#### **Purdue University** Purdue e-Pubs

College of Technology Masters Theses

College of Technology Theses and Projects

4-10-2012

## Research on the Relationship between Story and the Popularity of Animated Movies

Meng Wang wang897@purdue.edu

Follow this and additional works at: http://docs.lib.purdue.edu/techmasters



Part of the Film and Media Studies Commons

Wang, Meng, "Research on the Relationship between Story and the Popularity of Animated Movies" (2012). College of Technology Masters Theses. Paper 68.

http://docs.lib.purdue.edu/techmasters/68

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact epubs@purdue.edu for additional information.

# PURDUE UNIVERSITY GRADUATE SCHOOL

## **Thesis/Dissertation Acceptance**

This is to certify that the thesis/dissertation prepared	
By Meng Wang	
Entitled RESEARCH ON THE RELATIONSHIP BETWEEN STORY AND THE ANIMATED MOVIES	E POPULARITY OF
For the degree of Master of Science	
Is approved by the final examining committee:	
Nicoletta Adamo-Villani	
Chair	
Bedrich Benes	
Dennis R Short	
To the best of my knowledge and as understood by the student in the <i>Copyright Disclaimer (Graduate School Form 20)</i> , this thesis/disserts Purdue University's "Policy on Integrity in Research" and the use of	ation adheres to the provisions of
Approved by Major Professor(s): Nicoletta Adamo-Villani	
Approved by: Bedrich Benes  Head of the Graduate Program	04/09/2012
nead of the Graduate Program	Date

# PURDUE UNIVERSITY GRADUATE SCHOOL

## **Research Integrity and Copyright Disclaimer**

Title of Thesis/Dissertation:	
RESEARCH ON THE RELATIONSHIP BETWEEN STORY AND THE POPULARITY ANIMATED MOVIES	OF
For the degree of Master of Science	
I certify that in the preparation of this thesis, I have observed the provisions of <i>Purdue Executive Memorandum No. C-22</i> , September 6, 1991, <i>Policy on Integrity in Research</i>	
Further, I certify that this work is free of plagiarism and all materials appearing in this thesis/dissertation have been properly quoted and attributed.	
I certify that all copyrighted material incorporated into this thesis/dissertation is in com United States' copyright law and that I have received written permission from the copy my use of their work, which is beyond the scope of the law. I agree to indemnify and Purdue University from any and all claims that may be asserted or that may arise from violation.	right owners for save harmless
Meng Wang	
Printed Name and Signature of Candidate	
04/09/2012	
Date (month/day/year)	

<sup>\*</sup>Located at http://www.purdue.edu/policies/pages/teach\_res\_outreach/c\_22.html

## RESEARCH ON THE RELATIONSHIP BETWEEN STORY AND THE POPULARITY OF ANIMATED MOVIES

A Thesis

Submitted to the Faculty

of

Purdue University

by

Meng Wang

In Partial Fulfillment of the

Requirements for the Degree

of

Master of Science

May 2012

Purdue University

West Lafayette, Indiana

## TABLE OF CONTENTS

	Page
LIST OF TABLES	vi
LIST OF FIGURES	ix
ABSTRACT	xii
CHAPTER 1. INTRODUCTION	1
1.1. Significance	1
1.2. Statement of Purpose	2
1.3. Scope Specification and Research Question	2
1.4. Assumptions	4
1.5. Limitations	4
1.6. Delimitations	5
1.7. Definitions of Key Terms	5
1.8. Summary	6
CHAPTER 2. LITERATURE REVIEW	7
2.1. History of Animation	7
2.2. Evaluation on Movie Script	8
2.3. Theories of Story Elements	10
2.3.1. Theme	10
2.3.2. Characters	11
2.3.3. Plot	11
2.3.4. Scene	12
2.3.5. Conflicts and Suspense	12

	Page
2.4. Research Examples of Animated Movies	13
2.4.1. Themes of Disney Animation	13
2.4.2. Morality of Disney Animation	14
2.4.3. Pixar's Animated Movies	15
2.5. Related Psychological Theories	16
2.5.1. Emotion of Interest (not clear)	16
2.5.2. Focus, Empathy and Imagination	17
2.6. Summary	17
CHAPTER 3. FRAMEWORK AND METHODOLOGY	18
3.1. Theoretical Framework	18
3.2. Methodology	19
3.3. Study Design	20
3.3.1. Research Type	20
3.3.2. Variables of Study	20
3.3.3. Unit of Study	21
3.4. Procedure	21
3.4.1. Sampling Method	21
3.4.2. Theory-Generation Stage	22
3.4.3. Theory-Classification Stage	24
3.5. Data Analysis	24
3.5.1. Statistical Method	24
3.5.1.1. Choice of Statistical Method	25
3.5.1.2. Specification of Statistical Method	26
3.5.2. Theory-Generation Stage	28
3.5.3. Theory-Classification Stage	30
3.6. Summary	30

	Page
CHAPTER 4. RESEARCH IMPLEMENTATION AND RESULTS	31
4.1. Theory-Generation Stage	31
4.1.1. Case Description of Sample Group	31
4.1.1.1. Case 1	32
4.1.1.2. Case 2	32
4.1.1.3. Case 3	32
4.1.1.4. Case 4	32
4.1.1.5. Case 5	33
4.1.1.6. Case 6	33
4.1.1.7. Case 7	33
4.1.1.8. Case 8	33
4.1.1.9. Case 9	34
4.1.1.10. Case 10	34
4.1.2. Information Generation of Sample Group	34
4.1.2.1. Theme	46
4.1.2.2. Characters	49
4.1.2.3. Conflicts	76
4.1.2.4. Other Related Factors	77
4.2. Theory-Classification Stage	85
4.2.1. Case Description of Control Group	86
4.2.1.1. Case 11	86
4.2.1.2. Case 12	86
4.2.1.3. Case 13	86
4.2.1.4. Case 14	87
4.2.1.5. Case 15	87
4.2.1.6. Case 16	87
4.2.1.7. Case 17	87
4.2.1.8. Case 18	88
4 2 1 9 Case 19	88

	Page
4.2.1.10. Case 20	88
4.2.2. Information Generation of Control Group	89
4.2.2.1. Theme	100
4.2.2.2. Characters	100
4.2.2.3. Conflicts	115
4.2.2.4. Other Related Factors	116
4.2.3. Comparison of Sample Group and Control Group	120
4.2.3.1. Theme	124
4.2.3.2. Characters	127
4.2.3.3. Conflicts	137
4.2.3.4. Other Related Factors	138
4.3. Summary	142
CHAPTED 5 EINAL CONCLUCIONS	1.4.4
CHAPTER 5. FINAL CONCLUSIONS	
5.1. Conclusions	
5.2. Summary	147
REFERENCES	148
APPENDIX. THE LIST OF 22 QUESTIONS	151
VITA	

## LIST OF TABLES

Table	Page
Table 3.1. Top 10 and Bottom 10 Animated Films out of the Top 100 Animated Mov Released between 1980 to Dec.2011	
Table 4.1. Summary Analysis on Themes of the Top 10 Samples	48
Table 4.2. Major Characters Analysis of Shrek 2	51
Table 4.3. Major Characters Analysis of <i>The Lion King</i>	52
Table 4.4. Major Characters Analysis of <i>Toy Story III</i>	54
Table 4.5. Major Characters Analysis of Finding Nemo	56
Table 4.6. Major Characters Analysis of Shrek the Third	57
Table 4.7. Major Characters Analysis of <i>Up</i>	59
Table 4.8. Major Characters Analysis of Shrek	60
Table 4.9. Major Characters Analysis of <i>The Incredibles</i>	62
Table 4.10. Major Characters Analysis of Monsters. Inc.	63
Table 4.11. Major Characters Analysis of Despicable Me	65
Table 4.12. Summary Analysis of Major Characters in the Top 10 Samples	67
Table 4.13. Summary Analysis of Combination Type of Protagonist and Secondary Protagonist in the Top 10 Samples	75
Table 4.14. Conflicts Analysis of Shrek II.	78
Table 4.15. Conflicts Analysis of <i>The Lion King</i>	78
Table 4.16. Conflicts Analysis of <i>Toy Story III</i>	78
Table 4.17. Conflicts Analysis of <i>Finding Nemo</i>	79
Table 4.18. Conflicts Analysis of <i>Shrek the Third</i>	79
Table 4.19. Conflicts Analysis of <i>Up</i>	79
Table 4.20. Conflicts Analysis of <i>Shrek</i>	80
Table 4.21. Conflicts Analysis of <i>The Incredibles</i>	80

Table	Page
Table 4.22. Conflicts Analysis of <i>Monsters. Inc.</i>	80
Table 4.23. Conflicts Analysis of <i>Despicable Me</i>	81
Table 4.24. Summary Analysis of Source of Materials in the Top 10 Samples	82
Table 4.25. Summary Analysis of Related Information in the Top 10 Samples	83
Table 4.26. Summary Analysis of Themes in the Bottom 10 Samples	101
Table 4.27. Major Characters Analysis of Corpse Bride	102
Table 4.28. Major Characters Analysis of South Park	103
Table 4.29. Major Characters Analysis of <i>Hoodwinked</i>	104
Table 4.30. Major Characters Analysis of <i>The Tale of Despereaux</i>	105
Table 4.31. Major Characters Analysis of <i>The Road to EI Dorado</i>	106
Table 4.32. Major Characters Analysis of <i>Home on the Range</i>	107
Table 4.33. Major Characters Analysis of Return to Neverland	108
Table 4.34. Major Characters Analysis of <i>The Land before Time</i>	109
Table 4.35. Major Characters Analysis of <i>The Jungle Book 2</i>	110
Table 4.36. Major Characters Analysis of An American Tail	111
Table 4.37. Summary Analysis of Major Characters in the Bottom 10 Samples	112
Table 4.38. Summary Analysis of Combination Type of Protagonist and Secondary Protagonist in the Bottom 10 Samples	
Table 4.39. Conflicts Analysis of An American Tail	117
Table 4.40. Conflicts Analysis of <i>The Jungle Book 2</i>	117
Table 4.41. Conflicts Analysis of <i>The Land before Time</i>	117
Table 4.42. Conflicts Analysis of <i>Return to Neverland</i>	118
Table 4.43. Conflicts Analysis of <i>Home on the Range</i>	118
Table 4.44. Conflicts Analysis of <i>The Road to EI Dorado</i>	118
Table 4.45. Conflicts Analysis of <i>The Tale of Desperaux</i>	119
Table 4.46. Conflicts Analysis of <i>Hoodwinked</i>	119
Table 4.47. Conflicts Analysis of South Park	119
Table 4.48. Conflicts Analysis of <i>Corpse Bride</i>	120
Table 4.49. Summary Analysis of Source of Materials in the Bottom 10 Samples	121
Table 4.50. Summary Analysis of Related Information in the Bottom 10 Samples	121

Table	Page
Table 4.51. Comparison Analysis of Themes in Both Groups	128
Table 4.52. Comparison Analysis of Major Characters in Both Groups	128
Table 4.53. Summary Analysis of Combination Type of Protagonist and Secondary Protagonist in Both Groups	
Table 4.54. Comparison Analysis of Conflict in Both Groups	137
Table 4.55. Comparison Analysis of Source of Materials in Both Groups	138
Table 4.56. Comparison Analysis of Related Classical Types in Both Groups	139
Table 4.57. Comparison Analysis of Related Information in Both Groups	140

## LIST OF FIGURES

Figure	Page
Figure 2.1. Structure of narrative text (Seymour, 1978)	10
Figure 3.1. Research framework	19
Figure 3.2. An example of frequency distribution histogram	27
Figure 4.1. General storyline of <i>Shrek II</i>	35
Figure 4.2. General storyline of <i>The Lion King</i>	36
Figure 4.3. General storyline of <i>Toy Story 3</i>	37
Figure 4.4. General storyline of <i>Finding Nemo</i>	38
Figure 4.5. General storyline of <i>Shrek the Third</i>	39
Figure 4.6. General storyline of <i>Up</i>	40
Figure 4.7. General storyline of <i>Shrek</i>	41
Figure 4.8. General storyline of <i>The Incredibles</i>	42
Figure 4.9. General storyline of <i>Monsters. Inc.</i>	44
Figure 4.10. General storyline of <i>Despicable Me</i>	45
Figure 4.11. Distribution of major themes in the top 10 samples	47
Figure 4.12. Distribution of sub themes in the top 10 samples	47
Figure 4.13. Dispersion of theme numbers in the top 10 samples	49
Figure 4.14. Distribution of protagonists' types of the top 10 samples	50
Figure 4.15. Distribution of protagonists' genders in the top 10 samples	68
Figure 4.16. Distribution of protagonists' age levels in the top 10 samples	68
Figure 4.17. Distribution of protagonists' most notable trait in the top 10 samples	69
Figure 4.18. Distribution of antagonists' most notable trait in the top 10 samples	70
Figure 4.19. Distribution of supporting characters' most notable trait in the top 10 samples	71
Figure 4.20. Dispersion of supporting characters' numbers in the top 10 samples	71

Figure
Figure 4.21. Dispersion of positive characters' numbers in the top 10 samples
Figure 4.22. Dispersion of negative characters' numbers in the top 10 samples72
Figure 4.23. Dispersion of the ratio of positive characters' to negative characters' in the top 10 samples
Figure 4.24. Dispersion of the total number of characters in the top 10 samples
Figure 4.25. Distribution of combination types of protagonists and secondary protagonists in the top 10 samples
Figure 4.26. Typical model of conflicts development in the top 10 samples
Figure 4.27. Distribution of source of materials in the top 10 samples
Figure 4.28. Distribution of related classical types in the top 10 samples
Figure 4.29. Distribution of applied techniques in the top 10 samples
Figure 4.30. Distribution of "sequel" situation in the top 10 samples
Figure 4.31. General storyline of <i>Corpse Bride</i>
Figure 4.32. General storyline of <i>South Park</i>
Figure 4.33. General storyline of <i>Hoodwinked</i>
Figure 4.34. General storyline of <i>The Tale of Despereaux</i>
Figure 4.35. General storyline of <i>The Road to EI Dorado</i>
Figure 4.36. General storyline of <i>Home on the Range</i>
Figure 4.37. General storyline of <i>Return to Neverland</i>
Figure 4.38. General storyline of <i>The Land before Time</i>
Figure 4.39. General storyline of <i>The Jungle Book</i> 2
Figure 4.40. General storyline of <i>An American Tail</i>
Figure 4.41. Dispersion of theme numbers in the bottom 10 samples
Figure 4.42. Dispersion of positive characters' numbers in the bottom 10 samples 113
Figure 4.43. Dispersion of negative characters' numbers in the bottom 10 samples 114
Figure 4.44. Dispersion of supporting characters' numbers in the bottom 10 samples 114
Figure 4.45. Dispersion of total characters' numbers in the bottom 10 samples 115
Figure 4.46. Dispersion of the ratio of positive characters to negative characters in the bottom 10 samples
Figure 4.47. Typical model of conflicts development in the bottom 10 samples 120

Figure
Figure 4.48. Possible situations of comparison between both groups
Figure 4.49. Comparison of major themes between both groups
Figure 4.50. Comparison of sub themes between both groups
Figure 4.51. Comparison of theme numbers between both groups
Figure 4.52. Comparison of protagonists types between both groups
Figure 4.53. Comparison of protagonists' genders between both groups
Figure 4.54. Comparison of protagonists' age level between both groups
Figure 4.55. Comparison of protagonists' flaw traits between both groups
Figure 4.56. Comparison of antagonists' evil traits between both groups
Figure 4.57. Comparison of supporting characters' funny trait of the two groups 134
Figure 4.58. Comparison of the number of positive characters, negative characters, supporting characters, and total characters among both groups
Figure 4.59. Comparison of the ratio of the number of positive characters to negative characters in both groups
Figure 4.60. Comparison of combination between protagonist and secondary protagonist in both groups
Figure 4.61. Comparison of conflict between both groups
Figure 4.62. Comparison of the source of materials in both groups
Figure 4.63. Comparison of the related classical types in both groups
Figure 4.64. Comparison of applied techniques in both groups
Figure 4.65. Comparison of sequel situation in both groups
Figure 5.1. General story structure of extremely popular animation

#### **ABSTRACT**

Wang, Meng. M.S., Purdue University, May 2012. Research on the Relationship between Story and the Popularity of Animated Movies. Major Professor: Nicoletta Adamo-Villani.

Over the past ten years, animated films have become increasingly more important to the movie industry. Their increasing popularity is evident when looking at box office hits like *Shrek, Kongfu Panda*, and *Iceage*, to name a few.

No one will deny that some animated movies are more attractive to audiences than others. Previous studies show that a film's story is the decisive factor that makes a film a success or a flop. The story plays a central role in bringing in an audience and thus determing a film's critical acclaim and financial success. The story concept ties together various elements that are all closely related and together contribute to the overall effect of an animated film. This research aims to explore the relationship between an animated film's story and its popularity in order to better understand what makes a successful film as well as provide a useful reference for animation studios as they are deciding whether or not to pursue a certain script.

#### CHAPTER 1. INTRODUCTION

This chapter provides a brief overview of the study in order to facilitate a macroscopic understanding of the issue addressed. It provides general information including the major purpose, significance, scope and key terms.

#### 1.1. Significance

Animated movies have become a popular and significant movie genre as computer graphics technology has developed and improved. Because more and more scripts are being written for animated films, animation studios need an effective and reliable way to evaluate the potential success of a script before it gets to the production phase. This research intends to aid them in that selection.

In terms of theoretical significance, there are many academic theories and books on the stories of specific movies. However, research that addresses several films is rare. Especially rare are analyses that examine a movie's storytelling process. In order to address this lack, this research provides a new perspective that explores and builds a reasonable theory system by connecting story studies with movie theories thereby provides a basis for further future study.

#### 1.2. Statement of Purpose

The research aims to explore the reasons why some animated movies are more interesting and popular than others. In intends to do so by focusing on the movie script's storytelling process. This study has two primary intents.

First, this research is part of an academic direction. The researcher's academic focus is on 3D character animation, as such, this research focuses on several animated movies that have been released by various studios and companies. While many of the films surveyed bring in an audience, some animated movies are much more popular with the public than others. For example "Toy Story III" and "Megamind" are both 3D animated films released in 2010. The lifetime gross of the former is \$415,004,880, but that of the latter is only \$148,415,853. This discrepancy needs to be explained. What is it about the top three box office hits in the past few years, "Shrek II" (\$441,226,247), "Toy Story III" (415,004,880) and "Finding Nemo" (\$339,714,978) that makes them so popular?

The second reason for this research is career relevance. The researcher plans to work in the animation industry in future and desires to know more about storytelling principles and skills for animated movies. She also believes this research will be helpful in helping her to obtain the ability to distinguish potentially popular stories from those that are not -- an indispensable characteristic of an animation insider.

#### 1.3. Scope Specification and Research Question

This research aims to explore and analyze what types of story elements make some animated movies more popular than others. The popularity of an animated movie is

influenced by two factors: the animation itself and the audience's perception. As for the latter, though human perception may vary from person to person, generally public taste is consistent and conventional. In this sense, the research can employ the "control variable method" using the audience's "perception" as a constant and the "animation" presented to them as a variable.

There are several factors that impact the success of an animated film. These include a film's story, technical sophistication, propaganda strength, star cast. A film's popularity can even be influenced by external factors like the general economic situation. While all of these factors play a part, according to a literature review, the most decisive factor is the film's story. Thus the second scope limitation of the study is story.

Story is a general term that encompasses numerous elements in a film including its theme, characters, plots, scenes, etc. All of these aspects determine what the story is and how it's told. When these elements are put together and projected onto a screen, they comprise the whole movie. Therefore, the third scope limitation in this study is the stated story elements.

The objective of the study is to determine what story elements have the ability to make an animated movie more popular than others. It also hopes to determine the decisive elements among them. Based on the above objective, the specific research question is: "What kind of story elements can make an animated movie much more popular than others and what are the decisive factors?"

#### 1.4. Assumptions

The assumptions of this study are as follows:

- Sufficient previous theoretical reference and assistance for the specific analysis on animated movie samples.
- 2. A wide enough view to conduct a comprehensive investigation on the included samples in order to avoid missing key factors.
- 3. The objectivity of the relevant conclusion, as it depends greatly on the personal interpretations of the researcher.

#### 1.5. Limitations

The limitations of the study are as follows:

- The selected samples for theoretical analysis are only twenty animated movies, which
  are the top ten according to box office rankings even through there are thousands of
  animated movies.
- 2. The analysis is limited to the storytelling methods and story elements of the films, while there are other important factors that contribute to the success of an animated movie.
- 3. The conclusions of this research are limited to the personal understanding and generalization of the researcher.

#### 1.6. Delimitations

The delimitations of the study are as follows:

- Other animated movies on the box office list apart from the selected ten samples are not included in the research.
- 2. Other factors for the popularity of an animated film, such as special effects, music and advertising before being released are not addressed.

#### 1.7. Definitions of Key Terms

- Character "the representation of a person in a narrative or dramatic work of art (such as a novel, play, or film)" (Baldick, 2001; Childs & Fowler, 2006); "the crux of the story and the place conflict begins" (Kristyn, 2010).
- Conflict/Suspense that "question raised in the reader's mind as to the outcome of certain struggles, which are fought out before him" (Stewart, 1929); "the struggle of opposing forces in a story, it is what creates the drama and action that moves the story from beginning to conclusion" (Christy, 2011).
- Plot of a story "the diagram or plan of its action like the scenario of a motion picture, it is the blueprint from which the story is to be built the cold arrangement of materials in their proper order, ready for the elixir of dramatic narrative which is to infuse them with life" (Stewart, 1929); "one among several of the unities in fiction and it is trimmed, compromised, and adjusted to other elements for the sake of the unity of the whole" (Frank & Sandra, 1971).
- Story "an arrangement of words and images that re-create life-like characters and events" (Bill, 1995); "an unfolding pictorial drama of crescendoing scenes thrills

the reader by giving him the chance to see in-depth action." (Frank & Sandra, 1971).

- Scene "a microcosm in the macrocosm of the entire story. It has a beginning, middle, and end, with a strong reversal of the opening at the closing and with pluses and minuses in between" (Frank & Sandra, 1971).
- Theme "a broad idea, message, or moral of a story. The message may be about life, society, or human nature. Themes often explore timeless and universal ideas and are almost always implied rather than stated explicitly" (Obstfeld, 2002).
- Viewpoint "the emotional focus from which you develop the action of a story.

  Objective viewpoint merely reports the facts unemotionally without going into the mind of any character. In the subjective viewpoint, the writer shares the thoughts of one or more characters in a story with the reader" (Frank & Sandra, 1971).

#### 1.8. Summary

This chapter is an overview of the research. Based on the background, significance and statement of purpose, a general research interest is revealed. The scope specification details the broad research interests and specifies a single explicit research question. Assumptions, limitations and delimitations define the scope of the research question more clearly. Chapter 1 also provides the definitions of key terms and variables related to the research question including story, theme, scene, plot, character, and conflicts & suspense.

#### CHAPTER 2. LITERATURE REVIEW

In order to fully address the research question, several related topics were assessed during the literature review. These topics included prior studies of storytelling methods, diverse story elements, methods of movie scripts evaluation, and the function of human perception on works of art. Thus this section has been divided into four parts. The first includes an introduction and general background on animation. The second provides theories of story elements. The third contains relevant examples of animation analysis from different viewpoints. The fourth section presents psychological theories that can be applied to animation because of the connection between psychology and human perception.

#### 2.1. The History of Animation

Animation dates back to the birth of human culture. The word animation comes from the Latin word "anima," which means life (Louise, Megan, & Abby, 2011) and soul (Bin, 2009). The verb form, "animare," refers to the act of making something alive (Bin, 2009). Since the beginning of art as we know it, artists have been interested in making still art move. This is evidenced in ancient cave drawings in which the artists drew animals with extra legs and heads in an attempt to depict movement.

The nineteenth-century marked the start of inventors creating machines in an attempt to make pictures move. The first was the zoetrope which was invented in 1834. (Louise, Megan & Abby, 2011). In 1868 an English printer made the first flip-book (Louise, Megan & Abby, 2011). In the same year, photographer Eadweard Muybridge, captured people and animals in motion by taking multiple pictures of them with several cameras (Louise, Megan & Abby, 2011). He then combined all of these pictures together to create the illusion of movement.

Animation can be defined as "continuously broadcasting of a series of pictures, or the drawing which creates continuous changes to the vision" (Bin, 2009, 503-504). This phenomenon is a trick of human vision and depends on the storage trait of the human eye (Louise, Megan & Abby, 2011). What looks like a video to the viewer is actually a rapid sequence of still images. This process is how animated movies and television shows are created.

Jayne (1997) pointed out that the most important reason is movie directors and studios. They widen the animated films' market beyond the traditional core target of the family with young children to an older, young adult audience deliberately.

#### 2.2. Movie Script Evaluation

No one will deny the importance role that the script story plays in animated films. Jehoshua, Sam and John (2006) posit two reasons why it is necessary for a studio to carefully evaluate movie-scripts before they are green-lighed. First, it's extremely crucial that a company foresee the potential popularity of movie scripts because the financial investment required to make a movie is so large that studios cannot afford to make

mistakes. Second, a script's story is the most decisive factor in determining the success of a movie. A good storyline is the foundation of a successful movie production (Jehoshua, Sam & John, 2006): "any great film is always driven by script, script, script" (Silver, 2003). Pixar affirms this idea in their famous tagline -- "Story is King".

Because of the significant role that story plays in the movie industry, many previous researchers have built models that attempt to anticipate a movie's success of failure. In order to foresee a movie's performance during the story selection process, Jehoshua, Sam and John (2006) put forward the "bag-of-words" model. This model evaluates scripts by the words it contains and how many times a word appears without paying attention to word order. But the accuracy and reliability of such a method is limited when applied to a movie script because of the multiple dimensions contained in a story. For example, the short story of "A killed B" is markedly different from that of "B killed A" (Jehoshua, Sam & John, 2006)

Since a movie script's story is more likely to be subjective and can't be clearly understood by a computer, researchers presently approach the problem using human judgments. Blacker (1988), Field (1994, 1998) and Hauge (1991) described 22 specific criterions for a good movie story. Then, human judges read the story and answer several questions. Their answers serve as indicators of a script's initial box office performance. The 22 criteria used include Early Exposition (EAREXP), Surprise (SURP), Conflict Build-Up (BUILD), and Character Growth (CHARGROW). The 22 questions research method heavily influenced this study.

As stated above, the previous research on methods for judging a movie's story are primarily based on the experience or intuition of the investigators. Because of this, these

studies lack objectivity or accuracy. In order to produce a more objective and accurate study, this research will start with the story itself and make use of the analysis gained from prior theories.

#### 2.3. Theories of Story Elements

According to Seymour (1978) story is only one aspect of narrative text. Figure 2.1 charts his theory on the structure and components of a story.

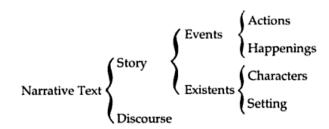


Figure 2.1. Structure of narrative text (Seymour, 1978)

Another classification provided by Stewart (1929) describes the elements of a rounded story. He indicated that a rounded story includes theme, scene, plots, character, conflict or suspense, climax, and ending. He also lists some other points to consider in evaluation a rounded story like viewpoint, flashback, transition, and revision (Frank & Sandra, 1971).

#### 2.3.1. Theme

Stewart (1929) stated that in the beginning of a story, it's important to arouse an audience's curiosity and get them interested in the theme of the story. It is crucial that the theme single and clearly defined (Ellin & Janice, 2010) in order to make the story tellable.

Theme is defined as the chief idea or spiritual content conveyed by a story and can be thought of as the soul of a story.

#### 2.3.2. Characters

"If plot is a story's skeleton, characters are its heart" (Laura, 2003). There are several methods for the building of a vivid character. The X-Ray Method (Stewart, 1929) may be instructive for the delineation of characters. Frank and Sandra (1971) proposed a method that focuses on detail. They posit that during the character creation process, the most effective method of characterizing is to describe a character by using specific and active details and selecting only those that show individuality. An effective measure for storywriters in practice is the "character tag" (Stewart, 1929) which involves asking a series of questions about the character to determine the chief characteristics of him /her.

#### 2.3.3. Plots

Plot does its work without being detected (Frank & Sandra, 1971). Plot is the story as it is actually told by linking the events together; it is how the reader becomes aware of what happened, i.e. the order of the appearance of the events in the work itself (Seymour, 1978). Therefore, it's reasonable to see plot as the real structure of the whole story. Ellin and Janice (2010) treat "a well-developed plot" as the second most important factor in a tellable story.

Frank and Sandra (1971) hold the similar opinion that a plot consists of scenes.

They write that each scene should contain: sharply delineated characters, clash and

conflict that keeps building actively as something happening, a time boundary, a place boundary, and an emotion boundary.

#### 2.3.4. Scene

Frank and Sandra (1971) proposed a useful formula for a good scene. They list the five parts of a successful scene. 1. Meeting – of the two forces involved in the conflict: the two forces or persons must clash. There must be emotion. 2. Purpose – make every scene have a purpose. 3. Encounter – which contains these possible elements: attempts – to interrogate or seek information, to inform, to overcome by argument or logic, to convince, to persuade, to influence, impress, to compel. 4. Final action – win, lose, or quit. 5. Sequel or Aftermath – (state of affairs; state of mind) – which leads into your next scene. A good way to learn the scenic reversal rhythm is to outline complete scenes of professional stories or movies (Frank & Sandra, 1971).

#### 2.3.5. Conflicts and Suspense

Stewart (1929) introduced the mechanics of suspense. He writes that contrast is the base for conflicts, conflict is the base for suspense, and suspense is the author's snare to catch and develop the reader's interest in the development of the whole story. There are five kinds of conflicts: man versus himself, man versus his background, man versus his situation, man versus man, and man versus fate. A story should be built on one major conflict and a series of smaller ones, and the smaller conflicts serve to mark the process by which the major conflict is resolved.

#### 2.4. Research Examples of Animated Movies

Animation is the omnipresent pictorial form of the modern era (Paul, 2005). It is a cultural symbol in our society. Most research in this area takes the form of case study.

#### 2.4.1. The Theme of Disney's Animated Movies

David (2008) takes a fresh look at Disney animated films from the perspective of their engagement with the theme of nature. Some of Disney's animated movies don't focus primarily on nature or natural environments, but the humanist core (Bin, 2009) is closely related to the natural world. This research proved instructive for the theme study undertaken in this work.

David (2008) details the different ways that Disney films interact with nature. The first type is the Adaptation of Fairy Tale Theme (David, 2008). Previous research suggests that in all of Disney's early films based on fairy tales (*Snow White*, 1937; *Cinderella*, 1950; *Sleeping Beauty*, 1959), "evil is always associated with the female nature out of control...The ultimate message of all three films is that, if you are industrious, pure of heart, and keep your faith in a male god, you will be rewarded" (Jack, 1991).

The second type of Disney nature theme describes a connection with nature. Social relationships with animals, as well as emotional interaction with them may act as a necessary part of healing (Jack, 1991). The wound that needs to be healed is the long-term disconnection with wild nature that has resulted from life in modern society; this kind of wound separates us from understanding the true meaning of being human.

The unexpected critical and commercial success of *Seal Island* in 1948 caused Disney add a new category of nature, "True Life Adventures" (David, 2008, pp.100-108). In true life adventure tales, "The lessons we learn from the wild become the etiquette of freedom" writes Gary in The Practice of the Wild (1991, pp.13).

The Little Mermaid (1989) is Disney's first attempt to revive the fairy tale format. It also established the viability of a different kind of heroine for the medium of animation (David, 2008). So the only solution here seems to be the separation of the natural and human world.

This article is quite useful for this research because it is deeply related to this topic. The direction and method of its analysis would be helpful for a case study. Useful themes conveyed by the above elaboration of this study are the underlined sections. They will act as a valuable norm for this study.

#### 2.4.2. The Morality of Disney's Animated Movies

Film is a powerful storyteller. By employing narrative, visuals, and music a film enhances its power to communicate a vision of moral living (Annalee, 2002). And five consecutive Disney animated films represent diversity in story origination and reveal differing dimensions or perspectives of Disney morality (Annalee, 2002). The five animated films are: *The Lion King* (1994), *Pocahontas* (1995), *The Hunchback of Notre Dame* (1996), *Hercules*, and *Mulan* (1998) (Annalee, 2002). Therefore, it is valid for this research to choose the top 10 animated movies according by their box office success and perform a case study based on previous theories and variables obtained in this part.

#### 2.4.3. Pixar's Animated Movies

Pixar's animated movies are based on the study of ethics. Ethics, which means "the love of wisdom", is a branch of philosophy. Robert (2010) stated that ethics is a study of what ought or ought not to be done. Wisdom helps us make correct judgments and decisions concerning various issues; in the same way, characters in movies are guided by wisdom (Robert, 2010).

The virtue and wisdom that Pixar films impart to audiences are hope and imagination (Robert, 2010). Robert evidenced this claim by pointing out that "in *Finding Nemo*, Dory keeps telling Marlin 'just keep swimming,' which conveys the theme that we should always see the bright side of everything and keep on going no matter what our situation is." Hope is one of the most important and common themes in Pixar films like as *Wall-E* and *Up*. Although these films include the reality of suffering in life and human society, they give us hope for a brighter future (Robert, 2010).

Identity is the theme of *Toy Story*. Justice is the theme of *A Bug's Life* ("For oppressed ants everywhere!"). Friendship can be seen in "Toy Story II" ("You've got a friend in me"). Humor can be seen clearly in "Monsters, Inc" ("These are the jokes, kid"). The strong bonds of Family is shown strongly in *Finding Nemo* ("I have to find my son"). Courage and Responsibility are the themes in *The Incredible* ("Where is my Super suit?"). The Adventure of life can be experienced in *Cars* ("Life is a journey"). Ambition is found in *Ratatouille* ("I want to make things"). Technology and happiness are the focus in *Wall-E* ("Everything you need to be happy"). Love is in *Up* ("I have just met you, and I love you!") (Robert, 2010).

#### 2.5. Related Psychological Theories

This section details the psychology used to explain human perception phenomena.

The following are some relevant psychological studies.

#### 2.5.1. Emotion of Interest

Silvia (2005) proposed that though psychologists have studied human interest for a long time (Arnold, 1910; Dewey, 1913), they have only recently viewed it as an emotion. And there are different models for determining what makes art (Berlyne, 1971), text (Schraw & Lehman, 2001), vocations, (Savickas & Spokane, 1999) and learning interesting (Hidi, 1990; Krapp, 1999).

The two variables related to human interest according to the "curve of interest" (Silvia, 2005; Jesse, 2002) are "Novelty – Complexity" and "Coping Potential" (Silvia, 2005). More specifically, "Novelty – Complexity" describes reliable effects on interest. This means people may become reliably become interested in something new, ambiguous, complex, obscure, uncertain, mysterious, contradictory, unexpected, or otherwise not understood (Silvia, 2005). "Coping potential" estimates the resources, power, ability, and control in relation to an event (Bandura, 1997; Lazarus, 1991).

Jesse (2002) describes "interest curves" that show the general change of human interest during the process of entertainment as time progresses. There are several crests and troughs on the curve that determine its shape. Three factors are considered to comprise interest: inherent interest, poetry of presentation and psychological proximity (Jesse, 2002).

#### 2.5.2. Focus, Empathy and Imagination

Focus, empathy and imagination can be regarded as the raw materials that make entertainment possible (Jesse, 2002). Focus is tied to "dramatic appeal" (Ellin & Janice, 2010). During the storytelling process, children need a perfectly safe edge of fear and sadness to satisfy their dramatic instincts (Ellin & Janice, 2010). Empathy is one of the most indispensable emotions and it allows us to appreciate artistic works. It is empathy that creates living characters (Frank & Sandra, 1971).

#### 2.6. Summary

The main function of this chapter is to provide relevant information gained from previous studies. First, it gives a theoretical basis for the case study analysis of story elements like the criterion of a good story. Second, it provides suggested methodology for the theoretical analysis process of this study such as the research examples about Disney's and Pixar's animated films. Third, this chapter details theories that influenced this study, such as the "22 questions list" and psychological theories on human perception.

#### CHAPTER 3. FRAMEWORK AND METHODOLOGY

This chapter outlines the research methodology and the general framework of the two research stages. It also details the four aspects of the study's design: variables, units of study, sampling and data analysis tools.

#### 3.1. Theoretical Framework

The research question this paper seeks to address is "what types of stories make an animated film more popular with audiences than others?" In order to answer this question, this study aims to analyze and summarize the relationship between various story elements and the popularity of the animated films in which these various elements are contained.

The study process includes two aspects: Theory Generation and Theory Classification. The Theory Generation stage consists of case analysis, information generalization and the construction of a theory system that addresses the research question. The Theory Classification stage classifies the points of the theory system into two groups and determines the decisive factors that answer the research question. The framework is illustrated in the following flow chart, Figure 3.1.

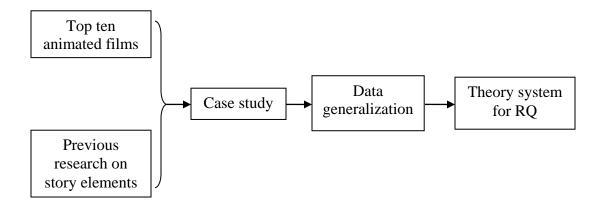


Figure 3.1. Research framework: Theory Generation Stage

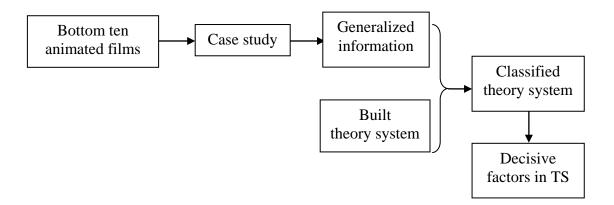


Figure 3.1. Continued. Research framework: Theory Classification Stage

#### 3.2. Methodology

The methods used for theory generation in this research are case study and induction. Induction methods include comparison, generalization, summarization, and statistical analysis methods. For theory classification, comparison and statistical analysis methods are used. These methods were selected based on the characteristics of the research and the purpose of the two stages.

#### 3.3. Study Design

Study design is the specific description of the research. It includes details such as research type, data source, and data collection and analysis procedures.

#### 3.3.1. Research Type

According to the framework, this is a qualitative research study. During the Theory Generation stage, a qualitative method is used to construct the theory system based on previous research, new interpretation, discovery and the judgment of the researcher. The qualitative method is used for the classification of the theory in the Theory Classification stage based and is based on similarities and differences.

#### 3.3.2. Variables of Study

The variables of this study are all the story elements related to the storytelling process. These include theme, scene, characters, plot, setting, and characters. Further, there are different parameters for each element according to previous theory and the generalization of the researcher. Since plot consists of scenes (Frank and Sandra, 1971), the variables of plot and scene have been combined in this study. Therefore, the variables of this study are the different story elements and their related parameters. These variables will be analyzed in the selected movie samples. Theme, Plot, Characters, Conflicts, and Other Factors will be the analysis directions in this study.

#### 3.3.3. Unit of Study

During the first stage, the unit of measurement used is the top ten animated films of the population, which is the sample group. During the second stage, however, the unit of measurement is the control group, which is the bottom ten animated films of the population.

#### 3.4. Procedure

This section details the steps taken to realize this research. According to the theoretical framework, the procedure has three major phases: the sampling process, theory generation, and theory classification.

#### 3.4.1. Sampling Methods

Given the purpose of the research and the keyword "popularity" in the research question, the researcher selected the top 100 animated movies released from January 1980 to December 2011 as the population of this study according to their box office ranking. The top 100 movies can generally be regarded as ones that were popular since there were thousands of animated films released during this time period.

During the first stage, a theory system of the story elements that make an animated film much more popular than others is built by generalizing the commonalities found in the story elements of the top 10 animated films. It is reasonable and effective to choose the top 10 as the most representative group for the requirement of "much more popular than the others." It is the sample group for this research.

During the second stage of research, the theory system needs to be classified into two groups: the common traits of all popular animated films, and the exclusive factors that are required for extremely popular animated films. The second group will be clarified using comparison and contrast. The researcher then chose the bottom 10 animated films according to box office rankings as the control group. The box office is the most authoritative reference to determine the level of popularity and success that a movie has achieved. The samples used for this research, which were selected according to their respective box office lifetime gross, are shown in Table 3.1.

## 3.4.2. Theory –Generation Stage

During the first stage, the research depends on a combination of factors that include previous theories, the personal analysis and judgment of the case study researcher and information generalization.

The first step of the Theory-Generation Stage is a case study of the 10 movies from the sample group followed by data induction. The case study includes analysis of the following elements: themes, plots, characters, conflicts and other related factors. Data induction includes analyzing and generalizing commonalities of these movies on the aforementioned aspects.

The second step of the Theory-Generation Stage is summarizing and building a theory system for the research question based on the analysis results found in the first step. These are the story element commonalities of the films in the sample group. This theory system is the answer to the research question---the characteristics of story elements that can make an animated film much more popular than others.

Table 3.1.

Top 10 animated films from the top 100 animated film list released for Jan 1980~Dec. 2011 (according to box office lifetime gross)

	Shrek II	The Lion King	Toy Story III	Finding Nemo	Shrek III
LG (\$)	441,226,247	422,053,252	415,004,880	339,714,978	322,719,944
	ир	Shrek	The Incredibles	Monster, Inc.	Despicable Me
LG (\$)	293,004,164	267,665,011	261,441,092	255,873,250	251,513,985

Bottom 10 animated films from the top 100 animated films list released for Jan1980~Dec.2011 (according to box office lifetime gross)

	Corpse Bride	South Park	Hoodwinked	The Tale of Despereaux	The Road to EI Dorado
LG (\$)	53,359,111	52,037,603	51,386,611	50,877,145	50,863,742

	Home on the Range	Return to Never Land	The Land before Time	The Jungle Book2	An American Tail
LG (\$)	50,030,461	48,430,258	48,092,846	47,901,582	47,483,002

## 3.4.3. Theory – Classification Stage

The procedure of this stage includes four steps based on the purpose of the Theory Classification stage. First, perform the case study and information generalization on the 10 movies from the control group. The methodology used is similar to that of the theory generalization stage. In this way, the story element commonalities of the bottom ten animated films can be ascertained. Second, compare the obtained information from the control group with the theory system built using the information from the sample group via statistical methods. After comparing and contrasting, the theory system can be separated into "similarities" and "differences". Third, analyze and summarize the similarities and differences. Because the differences are the exclusive factors of the sample group (top 10 animated films), these differences can be seen as the determining features of an extremely popular animated film.

## 3.5. Data Analysis

This section discusses the methods used for data analysis. It includes two phases - the theory generation phase and the theory classification phase. The most crucial aspect
of the data analysis process is the statistical method applied.

#### 3.5.1. Statistical Method

A large amount of data needs to be analyzed in this study, therefore it is necessary to select a valid statistical method and analyzing package. This section will discuss the choice of statistical method and specify it in detail.

## 3.5.1.1. Choice of Statistical Methods

In Statistics, there are two methods for data analysis: Descriptive Statistics and Inferential Statistics. Descriptive Statistics is the discipline of quantitatively describing the main features of a collection of data. It aims to summarize a data set statically, rather than using the data to learn about the population that the data is thought to represent. Inferential Statistics uses patterns in the sample data to draw inferences about the population represented while accounting for randomness.

For this research, the researcher chose to use a Descriptive Statistics method for the following three reasons:

# 1). Specificity of the range of application of this research

This study aims to gather characteristics, commonalities and decisive factors of a certain type of story: extremely popular animated movie stories (top 10). Therefore, the conclusion should not be generalized to the whole population (top 100) directly and statistically as that would make it unsuitable for Inferential Statistics.

## 2). Specificity of the sampling method of this research

In Statistics, there are two kind of sampling methods: Probability and Non-probability. The Probability sampling method is any method of sampling that utilizes some form of random selection, while Non-probability sampling does not involve random selection. The sampling used in this research is Purposive Sampling of Non-probability Sampling. The specific purpose and condition of this research determines its distinctive sampling method. And it is clearly non-random (top 10 and bottom 10 of the population). In this sense, inferential statistics can't be applied to the data analysis of this research because it requires random sampling since it is representative of the population.

Additionally statistical inferences from experiences are only valid under the randomization model of inferences (Ludbrook, J., & Dudley, H., 1998).

## 3). Specificity of the sample size of this research

The sample size represents the number of observations taken from a population to conduct a statistical analysis. In this research, a sample size of 10 is determined by the characteristics of the research itself (extremely popular animated films) as opposed to inferential statistics, where the formula used to calculate the sample size n is  $n = \left(\frac{z^*\sigma}{m}\right)^2$ . According to the given formula, the sample size should be 80 if the population is 100; therefore, inferential statistics does not fit this research.

In summary, Descriptive Statistics should be applied for data analysis in this research due to the particularity of its traits and the relevant sampling method.

# 3.5.1.2. Specification of Statistical Method

Descriptive Statistics includes two different categories: univariate and multivariate. Each has a different analysis method. This research should be classified as univariate since it is a combination of five individual studies on each variable as each story element can be separated from the others. Chen, Chiu and Wang (2009) indicate that all elements of a story are significant separately. The concentration of this research is on analyzing the commonalities in story elements for each film. Given this intent, the univariate method of Descriptive Statistics should be applied in the data analysis process.

According to the literature review, there are three major characteristics of univariate analysis that must be considered: the distribution, central tendency and dispersion of the data.

## 1). Distribution

The Distribution of the data is a summary of the frequency or percentage of individual values or ranges of values for a variable. One of the most common ways to describe a variable is by using a frequency distribution, which is represented visually using a histogram or bar chart as shown in figure 3.2. In this study, the researcher primarily uses bar charts to visually represent the distribution of data.

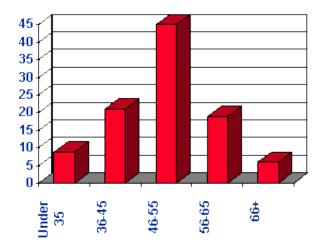


Figure 3.2. An example of a frequency distribution histogram

# 2). Central tendency

The central tendency is an estimate of the "center" of a distribution of values.

There are two major types of central tendency measures: Mean and Median. Mean is the arithmetic average of the observations. It is the average value of data. Median is the midpoint of a set of data. Thus, it is the typical value. The mean is sensitive to extreme observations or outliers, therefore it is not a robust measure of a distribution's center. The median is more robust than the mean since it is not influenced by extreme values (Moore,

Mccabe & Craig, 2009). Because of this, the researcher chose the median for measuring the central tendency of observation distribution.

## 3). Dispersion

Dispersion refers to the spread or variability of the values around the central tendency. There are two ways to describe dispersion: standard deviation s and five-number summary. Because the two sides of a strongly skewed distribution have different spreads, no single number such as s describes the spread well. The five-number summary does a better job (Moore, Mccabe & Craig, 2009). The visual representation used for five-number summary is the boxplot, which is suitable for showing dispersion.

Based on the information given above, data analysis of this research will use univariate descriptive statistics with bar charts for visually representing distribution, the median for measuring central tendency, and boxplots for showing dispersion. The statistical package used is SPSS.

## 3.5.2. Theory – Generation Stage

Data analysis in this stage includes case analysis and summary analysis.

Case analysis is used for information collection, and is performed by answering the following questions related to story elements:

## 1). Theme

What is the theme of each of these samples? What are the commonalities, if any between the samples?

## 2). Characters

What are the defining characteristics of the major characters from each movie in terms of appearance and personality? If there are basic laws for character setting in these movies, what are they?

## 3). Plot

How long, in terms of time duration, are different parts of the plot for each movie? If there is a general time model for plot setting, what is it?

## 4). Conflict

What types of conflicts are in different stages of the plot for each movie? If there is a common law of conflict development in these samples, what is it?

## 5). Other related factors

Besides the above variables, there are other changeable and uncertain factors that influence the storytelling process and the popularity of the animated film. This research aims to determine these factors as much as is possible and generalize the situation of these factors in the sample individually.

The summary analysis aims to generalize the information. The analytical methods will be a combination of graphic interpretation, tabular analysis, and statistical methods based on the package of SPSS along with with the discretion of the researcher.

Specifically, analysis of theme, scene, and characters will be conducted using the tabular summarization method. Analysis of plot and conflict will use a flow chart interpretation because of their tendency for progressive development. Additionally, descriptive statistics will be used during the entire analysis process for statistical description and summary.

# 3.5.3. Theory – Classification Stage

Data analysis in this stage includes analysis of the control group by employing the same method that was used on the sample group and a comparison of the information gathered from the two groups. The methods used during the analysis of the control group are similar to that of the theory generation stage. The information comparison includes graphic interpretation and tabular analysis. This comparison requires heavy use of statistical methods, which in this case is descriptive statistics using the SPSS statistics package.

## 3.6. Summary

This chapter outlines the framework of the research, clarifies the general procedure and provides information on the analysis methods used in this study. The principles of the first stage are based on previous theories and the on researcher's analysis. A theory system of conclusion will be generalized. During the second stage, the control group's traits are compared and contrasted with the theory system in order to determine the differences between the sample group and control group.

#### CHAPTER 4. RESEARCH IMPLEMENTATION AND RESULTS

This chapter presents data, describes the process of data analysis, and gives related results based the process detailed in the prior chapters. During the theory generation process, the sample group will be analyzed in terms of story elements, and the commonalities will be generalized. In the theory classification phase the theory system will be classified by comparison.

## 4.1. Theory Generation Stage

This section includes the general information from each case, and a generalization of commonalities on each story element in the sample group. The story elements include theme, characters, plot, conflicts, and other related factors. This is the basis of the theory classification phase.

## 4.1.1. Case Description

This section contains a description of each case, including a general introduction of each film and its storyline in the form of a flow diagram that is based on the transition places of major characters. It acts as necessary preparation for the analysis phases. The cases are organized with respect to their box office ranking.

# 4.1.1.1. <u>Case 1</u>

Case 1 is *Shrek II* which was produced by DreamWorks Animation in 2004. It is the second installment in the *Shrek* film series. The film shows two ogres struggling to find the best way to deal with themselves and their love. Figure 4.1 shows the general storyline of *Shrek II*.

## 4.1.1.2. <u>Case 2</u>

Case 2 is *The Lion King*, produced in 1994 by Disney Feature Animation, it is the 32<sup>nd</sup> feature in the Walt Disney Animated Classics series. The story describes the just revenge of a lion king. Its general storyline is shown in Figure 4.2.

# 4.1.1.3. <u>Case 3</u>

Case 3 is *Toy Story III* and was produced by Pixar and released by Walt Disney Pictures. The film depicts the lively adventure of a group of toys in a kindergarten ruled by a villain. The general storyline is shown in Figure 4.3.

## 4.1.1.4. <u>Case 4</u>

Case 4 is *Finding Nemo*, produced by Pixar, it is a story about an overly protective clownfish who, along with a forgetful friend, searches for his abducted son. The general storyline is shown by Figure 4.4.

## 4.1.1.5. <u>Case 5</u>

Case 5 is *Shrek the Third*, which was released in 2007 and was produced by Dreamworks Animation and distributed by Paramount Pictures. It is the story of an ogre learning to handle the responsibility of being a father and learning to face the future positively as the result of an adventure. The general storyline is shown by Figure 4.5.

## 4.1.1.6. Case 6

Case 6 is *Up*, which was released in 2009. *Up* was produced by Pixar, distributed by Walt Disney Pictures, and presented in Disney Digital 3-D. It is the story of an old man, a boy, a dog, and a bird who go on an adventure together. The general storyline is shown in Figure 4.6.

## 4.1.1.7. Case 7

Case 7 is *Shrek*, which was released in 2001 by DreamWorks Animation and loosely based on William Steig's 1990 fairy tale picture book *Shrek!*. It is about an indifferent ogre who is forced to face himself, his self-abasement and true love. The general storyline is shown in Figure 4.7.

## 4.1.1.8. <u>Case 8</u>

Case 8 is *The Incredibles*, which was released in 2004. It was produced by Pixar and distributed by Walt Disney Pictures. It is a story about the adventures of a family of superheroes and includes themes of social responsibilities and familial love. The storyline is shown in Figure 4.8.

## 4.1.1.9. <u>Case 9</u>

Case 9 is *Monsters*. *Inc.*, released by Walt Disney Pictures in 2001 and produced by Pixar Animation Studios. In the film, two monsters try to return a human girl to her own world. The general storyline is shown in Figure 4.9.

## 4.1.1.10. <u>Case 10</u>

Case 10 is *Despicable Me*, released in 2010 by Universal Pictures and Illumination Entertainment. It is a story of the changes that take place within an indifferent villain after he adopts three daughters. Its general storyline is shown in Figure 4.10.

# 4.1.2. Information Generalization of Sample Group

This section discusses the generalization of the data from the sample group in terms of theme, characters, plots, conflicts and other related factors. For each category the analysis procedure includes a case analysis and summary analysis.

The case analysis comprises the data-gathering process of these movies. The related information from each category will be listed. Summary analysis focuses on the induction, generalization and summarization of the information obtained from each case. Descriptive Statistics methods will be applied during both case and summary analysis.

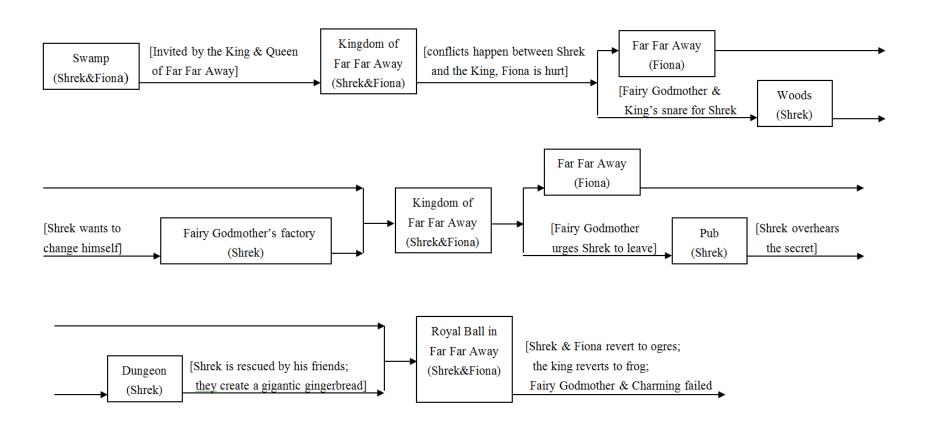


Figure 4.1. General storyline of Shrek II

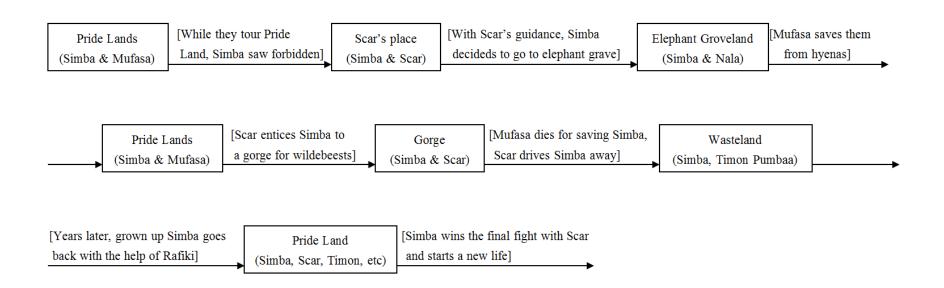


Figure 4.2. General storyline of The Lion King

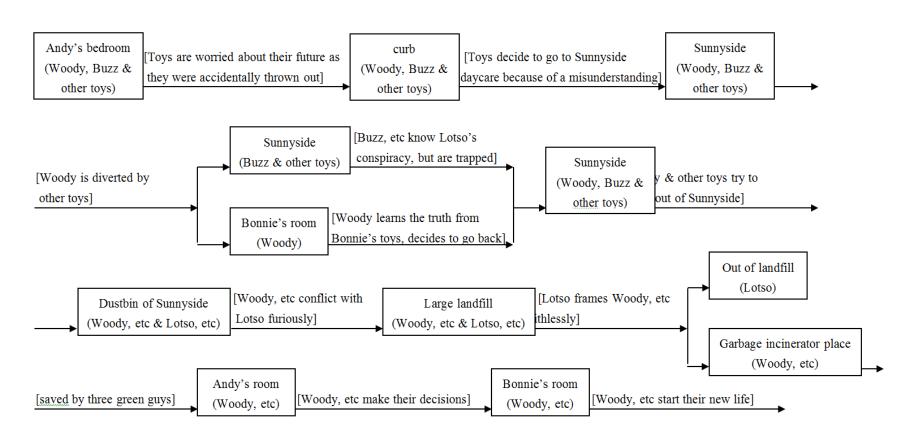


Figure 4.3. General storyline of Toy Story 3

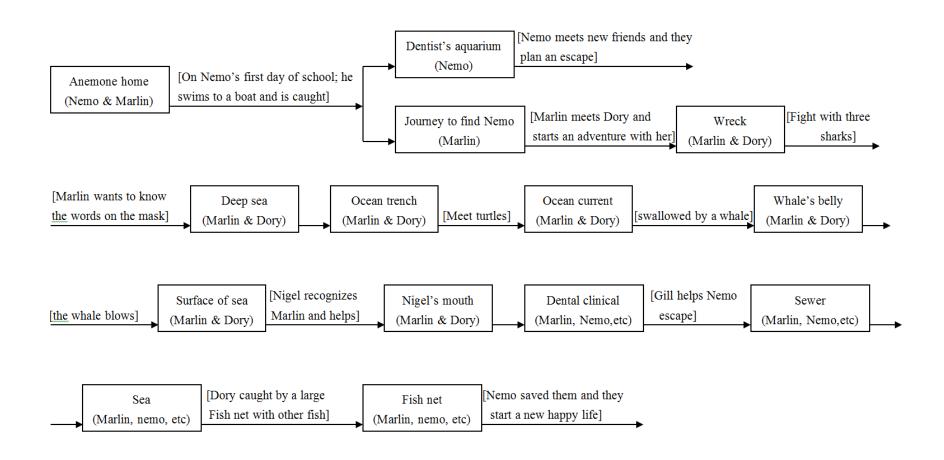


Figure 4.4. The general storyline of Finding Nemo

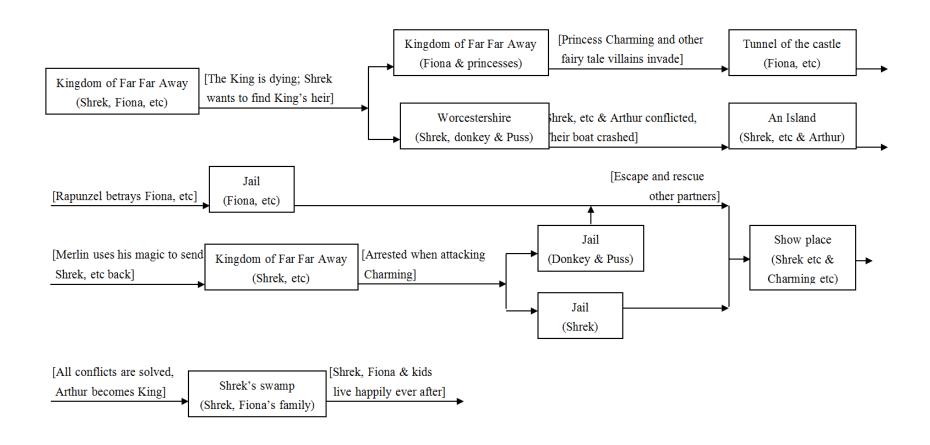


Figure 4.5. General storyline of Shrek the Third

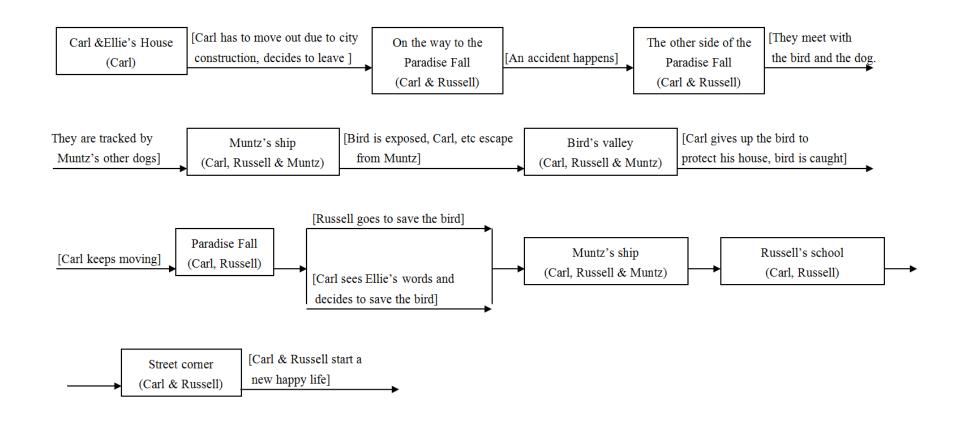


Figure 4.6. General storyline of Up

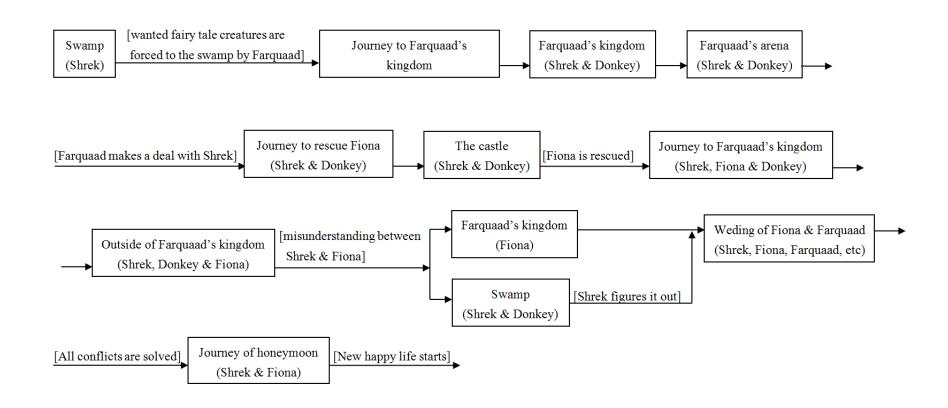


Figure 4.7. General storyline of Shrek

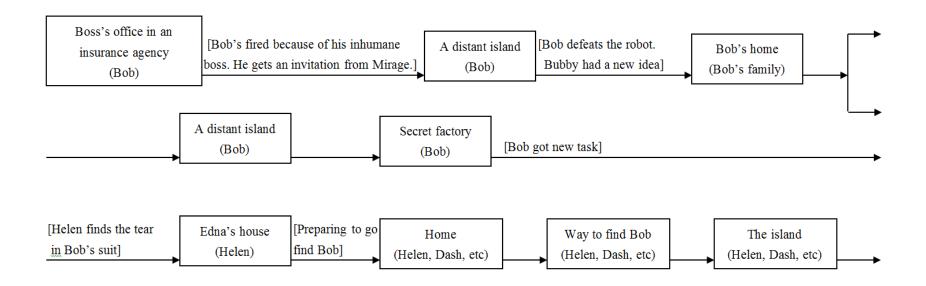


Figure 4.8. General storyline of The Incredibles

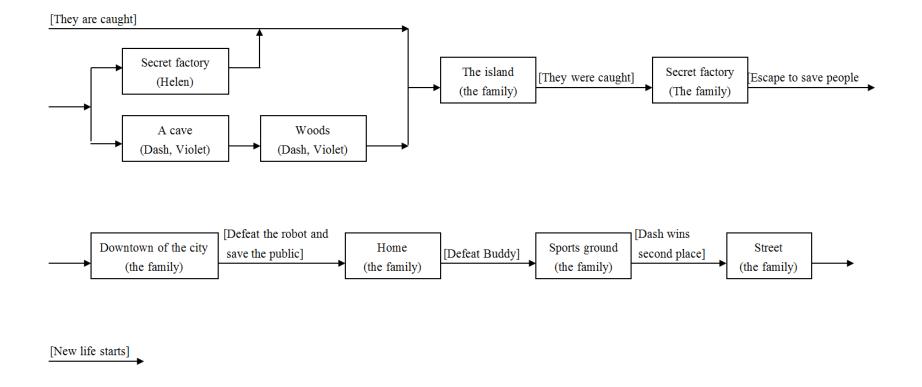


Figure 4.8. General storyline of The Incredibles Continued.

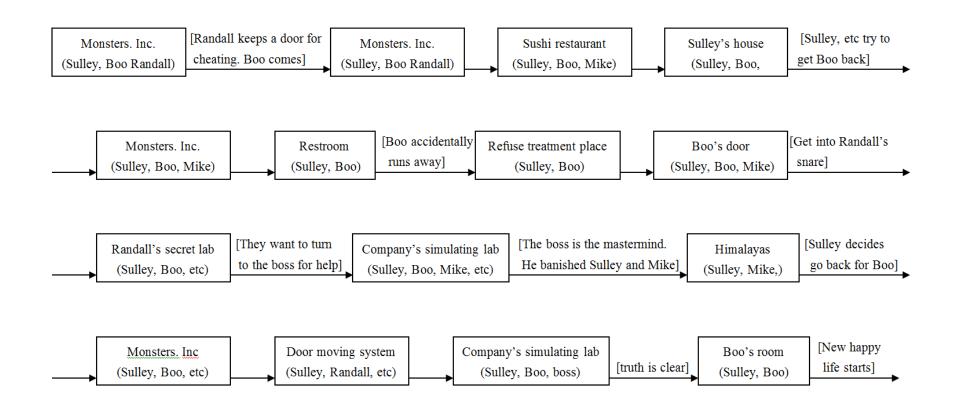


Figure 4.9. General storyline of Monsters. Inc.

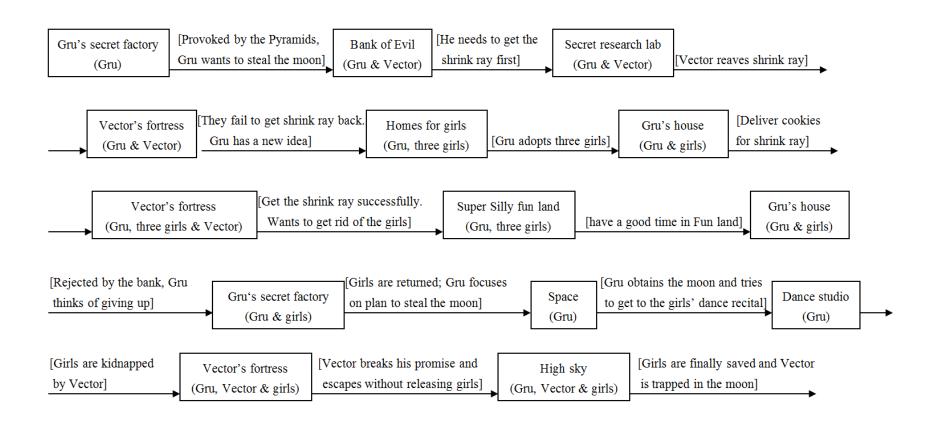


Figure 4.10. General storyline of Despicable Me

#### 4.1.2.1. Theme

The themes of the sample group can be generalized into two categories and seven sub-categories. Specifically, the first category is titled "self-growing" and indicates all types of self-development both internal and external to the protagonist. The three types or sub-categories of the self-growing category are self-redemption (saving oneself), self-realization (realizing one's dream) and self-recognition (overcoming one's inner flaws or imbalances). The second category is entitled "Love for others" and comprises themes related to human emotion and affection. There are four subcategories of the love for others category: love of family (love among family members), love of strangers (trust and friendship between strangers), love of team members (the amenable love between team members) and love of nature (nature worship). The theme generalization of the ten

Using the data contained in the table, the subsequent bar chart and boxplot can be generated in SPSS for the distribution and dispersion of data. This bar chart is shown is figure 4.11, which displays the distribution of the two major themes of the sample group. It's clear that within the ten popular films surveyed, the "self-growing" theme is a little bit more prevalent than the "love of others" theme.

The clustered bar chart in figure 4.12 shows the distribution of the seven subthemes in the sample group. Obviously, the "self-recognition" sub-theme is the longest one, followed by "love of family." Within the "self-growing" category, the sub-theme "self-realization" is shortest. As for the "love for others" category, "love of nature" is shortest.

In this sense, the researcher considers the sub-themes "self-recognition" and "love of family" as the most popular themes among audiences today, while the sub-themes "self-realization" and "love of nature" are the least popular.

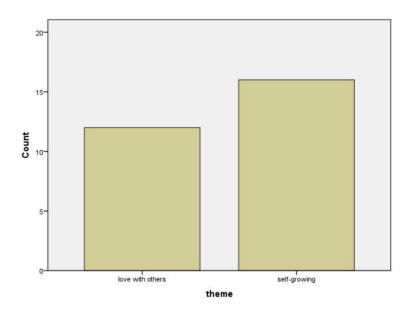


Figure 4.11. Distribution of major themes in the top 10 samples

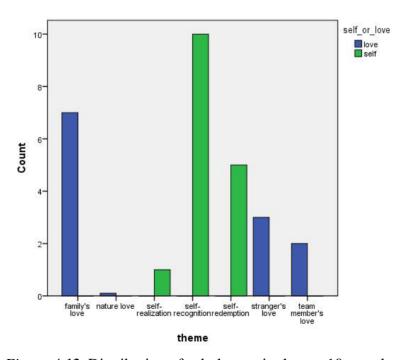


Figure 4.12. Distribution of sub themes in the top 10 samples

Table 4.1.

Summary Analysis on Themes of the Top 10 Samples

		Self-growing			Love with ot	hers		#
	Self-redemption	Self-realization	Self-recognition	Love of Family	Love of Team members	Love of Strangers	Love of Nature	
Shrek 2			V	V				2
The Lion King	V		V	V				3
Toy Story III	V		V		V			3
Finding Nemo	V		V	V				3
Shrek the third			V	V				2
Up	V	V	V	V	V	V		6
Shrek			V	V				2
The Incredibles	V		V	V				3
Monsters. Inc			V			V		2
Despicable me			V			V		2
	5	1	10	7	2	3		

The boxplot of figure 4.13 shows the dispersion of the number of themes in each film in the sample group. Clearly, it is left-skewed. There is an outlier of 6, the median is around 2.5, and 100% of the numbers lie in the range of 2 to 3 except for the outlier. The central tendency of this number sequence is 2.5, thus the typical value of the theme number is 2.5. This means that an extremely popular animated film tends to have 2 or 3 themes in total.

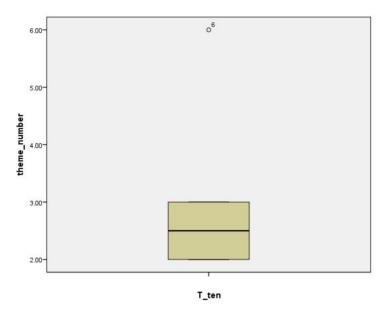


Figure 4.13. Dispersion of theme numbers in the top 10 samples

## 4.1.2.2. Characters

The major parameters of a character include their appearance, personality and role in the movie. In an animated movie, characters can be humans, animals, fantasy creatures (monsters) or an object. A character's personality is a highly flexible parameter. A character can be positive, e.g. brave, kindhearted, responsible, or humorous. It can also be negative, e.g. self-abased, indifferent, or unfriendly. The personality parameters of this research are based primarily on the psychological theory of human consciousness traits.

The character analysis of the sample group is shown in Tables 4.2~ 4.11. The tables display the primary traits of several characters from the films in the sample group. The listed information about the characters include the following: protagonist (type, gender, age level, and the most notable personality), antagonist (most notable personality), character number of Positive Group (the good guy team of protagonist, secondary protagonist and supporting group), Negative Group (the bad guy team of antagonist and henchmen), Supporting Group (positive side kicks), and Cast (the characters have lines).

Based on the character analysis tables, the summary analysis of the character setting can be generalized into the information listed in Table 4.2. The total number of characters is based on the voice cast listings from IMBD and includes the characters that have lines.

The distributions of the protagonist's traits, including type, gender, age level and most notable personality, are shown in Figure 4.14~4.17.

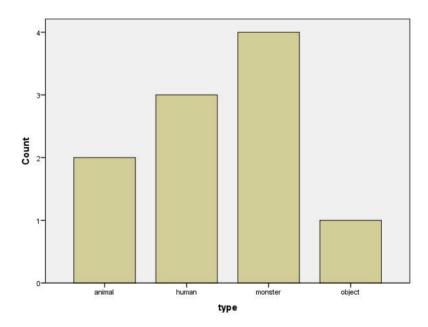


Figure 4.14. Distribution of protagonists' types of the top 10 samples

Table 4.2.

Major Characters Analysis of "Shrek 2"

			Shrek	Fiona	Donkey	Cat	King	Queen	Charming	Godmother	fairy creatures
	Hur	nan					V	V	V	V	V
Appearance		Animal			V	V	V				V
	Non-human	Monster	V	V							V
		Object									V
		Brave	V	V							
		Naive			V						
	Positive	Talkative			V						
_		Humorous	V	V							
	_	Funny			V	V					V
		Self-abased	V								
		Offensive								V	
Personality		Indifferent	V								
(Major)	Negative	Unfriendly							V	V	
-		Insecure	V								
		Self-esteem							V	V	
		Selfish					V		V	V	
		Evil							V	V	

Table 4.2 (continued).

Major Characters Analysis of "Shrek 2"

		Protagonist	V								
		Secondary		V							
		Protagonist									
	Positive	Supporting			V	V					
	Group	Characters									
Role		Secondary						V			V
Roic		Supporting									
		Antagonist								V	
		Henchman							V		
	Negative	Supporting					V				
	Group	Characters									
		Secondary	·							·	
		Supporting									

Table 4.3.

Major Characters Analysis of "The Lion King"

			Simba	Mufasa	Scar	Sarabi	Nala	Zazu	Timon	Pumbaa	Rafiki	Hyenas_3
		Animal	V	V	V	V	V	V	V	V	V	V
Appearance	Non-human	Monster										_
		Object										_

Table 4.3 (continued).

Major Characters Analysis of "The Lion King"

		Brave	V	V								
		Responsible		V								
		Upright		V								
	Positive	Tolerant		V								
		Talkative						V	V	V		
_		Funny						V	V	V		
		Self-abased	V									
		Offensive			V							
Personality		Timid	V									
(Major)		Afraid	V									
( '9'	Negative	Unemotional			V							
		Insecure	V									
		Selfish			V							
		Revengeful			V							V
		Evil			V							V
		Protagonist	V									
		Secondary		V								
		Protagonist										
	Positive	Supporting					V	V	V	V	V	
Role	Group	Characters										
		Secondary				V						
		Supporting										

Table 4.3 (continued).

# Major Characters Analysis of "The Lion King"

		Antagonist V	
		Henchmen	V
Role	Negative	Supporting	V
	Group	Characters	
		Secondary	V
		Supporting	

Table 4.4.

Major Characters Analysis of "Toy Story III"

			Woody	Buzz	Jessie	Lotso	Mr & Mrs Potato Head	Rex	Slinky	Piggy	Barbie	Chatter Telephone	Big Baby	Ken
	Huma	an												
Appearance		Animal												
	Non-human	Monster												
	Tion naman	Object	V	V	V	V	V	V	V	V	V	V	V	V
		Brave	V	V										
Personality		Kindhearted	V											
(Major)	Positive	Responsible	V											
		Upright	V											

Table 4.4 (continued).

Major Characters Analysis of "Toy Story III"

		Helpful	V											
	Positive	Speechful	V											
		Humorous	V	V										
		Funny		V			V	V		V				
_		Offensive				V								
D 111		Unfriendly				V								
Personality		Unemotional				V								
(Major)		Insecure				V								
	negative	Canting				V								
		Selfish				V								
		Revengeful				V								
		Evil				V								
		Protagonist	V											
	Positive	Secondary		V										
	Group	Protagonist												
		Supporting			V		V	V	V	V	V			
Role		Characters												
Kole		Secondary										V		
		Supporting												
_	Negative	Antagonist				V								
	Group	Henchmen											V	V
		Supporting												

Table 4.5.

Major Characters Analysis of "Finding Nemo"

			Nemo	Marlin	Dory	Gill	Bloat	Peach	Gurgle	Bubbles	Deb	Jacques	Sea turtle	shark	Dentist	Darla
	Hum	an													V	V
Appea		Animal	V	V	V	V	V	V	V	V	V	V	V	V		
ance	NI 1	Monster														
	Non-human	Object														
		Brave														
		Friendly			V	V	V	V	V	V	V	V				
		Naive	V													
		Dreamer				V										
	Positive	Helpful				V							V			
		Speechful			V											
Damana	-	Humorous											V			
Persona		Funny			V		V	V	V	V	V	V		V		
lity (Major)		Self-abased														
(Major)	-	Boring		V												
	-	Timid	V	V												
	Negative	Forgetful			V											
		Insecure		V												
	-	Rebelling	V													

Table 4.5 (continued).

Major Characters Analysis of "Finding Nemo"

		Protagonist	V													
Role _		Secondary		V												
	Positive	Protagonist														
	Group	Supporting			V											
		Characters														
		Secondary				V	V	V	V	V	V	V	V	V		
		Supporting														
		Antagonist														V
		Henchman													V	
	Negative	Supporting														
	Group	Characters														
		Secondary														
		Supporting														

Table 4.6.

Major Characters Analysis of "Shrek the Third"

			Shrek	Fiona	Charming	Donkey	Puss	Arthur	King	Queen	Fairy tale	Fairy tale
											creatures	villains
	Hum			V			V		V	V	V	
Appearance		Animal				V	V		V		V	V
	Non-human	Monster	V	V							V	V
		Object									V	V

Table 4.6 (continued).

Major Characters Analysis of "Shrek the Third"

		Brave	V									
		Selfless	V									
		Kindhearted	V									
		Speechful				V						
	Positive	Humorous	V									
		Funny				V	V					
		Susceptible										V
		Unfriendly										V
Personality		Insecure	V									
(Major)		Self-esteem			V							
	Negative	Afraid	V									
		Selfish			V							
		Revengeful			V							
		Evil			V							
		Protagonist	V									
		Secondary		V								
	Positive	Protagonist										
	Group	Supporting				V	V	V				
		Characters										
Role		Secondary							V	V	V	V
TOIC -		Supporting										
		Antagonist			V							
		Side kick										V
	Negative	Supporting										V
	Group	Secondary										
		Supporting										

Table 4.7.

Major Characters Analysis of "Up"

			Carl	Russell	Dog	Bird	Muntz	Ellie	Muntz's dogs_3
	Hu	man	V	V			V	V	
Appearance		Animal			V	V			V
	Non-human	Monster							
		Object							
		Brave							
		Kindhearted		V				V	
		Naive		V					
		Dreamer	V	V				V	
	Positive	Helpful		V					
		Talkative		V					
		Caring		V					
		Humorous							
Personality		Funny			V	V			V
(Major)		Offensive					V		V
(Wagor)		Indifferent	V						
		Lonely	V						
		Unfriendly	V						
	Negative	Unemotional							
		Insecure	V						
	- - -	Stiff	V						
		Selfish					V		
		Revengeful					V		
		Evil					V		

Table 4.7 (continued).

# Major Characters Analysis of "Up"

		Protagonist	V							
		Secondary		V						
	Positive	Protagonist								
	Group	Supporting			V	V				
		Characters								
Role		Secondary						V		
		Supporting								
		Antagonist					V			
		Henchman							V	
	Negative	Supporting							V	
	Group	Secondary								
		Supporting								

Table 4.8.

Major Characters Analysis of "Shrek"

			Shrek	Fiona	Donkey	Farquaad	Fairy tale creatures	Dragon
	Hı	ıman				V	V	
Appearance		Animal			V		V	V
	Non-	Monster	V	V			V	
	human	Object					V	

Table 4.8 (continued).

Major Characters Analysis of "Shrek"

		Brave	V	V				
		Naive			V			
	Positive	Talkative			V			
		Humorous	V	V				
_		Funny			V			
		Self-abased	V					
		Offensive				V		
		Indifferent	V					
D 114		Lonely	V					
Personality		Unfriendly	V			V		
(Major)	Negative	Unemotional				V		
		Insecure	V					
		Self-esteem				V		
		Stiff	V					
		Selfish				V		
		Evil				V		
		Protagonist	V					
		Secondary		V				
	Positive	Protagonist						
	Group	Supporting			V			
Role		Secondary					V	V
_		Supporting						
	Negative	Antagonist				V		
	Group	Henchmen						

Table 4.9.

Major Characters Analysis of "The Incredibles"

			Bob	Helen	Dash	Violet	Jack-Jack	Incrediboy	Frozone	Mirage	Edna	Gilbert
	Н	uman	V	V	V	V	V	V	V	V	V	V
Appearance		Animal										
	Non-human	Monster										
		Object										
		Brave	V						V			
		Responsible	V						V			
		Naive					V					
		Upright	V									
	Positive	Helpful	V									
		Caring	V									
		Cute					V					
D 11.		Funny									V	V
Personality		Self-abased										
(Major)		Offensive						V				
		Indifferent						V				
		Unfriendly										V
		Unemotional						V				V
	Negative	Fairly strong	V									
		Self-respecting										
		Jealous						V				
		Selfish						V				V
		Revengeful					•	V				
		Evil						V				

Table 4.9 (continued).

Major Characters Analysis of "The Incredibles"

		Protagonist	V									
		Secondary		V	V	V						
	Positive	Protagonist										
	Group	Supporting					V		V		V	
Role		Secondary										
		Supporting										
		Antagonist						V				
	Negative	Henchmen								V		
	Group	Supporting										V
		Secondary										
		Supporting										

Table 4.10.

Major Characters Analysis of "Monsters. Inc."

			Sully	Mike	Boo	Randall	Boss	Celia	Fungus	Roz	George	Snowman
	Hum	nan			V							
Appearance	Non-human	Monster	V	V		V	V	V	V	V	V	
	<del>-</del>	Object										

Table 4.10 (continued).

Major Characters Analysis of "Monsters. Inc."

		Brave	V							
		Kindhearted	V							V
		Naive			V					
	Positive	Upright	V							
		Talkative		V						
		Funny		V				V	V	
_		Self-abased								
		Offensive				V				
D 114		Indifferent					V			
Personality		Timid						V		
(Major)		Unfriendly				V				
	Negative	Unemotional				V				
		Canting					V			
		Stiff								
		Selfish				V	V			
		Revengeful				V	V	·	·	
		Evil	·			V	V			·

Table 4.10 (continued).

Major Characters Analysis of "Monsters. Inc."

		Protagonist	V									
		Secondary			V							
		Protagonist										
	Positive	Supporting		V								
	Group	Characters										
		Secondary						V		V	V	
Role		Supporting										
		Antagonist					V					
		Henchman				V						
	Negative	Supporting							V			
	Group	Characters										
		Secondary		·		·						
		Supporting										

Table 4.11.

Major Characters Analysis of "Despicable Me"

			Gru	Margo	Edith	Agnes	Dr. Nefario	Vector	Perkins	Gru's Mom	Minions
_	Hı	uman	V	V	V	V	V	V	V	V	
Appearance	_	Animal									
	Non-	Monster									
	human	Object									V

Table 4.11 (continued).

Major Characters Analysis of "Despicable Me"

		Brave									
		Clever		V							
		Naive				V					
	Positive	Dreamer	V								
		Cute				V					
		Naughty			V						
Personality		Humorous									
(Major)		Funny					V	V			V
		Faithless						V			
		Uncaring	V							V	
		Unfriendly	V								
	Negative	Unemotional	V								
		Selfish						V	V		
		Evil						V	V		
		Protagonist	V								
		Secondary		V	V	V					
	Positive	Protagonist									
	Group	Supporting					V				
Role		Secondary								V	V
		Supporting									
_	Negative	Antagonist						V			
	Group	Henchmen							V		

Table 4.12.

Summary Analysis of Major Characters in the Top 10 Samples

		Protagon	ist	Antago	nist	Positive	Negative	Ratio	supportin	ig group	Total
	Name	Type	Flaw (most notable)	Name	Evil?	group #	group #	PG/NG	number	Funny?	- #
Shrek 2	Shrek (M)	M (adult)	Y (Self-abased)	Godmother	Y	4	3	1.33	2	Y	32
The Lion King	Simba (M)	A (cub-adult)	Y (Afraid of past)	Scar	Y	4	4	1	2	Y	12
Toy Story III	Woody (M)	O (adult)	N	Lotso	Y	12	9	1.33	5	Y	45
Finding Nemo	Nemo (M)	A (kid)	Y (Timid)	N/A	N/A	3	2	1.5	1	Y	26
Shrek the third	Shrek (M)	M (adult)	Y (Afraid of future)	Charming	Y	5	4	1.25	2	Y	42
Up	Carl (M)	H (adult)	Y (Indifferent)	Muntz	Y	4	4	1	2	Y	14
Shrek	Shrek (M)	M (adult)	Y (Self-abased)	Farquaad	Y	3	1	3	2	Y	25
The Incredibles	Bob (M)	H (adult)	Y (fairly strong	Buddy	Y	4	2	2	0	N	16
			self-respecting)								
Monsters.Inc	Sully (M)	M (adult)	N	Waternoose	Y	3	2	1.5	1	Y	15
Despicable me	Gru (M)	H (adult)	Y (unemotional)	Vector	Y	4	2	2	>6	Y	23

Figure 4.14 shows the distribution of the protagonist types found in the sample group. Clearly, "monster" ("fantasy creature") is the most popular type, followed by human. Object is the least popular type.

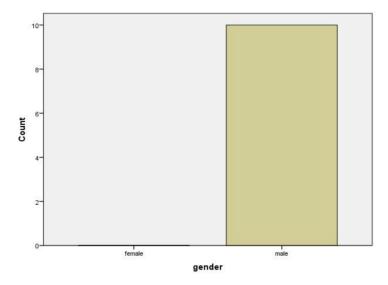


Figure 4.15. Distribution of protagonists' genders in the top 10 samples

Figure 4.15 shows the gender distribution of the protagonists in each film from the sample group. "Male" is clearly much more popular than "Female".

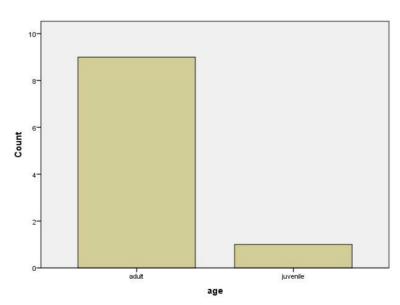


Figure 4.16. Distribution of protagonists' age levels in the top 10 samples

Figure 4.16 shows the age level distribution of protagonists in the films in the sample group. Obviously, "adult" is much more prevalent than "juvenile".

According to the case analysis, "faulty" is the most notable personality of all the protagonists of the sample group since 80% of protagonists have marks in the negative personality columns, Figure 4.17 shows that, according to the distribution, audiences answered yes much more often than no. Therefore, a faulty protagonist is more acceptable to an audience today.

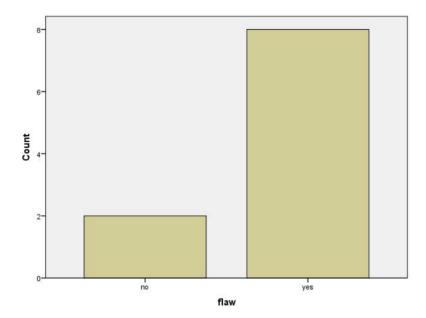


Figure 4.17. Distribution of protagonists' most notable trait in the top 10 samples

Similarly, Figure 4.18 shows the distribution of an antagonist's most notable common personality, "evil". The answer of "yes" is much more frequent than "no." Thus, an evil antagonist is essential for an extremely popular animated movie.

When it comes to the Supporting Group, there are two parameters that need to be discussed: the most prominent commonalties of Supporting Characters and the number of

characters in the Supporting Group (SG). Related information is displayed in Figure 4.19 and 4.20.

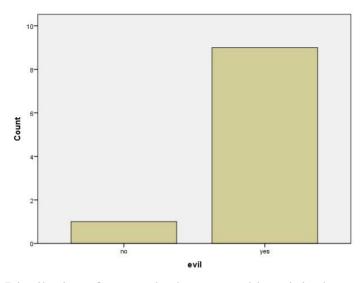


Figure 4.18. Distribution of antagonists' most notable trait in the top 10 samples

According to the case analysis, the most common personality characteristic of the Sample Group is "funny." Figure 4.19 shows this distribution. Clearly, responders answered "yes" more frequent than they answered "no" indicating that a funny supporting group is much more popular than a somber one.

The boxplot of figure 4.20 shows the dispersion of the number of characters in the Sample Group of the top 10 animated films. The dispersion of the character number sequence is apparently right skewed, the median is 2, and the outliers are 5 and 6. The most typical number of characters in the supporting group of the top 10 samples is 2.

The dispersion of the number of characters in the Positive Group, the number of characters in the Negative Group, the ratio of number of characters in the Positive Group to the number of characters in the Negative Group, and the number of characters in the Cast are shown in figures 4.21~4.24 respectively.

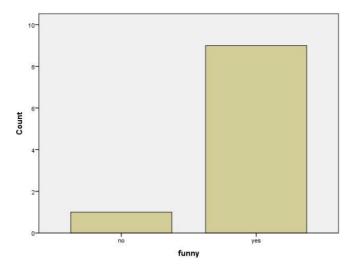


Figure 4.19. Distribution of the most notable trait of the supporting group (top ten)

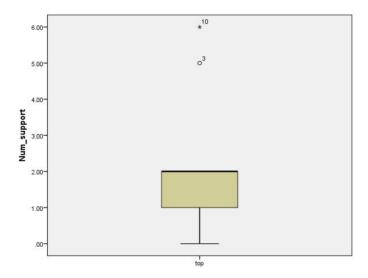


Figure 4.20. Dispersion of supporting characters' numbers in the top 10 samples

According to the boxplot of figure 4.21, the dispersion of the number of characters in the Positive Group of the top 10 samples is strongly left skewed. The median is 4, 50% of the ten samples have 3 or 4 characters, and the outlier is 12. Therefore, the most typical number of characters in the positive group in a highly popular animated film is 4 including the protagonist.

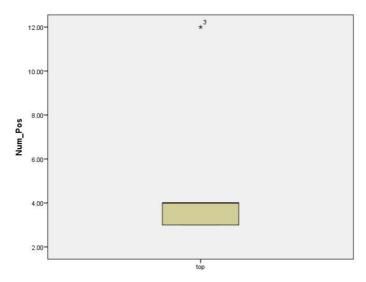


Figure 4.21. Dispersion of positive characters' numbers in the top 10 samples

Figure 4.22 shows the dispersion of the number of characters in the Negative Group of the top 10 samples. Clearly, the dispersion is strongly left skewed; the median is 2.5, and 50% of the ten samples have 2 to 4 characters in the Negative Group. Thus, there tends to be 2 to 3 characters, including the antagonist, in the Negative Group in a popular animated movie.

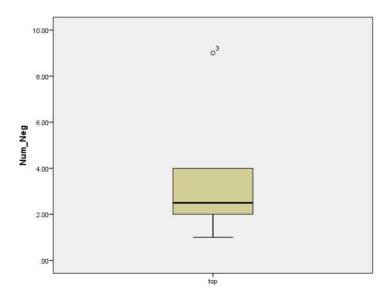


Figure 4.22. Dispersion of negative characters' numbers in the top 10 samples

Figure 4.23 shows the dispersion of the ratio of number of characters in the Positive Group to that of the Negative Group. According to the boxplot, the dispersion is strongly left skewed. The median is 1.4, which means in an extremely popular animated film, the ratio of the number of characters in the Positive Group and the Negative Group tends to be 1.4:1.

Figure 4.24 indicates the dispersion of the total number of characters in the top ten samples. The dispersion is slightly left skewed and the median is 24. Therefore the typical number of characters in a fairly popular animated film is 24.

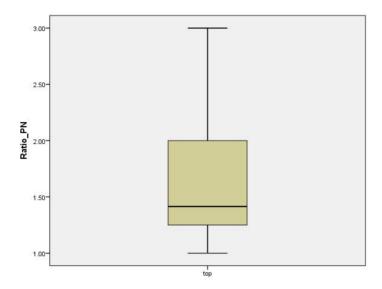


Figure 4.23. Dispersion of the ratio of character number of PN and NG (top ten)

According to the literature review, characters in a movie are the figures that communicate with the audience directly, as such, the setting of major characters can decisively influence the range of the audience. The type of major characters can be determined by the protagonist and secondary protagonist, who are both profoundly involved with the development of the plot and the emotional conflict. The antagonist

functions as an external negative force. Using this information, the range of the audience can be determined.

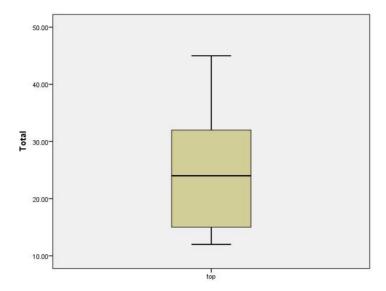


Figure 4.24. Dispersion of the total number of characters in the top 10 samples

Table 4.13 shows the types of major characters in the sample group. There are two combinations, A+A and A+J, A+A indicates that the major characters are both adults. "A+J" indicates that the story events occur between an adult and a child. In this scenario, the adult will experience self-growth and the love-learning process together with the child and may even learn from the child. In this sense, the type "A+J" can be seen as a fairy tale for adults.

Based on Table 4.13, Figure 4.25 displays the distribution of the types from the top ten samples. The combination of "A+J" is much more prevalent than that of "A+A", meaning the major character type of an extremely popular animated film tends to be "A+J." The reason for this is that this type of story tries to connect the world of juveniles

with that of adults. As such it is more acceptable and attractive to both groups and appeals to a larger range of audiences.

Table 4.13.

Summary Analysis of Combination Type of Protagonist and Secondary Protagonist in the Top 10 Samples

	Prot	agonist	Secondary Prota	Secondary Protagonist		
	Name	Age level	Name	Age level		
Shrek 2	Shrek	A	Fiona	A	A+A	
The Lion King	Simba	J-A	Mufasa	A	J+A	
Toy Story III	Woody	A	Buzz	A	A+A	
Finding Nemo	Nemo	J	Marlin	A	J+A	
Shrek the third	Shrek	A	Fiona & Arthur	A/J	A+J	
Up	Carl	A	Russell	J	A+J	
Shrek	Shrek	A	Fiona	A	A+A	
The Incredibles	Bob	A	Helen, Dash & Violet	A/J	A+J	
Monsters.Inc	Sully	A	Boo	J	A+J	
Despicable Me	Gru	A	Margo, Edith, Agnes	J	A+J	

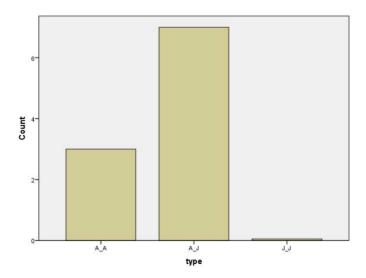


Figure 4.25. Distribution of combination types of protagonists and secondary protagonists in the top 10 samples

#### 4.1.2.3. Conflict

Previous researchers have determined that there are five kinds of conflicts: man versus himself, man versus his background, man versus his situation, man versus man, and man versus fate. The term man refers to the protagonist. Since conflicts develop within the plot during the storytelling process, it's quite possible that there is a general law that determines the development of conflict. The conflicts analysis of the ten samples is listed in Table 4.24~4.33.

According to the above tables, 8 of the movies (*Shrek II*, *The Lion King*, *Shrek the Third*, *Up*, *Shrek*, *The Incredibles*, *Finding Nemo*, and *Despicable Me*) have conflict development similar to that shown in figure 4.34. The conflict in this scheme contains the scenarios of Man versus Himself and Man versus His Situation in the Catalyst Phase. Following this phase, a new conflict of Man versus Man is added in the Development Phase. Next, the conflict of Man versus Himself is solved in the Climax Phase. Finally, the last two conflicts, Man versus Man and Man versus his Situation, are solved in the Confrontation Phase. The two exceptions to this conflict pattern are *Toy Story III* and *Monsters. Inc.* The reason for the exception is in the conflict theme of man versus himself. This difference arises because of character flaws found in the protagonists; the protagonists of the two movies (Woody and Sully) don't have obvious negative personalities in the characters analysis section. Thus the two parts of character analysis and conflict analysis are connected.

Since the flow chart of conflict development is suitable for 80% of the sample group, this model is "typical" in describing the conflicts development of an extremely popular animated film statistically.

#### 4.1.2.4. Other related factors

The above analyses focus on four story elements, but there are other factors related to a story that influence its popularity other than story elements. This section details these factors.

#### 1). Source of Materials

A story can be original or unoriginal. If it's unoriginal, it has source materials that it draws upon. These source materials are generally related to the original story and vary it through adaptation or spoofing, as shown in Table 4.24.

The related information for the above table is shown in Figures 4.27 and 4.28. As the information in Figure 4.27, clearly shows, the ratio of "unoriginal story" to "original story" is 1:1. Therefore, the classical is still valuable for movie story creation. Figure 4.28 shows the distribution of the types of related Classicals. From this chart it is clear that fairy tale is more popular story type than the other two. This means that in extremely successful animated films with an unoriginal story, the fairy tale story line is more popular than others.

Table 4.14.

Conflicts Analysis of "Shrek II"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself		V	V	V(solved)		
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

Table 4.15.

Conflicts Analysis of "The Lion King"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself		V	V	V(solved)		
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

Table 4.16.

Conflicts Analysis of "Toy Story III"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself						
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

Table 4.17.

Conflicts Analysis of "Finding Nemo"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself		V	V	V	V(solved)	
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

Table 4.18.

Conflicts Analysis of "Shrek the Third"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself		V	V	V(solved)		
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

Table 4.19.

Conflicts Analysis of "Up"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself		V	V	V(solved)		
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

Table 4.20.

Conflicts Analysis of "Shrek"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself		V	V	V(solved)		
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

Table 4.21.

Conflicts Analysis of "The Incredibles"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself		V	V	V(solved)		
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

Table 4.22.

Conflicts Analysis of "Monsters. Inc"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself						
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

Table 4.23.

Conflicts Analysis of "Despicable Me"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself		V	V	V(solved)		
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

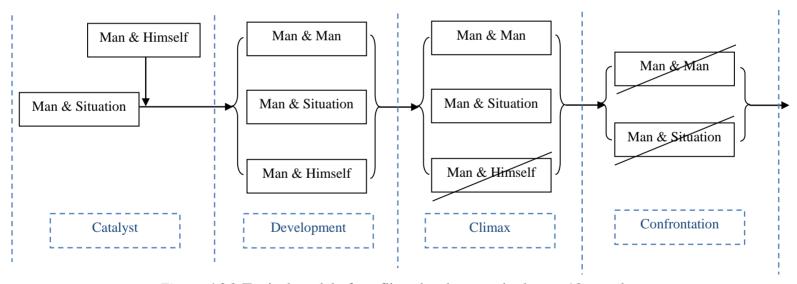


Figure 4.26. Typical model of conflicts development in the top 10 samples

Table 4.24.

Summary Analysis of Source of Materials in the Top 10 Samples

	Unoriginal Story		Original
	Adaptation of Classical	Spoofing of Classical	Story
Shrek 2	V (Fairy Tale "Shrek!")	V (Grimm's & Andersen's Fairy Tales)	
The Lion King	V ("Hamlet")		
Toy Story III			V
Finding Nemo			V
Shrek the third	V (Fairy Tale "Shrek!")	V(Grimm's & Andersen's Fairy Tales)	
Up			V
Shrek	V (Fairy Tale "Shrek!")	V (Grimm's & Andersen's Fairy Tales)	
The Incredibles	V (DC Comics)		
Monsters.Inc			V
Despicable me			V

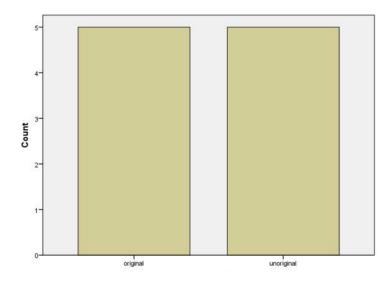


Figure 4.27. Distribution of source of materials in the top 10 samples

## 2). Techniques used for story realization

Applied techniques are the specific methods used to realize a story. There are three kinds of techniques that can be used for the production of a story. These are 3D

computer graphics, 2D traditional techniques, and other traditional techniques. The related data is shown in Table 4.25.

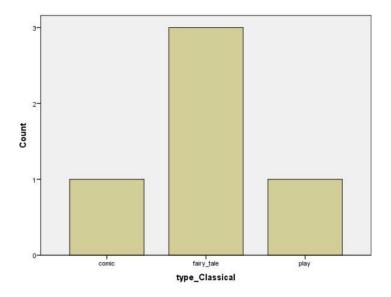


Figure 4.28. Distribution of related classical types in the top 10 samples

Table 4.25.

Summary Analysis of Related Information in the Top 10 Samples

_	Related Information		
	Technique used	Sequel?	
Shrek 2	3D	V	
The Lion King	2D		
Toy Story III	3D	V	
Finding Nemo	3D		
Shrek the third	3D		
Up	3D		
Shrek	3D		
The Incredibles	3D		
Monsters.Inc	3D		
Despicable me	3D		

The distribution of techniques used in the above table is shown in figure 4.29. Based on this information, it is obvious that 3D computer graphic technology is the

technique that is most used in the sample group. Therefore, extremely popular animated films tend to be in CG animation.

### 3). A sequel or not

The "sequel" factor should be discussed when considering a film's popularity. Figure 4.38 is based on the data in Table 4.25 and displays the distribution of yes and no answers to the question of whether there should be a sequel or not. Apparently, many more respondents answered "no" than "yes", thus a greatly successful animated film tends to not have a sequel.

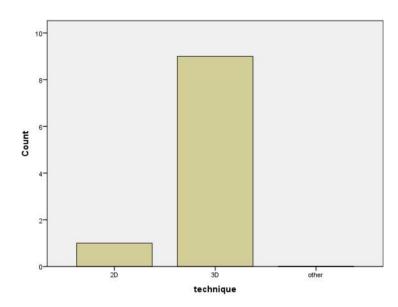


Figure 4.29. Distribution of applied techniques in the top 10 samples

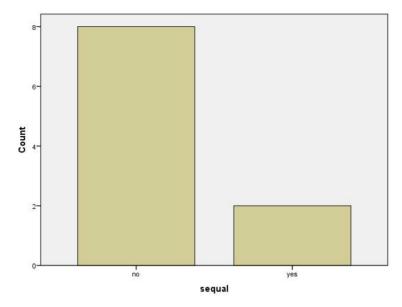


Figure 4.30. Distribution of "sequel" situation in the top 10 samples

#### 4.2. Theory Classification Stage

The commonalities of the Sample Group can be seen to comprise the characteristics of an extremely popular animated film. They include two parts: the characteristics common to all popular, animated films, and some decisive factors that are exclusive to greatly prevalent animated films.

In order to determine the decisive factors that make a successful animated film, the research needs to determine the traits of the Control Group i.e. the bottom 10 animated films of the population. The comparison of the Sample Group to the Control Group will produce some similarities and differences; the similarities represent the traits of all popular animated films, while the differences represent the decisive factors for success.

At this point, there are two sections of the research that still need to be completed: analysis of the control group and a comparison between the two groups. Investigation on

the control group will follow the analyzing methods of the sample group exactly. The comparison will be completed using descriptive statistics via SPSS.

#### 4.2.1. Case Description of the Bottom Ten Samples

This section describes each case of the bottom ten samples and includes a general introduction of the movies and their storylines in the form of flow charts based on the transition places of the protagonists. This section primarily serves as a reminder of the stories in the Control Group. It is also preparation for the analysis phase.

#### 4.2.1.1. Case 11

Case 11, *Corpse Bride*, is a stop-motion-animated fantasy musical film released in 2005. This film is based on Jewish folklore and uses a similar plot. The general storyline is primarily based on the place transitions of the major characters as shown in Figure 4.31.

#### 4.2.1.2. Case 12

South Park: Bigger, Longer & Uncut, Case 12, is an animated musical comedy film released in 1999. It is based on the animated television series South Park. Its plot is shown in Figure 4.32.

#### 4.2.1.3. <u>Case 13</u>

Hoodwinked!, is an American, computer-animated, family action comedy film released in 2005. The story is based on the folktale Little Red Riding Hood, and

structurally borrows from *Rashomon* and *The Usual Suspects*. Its plot is shown in Figure 4.33.

#### 4.2.1.4. Case 14

Case 14 is *The Tale of Despereaux*. It is a computer-animated film released in 2008 by Universal Pictures. It is loosely based on Kate Dicamillo's 2003 fantasy book of the same name. Information on the plot of this film is found in Figure 4.34.

#### 4.2.1.5. Case 15

The Road to EI Dorado is an American Animated adventure musical comedy film released by DreamWorks in 2000. EI Dorado utopically combines the civilizations of the Aztecs, Maya, Incas and Atlantis. The film is set in Ecuador or EI Salvador and its title refers to the road to gold. The plot of this film is shown in Figure 4.35.

#### 4.2.1.6. Case 16

Home on the Range. It is an American animated musical feature film produced by Walt Disney Feature Animation and released in 2004 by Walt Disney Pictures. The film has the same name as a popular country song "Home on the Range." It was the last traditionally animated Disney film until 2009. Its plot can be seen in Figure 4.36.

#### 4.2.1.7. <u>Case 17</u>

Return to Never Land.is an American animated film produced by DisneyToon

Studios and released by Walt Disney Pictures. This film is a sequel to the 1953 film Peter

Pan, based on J.M. Barrie's most famous work Peter Pan, or The Boy Who Wouldn't Grow Up. The plot information on this film is shown in Figure 4.37.

#### 4.2.1.8. Case 18

The Land before Time is an American animated adventure film that was executive-produced by Steven Spielberg, George Lucas, Kathleen Kennedy, and Frank Marshall. It was co-produced by Don Bluth, and originally released by Universal Pictures and Spielberg's Amblin Entertainment in 1988. The plot of this film is shown in Figure 4.38.

#### 4.2.1.9. <u>Case 19</u>

The Jungle Book 2 is an American animated film produced by the DisneyToons studios in Sydney and released by Walt Disney Pictures and Buena Vista Distribution in 2003. It is a sequel to Walt Disney's 1967 film *The Jungle Book*. This film is not based on Rudyard Kipling's book, *The Second Jungle Book*, which was first published in 1895. However, they do have several characters in common. The plot for this film is shown in Figure 4.39.

#### 4.2.1.10. <u>Case 20</u>

An American Tail is an American animated adventure film produced by Sullivan Bluth Studios and Amblin Entertainment, released in 1986. Its plot is illustrated in Figure 4.40.

#### 4.2.2. Information Generalization of Bottom-Ten Group

This part primarily aims to generalize and summarize the data of the control group -- the bottom 10 samples according to the categories of the four story elements. The method applied in this segment is quite similar to that which was applied to the control group generalization in section 4.1.2. It also includes two major parts -- case analysis and summary analysis. The outcome of this section, which is the commonalities of the bottom 10 samples, is preparation for a comparison of the similarities and differences between the two groups. According to the purpose and concentration of this research, the outcome of this section only needs to be in raw data form; no descriptive statistical conclusion is needed.

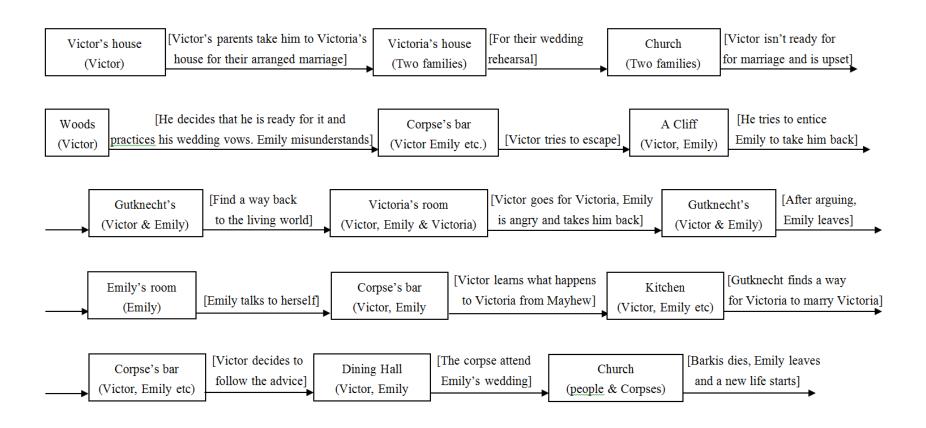


Figure 4.31. General storyline of Corpse Bride

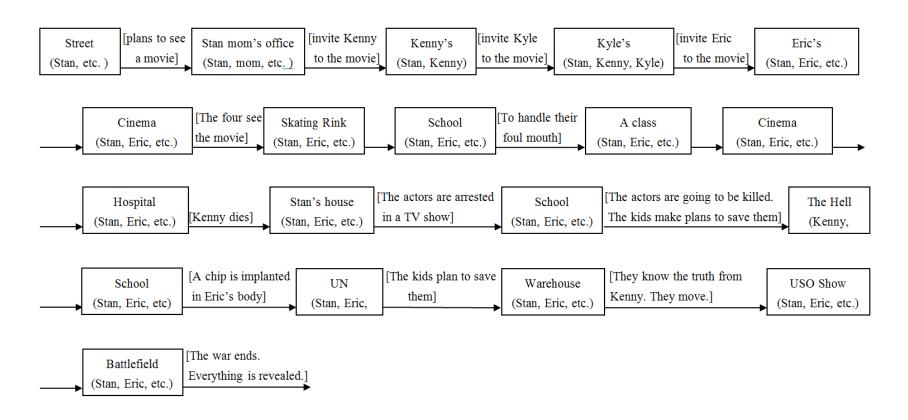


Figure 4.32. General storyline of South Park

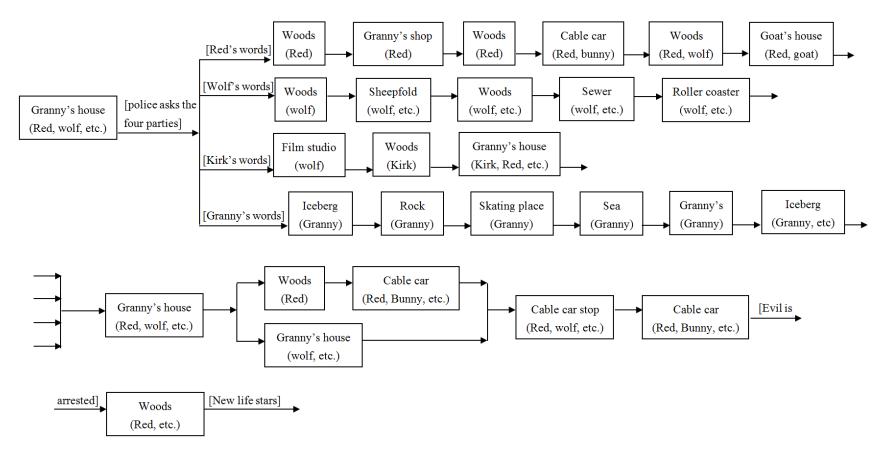


Figure 4.33. General storyline of Hoodwinked

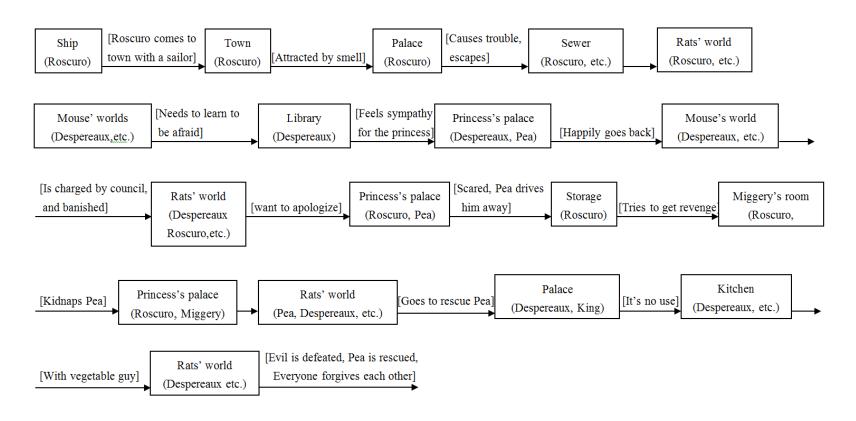


Figure 4.34. General storyline of The Tale of Despereaux

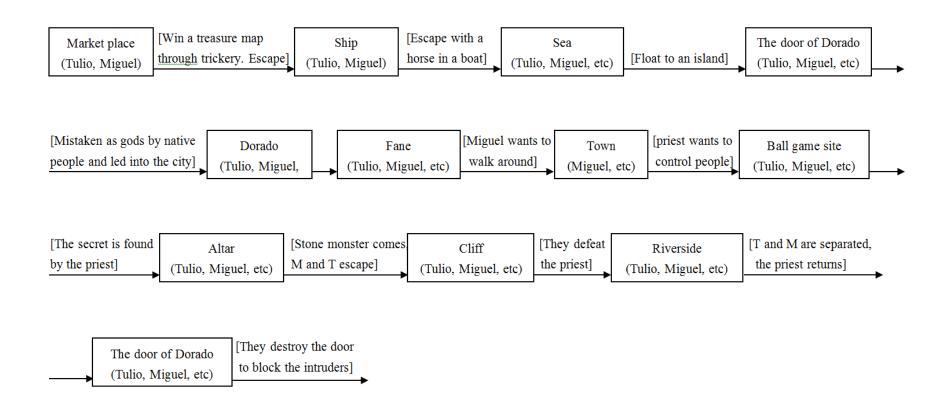


Figure 4.35. General storyline of The Road to EI Dorado

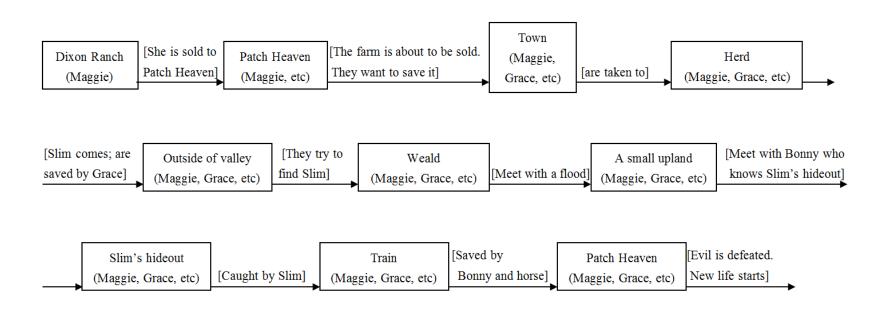


Figure 4.36. General storyline of Home on the Range

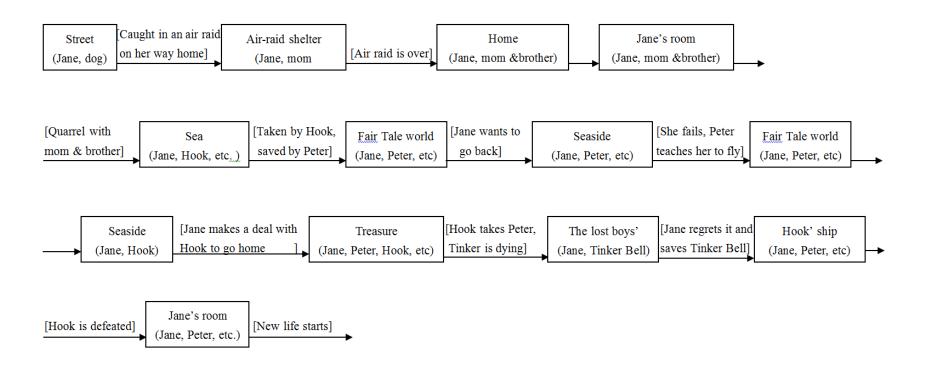


Figure 4.37. General storyline of Return to Neverland

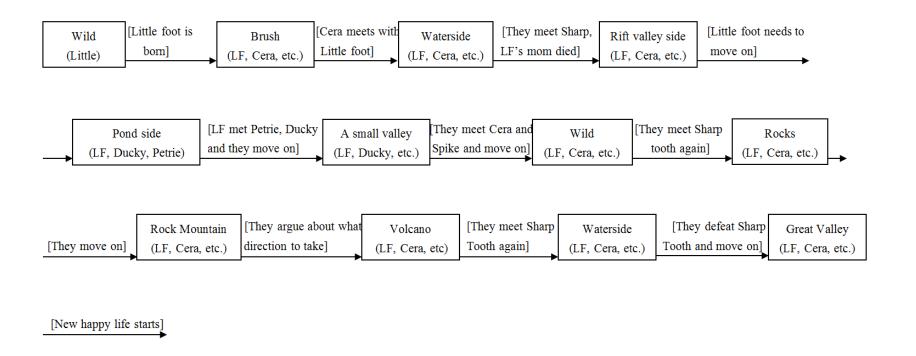


Figure 4.38. General storyline of The Land before Time

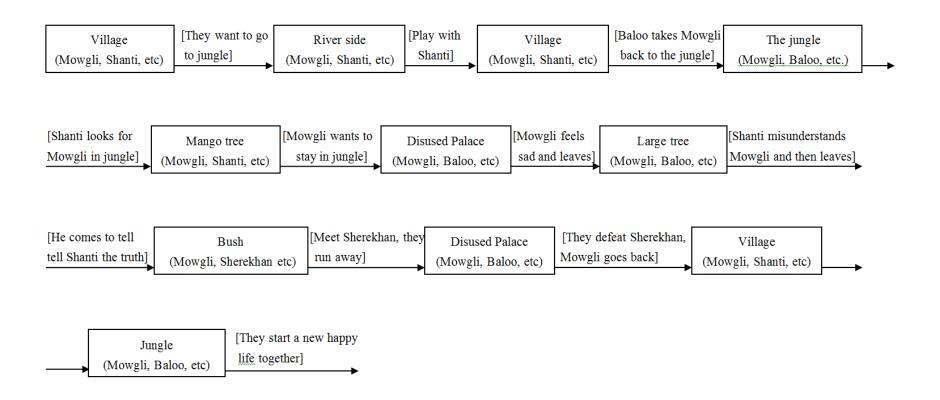


Figure 4.39. General storyline of The Jungle Book2

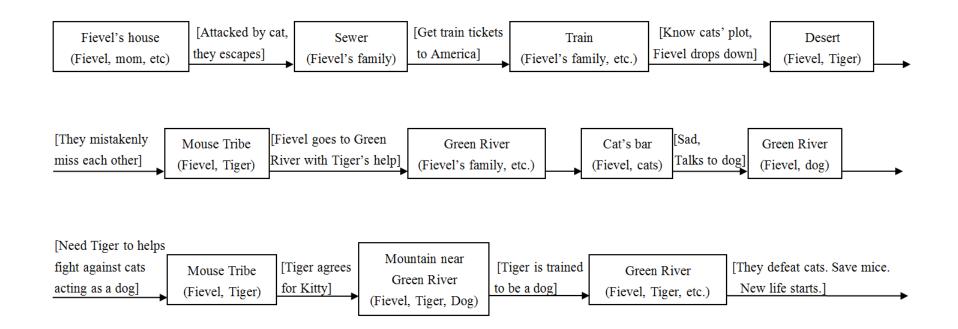


Figure 4.40. General storyline of An American Tail

## 4.2.2.1. Theme

Table 4.26 shows the summary analysis of the themes from the control group. Figure 4.41 indicates the dispersion of the theme number sequence. According to the boxplot, the dispersion is strongly right skewed; the central tendency is the median 3.5. The last line of the table indicates all the theme data of the control group.

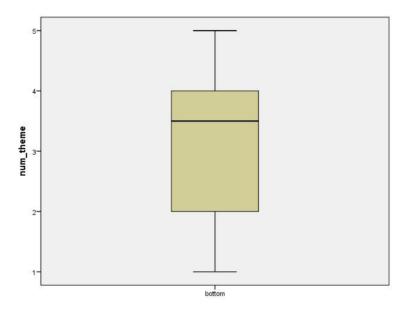


Figure 4.41. Dispersion of theme numbers in the bottom 10 samples

## 4.2.2.2. Characters

Character analysis of the ten cases in the control group is shown in Table 4.27~4.36 separately.

Based on the above case analyses, summary analysis on character information is shown in Table 4.37. According to this table, the central tendency of PG, NG, SG, Total and the ratio of PG/NG need to be calculated. Figure 4.42~4.46 shows the dispersions of the five sequences above.

Table 4.26.

Summary Analysis of Themes in the Bottom 10 Samples

		Self-growing			Love w	ith others		#
	Self-redemption	Self-realization	Self-recognition	Love of Family	Love of Team members	Love of Strangers	Love of Nature	
An American Tail	V	V		V	V			4
The Jungle Book2	V	V		V	V		V	5
The Land before Time	V	V		V	V	V		5
Return to Never Land	V		V	V	V			4
Home on the Range	V			V	V	V		4
The Road to EI Dorado					V	V	V	3
The Tale of Despereaux		V		V				2
Hoodwinked	V			V				2
South Park	V							1
Corpse Bride			V					1
Data results	7	4	2	7	6	3	2	3.5

Table 4.27.

Major Characters Analysis of "Corpse Bride"

			Victor	Emily	Victoria	Barkis	Nell	William	Maudeline	Finis	Pastor	Maggot &spider	Elder G	Other Corpse
	Hum	an	V	V	V	V	V	V	V	V	V	<del>-</del>		
Appearance		Animal										V		
	Non human	Monster											V	V
	Non-human	Object												
		Gentle	V		V									
		Kind	V											
	Positive	Speechful												
		Humorous												
		Funny										V		V
Personality		Blind		V										
(Major)		Indifferent					V	V	V	V				
	Negative	Selfish					V	V	V	V				
		Cruel				V								
		Evil				V								
		Protagonist		V										
	D :::	Secondary	V		V									
	Positive	Protagonist										**		
	Group	Supporting									***	V	***	
Role		Secondary									V		V	V
Role		Supporting				**								
		Antagonist				V								
	37 4:	Henchmen												
	Negative	Supporting					V	V	V	V				
	Group	Supporting												
	1	Supporting												

Table 4.28.

Major Characters Analysis of "South Park"

			Stan	Kenny	Kyle	Eric	Satan	Saddam	Stan's Mom	Chef	Terrance & Phillip	Wendy Gregory	Teachers	Others
	Hum	nan	V	V	V	V		V	V	V	V	V	V	V
Appearance		Animal												
	Non-human	Monster					V							
	Non-numan	Object												
		Foulmouthed	V	V	V	V		V			V			
		Ambitious						V						
Personality	Negative	Selfish												
		Cruel						V						
		Evil						V						
		Protagonist	V											
		Secondary				V								
	Positive	Protagonist												
	Group	Supporting		V	V									
		Secondary								V	V	V	V	V
Role		Supporting												
		Antagonist						V						
		Henchman					V							
	Negative	Supporting												
	Group	Secondary												
		Supporting												

Table 4.29.

Major Characters Analysis of "Hoodwinked"

			Red	Granny	Kirk	Wolf	Squirrel	Goat	Chief Bear	Det. Frog	Lizard	Bunny	Chief's assistants	Ski Team	others
	Hum	an	V	V	V									V	V
Appearance		Animal				V	V	V	V	V	V	V	V		V
	Non house	Monster													
	Non-human	Object													
		Brave	V												
		Just	V												
		Challenge-		V											
	Positive	lover													
		Reasoning								V					
Personality		Funny					V	V							
(Major)		Selfish										V			
	negative	Tricky										V			
		Evil										V		V	
		Protagonist	V												
		Secondary		V	V	V				V					
	Positive	Protagonist													
	Group	Supporting					V	V							
		Secondary							V		V		V		V
Role		Supporting													
		Antagonist										V			
		Henchman												V	
	Negative	Supporting													
	Group	Secondary													
		Supporting													

Table 4.30.

Major Characters Analysis of "The Tale of Despereaux"

			Despereaux	Roscuro	Botticelli	Princess	Despereaux's parents	King, queen	Miggery & her dad	Chef	Vegetable guy	Others
	Hum	an				V		V	V	V		
Appearance		Animal	V	V	V		V					V
	Non-human	Monster										
	Non-numan	Object									V	
		Dreamy	V			V						
		Just	V									
		Brave	V									
Personality		Fearless	V									
(Major)	Positive	Funny										
		Revengeful		V								
	Negative	Timid					V					
		Evil			V							
		Protagonist	V									
	Positive	Secondary		V		V						
	Group	Protagonist										
		Supporting							V	V	V	
Role		Secondary					V	V				
		Supporting										
		Antagonist			V							
	Negative	Henchman										
	Group	Supporting										
		Secondary										
		Supporting										

Table 4.31.

Major Characters Analysis of "The road to EI Dorado"

			Tulio	Miguel	Chel	Tzekel Priest	Chief	Cortes	Altivo	Squirrel	Other man in EI Dorado
	Hum	an	V	V	V	V	V	V			V
Appearance		Animal							V	V	
	NT 1	Monster									
	Non-human	Object									
		Dreamer	V	V							
	Positive	Just	V	V							
Personality	-	Kind					V				
(Major)		Cruel				V					
	negative	Tricky	V	V							
	-	Evil				V		V			
		Protagonist		V							
	Positive	Secondary	V		V						
	Group	Protagonist									
		Supporting					V		V	V	
	-	Secondary									V
Role		Supporting									
		Antagonist				V					
		Henchman						V			
	Negative	Supporting									
	Group	Secondary									
		Supporting									

Table 4.32.

Major Characters Analysis of "Home on the Range"

			Maggie	Mrs. Calloway	Grace	Buck	Slim	Rico	Jack	Pearl	Slim's brothers	Buffalos	Other farm animals
	Hun	nan					V	V		V	V		
Appearance		Animal	V	V	V	V			V			V	V
	NI 1	Monster											
	Non-human	Object											
		Out-going	V										
		Warmhearted	V										
	Positive	Kind			V					V			
		Funny				V			V			V	V
		Rigid		V									
Personality		Tone-deaf			V								
(Major)	Negative	Indifferent		V									
		Mercenary					V	V					
		Evil					V						
		Protagonist	V										
		Secondary		V	V								
	Positive	Protagonist											
	Group	Supporting				V			V				
Role		Secondary								V			V
		Supporting											
		Antagonist					V						
		Henchman						V					
	Negative	Supporting									V		
	Group	Secondary											
		Supporting											

Table 4.33.

Major Characters Analysis of "Return to Neverland"

			Jane	Peter Pan	Captain Hook	Tinker Bell	Lost Boys	Wendy	Danny	Smee	Edward	Other Pirates
	Hum	ian	V	V	V	V	V	V	V	V	V	V
Appearance		Animal										
	Non-human	Monster										
	Non-numan	Object										
		Brave		V								
	_	Humorous		V								
	Positive	Kind	V									
Personality	-	Naïve				V	V		V			
(Major)		Cynical	V									
	-	Tricky			V							
	Negative	Evil			V							
		Protagonist	V									
	-	Secondary		V		V						
	Positive	Protagonist										
	Group	Supporting					V					
Role	_	Secondary						V	V		V	
		Supporting										
		Antagonist			V							
	Negative	Henchman								V		
	Group	Supporting										V
	_	Secondary										
		Supporting										

Table 4.34.

Major Characters Analysis of "The Land before Time"

			Little foot	Cera	Ducky	Sharp tooth	Petrie	Spike	Little foot's mother	Cera's father	Little foot's Grandparents	Others
	Hum	an										
Appearance		Animal	V	V	V	V	V	V	V	V	V	V
	Non-human	Monster										
	140II-IIuIIIaii	Object										
		Brave	V									
		Steadfast	V									
		Kind	V						V			
	Positive	Friendly	V									
		Funny										
D 10		Cynical		V								
Personality		Prideful		V								
(Major)	Negative	Indifferent										
		Unfriendly		V								
		Protagonist	V									
		Secondary		V								
	Positive	Protagonist										
	Group	Supporting			V		V	V				
		Secondary							V	V	V	V
Role		Supporting										
		Antagonist				V						
		Henchman										
	Negative	Supporting										
	Group	Secondary										
		Supporting										

Table 4.35.

Major Characters Analysis of "The Jungle Book2"

			Mowgli	Baloo	Bagheera	Shanti	Ranjan	Sherekhan	Elephants	Condors	Snake	Villagers	Other Animals
	Hum	an	V			V	V					V	
Appearance		Animal		V	V			V	V	V	V		
	NT 1	Monster											
	Non-human	Object											
		Brave	V			V							
	Positive	Freedom-	V	V									
		lover											
Personality		Cruel											
(Major)		Revengeful						V					
	Negative	Evil						V					
		Protagonist	V										
		Secondary		V		V							
	Positive	Protagonist											
	Group	Supporting			V		V						
		Secondary							V			V	V
Role		Supporting											
		Antagonist						V					
		Henchman								V	V		
	Negative	Supporting											
	Group	Secondary											
		Supporting											

Table 4.36.

Major Characters Analysis of "An American Tail"

			Fievel	Tanya	Tiger	Kitty	Cat leader	Dog sheriff	Fievel's parents	Other rats	Other cats	Other animals
	Hum	an										
Appearance		Animal	V	V	V	V	V	V	V	V	V	V
	NT 1	Monster										
	Non-human	Object										
		Brave	V									
		Dreamer		V								
		Kind	V									
	Positive	Funny			V							
Personality	•	Friendly	V									
(Major)	•	Song-lover					V					
	-	Timid							V			
	Negative	Tricky					V					
		Evil					V					
		Protagonist	V				-					
		Secondary	-					V				
	Positive	Protagonist										
	Group	Supporting			V							
	•	Secondary		V		V			V	V		V
Role		Supporting										
		Antagonist					V					
		Henchman									V	
	Negative	Supporting										
	Group	Secondary										
	-	Supporting										

Table 4.37.

Summary Analysis of Major Characters in the Bottom 10 Samples

		Protagon	ist	Antagoni	st	Positive	Negative	Ratio	support	ing group	Total
	Name	Type	Flaw (most notable)	Name	Evil?	group#	group #	PG/NG	#	Funny?	- #
An American Tail	Fievel (M)	A (cub)	N	Cat Boss	Y	3	4	0.75	1	Y	25
The Jungle Book2	Mowgli (M)	H (kid)	N	Sherekhan	Y	3	1	3	2	N	17
The Land before time	Little foot (M)	A (cub)	N	Sharp tooth	Y	5	1	5	3	N	9
Return to Never Land	Jane (F)	H (kid)	Cynical (solved)	Captain Hook	Y	3	2	1.5	6	N	15
Home on the Range	Maggie (F)	A (adult)	N	Alameda	Y	3	2	1.5	2	Y	24
The Road to EI Dorado	Miguel (M)	H (adult)	N (tricky but just)	Tzekel-Kan	Y	4	2	2	3	N	13
The Tale of Despereaux	Despereaux(M)	A (cub)	N	Botticelli	Y	3	1	3	4	N	21
Hoodwinked	Red (F)	H (kid)	N	Bunny	Y	4	4	1	2	Y	18
South Park	Stan (M)	H (kid)	N (foulmouthed)	Saddam	Y	4	2	2	2	N	38
Corpse Bride	Emily (F)	H (adult)	Blind (solved)	Barkis	Y	3	1	3	2	N	19

Table 4.38.

Summary Analysis of Combination Type of Protagonist and Secondary Protagonist in the Bottom 10 Samples

	Prota	gonist	Secondary Prota	gonist	Types of Combination
	Name	Age level	Name	Age level	
An American Tail	Fievel	J	Dog sheriff	A	J+A
The Jungle Book2	Mowgli	J	Shanti	J	J+J
The Land before time	Little foot	J	Cera	J	J+J
Return to Never Land	Jane	J	Peter Pan	J	J+J
Home on the Range	Maggie	A	Mrs. Calloway & Grace	A	A+A
The Road to EI Dorado	Miguel	A	Tulio	A	A+A
The Tale of Despereaux	Despereaux	J	Roscuro & Princess	J	J+J
Hoodwinked	Red	J	Granny	A	J+A
South Park	Stan	J	Eric	J	J+J
Corpse Bride	Emily	A	Victor	A	A+A

According to Figure 4.42, the dispersion of character numbers of PG is strongly left skewed, so the central tendency is the median 3. Similarly, Figure 4.43 shows that the dispersion of character number of NG is greatly right skewed and there are two outliers of 4, which are the 1st and the 8th observations, so the central tendency is the median 2. Figure 4.44 illustrates that the dispersion of the character number of supporting groups is strongly left skewed, so the central tendency is the median 2. Figure 4.45 shows that the dispersion of the total number of characters is right skewed; the central tendency is the median 19. Figure 4.46 demonstrates the dispersion of the ratio of PG to NG. It is strongly left skewed and the central tendency is the median 2.

Moreover, analysis on the range of audiences of the control group should also be completed. Table 4.48 shows the related data, and it is obvious that the ratio of "A (adult) +A (adult)": "A (adult) +J (juvenile)": "J (juvenile) +J (juvenile)" is 3:2:5.

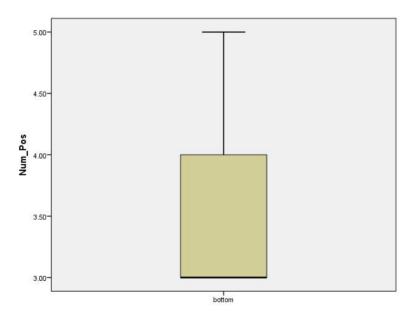


Figure 4.42. Dispersion of positive characters' numbers in the bottom 10 samples

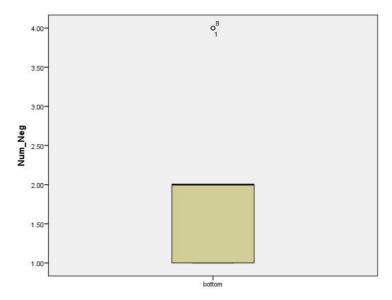


Figure 4.43. Dispersion of negative characters' numbers in the bottom 10 samples

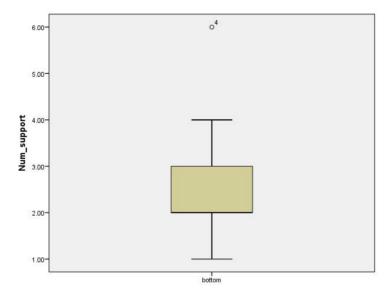


Figure 4.44. Dispersion of supporting characters' numbers in the bottom 10 samples

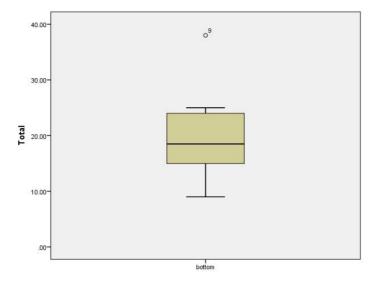


Figure 4.45. Dispersion of total characters' numbers in the bottom 10 samples

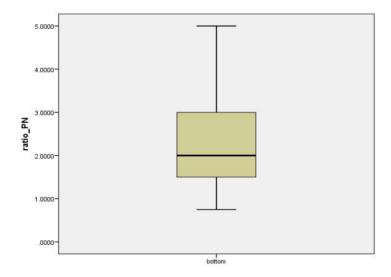


Figure 4.46. Dispersion of the ratio of character number of PG and NG (bottom ten)

# 4.2.2.3. Conflicts

The conflicts analysis of the bottom ten samples of the control group is listed in Table 4.39~4.48. Based on the above case analysis of the control group, 8 of the 10 movies' conflict development can be described by using the model of Figure 4.47

verbatim; they are An American Tail, The Jungle Book 2, The Land Before Time, Home on the Range, The Road to EI Dorado, The Tale of Despereaux, Hoodwinked, South Park. This model can be used because the protagonists of the 8 movies don't have character flaws which fall under the conflict category of man versus himself.

## 4.2.2.4. Other related factors

The control group should also be analyzed for other related factors using the same method of sample grouping in addition to the above four story elements.

## 1). Source of Materials

Table 4.49 shows the source of the material information in the control group.

Clearly, the ratio of "original to unoriginal" is 5 to 5. The ratio of the types of Classical is fairy tale: fantasy book: TV series: Folklore equals 2: 1: 1: 1.

# 2). Techniques used for story realization

The data of production techniques of the control group are shown in table 4.50.

## 3). A sequel or not

The information of "a sequel or not" of the control group are shown in table 4.50.

Table 4.39.

Conflicts Analysis of "An American Tail"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself						
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

Table 4.40.

Conflicts Analysis of "The Jungle Book2"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself						
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

Table 4.41.

Conflicts Analysis of "The Land before Time"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself						
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

Table 4.42.

Conflicts Analysis of "Return to Never Land"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself		V	V	V(solved)		
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

Table 4.43.

Conflicts Analysis of "Home on the Range"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself						
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

Table 4.44.

Conflicts Analysis of "The Road to El Dorado"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself						
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

Table 4.45.

Conflicts Analysis of "The Tale of Despereaux"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself						
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

Table 4.46.

Conflicts Analysis of "Hoodwinked"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself						
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

Table 4.47.

Conflicts Analysis of "South Park"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself						
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

Table 4.48.

Conflicts Analysis of "Corpse Bride"

	Beginning	Catalyst	Development	Climax	Confrontation	Ending
Man vs Himself		V	V	V(solved)		
Man vs Background						
Man vs Situation		V	V	V	V(solved)	
Man vs Man			V	V	V(solved)	
Man vs Fate						

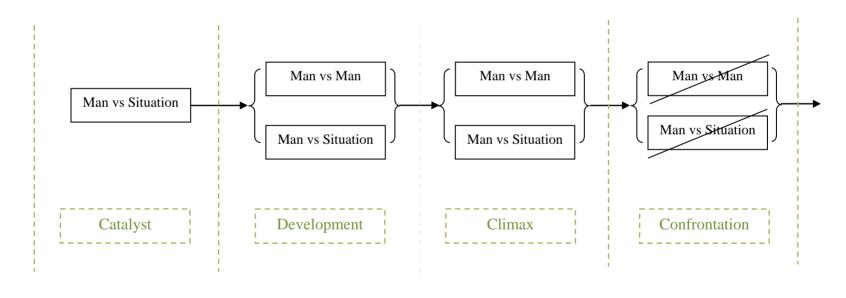


Figure 4.47. Typical model of conflicts development in the bottom 10 samples

Table 4.49.

Summary Analysis of Source of Materials in the Bottom 10 Samples

	Unoriginal	Story	Original
	Adaptation of Classical	Spoofing of Classical	Story
An American Tail			V
The Jungle Book2			V
The Land before time			V
Return to Never Land	V(Fairy Tale Peter Pan)		
Home on the Range			V
The Road to EI Dorado			V
The Tale of Despereaux	V(2003 fantasy book)		
Hoodwinked	V(Little Red Riding Hood)	V	
	(Rashmon)		
South Park	V (TV series )		
Corpse Bride	V (Jewish folklore)		
-	5		5

Table 4.50.

Summary Analysis of Related Information in the Bottom 10 Samples

	Related I	nformation		
	Technique Used	Sequel?		
An American Tail	2D	N		
The Jungle Book2	2D	Y		
The Land before time	2D	N		
Return to Never Land	2D	Y		
Home on the Range	2D	N		
The Road to EI Dorado	2D	N		
The Tale of Despereaux	3D	N		
Hoodwinked	3D	N		
South Park	2D	N		
Corpse Bride	Stop Motion	N		

## 4.2.3. Comparison of sample group and control group

This research has gathered the commonalities of story in the sample group and the raw data of story in the control group. This part mainly contains the comparison of the related data within the two groups, classification of the commonalities of the sample

group (generated theory) based on the two groups' similarities (non-decisive factors) and differences (decisive factors), and judgments and conclusions.

In accordance with analysis performed in previous steps, this section includes five facets: theme, characters, plot, conflicts and other related factors respectively.

There are three possible situations for the distribution comparison via the descriptive statistical method as shown in Figure 4.48. As for these conditions, the statistical consular provides advice for observational criterion to be used for comparison.

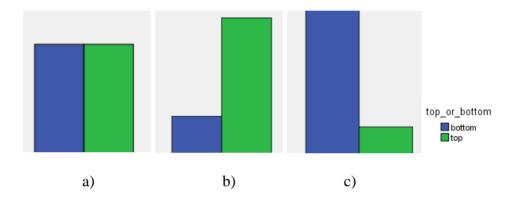


Figure 4.48. Possible situations of comparison between both groups

Figure 4.48 a) shows that the length of the two bars are similar, which means that this parameter isn't decisive for determining the popularity of an animated film. Figure 4.48 b) shows that the bar representing the top ten is much longer than that representing the bottom ten. This parameter would be a positive decisive factor for determining an extremely popular animated film. Figure 4.48 c) illustrates that the bar representing the bottom ten is much longer than that representing the top ten. As such, this parameter would exert negative influence on the popularity of a very successful animated movie.

According to the statistical consular, the specific observational criterion is comprised of two parts -- the count and the percentage or ratio. First, let us turn to the count. Since the sample size of this research is 10, it is reasonable and logical to consider the following: "a difference value equals or less than 2" as similar or close, "a difference value equal or more than 4" as quite different, and "a difference value of 3" as inconclusive. As for the percentage or ratio, "three times" can be a rational criterion, so if "difference value A" is three times larger than "difference value B", then "difference value A" is substantially larger than "difference value B." These criterions will be applied to this research in a later section.

The elaboration of this section consists of four parts: the description of the descriptive statistical results, a deduction of the decisive factors based on a statistical description of the first step, judgment on the theoretical reasons for the deduction, and an extension of the external correlation of the deduction.

Additionally, the findings of this research are intended to be more reasonable, logical, acceptable and enlightening assessments, than strictly accurate and exact. This is the definition of the range of this study's conclusion. There are two reasons for this definition. First, the focus of this research is animated movies, which is a type of art. Because art is the product of human emotion and imagination that function outside of definitive rules, analyses of art can only shed light on existing regular patterns in order to create helpful guidelines for future creators. Second, the valid descriptive statistical method itself is more about the description of phenomenon, and less about mathematical calculation.

#### 4.2.3.1. Theme

Table 4.51 is a data comparison table based on the summary analysis of themes in the sample group and control group. A comparison of the distribution of the themes found in the two groups is shown in Figure 4.49~4.51.

Figure 4.49 provides a comparison of the distributions of the two groups' major themes. Obviously, the top ten group has a little more (difference value of 2) "self-growing" themes than the bottom ten. On the other hand, the bottom ten has many more (DV of 6) "love with others" themes than the top ten which shows that the "self-growing" theme is not a decisive factor for an extremely popular animated film. It also shows that, the "love of others" theme will exert a negative effect on an animated film's popularity.

Figure 4.50 shows a comparison of the distribution of all the sub-themes in the two groups. Clearly, the top ten films include many more (DV of 8) "self-growing" themes than the bottom ten. In contrast, bottom ten films have substantially more (DV of 4) "love of team members" themes. This data tells us that the "self-recognition" theme is a significant factor in making a successful animated film, while the "love of team members" theme may have a negative influence on an animated film's popularity.

Judgment: the difference between the three sub-themes of "self-growing" can be either "inside" or "outside" themes. Self-recognition describes an inner change of the protagonist, while the other two sub-themes tend to focus more on overcoming external difficulties like time and space limitations, a talent limitation, an obstacle that results from an enemy or a win. Audiences tends to have more resonance with a story related to the heart.

Meanwhile, the top ten and bottom ten films have exactly the same number of "love of family" and "love of stranger" themes. They also have a very similar number of "love of nature" and "self-redemption" themes (DV of 2). This information tells us that the themes of "love of family," "love of stranger," "love of nature" and "self-redemption" are not decisive factors for a film's success. The "love of family" theme is always an essential part of a very successful animated film, but isn't a decisive factor.

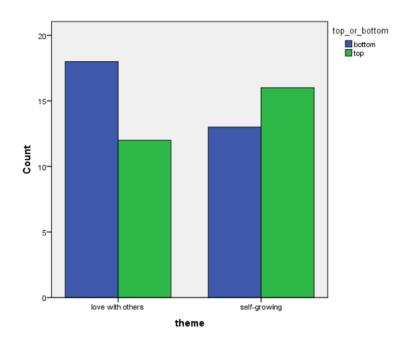


Figure 4.49. Comparison of major themes between both groups

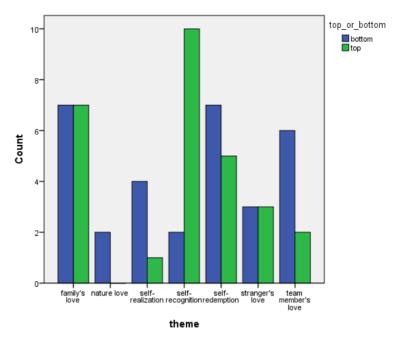


Figure 4.50. Comparison of sub themes between both groups

Figure 4.51 shows the distribution of theme number's central tendency of the two groups. Clearly, the bottom ten films tend to have 1 more theme than top ten films. This tells us that the number of themes in a film is not a decisive factor for popularity because the difference is quite close.

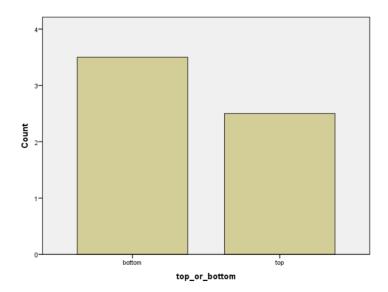


Figure 4.51. Comparison of theme numbers between both groups

## 4.2.3.2. Characters

Based on the summary analysis of characters provided previously, the data comparison of the two groups is listed as Table 4.52. The comparison of the distributions of related data is shown in descriptive statistical methods via SPSS.

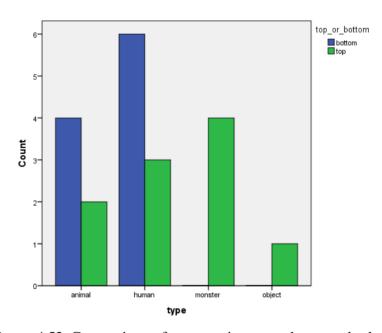


Figure 4.52. Comparison of protagonists types between both groups

## 1). Protagonist

Figure 4.52 shows a comparison of protagonists' types between the two groups. According to the length of the bars, the top ten films have much more (DV of 4) "monsters" (fantasy creatures) than the bottom ten. As a result of this information, a "monster" would be the most advisable choice of a protagonist if you were intending to make a highly successful animate film. On the other hand, the bottom ten films have many more "human" protagonists than the top ten, so "human" would exert negative effects on the popularity of an animated film. It's also clear that the protagonist types of the top ten films are more diverse than those in the bottom ten films.

Table 4.51.

Comparison Analysis of Themes in Both Groups

		Self-growing			Love with others							
	Self-redemption Self-realization Self-recognition		Self-recognition	Love of Family	Love of Team Members	Love of Strangers	Love of Nature					
Top ten	5	1	10	7	2	3	0	2.5				
Bottom ten	7	4	2	7	6	3	2	3.5				

Table 4.52.

Comparison Analysis of Major Characters in Both Groups

				]	Protagon	nist					Antag	onist	P	NG	PG/		SG		Total
													G		NG				
	Туре			Gender Age		Flaw Evil				Funny									
	Human	Monster	Animal	Object	Male	Female	Juvenile	Adult	Yes	No	Yes	No	#	#		#	Yes	No	#
Top ten	3	4	2	1	10	0	1	9	8	2	9	1	4	2.5	1.4	2	9	1	24
Bottom ten	6	0	4	0	6	4	7	3	2	8	10	0	3	2	2	2	3	7	18.5

Judgment: Audiences are always interested in alternative worlds that are totally different from their own because of their innate curiosity and inquisitiveness. It seems also that a monster world captures their imaginations more than an animal world or a human world.

Figure 4.53 shows a comparison of the protagonists' gender in the two groups. Obviously, the top ten films have many more (DV of 4) "male" protagonists than the bottom ten. Thus a "male" protagonists is another decisive factor for an extremely popular animated film. The bottom ten films have many more "female" protagonists than the top ten (DV of 4). This shows that a "female" protagonists would negatively influence the popularity of an animated film.

Figure 4.54 shows a comparison of protagonists' age level. From this bar chart, we can see that the top ten films have many more "adult" protagonists than the bottom ten (DV of 6), which means that including an "adult" protagonist is a positive step in creating an extremely popular animated film. Conversely, the bottom ten films have several more "juvenile" protagonists than the top ten, thus having a "Juvenile" protagonist has a negative effect on an animated movie. Judgment: the age level of the protagonist may indicate, to a large extent, the type of story that is being told. Thus, a juvenile protagonist might suggest an immature and childish story that is unattractive and boring to adult audience.

Figure 4.55 shows the comparison of the character "flaws" in both groups. The top ten films have many more (DV of 6) "yes" (or character flaws) than the bottom ten, which means that the top ten group includes more "faulty" protagonists than the bottom ten. This shows that an imperfect protagonist is another decisive factor in the creation of a highly successful animated film. Judgment: It is true that there are no perfect people in

the world, therefore flaws makes a character more real, multi-dimensional and acceptable to an audience. Many people think that the most difficult and valuable progress that a human can make is to admit their faults and correct them because this indicates an inner victory in the war between one's willpower and one's inherent flaws. Because of this, the story of a flawed character who overcomes makes for an interesting and edifying story. Extension: This point is connected and in accordance with the most popular theme "self-recognition".

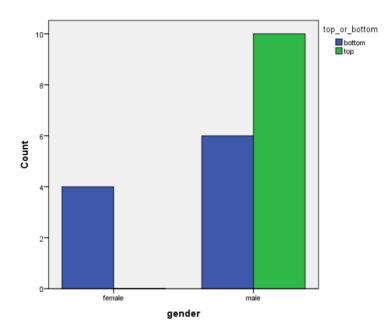


Figure 4.53. Comparison of protagonists' genders between both groups

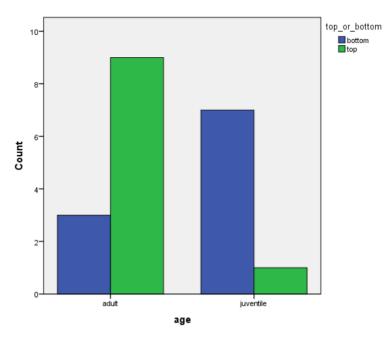


Figure 4.54. Comparison of protagonists' age level between both groups

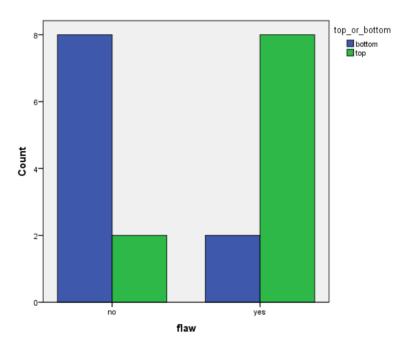


Figure 4.55. Comparison of protagonists' flaw traits between both groups

# 2). Antagonist

Figure 4.56 shows a comparison of the most notable traits of the antagonists in the two groups. Apparently, the bottom ten has a similar (DV of 1) "yes" as the top ten which indicates that an "evil" antagonist isn't a decisive factor for an extremely popular animated film.

# 3). Supporting Group

In this research, the criterion for a "funny" character is obvious funny characteristics or personalities, e.g. talkative, forgetful, loves to sing, joker, etc.

According to previous analysis on characters, "funny" is the most notable trait of a supporting character in a top ten animated film. Therefore it is a comparable parameter.

Figure 4.57 displays a comparison of the "Funny" trait in supporting characters of the top ten and bottom ten films. According to the chart, the top ten have many more (DV of 6) "yes" than the bottom ten, which means that having "funny" supporting characters is a decisive factor in making a popular animated film.

# 4). Character number of PG, NG, SG and Cast

The character number is another important parameter of character setting. Figure 4.58 shows a comparison of the different types of character numbers of top ten characters and bottom ten. According to the chart, the top ten's character number of PG is 1 more than the bottom ten, the top ten's character number of NG is .5 more than the bottom ten and the top ten's character number of SG is exactly the same as the bottom ten. Therefore, the character numbers of PG, NG and SG aren't decisive factors for the popularity of an animated film.

However, the total number of characters in a top ten film is 5.5 more than the total number of characters in a bottom ten film, so the number of characters in a film is a decisive factor for a popular animated film. This means that relatively more characters tends to exert positive influence on the success of an animated film. Judgment: Basically, more characters in a film provide more enticing audiovisual effects, which makes the film more attractive to audiences.

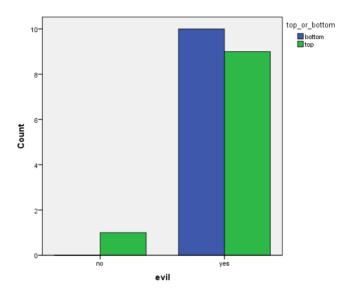


Figure 4.56. Comparison of antagonists' evil traits between both groups

# 5). Ratio of the number of characters in positive group and negative group

The comparison of the ratio of PG/NG of top ten and bottom ten is shown in figure 4.59. The ratio of the top ten is 1.4, while that of the bottom ten is 2. Judgment: A reasonable range of this ratio should be between 1 and 2. The ratio needs to be more than 1 to provide a logical reason for a happy ending which occurs when "good prevails over evil." For this to happen, the good characters need to have a little bit more strength than the evil ones. At the same time, the number of characters in the positive group and that of

the negative group should be close (less than 2) because a similar strength competence between the good characters and the bad keeps the audience interested in the fight between the two sides.

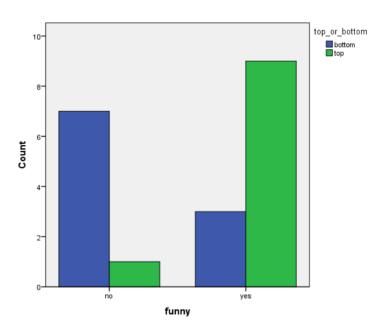


Figure 4.57. Comparison of supporting characters' funny trait of the two groups

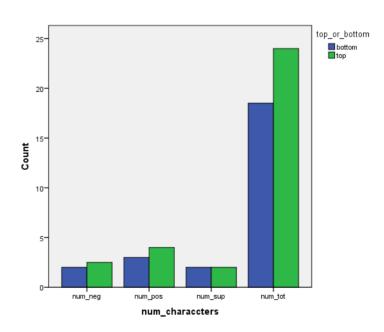


Figure 4.58. Comparison of character number of PG NG SG Total in both groups

In this sense, a ratio between 1 and 2 is more acceptable and rational for an audience. However, according to the bar chart, since the difference between 1.4 and 2 isn't quite significant, the ratio of PG/NG isn't a decisive factor for an extremely popular animated film.

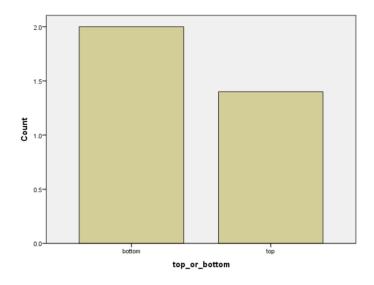


Figure 4.59. Comparison of the ratio of PG/NG in both groups

# 6). Range of Audience

Based on summary analysis of the range of the audience in the previous steps, the data comparison of sample group and control group is shown in table 4.53.

Table 4.53.

Summary Analysis of Combination Type of Protagonist and Secondary Protagonist in Both Groups

	A+A	A+J	J+J
Top ten	3	7	0
Bottom ten	3	2	5

Based on above table, the comparison of the two groups' distributions is show in figure 4.60. Obviously, the top ten films have several more "A+J", several less "J+J" than the bottom ten and the same "A+A." Thus, the type of "A+J" is one of the decisive factors for an animated film's popularity, while "J+J" will negatively influence the success of an animated film. Judgment: "A+A" basically suggests an adult story, which is more attractive to adult audiences than juvenile audiences. "J+J" indicates a pure children's story, which is quite boring for adult audiences. "A+J" is a fairy tale story for adults, which can act as a connection between the worlds of adult and that of kids because both adults and kids can learn from life experiences portrayed on screen. Extension: Animation is different from other movie genres because of its broad appeal to juveniles, adults, or both. Obviously, having a film that appeals to both is best. An "A" angle of the story guarantees the adult audiences will accept the film, while an "A+J" type of story is one that is intended for both juvenile and adult audiences.

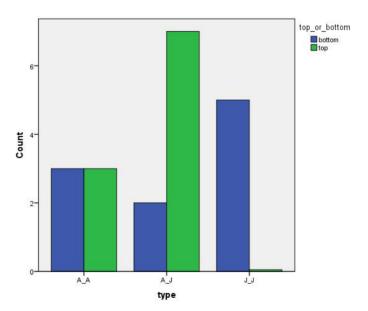


Figure 4.60. Comparison of major characters' types in both groups

# 4.2.3.3. Conflicts

Looking at a comparison of conflict development between the top ten and bottom ten films, it's obvious that the only difference in their typical developing model is found in their portrayal of the conflict of "man versus himself." The related data is shown in Table 4.54, and the comparison information is found in Figure 4.61.

Table 4.54.

Comparison Analysis of Conflict in Both Groups

	With "conflict of man & himself"	Without "conflict of man & himself"
Top ten	8	2
Bottom ten	2	8

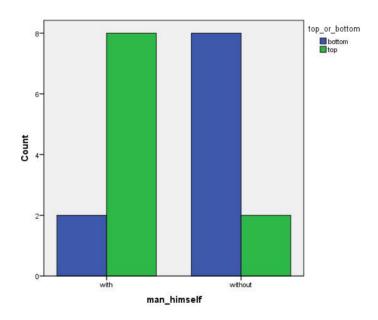


Figure 4.61. Comparison of conflict between both groups

Obviously, more of the top ten films (DV of 6) include the conflict type of "man versus himself" than the bottom ten. This shows that the conflict type "man versus

himself" is a decisive factor for a greatly popular animated film. Judgment: Using the typical model of conflict development in the bottom ten films, it is clear that there is no obvious boundary between the Development Phase and the Climax Phase because conflicts don't change in the Climax Part. As such, the Climax is more likely to be part of the Development which means it is no longer intriguing. Extension: at this point, this deduction is connected with the faulty trait of a protagonist since the flaw would be the conflict of "man versus himself."

#### 4.2.3.4. Other related factors

Based on previous analysis, there are three other factors that relate to story that should be considered besides the four story elements already considered. These are source of material, technique used for story realization and inclusion of a sequel or not.

1). Source of material

This chart is based on previously mentioned analysis of the source of materials for top ten and bottom ten films. The data from these two groups is listed in Table 4.55 and the comparison is displayed in Figure 4.62.

Table 4.55.

Comparison Analysis of Source of Materials in Both Groups

	Unoriginal story	Original story
Top ten	5	5
Bottom ten	5	5

Table 4.56.

Comparison Analysis of Related Classical Types in Both Groups

	Fairy Tale	Fantasy book	play	comic	folklore	Movie/ TV series
Top ten	3	0	1	1	0	0
Bottom ten	2	1	0	0	1	1

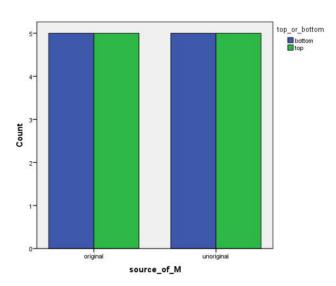


Figure 4.62. Comparison of the source of materials in both groups

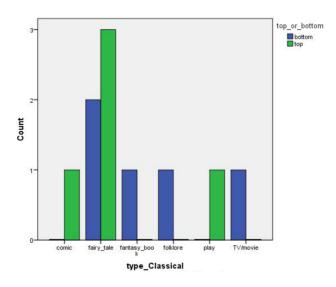


Figure 4.63. Comparison of the related classical types in both groups

Obviously, the top ten and bottom ten films have exactly the same number of original stories and unoriginal stories. In this sense, "original story or not" isn't a decisive factor for the popularity of an animated movie.

As for a comparison of the types of relevant Classical Types in the two groups, specific data is shown in Table 4.56, and the comparison is shown in Figure 4.63.

According to the bar chart, it's clear that all the difference values are 1, which is too small a value to be a decisive factor in the determining the popularity of an animated film. Therefore, the type of the related Classical won't decisively influence the popularity of an animated film.

# 2). Technique used for story realization

Based on summary analysis of the two groups, the data on applied technique is listed in Table 4.57, and the comparison information is shown in Figure 4.64.

Table 4.57.

Comparison Analysis of Related Information in Both Groups

	Related Information				
	Technique used			Sequel	
	2D	3D	Other	Yes	No
Top ten	1	9	0	2	8
Bottom ten	7	2	1	2	8

From the bar chart, it is obvious that top ten films use more 3D techniques, and less 2D than the bottom ten with the DV of 7 and 6 respectively. Therefore, the use of 3D CG technique is a decisive factor for a popular animated film, while using a 2D traditional technique exerts a negative influence on the popularity of an animated movie.

Judgment: Though story is the soul of an animated movie, realization techniques are indispensable to a film's success because they determine the external form and audiovisual effects of the whole film. This may be the reason why lots of historical 2D animated films like, "Beauty and the Beast" (1991\_2D & 2012\_3D) and the Lion King (1994\_2D & 2011\_3D) are later converted to 3D.

# 3). A sequel or not

The factor of "sequel" should be analyzed when considering a film's popularity since a sequel is related to the continuity and maturity of the story.

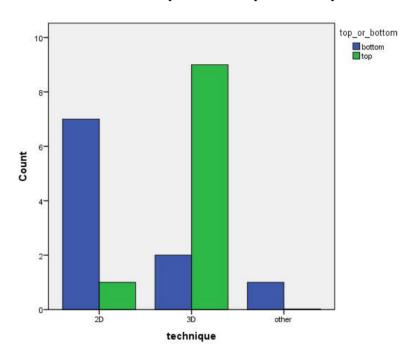


Figure 4.64. Comparison of applied techniques in both groups

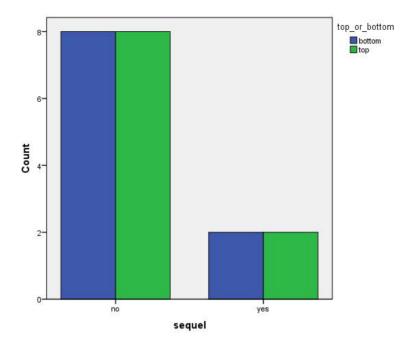


Figure 4.65. Comparison of sequel situation in both groups

Related data on the summary analysis of the "sequel" situation of the two groups is listed in Table 4.57 and the comparison of the distribution is displayed in Figure 4.65. Obviously, the number of "sequels" for the top ten is exactly the same as that of the bottom ten, which means a "sequel" is not a decisive factor for the popularity of an animated film.

# 4.3. Summary

This chapter completes the realization process of this research using the guidelines suggested in previous chapters. It includes two steps and three parts of work. The first step is theory generation, which is comprised of a generalization of commonalities in the sample groups. The second step is theory classification. This step includes two parts—a summary of common traits of the control group in the form of raw

data, and a comparison of the sample group and control group in order to determine decisive factors among the common traits.

#### **CHAPTER 5 FINAL OBSERVATIONS**

In order to fully address the intents and process of this research, the conclusion includes two parts: 1) common characteristics of highly successful animated films, as represented by the top ten animated movies, and 2) decisive factors among these commonalities of success animated films, including positive and negative traits.

### 5.1. Conclusion

Based on the results of previous analysis, the characteristics description includes five facets: theme, character, plot, conflict and other related factors respectively.

#### 1). Theme

Of the two major themes, "self-growth" and "love of others", "self-growth" tends to indicate more success than "love of others." However, it isn't a decisive factor in the success of an animated film. Though inclusion of the "love of others" theme may have a negative effect.

The sub-themes of the major themes are also important, among the three sub-themes of the major theme "self-growth" ("self-realization," "self-recognition," and "self-redemption") "self-recognition" is the most popular. Among the four sub-themes of the major theme "love of others" ("love of family," "love of nature," "love of strangers" and "love of team members") "love of family" is the most prevalent.

Moreover, the sub-theme "self-recognition" is a decisive factor for an extremely popular animated film, while the sub-themes of "love of family," "love of nature" and "self-redemption are not. Furthermore, the sub-theme "love of team members" will negatively influence an animated film's success. An extremely popular animated movie tends to have 2~3 sub-themes, but the number of themes and sub-themes is not a key factor for an animated film's success.

#### 2). Characters

Among the four types of protagonists ("fantasy creature," "human," "animal," and "object") a "fantasy creature" protagonist is the most successful, However, the protagonist types of greatly popular animated films tends to be diverse; the category of "male" is more popular than "female"; "adult" occurs more often than "juvenile"; a "faulty" character is more successful than a "perfect" one.

Furthermore, "fantasy creature," "male," "adult," and a "faulty" character are decisive characteristics of a protagonist of a very successful animated film. However, having a "human" protagonist will negative affect the popularity of an animated film.

When turning to the other characters, some interesting data emerges. It is indispensable that antagonists are "evil" in order to make a popular animated film, but it isn't a decisive factor for immense popularity. Supporting characters are more popular if they are "funny" and the character number of the supporting group tends to be 2. A "funny" supporting character is one of the decisive factors for immense success, while a SG of 2 characters is not.

As for the number of characters in a positive group, negative group, and total, we see that a popular animated film tends to have 4 positive characters, 2~3 negative and a

total of 24 characters, and the ratio of PG/NG is 1.4. However, the character number of PG, NG, and the ratio of PG/NG isn't a decisive factor in making a greatly successful animated film, though having a relatively large total number of characters is decisive.

When determining the age combination of major characters, it is clear that the combination of an Adult + a Juvenile (A+J) is much more popular than the other two combinations – and adult and an adult (A+A) and two juveniles (J+J). The "A+J" type is one of the critical factors for great success.

Based on the above analysis of story elements, a general story structure of a successful animated film is shown in Figure 5.1.

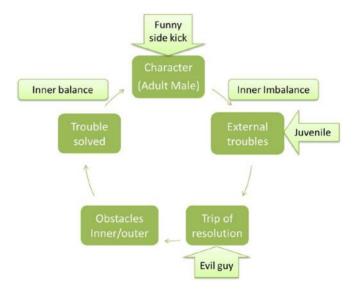


Figure 5.1. General story structure of extremely popular animation

# 3). Conflicts

The typical model of conflict development of a popular animated film is shown in Figure 4.34. The decisive factor for popularity is the inclusion of the conflict type of "Man versus Himself".

#### 4). Other related factors

When looking at the source of materials used for a film's story, original or unoriginal sources within the top ten films are equivalent; the Classical types used for an unoriginal story are fairy tale, comedy and plays and the study found that a fairy tale source is used more than the other two. However, having an "original" or "unoriginal" source is not a decisive factor for an extremely popular animated film, nor was the use of a classical trope.

Another related factor is the technique used for story realization. A greatly successful animated film tends to use 3D computer graphic techniques. The applied technique used is a decisive factor for success.

Finally, whether or not a film has a sequel, the research shows that a successful animated movie doesn't have a sequel, though "sequel" is not a decisive factor for the large popularity of an animated film.

# 5.2. Summary

This section chiefly provides the final conclusions of this research broken down into five categories based on analysis performed in the previous steps. These categories are theme, character, plot, conflict and other related factors, taken together, these categories can be understood as a theoretical criterion for determining a potentially successful story for an animated film.

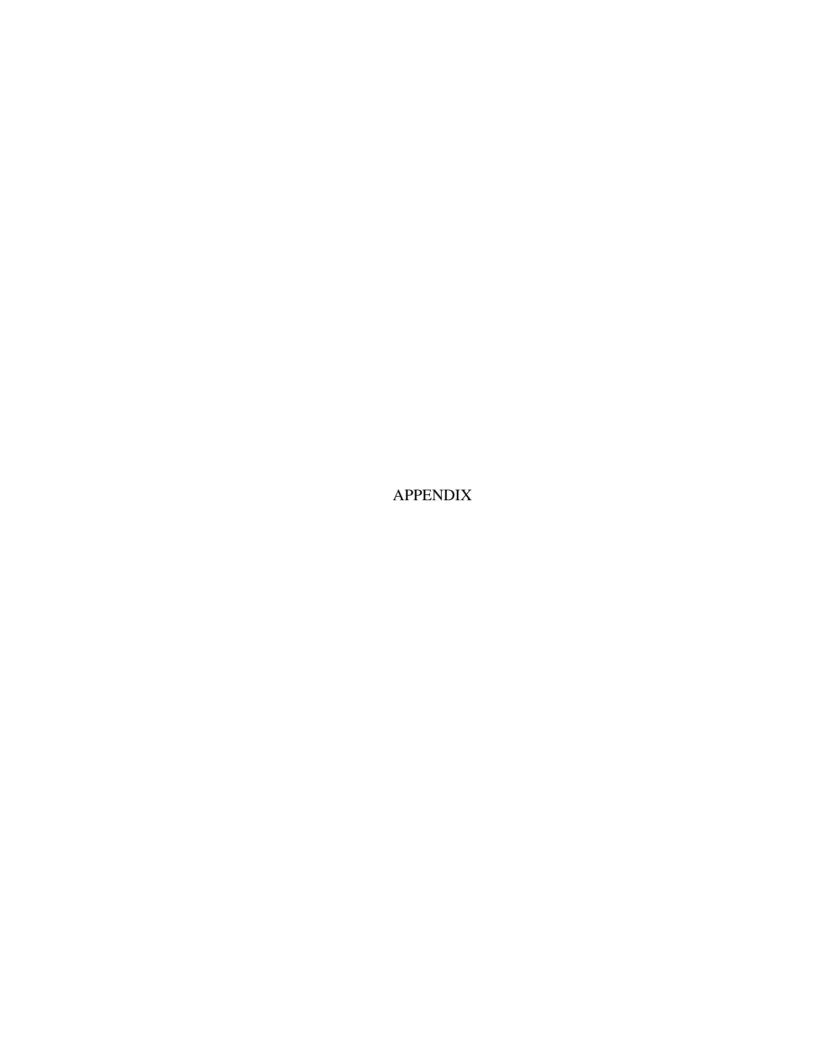


#### LIST OF REFERENCES

- Annalee, R.W. (2002). *Mouse morality: the rhetoric of Disney animated film.* The University of Texas Press. Austin, TX.
- Arnold, F. (1910). *Attention and interest: A study in psychology and education*. Self-efficacy: The exercise of control. New York, NY.
- Animation: 1980-Present. (n. d.). *Box Office Mojo*. Retrieved December 1, 2011, from http://boxofficemojo.com/genres/chart/?id=animation.htm
- Bin, G.P. (2009). Consideration about humanist core of animation creation. *Proceedings* of Computer-Aided Industrial Design & Conceptual Design. CAID & CD 2009. *IEEE 10th International Conference*, 503-506.
- David, W. (2008). *The idea of nature in Disney Animation*. Ashgate Publishing Company. Burlington, VT.
- Dewey, J. (1913). *Interest and effort in education*. Houghton Mifflin Company. Boston, NY.
- Dodge, Y (2003) *The Oxford Dictionary of Statistical Terms*. Oxford University Press. New York, NY.
- Ellin, G. & Janice, D.N. (2010). *Storytelling: Art and technique*. Greenwood Publishing Group. Westport, CT.
- Frank, A. D. & Sandra, S. (1971). *Handbook of short story writing*. Writer's Digest. Cincinnati, Ohio.
- Gary, S. & Jim, H. (2010). *The Etiquette of Freedom: Gary Snyder, Jim Harrison, and the Practice of the wild.* San Simeon Films. Berkeley, CA.
- Hsiang. C. C., Hung. C. C.& Juite. W.(2009). Exploring the elements of a story from advertising and its effectiveness. *The 16th ACME International Conference on Pacific Rim Management, Association for Chinese Management Educators*. San Francisco, California.

- Jehoshua, E., Sam, K.H. & John, Z.Z. (2006) From Storytelling to Box Office: A New Approach for Green-Lighting Movie Scripts. *Management Science*, 53 (6), 881-894.
- Jayne, P. (1997). *A reader in animation studies*. John Libbey & Company Pty Ltd. London.
- Jesse, S. (2002). Understanding entertainment: Story and gameplay are one. *The human-computer interaction handbook: fundamentals, evolving technologies and emerging applications*. Lawrence Erlbaum Associates, Inc. Mahwah.
- Laura, S. (2003). Screenwriting for dummies. Wiley Publishing, Inc. Hoboken, NJ.
- Louise, G., Megan, C. & Abby, C. (2011). Art that moves: Animation around the world. Capstone Global Library, Ltd. Chicago, IL.
- Moore, Mccabe & Craig. (2009). *Introduction to the practice of statistics*. W.H. Freeman Publishers. Gordonsville, VA.
- Paul, W. (2005). Animation: Genre and authorship. Wallflower Press. London.
- Results from Nonprobability Samples Can Be Quite Useful, Despite Limits. (n. d.). *Insight Central*. Retrieved January 30, 2012, from http://analysights.wordpress.com/2010/08/18/results-from-nonprobability-samples-can-be-quite-useful-despite-limits/
- Robert, V. (2010). *The wisdom of Pixar: An animated look at virtual*. InterVarsity Press. Downers, IL.
- Sample Size Calculator (n. d.). *Creative Research System*. Retrieved January 30, 2012, from: http://www.surveysystem.com/sscalc.htm
- Seymour, C. (1978). *Story and discourse: Narrative structure in fiction and film.* Cornell University Press. New York, NY.
- Sheldon M. Ross (2005), *Introductory statistics*. Elsevier/Academic Press. Amsterdam, NL.
- Silvia, P.J. (2005). What is interesting? Exploring the appraisal structure of interest. *Emotion*, 5, 89-102.
- Silver, P. (2003). *Screenwriting in the 21<sup>st</sup> Century*. Sterling Publishing Company Inc. New York, NY

- Stewart, B. (1929). Short story technique. Houghton Mifflin Company. Boston.
- William M.K. Trochim. (2006). Descriptive Statistics. *Research Methods Knowledge Base*. Retrieved from http://www.socialresearchmethods.net/kb/statdesc.php
- William M.K. Trochim. (2006). Nonprobability Sampling. *Research Methods Knowledge Base*. Retrieved from http://www.socialresearchmethods.net/kb/sampnon.php



### APPENDIX. THE LIST OF 22 QUESTIONS

- 1) Clear Premise (CLRPREM): The story has a clear premise that is important to audiences.
- 2) Familiar Setting (FAMSET): The setting of the story is familiar to you.
- 3) Early Exposition (EAREXP): Information about characters comes very early in the story.
- 4) *Coincidence Avoidance (COAVOID)*: Story follows a logical, causal relationship. Coincidences

are avoided.

5) Inter-Connected (INTCON): Each scene description advances the plot and is closely connected to

the central conflict.

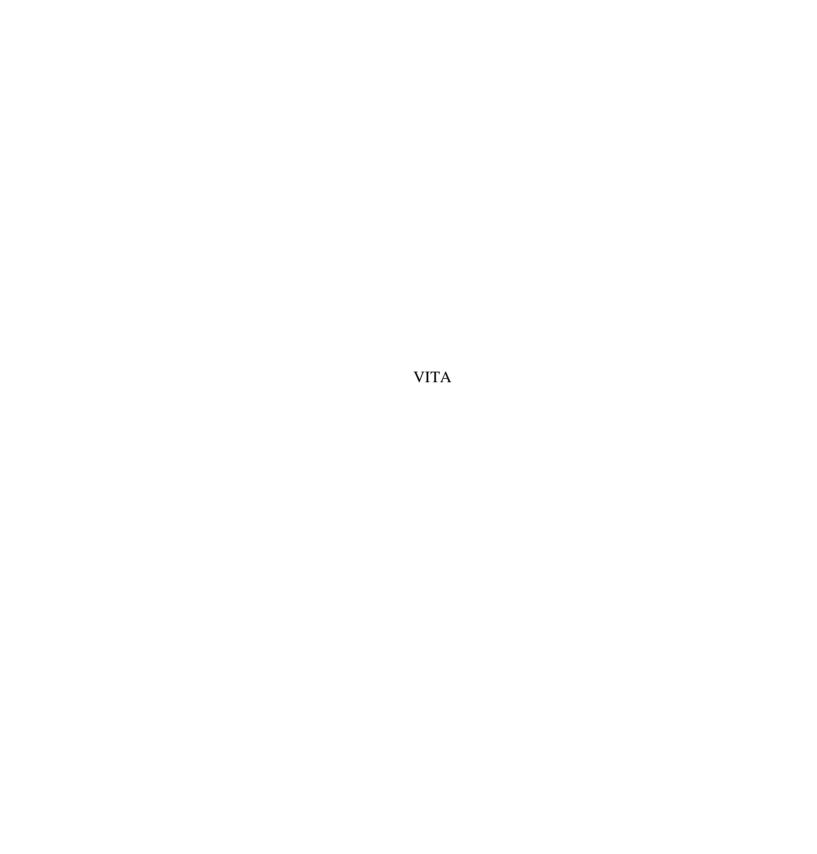
6) Surprise (SURP): The story contains elements of surprise, but is logical within context and within

its own rules.

- 7) Anticipation (ANTICI): Keep readers trying to anticipate what would happen next.
- 8) Flashback Avoidance (FLHAVOID): The story does not contain flashback sequences.
- 9) Linear Timeline (LINTIME): The story unfolds in chronological order.
- 10) *Clear Motivation (CLRMOT)*: The hero of the story has a clear outer motivation (what he/she wants to achieve by the end of the movie).
- 11) Multi-dimensional Hero (MULDIM): Many dimensions of the hero are explored.
- 12) Strong Nemesis (STRNEM): There is a strong nemesis in the story.
- 13) *Sympathetic Hero (SYMHERO)*: Hero attracts your sympathy because he/she exhibits courage AND belongs to one of the followings: -good/nice, funny, good at what he does OR has power.
- 14) Logical Characters (LOGIC): Actions of main characters are logical considering their characteristics. They sometimes hold surprises but are believable.
- 15) Character Growth (CHARGROW): Conflict is important enough to change the hero.
- 16) Important Conflict (IMP): The story has a very clear conflict, which involves high emotional stakes
- 17) *Multi-Dimensional Conflict (MULCONF)*: The central conflict is explained in many different points of view.
- 18) Conflict Build-up (BUILD): The hero faces a series of hurdles. Each successive hurdle is greater

and more provocative than the previous ones.

- 19) Conflict Lock-in (LOCKIN): The hero is locked into the conflict very early in the movie.
- 20) *Unambiguous Resolution (RESOLUT)*: Conflicts is unambiguously resolved through confrontation between the hero and nemesis at the end.
- 21) Logical Ending (LOGICEND): The ending is logical and believable.
- 22) Surprise Ending (SURPEND): The ending carries surprise and is unexpected.



# **VITA**

# Meng Wang Graduate School, Purdue University

# **Education**

B.A., New Media and Art, 2008, Harbin Institute of Technology, Harbin, China M.A., New Media and Art, 2010, Harbin Institute of Technology, Harbin, China M.S., Computer Graphic Technology, 2012, Purdue University, West Lafayette, Indiana

# Research Interests

3D Character Animation Storytelling Process of Animated Movies