinction.

A scale of moral evaluation of characters was used to check whether participants had perceived the differences in the morality of characters presented in the “ambiguous” and “unambiguous” versions of the clip. The moral evaluation scores in those clips should be significantly lower than those in the ambiguous clips, in which characters do both good and bad things.

For the character morality evaluation scale, a 4 (movie: HSF, TOG, TFH, WDL) by 2 (ambiguity: ambiguous, unambiguous) mixed analysis of variance was run using the repeated
measures procedure of the SPSS General Linear Model. Tolerance to ambiguity was included as a covariate in the model. The “movie” variable was within subjects. Ambiguity was a between subjects variable.

As expected, the results indicate a significant main effect of ambiguity $F(1,152) = 26.11; p < .001$, partial $\eta^2 = .15$, such that characters in the ambiguous movie versions were rated as morally better ($M = 3.94, SE = .07$) than characters in the unambiguous versions ($M = 3.43, SE = .07$). Overall, the manipulation check worked as expected.

There are some indications that the manipulation did not work consistently across all four movie clips, or across the different movie orientation groups. Pairwise comparisons of a significant movie by ambiguity interaction $F(3, 150) = 6.60; p < .001$, partial $\eta^2 = .12$ indicate that in one of the movies the character’s moral standing was not perceived as significantly different (TFH, $p = .10$), whereas in the other three, he was (HSF, $p < .001$; TOG $p < .01$; WDL, $p < .05$). The manipulation of morality may not have worked for that specific movie.

As a second form of character evaluation, participants rated each character through a series of semantic differential items (Osgood, Suci, & Tannenbaum, 1957), in which each character was rated along seven point scales using polar words as anchors (i.e. active/passive; warm/cold). 4 of these items measured a moral dimension (good/bad; helpful/unhelpful; honest/dishonest; kind/unkind). Reliabilities for these moral semantic differential scales, per movie, were high (Cronbach’s $\alpha$ HSF = .86; TOG = .88; TFH = .80; WDL = .83), and the mean of the four items was used to create a moral semantic differential scale for each movie. Because the negative moral words were located at the high point of the scale, lower values in this scale indicate higher moral ratings.

A 4 (movie: HSF, TOG, TFH, WDL) by 2 (ambiguity: ambiguous, unambiguous) mixed analysis of variance was run using the repeated measures procedure of the SPSS General Linear Model and the semantic differential moral scale as a dependent variable. Results for this second manipulation check show a significant main effect of ambiguity on
moral ratings $F(1, 152) = 31.60; p < .001$, partial $\eta^2 = .17$. Characters’ morality was rated significantly higher in the ambiguous (M = 3.9, SE = .07) than the unambiguous (M = 4.4, SE = .07) movie versions. There were no other main or interaction significant effects. According to this measure, the morality manipulation was effective.

Finally, a 4 (movie: HSF, TOG, TFH, WDL) by 2 (ambiguity: ambiguous, unambiguous) mixed analysis of variance was run using the repeated measures procedure of the SPSS General Linear Model and a single item evaluation of character complexity as the dependent measure. Results for the complexity manipulation check indicates a significant main effect of ambiguity on perceived complexity of the character $(1, 152) = 4.13; p < .05$, partial $\eta^2 = .03$. Characters were rated as significantly more complex in the ambiguous (M = 5.0, SE = .08) than the unambiguous (M = 4.8, SE = .08) movie versions. According to this measure, the moral ambiguity manipulation was effective in creating a perception of character complexity.

Taken together, the significant main effects of the ambiguity manipulation on character morality and character complexity allow us to confirm that the manipulation was overall effective in creating a perceived difference in both morality and complexity between the characters in the different movie versions. However, the manipulation of morality seems to have failed for at least one movie (TFH) according to the measure of perceived moral character. It was decided to eliminate this movie from the analyses, and we tested the study hypotheses only for the three movies in which the manipulation was unquestionably successful.

**Hypotheses Testing for Enjoyment and Character Liking**

For all variables measured by Likert type item scales, the same mode of analysis was used. Namely, a 3 (Movie: HSF, TOG, WDL) by 2 (Ambiguity: ambiguous, unambiguous) by 4 (Movie Enjoyment Orientation: dual, hedonic, eudaimonic, low) mixed analysis of variance was run using the repeated measures procedure of the SPSS General Linear Model. Tolerance
to ambiguity scores were introduced as a covariate in the model. When the tolerance to ambiguity covariate had a significant effect, it was kept in the model and is reported in the analyses. When the covariate did not have a significant effect, it was removed from the model. In all cases, Movie is a within subjects variable, all other variables are between subjects. Number of participants for all variables measured by Likert type items was N = 154. The ideal number of participants per cell for this sample size would have been 19 to 20. However, because the enjoyment orientation variable was measured, not assigned, there were slight imbalances in the distributions of participants per cell. Also, the distribution of gender precluded us from including sex as a variable of analyses, mostly because there were not enough men at all the different category groups to detect differences in a statistically relevant way. A detailed reporting of significant differences is reported for each separate variable, and a summary table for all means across five Likert scale variables, including counts of participants for each treatment cell, is presented in Table 6 below.

Movie enjoyment. Results show significant main effects of both Ambiguity (F (1, 145) = 5.27 p < .05, partial η²=.04) and Movie Orientation (F (3, 145) = 4.06; p < .01, partial η²=.08). Participants enjoyed more the ambiguous movie clips (M = 4.02, SE = .10) than the unambiguous movie clips (M = 3.7, SE = .10), a result that supports Hypothesis 1. Participants with dual movie enjoyment orientation were the most likely to enjoy the movie clips (M = 4.24, SE = .15), whereas participants who rated as high hedonics were the least likely to enjoy the movie clips (M = 3.56, SE = .14). Pairwise comparisons show that the difference between those groups is the only significant one (p < .01). There were no significant differences in enjoyment between those groups and the other two (high eudaimonics = 3.91, SE = .13; low both = 3.72, SE = .15). This significant effect of movie enjoyment orientation on movie enjoyment was unexpected and it had not been considered in our hypotheses.
Table 6. Means of Movie Enjoyment, Character Cognitive Liking, Character Affective Liking, Technical Evaluation of Authors and Willingness to Engage with Authors, across Movie Enjoyment Orientation and Movie Moral Ambiguity. (N = 154).

<table>
<thead>
<tr>
<th></th>
<th>Movie Enjoyment</th>
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<th>Author Technical</th>
<th>Author Engagement</th>
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<td>4.41 (.16)</td>
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<td>4.07 (.17)</td>
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<td>3.77 (.17)</td>
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<td>3.73 (.10)</td>
</tr>
</tbody>
</table>

A significant interaction effect of Ambiguity by Movie Orientation ($F(3, 145) = 2.67; p < .05$, partial $\eta^2 = .05$) may shed light on the main effect results. An examination of Bonferroni corrected pairwise comparisons for this interaction indicates that ambiguity makes a significant difference in enjoyment only for participants who rate as high hedonic. These participants were significantly less likely ($p < .001$) to enjoy the unambiguous movie ($M =$
3.12, SE = .20) than the ambiguous movie (M = 4.00, SE = .20). Indeed, hedonics were significantly less likely to enjoy the unambiguous movies than eudaimonic (p < .05) and dual participants (p < .001). Hypothesis 6 predicted an interaction between ambiguity and movie enjoyment orientation, but it stated that viewers high in eudaimonicity would be more likely to enjoy ambiguous movies, whereas results indicate that these viewers liked both movie versions equally. H6 is not supported as it was formulated. However, as reported above, there is a significant interaction of movie enjoyment orientation and ambiguity, for the unambiguous movie clips.

There was no significant main or interaction effect of movie on enjoyment, nor was there a significant effect of tolerance to ambiguity on enjoyment of the clips.

**Affective Character Evaluation.** Ambiguity had a significant effect on affective evaluations of characters (F (1, 145) = 21.91; p < .001, partial η²=.13). Participants were more likely to affectively like characters in ambiguous (M=3.22, SE = .08) than unambiguous versions of the movies (M = 2.70, SE = .08), a result that provides support for Hypothesis 2. This main effect appears while controlling for a significant effect of tolerance to ambiguity on affective liking of characters (F (1, 145) = 10.73; p < .001, partial η²=.07), which indicates that overall participants with higher tolerance to ambiguity show higher levels of affective liking for characters. There were no other interactions or main effects for affective liking.

**Cognitive Character Evaluations.** The only significant predictor of cognitive liking of character was Movie Orientation (F (3, 145) = 4.33; p < .01, partial η²=.08). Dual oriented participants were the most cognitively appreciative of the characters (M = 4.74, SE =.14), followed by high eudaimonics (M = 4.41, SE =.11), high hedonics (M =4.14, SE = .12) and low in both (M = 4.16, SE = .14). Only the differences between the both high group and the high hedonic and both low groups are significant (p < .05 in both cases). Hypothesis 4, that participants high in eudaimonicity would cognitively like characters better than participants
low in eudaimonicity is partially supported (supported for the dual group, not supported for the eudaimonic group).

There was no main effect of ambiguity on cognitive evaluation of the characters (H3 is not supported) nor were there significant interaction effects of movie enjoyment orientation and ambiguity (H5 is not supported). However, the effect of the covariate tolerance to ambiguity on cognitive evaluation of characters was significant \( (F(1, 145) = 16.63; p < .01, \text{ partial } \eta^2 = .06) \). Overall, higher tolerance to ambiguity predicted higher levels of cognitive liking of characters.

**Hypotheses Testing for Moral and Extra-Narrative Thoughts**

Analyses of thought list variables are based on the proportion of each kind of thought for each participant. Thus, for example, “moral thought proportion” corresponds to the number of moral thoughts produced by a participant for a movie, divided by the total number of thoughts produced by that participant for that movie. Two participants (out of the total 154) did not provide any thoughts for any movie and were dropped from these analyses.

The model used for the analyses is the same as for Likert Scale variables, this is, a 3 (Movie: HSF, TOG, WDL) by 2 (Ambiguity: ambiguous, unambiguous) by 4 (Movie Enjoyment Orientation: dual, hedonic, eudaimonic, low) mixed analysis of variance was run using the repeated measures procedure of the SPSS General Linear Model, with proportion of target thoughts as the dependent variable.

**Moral thoughts.** Two competing hypotheses (7a and 7b) proposed different rationales for the effect of movie ambiguity on the likelihood of expressing moral thoughts. There was no main effect of ambiguity on expression of moral thoughts, so none of the hypotheses is fully supported. The analyses for proportion of moral thoughts as response to the thought listing question indicate only one significant interaction effect of Ambiguity by Movie Orientation \( (F(3, 143) = 2.66, p = .05, \text{ partial } \eta^2 = .05) \). Hedonically oriented participants were significantly more likely to express moral thoughts when the movie was ambiguous \( (M = .13, \text{ ...} \)
SE = .03) than when it was unambiguous (M = .06, SE = .02, p = .05). The hedonically oriented group behaved as predicted by H7a, suggesting that, for them, ambiguity fosters reflection about morality, whereas exclusivity of moral violations (unambiguous badness) does not. For all other enjoyment orientation groups, moral ambiguity did not make a difference in the expression of moral thoughts. H8, that eudaimonically oriented participants would be more likely than hedonically oriented participants to express moral thoughts is not supported (see Figure 1).

Extra-narrative thoughts. Hypothesis 9 predicted that viewers high in eudaimonicity would be more likely to produce extra-narrative thoughts in response to the movie clips. Results show a significant main effect of movie enjoyment orientation on proportion of extra-narrative thoughts (F (3, 143) = 4.66, p < .001 partial η² = .09). Participants oriented to movies eudaimonically (M = .63, SE = .05) were significantly more likely than both hedonically oriented participants (M = .40, SE = .05, p < .01) and low movie orientation participants (M = .40, SE = .06, p < .05) to express extra narrative thoughts. Dual orientation participants (M = .45, SE = .06) did not significantly differ from the other groups in their expression of non story world thoughts. Hypothesis 9 is partially confirmed: viewers who were high only in the eudaimonicity scale were indeed more likely to produce extra-narrative thoughts, but viewers high in eudaimonicity and high in hedonicity (dual) were not more likely than the other groups to respond with extra-narrative thoughts.

The different movies also elicited significant difference in extra-narrative thoughts expressed (F (1, 143) = 6.31, p < .01, partial η² = .04). Participants were significantly less likely to express non story world thoughts about House of Sand and Fog (M = .41, SE = .03) than about Twenty One Grams (M = .52, SE = .03, p < .05), whereas there were no significant differences regarding We don’t live here anymore (M = .48, SE = .03). There were no other significant main or interaction effects.
Extra-narrative thoughts were coded into four different categories: self, world, actors and authors, and analyses were conducted for the proportion of thoughts for each of these categories. Ambiguity and Enjoyment Orientation did not have any main or interaction effects on proportion of thoughts about the self. Hypothesis 10, that stated that ambiguous movies would be more likely to elicit self thoughts than unambiguous ones, and Hypothesis 11, that stated that participants high in eudaimonicity would be more likely than those low in eudaimonicity to express thoughts about the self, are rejected. The independent variables in this study failed to make a difference in expressed thoughts about the self.

There was a significant effect of movie enjoyment orientation in thoughts about the real world issues ($F(3,143) = 8.27 \ p < .001$, partial $\eta^2 = .15$). Eudaimonically oriented participants ($M = .44, SE = .05$) were significantly more likely than hedonically oriented participants ($M = .19, SE = .05, p < .001$) and low orientation participants ($M = .13, SE = .06, p < .01$) to express thoughts about real world issues. Dual oriented participants ($M = .26, SE = .05$) did not significantly differ from other groups in their expression of real world issues thoughts. Hypothesis 12, that viewers high in eudaimonicity would be more likely to express
real world thoughts is partially supported (only for the exclusively eudaimonic group). There were no other significant effects regarding thoughts about real world issues.

**Valence, Emotion, Interrogative thoughts.** This project offered no hypotheses regarding the proportion of emotion thoughts, the valence of thoughts, or the proportion of interrogative thoughts. However, these variables were analyzed as part of an exploration of participants thought list responses. All of the significant results found in the analyses of these variables involve movie effects rather than effects of the independent variables of interest (ambiguity and movie enjoyment orientation).

Analyses of thought valence were conducted by creating two separate variables: proportion of positive thoughts and proportion of negative thoughts. For both variables, there were no significant main effects of movie enjoyment orientation or moral ambiguity. However there was a significant main effect of movie on proportion of negative thoughts \((F (2, 143) =10.39, p < .001, \text{ partial } \eta^2 = .13)\). Participants were more likely to express negative thoughts about *House of Sand and Fog* \((M = .84, \text{ SE} = .07)\) than about both *Twenty One Grams* \((M = .44, \text{ SE} = .07, p < .001)\) and *We don’t live here anymore* \((M = .55, \text{ SE} = .07, p < .01)\). Analysis on proportion of emotion thoughts indicated no significant or main or interaction effects.

Results of the analysis for interrogative thoughts show a significant movie by movie enjoyment orientation interaction \((F (3, 143) =2.71, p < .05)\). Eudaimonically oriented participants were significantly less likely than low movie orientation participants to include questions, uncertainty or curiosity as part of their thought list, in both *House of Sand and Fog* \((\text{Eud ME} = .12, \text{ SE} = .05; \text{ Low ME} = .32 \text{ SE} = .06 ; p < .05)\) and *Twenty One Grams* \((\text{Eud ME} = .18, \text{ SE} = .05; \text{ Low ME} = .42 \text{ SE} = .07 ; p < .05)\).
Table 7. Means of extra-narrative thought proportion, and proportions of extra-narrative sub-categories, across Movie Enjoyment Orientations and Ambiguity (N=152).

<table>
<thead>
<tr>
<th></th>
<th>Self</th>
<th>Real World</th>
<th>Actor</th>
<th>Author</th>
<th>Overall</th>
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</thead>
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<td>.06 (.02)</td>
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<td>.03 (.01)</td>
<td>.12 (.03)</td>
<td>.40 (.05)</td>
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<td>.18 (.04)</td>
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</tr>
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<td>.02 (.01)</td>
<td>.08 (.03)</td>
<td>.63 (.05)</td>
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<td>.03 (.01)</td>
<td>.12 (.02)</td>
<td>.48 (.04)</td>
</tr>
</tbody>
</table>

Hypotheses Testing for Author Engagement

Author Thoughts. There were no significant main or interaction effects of ambiguity or movie enjoyment orientation on proportion of author thoughts. Hypothesis 13, that ambiguous movies would elicit more author thoughts than unambiguous movies, and Hypothesis 15, that eudaimonic viewers would be more likely to report thoughts about movie authors, are rejected. Regarding Hypothesis 16, that eudaimonic and hedonic participants would differ more in their expression of author thoughts when movies were ambiguous than
when they were unambiguous, it is rejected when the alpha value of .05 is used. There is, however, a close to significant interaction effect of Ambiguity and Movie Enjoyment Orientation on proportion of author thoughts ($F (3,143) = 2.61, p = .07$, partial $\eta^2 = .05$) which we report here because it is directly relevant to a key hypothesis of this study, and because the comparison between the target categories of interest is statistically significant. Bonferroni corrected pairwise comparisons indicate that hedonically oriented participants were significantly less likely to express author thoughts when movies were ambiguous (M = .05, SE = .05) than when they were unambiguous (M = .18, SE = .04, $p < .05$). Hypothesis 16 receives some support inasmuch as there is an interaction effect. However, the original prediction was that ambiguous movies would foster author thoughts in eudaimonic participants, whereas the data support the notion that ambiguous movies discourage hedonic participants from thinking about authors (see Figure 2). For the other enjoyment orientation groups, movie ambiguity did not make a significant difference on expression of author thoughts.

Figure 2. Proportion of author thoughts by ambiguity and movie orientation (N = 152).
Movie had significant main effects on proportion of thoughts about actors \((F (1, 143) = 4.32, p < .05, \text{partial } \eta^2 = .03)\) and about authors \((F (1, 143) = 7.7, \ p = .001, \text{partial } \eta^2 = .05)\). In both cases, the pattern was the same. Participants were more likely to express thoughts about actors \((M = .04, \ SE = .01, p < .05)\) and authors \((M = .16, \ SE = .03)\) when discussing *Twenty One Grams* than either *House of Sand and Fog* \((\text{Actors } M = .02, \ SE = .01, p < .05; \text{Authors } M = .09, \ SE = .02, p < .01)\) or *We don’t live here anymore* \((\text{Actors } M = .02, \ SE = .01; \text{Authors } M = .12, \ SE = .02, p < .05)\).

**Author engagement.** Results show significant main effects of Ambiguity \((F (1, 145) = 7.87; p < .01, \text{partial } \eta^2 = .05)\) and Movie Orientation \((F (3, 145) = 8.70, p < .001, \text{partial } \eta^2 = .15)\) on willingness to engage with author information after watching the movie. Participants were more likely to further want to engage with author information if they saw the ambiguous version of the movie \((M = 4.10, \ SE = .10)\) than the unambiguous version \((M = 3.71, \ SE = .10)\), a result that provides support for Hypothesis 14. Hypothesis 17 stated that participants high in eudaimonicity would be the most likely to want to engage with author information. Participants who had a dual orientation to movie enjoyment were the most likely to further want to engage with authors \((M = 4.51, \ SE = .15)\). The ratings of this group were significantly higher than the ratings of each of the other groups \((\text{High eudaimonic } M = 3.87, \ SE = .13, p < .01; \text{High hedonic } M = 3.76, \ SE = .14, p < .01; \text{Low both } M = 3.47, \ SE = .15, p < .001)\). Differences among the other three groups were not statistically significant. Hypothesis 17 is partially supported: supported for the dual group, but not for the eudaimonic group. There was no significant interaction of movie enjoyment orientation and ambiguity; Hypothesis 18 is not supported.

**Author Technical Evaluation.** Results show main effects of both Ambiguity \((F (1, 145) = 4.17; p < .05, \text{partial } \eta^2 = .03)\) and Movie Orientation \((F (3, 145) = 6.17; p < .001, \text{partial } \eta^2 = .11)\) on technical evaluations of authors. Participants were more likely to evaluate authors as technically proficient when movies were ambiguous \((M = 4.67, \ SE = .07)\) than
when they were unambiguous (M = 4.46, SE = .07). Also, dual oriented participants gave the highest ratings of technical proficiency to authors (M = 4.97, SE = .11). The ratings of this group were significantly higher than the ratings of each of the other groups (High eudaimonic M = 4.53, SE = .09, p < .05; High hedonic M = 4.45, SE = .10, p < .01; Low both M = 4.33, SE = .11, p < .001). Differences among the other three groups were not statistically significant.

A significant interaction of Ambiguity and Movie Orientation (F (3, 145) = 3.14; p < .05, partial η² = .06) indicates that although there are no significant technical evaluation differences among groups when movies are ambiguous, there is a significant difference between dual orientation participants and each of the three other movie enjoyment orientation groups. When movies are unambiguous, participants high in both orientations gave significantly higher ratings (M = 5.06, SE = .16) than participants that were High eudaimonic (M = 4.51, SE = .13, p < .05), High hedonic (M = 4.13, SE = .12, p < .001) and Low both (M = 4.17, SE = .17, p < .001). Differences among the latter three groups were not significant.

Tolerance to ambiguity was also significant in this model F (1, 145) = 5.14; p < .05, partial η² = .03) such that participants with higher tolerance to ambiguity were more likely to give higher technical author evaluations.
CHAPTER 7
DISCUSSION OF RESULTS

Character Liking and Movie Enjoyment

Traditional Affective Disposition Theory states that viewers will develop a positive affective disposition (affective liking) towards characters that are morally good, and that they will enjoy a movie more if those good characters are rewarded in the end of the movie. In this study, participants were indeed more likely to create positive affective dispositions towards character that showed some moral goodness (ambiguous) than towards those that were unambiguously bad, which indicates that participants respond positively (in terms of affective affiliation) to even small signs of goodness in otherwise evil characters (see summary of predictions and results in Table 8 below). Still, ratings of affective liking were not extremely high in any of the conditions (average affective liking was 2.96 for a 1-6 point scale), clearly an indication that morally reprehensible actions were also taken into account as part of the character evaluations. Morally good behaviors in the ambiguous characters were enough to make them more likeable than unambiguously bad characters, but not overwhelmingly liked. This pattern was consistent for all participants, regardless of their movie enjoyment orientation.

Overall, participants enjoyed the movie clips more when characters were morally ambiguous than when they were unambiguously bad. Since in these movie clips there was no clear sense of how the characters ended (endings were open at their best, unhappy at their worst—in any case, no character was rewarded), it is hard to interpret this result in light of traditional ADT. Enjoyment does not seem to be based directly on rewarding of the somewhat good characters, but it is possible that the lack of clear punishment for the unambiguously bad character decreased the enjoyment
ratings for those movies. The results for movie enjoyment run parallel to the results on character affective liking: movies with ambiguous characters (more affectively liked) were enjoyed more than movies with unambiguously bad characters (less affectively liked). Most of this difference, however, stems from viewers with an exclusively hedonic movie enjoyment orientation, who seemed to particularly dislike the combination of lack of positive morality and absence of punishment.

On the other hand, participants who rated high in both eudaimonicity and hedonicity were more likely to think the characters were cognitively interesting. This group was also more likely to enjoy the movies regardless of the movie’s ambiguity level. It may be that having a dual orientation to movies provides people with more flexibility regarding the way they receive a film. If the character presents some morally good traits, and is thus more likeable in affective terms, they can rely on affective liking of the character to enjoy the movie. If the character is unambiguously bad, is hard to like in affective terms, and goes unpunished, they can turn to cognitive aspects of the movie, and base their enjoyment on cognitive interest in the character. This may explain why dual participants enjoyed movies more than any other group, and significantly more than the hedonic and low groups, that are not motivated to find cognitive gratifications in movies. Indeed, since none of the two conditions presented a traditional narrative schema in which completely good guys receive a well deserved reward, it is not surprising that hedonically oriented participants were the least likely to enjoy the movies overall.
Table 8. Comparison table of hypotheses and findings, by dependent variable.

<table>
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<th>Main Effects of Movie Enjoyment Orientation</th>
<th>Main Effects of Moral Ambiguity</th>
<th>Interaction Effects</th>
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<td>Hyperthesis</td>
<td>Finding</td>
<td>Hyperthesis</td>
</tr>
<tr>
<td><strong>Movie Enjoyment</strong></td>
<td>No Prediction</td>
<td>D &gt; H</td>
<td><strong>H1</strong></td>
</tr>
<tr>
<td><strong>Affective Liking</strong></td>
<td>No Prediction</td>
<td>Effect</td>
<td><strong>H3</strong></td>
</tr>
<tr>
<td><strong>Cognitive Liking</strong></td>
<td><strong>H5</strong></td>
<td>D &gt; H</td>
<td><strong>H4</strong></td>
</tr>
<tr>
<td><strong>Extra-narrative Thoughts</strong></td>
<td><strong>H9</strong></td>
<td>D &gt; H</td>
<td>E &gt; H</td>
</tr>
<tr>
<td><strong>Self Thoughts</strong></td>
<td><strong>H11</strong></td>
<td>No Effect</td>
<td><strong>H10</strong></td>
</tr>
<tr>
<td><strong>World Thoughts</strong></td>
<td><strong>H12</strong></td>
<td>E &gt; H</td>
<td>No Prediction</td>
</tr>
<tr>
<td><strong>Author Thoughts</strong></td>
<td><strong>H15</strong></td>
<td>No Effect</td>
<td><strong>H13</strong></td>
</tr>
<tr>
<td><strong>Interest in Author</strong></td>
<td><strong>H17</strong></td>
<td>D &gt; H</td>
<td><strong>H14</strong></td>
</tr>
<tr>
<td><strong>Technical Eval Author</strong></td>
<td>No Prediction</td>
<td>D &gt; H</td>
<td>No Prediction</td>
</tr>
<tr>
<td><strong>Moral Thoughts</strong></td>
<td><strong>H8</strong></td>
<td>No Effect</td>
<td><strong>H2a</strong></td>
</tr>
</tbody>
</table>

Previous research on enjoyment movies with ambiguous and bad characters has proposed that these movies are enjoyed more because they provide cognitive interest. In this study, cognitive interest in characters was, in absolute terms, higher.
than affective liking for characters. However, enjoyment of the movie overall followed the pattern of affective liking rather than the pattern of cognitive interest. It is true that viewers who are motivated to watch movies for both hedonic and eudaimonic gratifications were more likely to find cognitive interest in the characters, and to enjoy the movies more, but this appears to be a factor of their individual characteristics as viewers. Apparently it is necessary to have some orientation towards cognitive gratifications to enjoy movies with morally ambiguous and morally bad characters.

*Extra-narrative thoughts: self and the real world*

This study explored responses to movie narratives, beyond enjoyment. In particular, the study probed for responses showing that participants connected the story content with the real world, the self, and the story’s authors. To probe for such thoughts, participants were offered the opportunity to list issues they might talk about if they were to discuss the movie with others.

Participants high in eudaimonicity and those who watched the ambiguous movie clips were expected to be more likely to propose discussion topics beyond the movie’s plot and characters. Results showed that participants who rated high in eudaimonicity and low in hedonicity were significantly more likely to propose topics of discussion that go beyond character and plots. In their case, extra-narrative thoughts are the majority of thoughts produced (63% on average), whereas for all other groups the majority of thoughts were narrative. This result is expected, inasmuch as high eudaimonics are likely to seek meaningfulness, connection and insight about the world and humanity in movies. At the same time, it is intriguing because it indicates that preponderance of extra-narrative thoughts requires not only the predicted high level of eudaimonic motivation, but a low hedonic orientation level. Participants who were high in both eudaimonic and hedonic orientations were more likely to behave, in this regard, like those whose motivations are exclusively hedonic, and even like those who rate low in both enjoyment motivations. Dual oriented
participants, who are more likely to enjoy different kinds of movies, chose to stay mostly within the narrative world when listing topics of interest, as did those who rate low in eudaimonic motivations. One possibility is that this group considered the “others” implied in the question (the ones with which the movie would be discussed) and, having the choice to focus on narrative or extra-narrative issues, tended to focus on the narrative world, which may be a more likely common ground of interest. Exclusively eudaimonic participants, who are probably more adamant in their motivation to connect movies to real world issues, proposed thoughts that correspond closely to their sole orientation.

Across all groups, the overwhelming majority of extra-narrative thoughts listed were thoughts about real-world issues. Expectedly, the exclusively eudaimonic group was more likely to propose real world issues as topics of discussion. Again, the dual group, from which a similar pattern was expected, behaved instead similarly to the low eudaimonic groups. The explanation for this discrepancy may be the one proposed above. More interestingly, there were no differences among any of the groups regarding thoughts about the self. Viewers high in eudaimonicity, who were expected to connect the movie to the self significantly more than those high in hedonicity, or low in both, were just as likely—or rather just as unlikely, to propose discussion topics that explicitly connected movie content to the self. This study failed to find evidence that the eudaimonic motivation to search for meaning includes a motivation to meaningfully connect the movie content to the self, a finding that sheds a dimming light on the hopes that movies are used as a tool for self development, even among the most thoughtful viewers. Overall, thoughts about the self were scarce, averaging 3% of thoughts produced. Lack of significant differences among groups in this variable may be due to difficulty detecting significant differences at such low values.

The results indicate that character moral ambiguity had virtually no effect on production of extra-narrative thoughts. Across the ambiguity conditions, presence of extra-narrative thoughts was constant, averaging 47% of thoughts produced. Contrary to our
prediction, movies with unambiguously bad characters were just as likely as movies with ambiguous characters to foster discussion about extra-narrative issues, a pattern that is consistent across the extra-narrative sub-categories of real world thoughts and self thoughts. The absence of increased self thoughts for ambiguous movies is particularly surprising since there is previous evidence that people will refer to their personal experiences and beliefs in order to address ambiguity in narratives (Hakemulder, 2000). It is likely that some answers coded as “real world” answers were actually references to personal beliefs, attitudes and experiences, but since they were not explicit about the connection to the self, they were not detected by our coding scheme. Another possibility is that participants were reluctant to bring up personal issues as part of an imagined conversation with others, or an actual exposure to the experimental analysis. For whatever reasons, presence of thoughts about the self was uniformly low, and unaffected by any of the independent variables in this study.

**Thinking about authors**

Extra-narrative thoughts about authors were of particular interest to this study, inasmuch as they are evidence that participants consider the movies in a communicationally sophisticated way. The need to address the authors’ presence, their technical failures and successes, or their intentions, are evidence that viewers are both aware of authors, and willing to engage in an, at least, imaginary communicative act with them. Considering whether authors intend to create a melodrama or an action movie, criticizing editing failures, applauding cinematographic achievements, etc., are all ways of conveying that an intention is recognized and the success or failure of the intention is evaluated. In the same way, reference to authors’ stance regarding the movie content also reflects awareness that a movie is a crafted message. A willingness to discuss a movie’s topic (i.e. infidelity, organ donation, privacy,) as a topic for which someone (the author) has made a point, makes it the viewer’s turn to respond with their own agreement or disagreement, and maybe ponder their previously held positions in response to the perceived movie message. In particular, morally ambiguous characters were
expected to elicit some of these kinds of thoughts, in which the moral ambiguity of characters is referred back to the authors that created them.

The analysis of the thought list for thoughts about authors did not provide statistically significant results. However, the close to significant interaction of ambiguity and movie enjoyment orientation is intriguing. Participants who rated high in a hedonic orientation to movies were more likely to engage in thoughts about authors when movies presented an unambiguously bad protagonist than when they presented an ambiguous character. For this group, exclusive badness fostered significantly more author thoughts than moral ambiguity. These thoughts, like most author thoughts in this study, focused on technical and genre discussions— and considering that unambiguous movies were less likely to be enjoyed by this group, it is likely that they pointed to technical failures and other forms of criticism of authors. High hedonics expect to get positive affect from movies, which the unambiguously bad movies failed to provide. In response to this failure of the message to match their preferred expectation, hedonically oriented participants were more likely than the other groups to turn to thoughts about the authors, rather than, for example, to thoughts about the self (i.e. “I don’t like these kinds of movies”, “This movie depressed me”, “I would prefer a different movie next time”).

**Interest in authors**

The thought lists analyzed above were not the only measure designed to evaluate participants’ attitudes towards movie authors. After viewing all four movies, participants answered a series of questions that directly asked for both technical evaluations of authors, and inquired whether they were interested in finding out more information about the authors and their intentions in creating these particular movies. These two scales have the advantage of distinguishing between technical author concerns, and concerns related more directly to the movie’s content and message.
As predicted, participants reported more interest in knowing more about authors’ intentions when movies were ambiguous, and participants high in eudaimonic motivation (in particular, participants high in both eudaimonic and hedonic motivations) were the most likely to be willing to engage with authors. Ambiguous movies, however, failed to encourage even higher levels of interest from eudaimonic groups, as had been predicted.

Participants were not only more interested in finding out more about authors when movies were ambiguous than when they were unambiguous, they were also more likely to think that the authors of the movie were more technically proficient for ambiguous movies than the unambiguous ones. Dual oriented participants were more likely to think that authors were technically proficient than all the other groups. Dual oriented participants were also significantly more likely than all the other groups to judge the authors of unambiguous movies as technically proficient.

The fact that, as discussed earlier, dual participants have two paths towards movie enjoyment makes them the most likely group to make positive evaluations about movie authors. It is possible that since their set of expectations for enjoyment is multifaceted, they are more likely to be appreciative of what is offered to them. Since they are more satisfied than any other group, they might be expected, by some accounts, to be less interested in further engagement with authorial figures. If expectations of the receiver are met by the message, there is no need to refer to the author for clarification. However, this group is also the most likely to be interested in seeking further information about authors, and the most likely to be interested in further information regarding the unambiguous movies.

A possible interpretation of these results is that for the dual group, new information from authors whose movies were enjoyed is likely to shed more light on the meaning and purpose of the movie (a eudaimonic gratification) and maybe extend hedonic gratification by allowing an opportunity to remember and revisit positive feelings experienced while watching. Thus, the dual orientation to movies allows for both a broader spectrum of enjoyable films,
and an expectation that both kinds of gratifications received from a movie may outlast the time frame of the viewing experience.

*Moral thoughts and other results*

Of the two competing hypotheses for the proportion of moral thoughts as responses to the thought list item, there was partial support for the one stating that moral ambiguity in a movie protagonist would elicit more thoughts about moral issues than unambiguous badness. However, it was only participants oriented hedonically that responded in this way. Moral behavior of the character had no effect on the other groups’ likelihood to mention moral issues as topics of discussion, and, if anything, participants oriented eudaimonically followed the opposite pattern, giving more moral responses when characters were unambiguously bad.

Previous research had indicated that participants were more likely to mention moral issues when reviewing a movie with presence of moral ambiguity than when reviewing a movie with clearly differentiated good and bad characters. The mixed results here suggest that there may be different paths towards moral thinking for participants who have different paths to movie enjoyment.

Participants oriented hedonically are seeking a movie in which they can find positive affect towards a character and see that character be rewarded, a narrative template known to provide the affective gratification they seek. An unambiguously bad character is unlikely to fulfill that expectation, and hedonically oriented participants disliked such characters, failed to find them interesting, and did not particularly enjoy the movies they were in. It is possible that they disengage from these characters completely, which decreases the chance that they ponder the moral issues these characters are involved in. On the other hand, an ambiguous protagonist holds some promise of being the ‘good’ character needed if they are to be able to apply their favored enjoyment schema. Hedonically oriented participants may engage in thoughtfulness about the character morality in order to determine whether it is possible to accept this
character as the “good guy”, root for him/her, and engage fully with the schema that they know to be successful to enjoy fictional drama.

Participants oriented eudaimonically are more interested in movies that help them make meaning of the world. Thus, they may be less likely to process a movie in terms of a traditional narrative enjoyment schema (who is good, who is bad, who do I want to see rewarded), and more likely to process it as a reflection of reality. Eudaimonically oriented participants might be more interested in the way in which the movie’s moral issues are related to the real world than in the moral status of the character him/herself. If this is the case, we might expect their moral thoughts to be mostly extra-narrative—in particular, about the real world, than narrative thoughts about the protagonists’ character. Testing this idea more precisely is an intriguing avenue for future research in this area.

**Role of Tolerance to Ambiguity**

Throughout the analyses of the data, scores in a scale for tolerance to ambiguity were used as a covariate in the statistical models. Moral ambiguity was a key manipulation and predictive factor in our hypotheses, and it made sense to consider that individual differences in tolerance to ambiguity might have an effect on participants’ responses to the movies. Interestingly, tolerance to ambiguity did not have significant effects on any of the thought listing variables. Participants’ open ended reactions to the movies were unaffected by individual differences in this variable, which is a general cross-domain measure of openness to different experiences, acceptance of uncertainty, and acceptance of diversity, whereas in some cases—as discussed above, a more domain specific measure of a similar tendency—eudaimonicity, did have some effects. In thinking about the topics that they were likely to discuss with friends, domain specific differences in openness (eudaimonicity) seemed to make a difference, but non-specific orientations towards openness (tolerance to ambiguity) were unlikely to be relevant.
When evaluating movies through scale items, however, tolerance to ambiguity did make a difference for some variables. Participants higher in tolerance to ambiguity were more likely to like characters both affectively and cognitively; and they were more likely to give authors higher ratings of technical proficiency. In these three cases, the effect of tolerance to ambiguity appeared only as a main effect, this is, across movie ambiguity conditions and movie enjoyment orientations. Thus, although the study found some evidence that tolerance to ambiguity has an effect on movie appreciation (namely, increasing positive forms of evaluation of characters and authors), in none of those cases did it account for the effect of movie ambiguity on the dependent variable, and, more importantly, it controlled for the possible confound with movie enjoyment orientations.

Tolerance to ambiguity had no effect on measures of movie enjoyment or interest in authors. In general, the behavior of tolerance to ambiguity as a covariate indicates that although at times it enhanced evaluations of the movies, it did so across the board, probably due to the positive attitude to new stimuli that people who rate high in this scale have. However, tolerance to ambiguity does not seem to explain or affect differences created by moral ambiguity levels of the movies, nor does it seem to explain the same proportion of variance that high scores in eudaimonicity do, despite the high correlation between the two variables (.30, \( p < .001 \)). Tolerance to ambiguity’s effects appear to be general effect of broad openness to new and strange stimuli, whereas effects of movie enjoyment orientation seem to be domain specific –linked to participants’ specific attitudes towards movies and stories.

**Summary of moral ambiguity effects**

Effects of moral ambiguity were, overall, fewer than expected. In particular, ambiguous movies did not seem to provoke an increase in thoughtful responses such as higher cognitive interest for the ambiguous characters, higher proportion of extra-narrative thoughts about the self, the real world or the movies’ authors, or higher proportion of morality thoughts.
Per this study, character moral ambiguity in the message is not enough, on its own, to elicit these kinds of thoughtful responses.

Ambiguous characters were more likely to be affectively liked and movies with ambiguous characters were more likely to be enjoyed than unambiguous ones. These results seem to be driven by affective processes. However, ambiguous movies were also more likely to produce higher technical proficiency ratings for authors, and higher interest in engaging with further author information. The inclination of participants to give higher ratings to authors of movies they enjoyed more may be expected. However, higher interest in further engagement with the author (willingness to read interviews, find out the authors’ intentions in making the film) is a sign that, regardless of their movie enjoyment orientation, viewers’ interest in maintaining some form of communicative engagement with authors of fictional messages can be increased by the presence of moral ambiguity in a character. Whether this motivation stems from the fact that the movie was enjoyed and participants expect a continuation of positive affective gratification, or whether it stems from cognitive interest in reflecting upon issues unresolved in the movie, is not completely clear from the pattern of results in this study, but there are some indications that motivations for continued engagement may be different for hedonic and eudaimonic participants.

Hedonically oriented participants were significantly less likely to enjoy unambiguous movies and, at the same time, significantly more likely to propose movie authors’ issues as part of their thought listing for those movies. This combination of results may be an indication, as discussed previously, that hedonically oriented participants are likely to turn to authorial thoughts when frustrated in their affective gratifications expectations. On the other hand, hedonics were the only group that was more likely to respond to morally ambiguous movies with increased thoughts about morality. Overall, hedonics were the group most affected by differences in the characters’ moral status, showing both some signs of frustration when the movie’s moral schema did not allow for positive gratification, and signs of increased
interest and focus on morality when the movie’s moral ambiguity offered a potential for such gratifications.

The other participants affected by differences in movie morality were dual oriented participants, who were significantly more likely to give high technical proficiency ratings to the authors of unambiguous movies, in what may be interpreted as a sign of their flexible path towards movie evaluation.

**Summary of movie enjoyment orientation effects**

Most of the hypotheses involving movie enjoyment orientation groups predicted that participants high in eudaimonic orientations would engage with movies in more thoughtful ways than their low eudaimonicity counterparts: being more likely to engage with characters cognitively, producing more extra-narrative thoughts connecting the movies with the self, the world and the authors, showing more interest in seeking further authorial information, expressing more moral thoughts about movies. Moreover, these more thoughtful responses were expected to be particularly salient when movies were morally ambiguous, since ambiguity is the kind of cognitive challenge that these viewers are likely to prize.

High eudaimonicity viewers were overall more thoughtful in that they were more likely to find cognitive interest in characters and produce more thoughts about real world issues than low eudaimonic viewers. However, they were not any more thoughtful regarding the self, authors and morality. Neither did ambiguous movies significantly increase thoughtful responses in high eudaimonicity viewers. One possibility is that there was a ceiling effect for thoughtfulness, such that eudaimonic viewers are highly thoughtful for any kind of stimulus (i.e., the unambiguous movies), and at such high ratings, even a more challenging stimulus (an ambiguous movie clip) cannot make a difference. Another possibility is that high eudaimonic viewers found ambiguous and unambiguous movies equally engaging, but for different reasons. It is possible, for example, that whereas morally ambiguous movies are cognitively challenging because they present a complex character whose moral behavior requires some
reflection (requiring thoughtfulness about morality and the moral issues involved),
unambiguously bad movies are cognitively challenging because they defy the traditional
schemas for movie entertainment, a challenge that is cognitively engaging in a different level
(thoughtfulness about extra-narrative content, or the movie as an artifact).

Some support for this second possibility is found in the differences between dual
oriented and exclusively eudaimonic oriented participants. Eudaimonic viewers, were more
likely than any other group to produce thoughts about the movie issues as real world issues,
and they were somewhat (though not significantly more, see Figure 2) more likely to comment
on moral issues when movies were unambiguous. They seem to have enjoyed the challenges
posed by ambiguity and responded with thoughts about real world issues and morality. On the
other hand, dual oriented participants gave significantly higher technical rating to authors of
unambiguous movies than exclusively eudaimonic participants. This result, as well as their
significantly higher level of interest in movie authors, can be interpreted as interest in and
appreciation for authorial intentions and genres, in particular in response to movies that break
the traditional narrative schema. The difference between these two groups, both high in
eudaimonicity, may be an indication that eudaimonic orientations may find different ways of
engaging thoughtfully with a movie (content and artifact), both of them leading to enjoyment.
Advantages and Disadvantages of the Design

As with any study, the experiment presented here had some advantages and some disadvantages. The use of repeated measures for multiple messages is crucial to the claim that the effects found are due to the manipulated independent variable (in this case, moral ambiguity) rather than of idiosyncratic characteristics of the message. The messages presented here were different in the kind of moral violations presented, so effects can’t be attributed either to specific responses to one kind of moral violation (infidelity, violation of privacy, domestic abuse, greed, murder, racism). Still, the results can’t be easily generalized to any kind of moral violation. The moral violations presented are mostly non-controversial: most people would agree that it is wrong to engage in such behaviors. Future studies in this area should address controversial or polarizing morally relevant issues (abortion, death penalty, homosexual relationships, teen pregnancy), which are likely to produce different responses in participants.

Manipulating ambiguity through careful editing of real movies allowed for very precise and objective control of the manipulation, while still using complex stimuli. The movie sources for the clips were four critically acclaimed movies, and the target characters were portrayed by first rate actors. Thus, the stimuli had a level of ecological validity that experimentally created stories (even videos) might have lacked. High quality movies as these are likely to be transporting, this is, to produce in the viewer high levels of absorption into the story world. Transportation for the experimental stimuli was not measured, but it is likely to be equivalent to transportation levels had in real viewing contexts, for example, watching these films at home. The length of the clips (around 6 minutes), can be considered equivalent to a segment of TV fiction viewing.
The presence of well known actors may have had some undesired effects on the manipulation. A qualitative examination of the thought lists for the movie dropped from the analyses because of the failed manipulation (25th Hour) showed a disproportionate number of comments about the actor portraying the main character (Edward Norton), most of them quite laudatory. The presence of an extremely well known and well loved actor may have interfered with the manipulation in this case. For almost all analyses run using all four movies, the effects found included interactions of the target independent variables with “movie”, in which the dropped movie (25th hour) behaved differently from the other 3 movies. Since this difference could be explained by the failure of the manipulation, it was deemed appropriate to drop the movie, for clarity’s sake. The qualitative evidence indicates that effects of actors’ prestige and likeability on perceptions of characters’ morality may well be its own topic of study. It is possible to speculate that the positive attitudes towards Norton made it hard for audiences to make moral distinctions between the “bad” version of his character, and the “ambiguous” one. From the observation here, it seems likely that a disliked actor (say, Mel Gibson) acting as a good hero may still be evaluated as less moral than a well liked actor (Edward Norton) acting as an antihero.

A very frustrating but to an extent inevitable disadvantage of this design, is that it could not include the complete scope of the character morality variable. At first sight, the ideal scenario would have been to compare unambiguously bad, ambiguous and unambiguously good characters. Such a design would definitely have helped answer some questions left unresolved here, in particular those attempting to distinguish affective disposition theory effects from effects that are responses to cognitive challenges of ambiguity. This design did not incorporate both kinds of unambiguous characters because it was extremely difficult to produce, from the same original movie, those three versions. The difficulty in doing so stems from a key narrative issue. A narrative must have some kind of conflict that triggers events and furthers the plot. In the case of our study, creating an “unambiguously good” version of
the character would have resulted in a plotless sequence of scenes – both boring and narratively incomprehensible. This may have been a result of the study focusing on one single character rather than in a contrast between a good character and a bad character. Experiments attempting to address the complete scope of the ambiguity variable may need to operationalize and manipulate ambiguity in a different way, using two or more characters.

Moreover, as suggested in the discussion section, manipulations of moral standing of characters may act simultaneously as manipulations of schema. Unambiguous evil may activate antihero schemas, unambiguous good may activate hero schemas, ambiguity and open-endedness seem to allow audiences the option to process the movie as their preferred schema, or to suspend schema “choice” until extra information is provided. In this study, for example, outcomes were unclear, and outcomes may well be a late piece of information that viewers use to decide, in retrospect, what schema/genre the movie belongs to. This may be consistent with research in moral psychology indicating that people judge the morality of an act by its final consequences. Future research, then, will need to address consequences as part of the manipulation of morality in a film. Other forms of morality manipulation, such as the manipulation of an act and its consequences, rather than focus on a single character might be fruitful as well. In this study I chose to manipulate morality in characters, because judgments of characters are known to strongly drive comprehension and entertainment. However, manipulating moral ambiguity may be even more complicated than originally thought, and unambiguously bad/unambiguously good movies may not constitute a true polarity when narrative structures are involved, as they may activate different processing schemas/genres, and probably the levels of liking and interest associated to those schemas and genres.

**Practical Implications**

As they stand, the results found here are not particularly promising for the status of media fictional narratives as a tool that prompts personal reflection, growth and moral development, at least not if development is expected to occur through thoughtfulness.
Thoughts connecting the contents of the narrative to the self were overall low, even in response to a question that proposed a scenario of close discussion with friends. Moral ambiguity in movies did not increase the proportion of thoughts connected to the self. At the very best, the results allow speculation that personal attitudes and beliefs emerged as part of the real world thoughts, with their link to the self invisible to the coding scheme used here. In such a scenario, the potential of movies to promote self development could be said to actualize at not completely conscious levels. At worst, the results can be interpreted as evidence that audience members are more likely to engage in thoughts about characters, authors, actors and the world at large than on the self. The fact that author thoughts appear more frequently than self thoughts provides both some evidence that authors are not as invisible to fiction readers as literary theory suggests they are (or should be), and that viewers are reluctant or unable to explicitly and consciously connect movie content to the self.

Results are much more promising when considered as vehicles for the reflection on social awareness issues. Thoughts about “real world issues” were very frequent, and they overwhelmingly included the social issues addressed in the movie, including issues that pro-social agencies may be interested in bringing to society’s attention (organ donation, immigrant stereotypes, privacy laws, domestic abuse, etc.). In this study, movies appeared to be quite successful at creating at least a temporary activation of those issues. For at least some of the viewers, hedonically oriented ones, activation of moral issues was also increased when movies were ambiguous. Moreover, the increased interest in engaging with authors and seeking more information about the movie’s meaning and the authors’ intention may be an indication that ambiguity is good characteristic for a movie to have when further engagement in information seeking is a desired outcome.

Implications for the communicative dimension of narratives

This study set out to find evidence that, despite the claims that narratives are supposed to absorb viewers into the story world and make authors as invisible as possible, audiences do,
under certain circumstances, engage in thoughts about authors, specifically authorial intentions. Such evidence would indicate that, contrary to some conceptualizations of fiction, evaluations and thoughts about authors are part of the communicative processes that occur during fiction. We proposed here that, regardless of conventions in storytelling and story interpretation that assume authorial invisibility as a necessity of successful fiction, sometimes thoughtfulness about authors may play an important role in the relationship that audiences have with a fictional message. To assess this possibility, participants’ provided open ended thoughts about the movie clips, and responded to direct questions about their willingness to engage with further information about authors. Findings were mixed. Considerations about authorial intention did emerge as part of open ended responses, but they did so mostly as critical technical considerations (“this scene was well/badly written”) and as considerations about the movie’s genre (“typical melodrama”). Open ended references to authors rarely, if ever, connected the author with the story line’s plot or themes (“this movie seems to endorse mistreatment of women”), as might have been expected. On the other hand, ambiguity did increase interest in engaging with authorial information, specifically regarding the authors and writers intentions in producing the specific movies seen.

Overall, findings indicate that spontaneous thoughts about authors are more related to technical and genre discussions than to movie content. In this sense, audiences negotiate their relationship with authors through discussion of met or unmet expectations about the ways a story is told and the main themes chosen (e.g., “I expect you to do X, you did Y”; “I am not interested in what you offer”), rather than through discussion of content detail and stances. In communicative terms, this would mean that, when considering authors, audiences are more likely to consider their role as a creator of a movie artifact than their role as a social actor with something to say regarding socially relevant content in the movie’s plot. The increased interest in authors of movies with ambiguous characters may be even more interesting in communicative terms. It indicates a willingness, on the part of audience members, to abandon
the ideally invisible author for the sake of clarification, extra information or answers to questions left open in the narrative itself. In this sense, it may well be that whereas authorial invisibility is desirable while watching a movie, and useful for the production of academic criticism of stories as self contained messages, authorial visibility is interesting to audiences, who are willing to engage them in order to extend their relationship with a story beyond the mere viewing experience.

The results of this study may show that, whereas a story that successfully matches expectations of an audience does not require extensive communication grounding between authors and audiences, a story that has elements of ambiguity may ignite a more extended communicative process between audience and authors, in the form of technical evaluations and willingness to seek further authorial information. The idea that fiction, in general, is not communicative is untenable in principle, and, as shown by the results here, also questionable when exploring the actual responses of audiences.

**Future Directions in Research**

Future research on movie enjoyment orientations should continue to examine the ways in which combinations of hedonic and eudaimonic tendencies produce different responses. The explanation suggested here, that dual oriented participants have a more flexible path towards movie enjoyment, should be further tested. Dual oriented viewers may be a group of participants that like movies more in general, but, throughout this study, dual oriented participants’ responses aligned more closely to eudaimonic responses than to hedonic responses. Both high eudaimonicity groups seemed to be more appreciative of transgressions of the traditional moral narrative schema, as well as more likely to enjoy clips overall.

High eudaimonic orientation may be related not only to search for meaning, but to openness to original aesthetic experiences, and an appreciation of movies as artifacts. On the contrary, hedonic participants seemed to respond positively to a more traditional schema, and seem less interested and appreciative of aesthetic artifact variations.
One final point of interest is the behavior of so-called low orientation participants. This group is, by their own reporting, low in both hedonic and eudaimonic motivations to watch movies: a group of people that might not like fiction films at all. Throughout most of this study, however, their responses did not significantly differ from those of the hedonically oriented group. These results may be an indication that populations who are not, in principle, interested in fictional film, may respond to them the way hedonic groups do when exposed to them. There are, however, some interesting caveats. Low oriented participants were not, as hedonics, less likely to enjoy unambiguous movies, less likely to think about authors when movies were unambiguously bad, nor were they more likely to produce moral thoughts when movies were ambiguous. It is possible that low oriented participants are less invested in obtaining a specific form of enjoyment from films, and so, paradoxically, they are more likely to reasonably enjoy any kind of message they are presented.

The evidence, then, indicates that although the dual oriented group’s behavior aligned more closely to the purely eudaimonic group’s behavior, and the low oriented group’s behavior aligned more closely to the hedonic group’s behavior, there are significant differences in both cases that preclude us from concluding that the use of eudaimonic and hedonic orientations as separate variables is enough to explain audiences’ responses to fiction.

Future research in this area will need to address the distinction between focus on authors as conveyers of problematic social ideas and focus on authors as technical craftsmen of artifacts. If audiences have an inclination to think of authors as related in some way to the real world issues they are addressing, this inclination might be more likely to appear when the movies address more controversial moral issues or moral issues that are particularly salient to certain groups, a direction that future research should definitely take.

Finally, whether using consensual moral violations or more controversial moral topics, future research will also have to account for the ways in which moral standing of characters affects perceptions of genre and thus alters narrative schema.
expectations. As reviewed earlier, and through results of this study, these two dimensions are connected. Viewers expecting a traditional drama are ready to identify good and bad guys, and need to do so to enjoy a film. If a character is hard to identify as good easily, viewers may need to reformulate their expectations either by reevaluating the genre of the movie and switching to a different enjoyment schema, or restructuring and possibly expanding the path towards enjoyment for a genre. It cannot be unproblematically assumed that audiences will process good, ambiguous and bad characters with the same set of schematic expectations. Good characters may activate traditional narrative schemas, likely to be enjoyed by hedonically oriented audiences; bad characters may activate antihero schemas, likely to be enjoyed by audiences high in eudaimonicity. Ambiguous characters may be particularly problematic. It may well be that moral ambiguity does not produce a “moral ambiguity schema” of its own, but leaves schema open, and audiences free to align their expectations with their preferred schematic versions, or in need to create new schemas to approach such stories.

In the presence of ambiguity, hedonic audiences may hold on to the likelihood that the character is ultimately good, and will find, if not reward, at least meaning (and not punishment). Hedonically motivated audiences may expect that a movie with an ambiguous characters will end up aligning more or less to a traditional narrative schema, and react with frustration when, by the end of the movie, this does not happen. The results in this study can be interpreted to indicate this. On the other hand, participants oriented eudaimonically, who are more open to challenges from movies, may enjoy the ambiguous movie at face value, without expecting it to fulfill any particular template. Such an attitude allows them to enjoy an ambiguous movie more than hedonics do, but not any more than they enjoy any other movie, which may explain the low impact of movie ambiguity on high eudaimonicity viewers. The idea that moral ambiguity in a movie may act not as a defined schema but as an undefined
template for differently motivated audiences to project their expectations is a consideration that should be closely examined in future research in the area.
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