以敘事與影音元素建構動畫喜劇之觀眾接收架構

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摘　要

　　動畫影片中的幽默喜趣元素往往是觀眾預期的娛樂效果和票房成功的要素，本研究探討動畫影片中幽默敘事和影音元素，從而建立理論架構。首先從哲學、心理學、語言學中爬梳整理幽默相關理論，並整合動畫理論體系有關喜劇敘事元素論述，設計問卷做量化專家調查，以模糊德菲(Fuzzy Delphi)法分析專家共識，以及對喜劇敘事與影音元素的重要性判斷。分析結果顯示，逆轉、誇張、諷刺三項為專家認為最重要的敘事元素。影音方面，角色表演、角色設計、聲音為最重要的三項元素。據此，本研究提出動畫喜劇的觀眾接收架構，整合敘事與視聽元素，以及喜劇氣氛，連結至觀眾的接收，並將敘事元素與前述幽默理論相連結。

關鍵詞：動畫、喜劇、架構、模糊德菲法、敘事

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Toward a framework with narrative and audiovisual elements on the reception of audience for animation comedy

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Abstract

Comic effects triggered by humorous content in animated films are essential to entertain audiences and a key to success at the box office. This research aims to investigate the importance of narrative and the audiovisual elements in animations for the comic effects to form aframework. We first look into the humor theories from areas of philosophy, psychology and linguistics, and integrated into the discourse of animation comedy. Accordingly, the evaluation for the importance of the elements is based upon the surveys of experts' opinions from the animation industry and the academy. The experts' consensus on weights and ratings was mathematically derived using fuzzy Delphi methodology. The result indicates that reversal, exaggeration and satire are regarded as the most significant narrative elements for comic effects in an animated film. In regard to the application of audiovisual elements, characters' acting, character design and sound are perceived to be predominantly important among audiovisual elements. Accordingly, based upon the results obtained by the survey, a framework of audiences' reception of the comic effects triggered by humorous content of animated films is established in combination with narrative and audiovisual elements. Narrative elements are further linked to humor theories in literature.

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Introduction

Animated films have long been considered a medium of entertainment for people of all ages, for whom the first impression made by animation is mostly a warm or hilarious atmosphere, usually included in the genre of "comedy." Indeed, this is the most popular form of feature-length animated films, as has been reflected in the success it has enjoyed at the box office.

Below we list the top twenty animated films with the highest box office record of all time worldwide in the authoritative internet database Box Office Mojo in Table 1. They were also checked to see if they belonged to the genre of comedy in another authoritative internet database, IMDb (Internet Movie Database). Comedy is defined in the Cambridge Dictionary as a (type of) film, play, or book that is intentionally funny either in its characters or its action, or the humorous part of a situation. In the Oxford Dictionary, it is defined as professional entertainment consisting of jokes and sketches, intended to make an audience laugh. Thus it strongly relates to fun, humor, entertainment, and laughter.

Table 1. A list of box office record top animated films of all time worldwide up to February 19th, 2019

Ranking	Title	Comedy?	Ranking	Title	Comedy?
1	Frozen	Yes	11	Shrek 2	Yes
2	Incredibles 2	No	12	Ice Age 3	No
3	Minions	No	13	Ice Age 4	Yes
4	Toy Story 3	Yes	14	The Secret Life of Pets	Yes
5	Despicable Me 3	No	15	Inside Out	Yes
6	Finding Dory	Yes	16	Coco	Yes
7	Zootopia	Yes	17	Shrek 3	Yes
8	Despicable Me 2	Yes	18	Shrek 4	Yes
9	The Lion King	No	19	Madagascar 3	Yes
10	Finding Nemo	Yes	20	Monster University	Yes

Source: Created by the author by referencing Box Office Mojo

As expected, Hollywood productions dominate the chart of highest box office returns. The commercial success of these productions may be partly attributed to strong marketing strategies, enormous capital investment and technology supplies. In addition to this, it can be observed that a large proportion of them are rated as comedy in IMDb. It should be noted that currently IMDb classifies only three genres maximum for a single film. Animation is always the first genre for any animated feature film. The other two popular genres, besides comedy, are adventure and family. There are only a few best-selling animations which are not classified as comedy, for example, The Lion King. Even where the movie is not categorized as comedy, there are comic atmosphere in many parts of the movie. For example, the two sidekick characters Pumbaa and Timon have many funny performances

in the film.

The "comic climate" was introduced by Mast (1979) in the discussion of film comedy. He referenced American poet and writer Elder Olson's concept of "worthlessness." In a movie with a comic climate, viewers know that all the plot and actions are innocuous, thus these elements do not need to be taken too seriously. Therefore, the viewers feel relaxed and pleasant. Even in some movies dealing with the subject of life and death, if a comic climate exists, audiences will not take the story too seriously. This type of film is usually called "black comedy." Unlike live-action movies which record scenes and actors from the real world, animation is created out of nothing. Viewers also recognize this from the very beginning, therefore a comic climate is easier to be formed in animation than in live-action movies. This is elaborated and discussed later in this article. Additionally, from a historical point of view, in the early cinema system of USA, seven-minute-long animations, described by Klein (1993) as "controlled anarchy," screened before feature-length films, were all deliberately playful to amuse and relax audiences. From then to now, animation has been a medium that is especially suitable for the study of humor and comic effects, and the result is, in return, beneficial for conceiving new productions of animations, and other time based media.

Overview of studies and theories

Humor, laughter, and comic effect

Humor seems to be a term that almost everyone knows, but not everyone is able to clearly explain the concept. As indicated in the Preface of Handbook of Humor Research (McGhee and Goldstein 1983), there is no single and clear definition of the phenomenon of humor. Generally, people call it "humor" broadly speaking, when an object or a situation makes people smile or laugh. However, Ermida (2008) depicted conceptually the relationship between humor and laughter. Laughter is not always caused by humor or funny events, but could be stimulated by physical touch, or embarrassment and shame in some cultures. She further argued for the overlapping between humor with wit and irony.

In this study, we consider comic effects caused by humorous content as covering a wide range under the umbrella term of humor, including ridicule, wit, absurdity, nonsense, sarcasm etc. We looked at stimuli in narrative, as well as images and sounds in animations, and possible reception by audiences. As Lewis (1989) pointed out, humor has complex and diverse aspects to engender comic effects; we do not intend to shape a universal theory for humor, but instead try to shed light on the mechanism for the response of amusement stimulated by moving images in the form of animation.

Approaches and theories

From a historical point of view, there are basically three approaches to conceptualize the nature

of humorous content (Gregory 2004, Martin 1998, Ermida 2008), and the three proposed models had evolved and branched out into modern research disciplines. In spite of the earliest philosophical debate on laughter and humor tracing back to Plato and Aristotle, it was not until in the seventeenth century that Thomas Hobbes organized these debates and proposed superiority theory, or disparagement theory, which stands as the first approach. He believed that people laugh when they feel self-glorifying and triumph. The second approach first appeared in the eighteenth century when Immanuel Kant, and later Arthur Schopenhauer, suggested that the incongruity between an idea and the real subject it represents occasions the feeling of humor. Herbert Spencer added that the incongruity should be diminishing, which means in a joke, the idea people previously recognized turns out to be smaller or less serious; therefore, we feel relief and laugh. Expanding Spencer's notion, Sigmund Freud proposed a framework for humor centered on the idea of energy release in the system of psychoanalysis. In the framework, he distinguished jokes, comedy, and humor. Each of these transfers and releases unpleasant emotions, thus avoiding the waste of psychic energy. Jokes refer to a verbal version of psychic energy release, while the laughter caused by the comic event in comedy is the non-verbal form. Humor is specifically indicated as a mechanism of perspective, transforming from negative emotion to positive. Modern cognitive psychology and neuroscience basically rejected the concept of psychoanalysis, as it cannot be testified with scientific methods, while the Freudian notions still sheds light to some extent when this study looks to categorize the elements of animations into verbal and non-verbal.

Most contemporary studies in humor from both psychology and literature, tend to favor incongruity-based theory. It is also noted that contrast and heterogeneity is not enough, as Paul McGhee pointed that there are instances of humorous and non-humorous incongruity (Ermida 2008). Humorous incongruity has to be displayed with fantastic or playful elements, which echo Mast's comic climate described previously. This is also correlated with what Apter (1982) suggested, that the humorous elements invoke our cognitive play, which is similar to the state of play in our childhood. Researchers in psychology understand the operations of our minds and functions of brains through observable and testable phenomena and experiments (Goldstein 2011; Ruch 2008). A sense of humor in respect of the individual personality is one of the central discussions. Martin and Lefcourt (1984) developed the Situational Humor Response Questionnaire to test individuals' sense of humor. Paul McGhee established the Sense of Humor Scale to evaluate the playful/serious attitude and positive/negative mood, and sense of humor (Goldstein and Ruch 2018). Thorson and Powell (1993) tested and analyzed the correlation of people's sense of humor and personality. Based upon experiments of personality in regard to the sense of humor, Ruch, McGhee, and Hehl (1990) proposed two cognitive process types of incongruity, which are incongruity-resolution and nonsense humor, and they differed in terms of whether the incongruity situation in jokes is fully resolved or not. Parovel and Guidi (2015) tested the visual perception and reaction with psychophysical methods based upon

incongruity theories.

In the area of linguistics, Victor Raskin (1979) proposed Semantic Script Theory of Humor to explain the formation of verbal humor. A verbal joke is constructed based upon the opposition of semantic script. He and Salvatore Attardo (1991) revised the theory as the General Theory of Verbal Humor. This series of theoretical developments is described as being closer to incongruity-based theory, especially the process of rationalizing the incongruity (Attardo, Hempelmann, and Maio 2002). Psycholinguistics, a branch of cognitive psychology, suggested a similar mechanism which is the "comprehension-elaboration theory of humor elicitation" based on the central idea of schema (Martin 2006, Wyer and Collins 1992). When we listen to the setup of a joke, a schema is established in our mind. A new schema is re-established when the punch line appears. We sense humor when the new schema conflicts the old one, and we research ways to resolve it.

Narrative techniques of Animation Comedy

As previously stated, animation is often considered medium of entertainment. Animation directors and animators have developed various strategies and methods to amuse audiences. With an academic approach, Paul Wells (1998) systematically archived and organized these methods and ways of expression in a book section named as "25 ways to start laughing." He explored animations from a very early stage in animation history, such as J. Stuart Blackton's animation made in the early 20th century, through animated shorts in the so-called golden age, up to the late twentieth century when computer animation started booming.

Wells (2007) also identified seven key gag forms and five types of comic practices in animation. These forms and types are basically narrative techniques such as reversal and irony in scriptwriting for animation comedy.

Character morphology

The discussion on the audiovisual styles of animation is complicated even when verbal elements are excluded. Among the audiovisual elements, character is one central factor that significantly influences the audience's perception. In regarding the styles of character design, Scott McCloud (1993) proposed a theory with a triangle plane to include all styles of characters. It is a two-dimensional spectrum with three vertices as shown in Figure 1. Theoretically, a character with any style can be identified by his/her own position in this triangle plane.

In this triangle, a character whose position is close to the pole "Reality" indicates that the visual style of this character appears real. Usually it is considered that the opposite of realism is abstract. The extremely abstract character is located on the pole "The picture plane." The character's figure here is simplified into pure forms of shapes such as a rectangle or circle, or consists of these shapes. It is difficult to recognize the character's facial features.
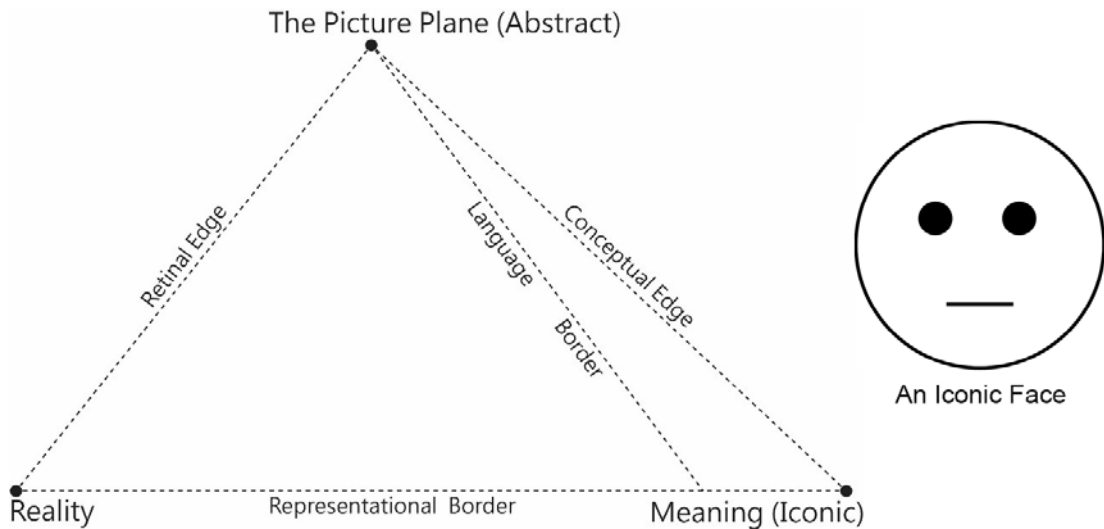
Figure 1. McCloud's triangle plane of character's morphology

Source: Created by the author by referencing McCloud (1993)

One unique concept in McCloud's triangle is the third pole termed "Meaning." Different from the abstract "The picture plane," the style of a character close to the pole "Meaning" is simplified yet recognizable. The utmost form of "Meaning" is the words and text we use. The features of a character can also be the combination of iconic shapes. For example, a circle with two black dots and a dash in it is easily recognized as a face as shown in Figure 1.

Purpose

This study intends to propose a preliminary framework to bridge animation studies with theoretical frameworks in psychology and linguistics in terms of comic effects, and to expand humor research and verbal humor. As described above, verbal humor has been the central discussion of specific areas in psychology and linguistics. Media with narrative and visual elements such as animation include more than just verbal elements. In fact, verbal jokes can be included as a part of narrative but the humor in narrative is not necessarily expressed through the verbal form. Comic effects, as Freud pointed out, are expressed through the non-verbal form of humor.

Additionally, through the reviews on the studies and theoretical frameworks of humor and comic effects, most studies are inclined to be on topics of how people receive jokes and humorous content. Thus, the underpinning of this research is to understand the phenomenon that illustrates what and how comic effects are created and produced in humorous content in animation to attract an audience.

The major research question of this study is: how can comic effects be expressed through the narrative and audiovisual elements in the humorous content of animated films? Subsidiary questions

include what are the key narrative and non-verbal audiovisual elements required to create comic effects? How can humor theories be integrated in to the framework?

The topic of this research is in relation to a broad area without much preceding research context. Therefore, the limitation of this study is that it is only an overview of possible narrative and audiovisual elements to create comic effects in animated films. This research does not intend to include deep and detailed analysis of individual element, such as what are appropriate ways of characters' performing. Additionally, the analyzed narrative and audiovisual elements in this study are based on available literature. New elements are possibly observed in the content of animations or field observation for audience in the future stage of this research.

Method

In order to understand the comic effects in animated films and analyze the importance of the narrative and audiovisual elements to create these effects from the creation and production point of view, a quantitative methodology was set up. Since this research deals with a broad topic, Fuzzy Delphi Method (FDM) was chosen to resolve questions. As a family of multi-attribute decision-making, FDM is a method for handling a complex issue through the consensus of a group of decision-makers (DeSanctis and Gallupe 1985, Rohrbaugh 1979, Woudenberg 1991, Delbecq, Van de Ven, and Gustafson 1986, Saaty and Vargas 2012).

A Delphi questionnaire was designed to survey fifteen experts selected by researchers in order to obtain unbiased opinions as much possible. The Delphi survey is composed of semantic scales ranging from 1 (strongly disagree) to 7 (strongly agree). The linguistic term is converted into fuzzy numbers to evaluate the audiovisual elements of an animation and is applied in this research to break down the narrative and audiovisual elements of animation. Ten of them were animation directors, producers, and senior animators with more than five years in the animation industry. Directors and producers are all have experience in production departments of animation. The other five experts were professors and lecturers who currently teach animation-related courses in universities and have industrial or independent film making experience. FDM was applied to calculate and analyze the experts' opinions on weighting the narrative and non-verbal audiovisual elements of animation comedy. Fuzzy Delphi is usually applied to determine the best policy in management issues from experts' opinion (Hsu, Lee, and Kreng 2010).

The elements in regard to narrative in the survey is based on Paul Wells' (2007) gag forms and types of comic practices. After merging and adding from Wells' original proposition, eleven types of narrative elements to create comic effects were listed in the questionnaire for rating and evaluation. They are exaggeration, reversal, impropriety, irony, pun, repetition, understatement, accident, anthropomorphism, emotion and homage. In the beginning of the survey of each expert, example clips presenting humor narrative elements collected beforehand were displayed to the him or her with

explanation to ensure they understand elements in real cases.

　　The audiovisual elements in the survey is further deconstructed based upon animation production literature (Winder and Dowlatabadi 2001；Laybourne 1998；Kerlow 2009；Furniss 1998). Figure 2 shows the deconstructed elements of an animation with FDM. It should be noted that the verbal section is listed but not further considered or categorized. The non-verbal audiovisual elements are listed in a hierarchical order. The first level embodies the major sections of audiovisual styles for animation production. Elements are further specified into the second level.

Figure 2. The hierarchical evaluation of animation elements

Source: Created by the author

　　It is noted that the second level of the character design and the set design is based on McCloud's theory of triangle plane as discussed in the previous section. In addition to the three poles in the triangle plane, "caricature" is added as the fourth pole, since it seems independent from the other

tendencies. Caricature or exaggeration is one prominent characteristic for many types of animations as shown in Figure 3.
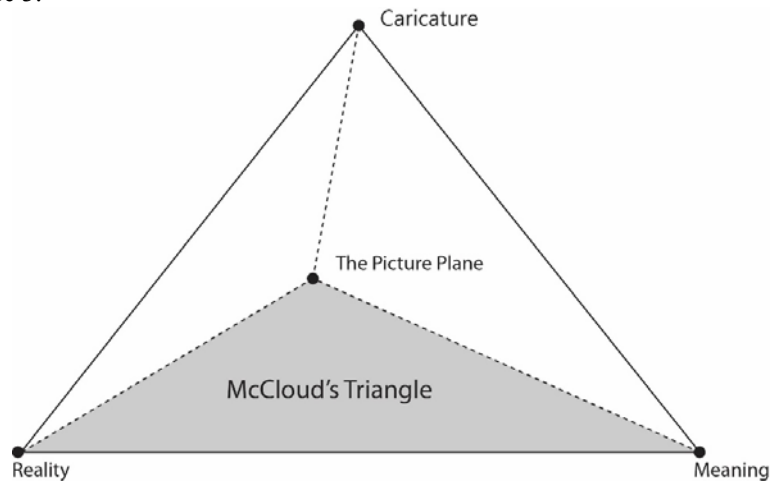

Figure 3. The pyramid based on McCloud's triangle for the elements in character design and set design

Source: Created by the author

As for narrative elements, the hierarchical audiovisual elements were explained to experts to confirm the meaning for understanding.

Result and discussion

The result of experts' evaluation is first checked for consensus as shown in Table 2. The percentage of consensus for all three types and elements is over sixty percent. It indicates that experts' opinions have reached an acceptable level of consistency. The consensus on the first level of non-verbal audiovisual styles is the highest, while the consensus on the narrative is the lowest. It indicates that narrative is more complicated and varied based on individual experience, therefore experts in the field do not find it easy to identify its importance, while the importance of audiovisual elements is easier to identify.

Table 2. The evaluation of criteria based on experts' opinions

Types and Elements	% of Consensus
Narrative	60.61
Non-verbal Audiovisual 1st level	74.29
Non-verbal Audiovisual 2nd level	66.93

Source: Created by the author

The importance of elements and styles is determined by the ranking of each score. The weight of each criterion (i.e., elements) is converted into a score by using the de-fuzzy method. The process of de-fuzzy for the narrative types is shown in Table 3. The high value of weight indicates the strong effects according to experts' opinions.

Reversal, exaggeration and irony are the three narrative types with the strongest comic effects. Reversal means that the storyline turns opposite or around the other way which totally disrupts the audiences' expectation. It is normally used as the punch line of a verbal joke. There is also a "rule of three" for the storytelling in which the first part of the story sets up a situation, the second part goes linearly forward, and the last part turns it upside down. Reversal is very likely linked to the incongruity theory of humor, especially the incongruity-resolution type, and the schema theory in cognitive psychology as stated previously. The final part of the story has conflicts with the assumptions of the previous two ideas which have established a schema, and leads to the feeling of incongruity.

Exaggeration, or hyperbole in verbal terms, is one of the most noticeable characteristics of animation. It has been applied numerous times to entertain audiences by renowned animators and animation directors such as Tex Avery and Chuck Jones, in the so-called golden age of animation in the USA. Exaggeration is possibly related to the nonsense type of incongruity, for we do not go through the resolution stage. It is not only implemented as a narrative technique but is also used in the character design and acting in animation.

Table 3. De-fuzzy score for narrative types

Narrative elements	De-fuzzy Scores
Reversal	0.83
Exaggeration	0.81
Irony	0.77
Pun	0.73
Accident	0.69
Emotion	0.66
Impropriety	0.64
Anthropomorphism	0.64
Repetition	0.61
Homage	0.55
Understatement	0.40

Source: Created by the author

Irony, satire, sarcasm, and parody (Fatima 2016) are all attributed to the similar way they function to create comic effects. By these means, the joke or the plot in the story reveals the flaw or paradox of the subject or character it makes fun of. The contrast plays an important role in creating verbal irony (Cori, Canestrari, and Bianchi 2016, Canestrari and Bianchi 2018). The comic effect is created by the opposite statement of the situation. It can be applied to a character, an institution or

anything in the films. Irony works even more effectively when applied to our real world, as often seen in TV animation series, The Simpsons (1989-). This seems to relate more to the cognitive process of incongruity and resolution, for we often need to have some knowledge of the topic it plays fun with.

Pun has a double meaning and is often referred to as a verbal form of expression. More or less, this way of expression is hindered by the extent of understanding of language. Pun can also be presented through the symbol of images to create comic effects. This is also strongly related to the incongruity-resolution type of humor.

Accident is usually represented through physical actions. The farce and slapstick in the silent film era employed many examples of accident to create comic effect. Animated shorts produced by Warner Brothers or MGM studios in the golden age of American animation are also full of violent accidents of chasing and fighting between characters. The most notable characteristic of this category is that the main characters will never get hurt no matter how high they fall from or how big the truck that runs them over. This is possibly the reason why people enjoy these violent accidents in animations. The physical accidents as funny elements are also often seen in contemporary computer animations produced by Pixar, DreamWorks etc. It seems to be linked closer to the superior theory of humor in which we feel triumph or gloat over the character in the story.

Sometimes, characters' emotions in the stories make the audience laugh. That is why people love the short-tempered Donald Duck. Interestingly, we also laugh at the sentimental characters when we think the reasons to make them cry are unimportant and negligible. The comic effect of emotion possibly also comes from audiences' psychological state of superiority over the characters.

Impropriety is behavior that violates social, ethical or moral norms, whereby someone can be drunk, crazy, absurd or foolish. Sometimes the behavior might break the social taboos that in real life we would not dare attempt. The comic effects are possibly engendered by our feeling of superiority. In some situations, the humor perhaps comes from the liberation from unreasonable social regulation. The often seen scenarios in animations are adults reduced to children's behavior, or sexual habits in comedy (Sălcudean and Negrea 2015), as sexual behavior is not generally supposed to be public.

Anthropomorphism is another noticeable and ubiquitous technique for storytelling in animations. Audiences may simply be surprised by the way that animals, or even lifeless objects, suddenly come to life and behave like human beings. People laugh at anthropomorphic animals possibly because of their nonsense nature.

Repetition is another obvious story plot for comic effects. Instead of the rule of three, a series of events happen over and over. They are usually in fast-paced actions to amuse audiences in farce and slapstick scenarios. In many cases of repeated events, the character faces an unlucky situation, but not necessarily. Sometimes the simple repeated actions make the audience joyful, as in The Legend of Rockabye Point (1955) directed by Tex Avery. The scenario that the bear repeatedly sings a lullaby to comfort the fierce guard dog works every time to create great comic effect. This narrative element seems to correlate to nonsense humor, for it need neither resolution nor a sense of superiority.

Homage is a form similar to irony which lies on the opposite axis, so as to relate to the incongruity-resolution type of humor. It uses a similar scenario or objects in the scenes to salute a previous masterpiece. The comic effects emerging from the application of homage closely correlate to those from the notion of intertextuality (Wood 2007), where similar content is intentionally created to emulate the old work. It can also be seen as an inside joke for sophisticated audiences. Spectators can understand the joke only when they have seen the scenes where the homage is made explicit.

In the experts' opinion, understatement is a type of narrative technique with a less strong effect. It is opposite to exaggeration by acting with less strength than expected. It might not be as weak as shown in the list. Understatement is difficult to express and has been applied relatively less in the story plot of animations. It works as a moderate version of irony, for having less contrast (Cori, Canestrari, and Bianchi 2016), so it possibly also relates to incongruity-resolution humor.

The results of de-fuzzying criteria for non-verbal audiovisual styles are shown in Table 4. Acting, character design and sound are the three strongest elements for both first level and second level of them. Editing and cinematography are at a similar level of medium impact for the comic effects. Set design and color have the lowest impact.

Table 4. De-fuzzy weight for the non-verbal audiovisual styles

1st level	Weight	2nd level	Weight
Character Design	0.91	D. of Realism	0.44
		D. of Abstraction	0.47
		D. of Iconism	0.68
		D. of Exaggeration	0.76
Acting	0.96	Eyes	0.8
		Facial Expression	0.87
		Body Performance	0.84
		D. of Exaggeration	0.8
Color	0.66	Color Scheme	0.49
		Contrast	0.45
		Brightness	0.4
Set Design	0.67	D. of Realism	0.31
		D. of Abstraction	0.39
		D. of Iconism	0.41
		D. of Exaggeration	0.44
Sound	0.88	Music	0.65
		Sound Effect	0.71
Cinematography	0.76	Distance of Camera	0.58
		Camera Movement	0.59
		Camera Angle	0.61
		Use of Lens	0.56
Editing	0.77	Shot Length	0.62
		Transition	0.55
		Editing Style	0.58

Source: Created by the author

The process of de-fuzzification helps to identify the elements in relation to character based on the ranking of importance. The design and performance of characters are verified to be the crucial elements in creating comic effects for audiences. This again resonances and confirms the importance of the animation principles developed by Disney (Johnston and Thomas 1995) to guide animators to draw the acting of characters. The effect of sound is also important even though the verbal joke was not placed into the consideration of the experts.

Cinematography and editing are assumed to determine the tempo and overall layout of the moving images. The importance of these elements is considered secondary to the elements of character and sound. Color and set design are related to the atmosphere and environment of the films. They are considered less important in the quest to amuse audiences.

A proposed framework

Based upon the previous research of the experts' evaluation on animation comedy, here we proposed a flowchart of production and perception as shown in Figure 4.
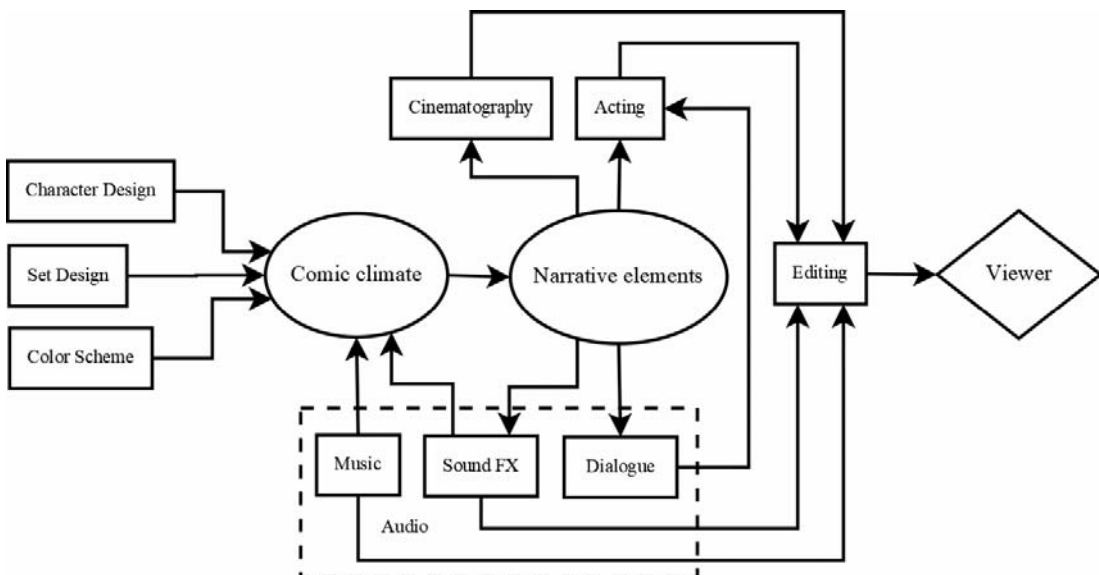

Figure 4. A flowchart of production and perception for generating comic effects in animation

Source: Created by the author

Comic climate and narrative elements are at the center of this flowchart. The comic climate has to exist before the narrative elements. The comic climate is presented through visual elements such as character design, set design and color scheme. For example, a round shaped character in a bright sunny outdoor context creates a comic atmosphere. Music and sound effects are also important clues for the mood in comedy. Soft or fast-paced music incorporating amusing sound effects adds to the

atmosphere. Eleven identified narrative elements are the major means to trigger audiences' laughter. These narrative elements are either expressed through audio means, including dialog and sound effects, or visual elements, primarily the action of characters in consideration of cinematography, analogous to the punch line of a joke, to create laughter.

Despite in the previous section having summarized the score or the importance of each narrative type, we hesitate to conclude that they are universal principles. Not only is the consensus of the experts only 60 percent, but also because of the fact that even the performance of the same narrative element, such as reversal or irony, varied according to the ability of the animators and directors. These elements are then integrated through the process of editing to show an audience. A comedy is usually composed and edited as fast-paced sequences in combination with music, as indicated previously. Nevertheless, the relationship between major humor theories, including incongruity and disparagement, and narrative elements, is proposed as the following figure, as discussed in the previous section.
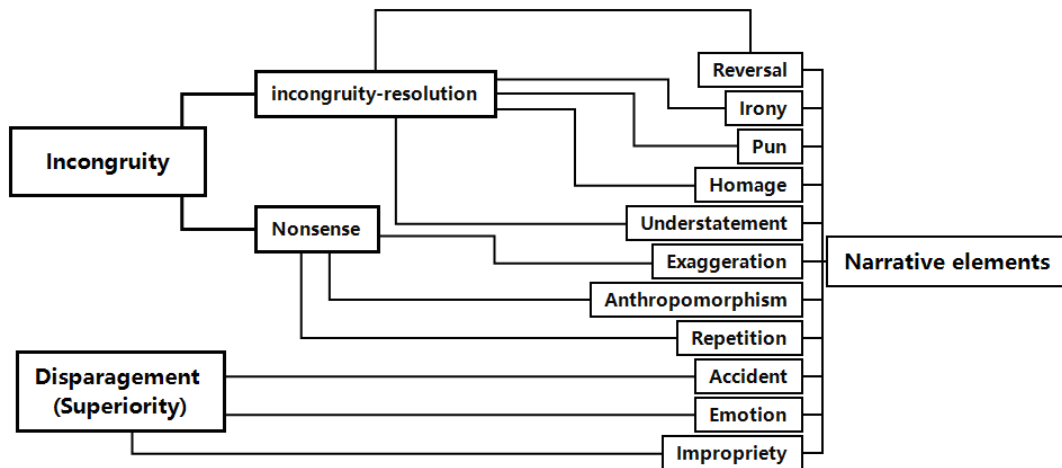

Figure 5. Relationship of humor theories and narrative elements

Source: Created by the author

Summary and future research

This research surveyed experts in the animation industry and academia to weight and rate the narrative types and non-verbal audiovisual styles of animation comedy. The method of fuzzy Delphi is applied to break down the complex elements of animation and derive the data in the survey. The weights of narrative types and non-verbal audiovisual styles are presented for reference and further study.

The result obtained in this stage of research will be tested and verified by a methodology of field study in the next stage with the consideration of production. It will include surveys of audiences'

responses after viewing animated shorts and actual observations of audiences' reactions while they are viewing feature-length animations in theaters. In addition, narrative elements of humor are also present in verbal form. Often the boundary between verbal and non-verbal is not obvious in the narrative. This issue will be explored further explored in the future.

Moreover, most of the results of this survey and future research are likely to be applied on live-action films, especially those in related to narrative elements, for animated and live-action films are similar in term of the storytelling. Anthropomorphism is probably the only exception because it is performed only in animation. Many of results with regard to non-verbal elements are also applicable to live-action films. All 1st level non-verbal audiovisual elements in animation corresponds to live-action films, while the morphological directions of character design and set design in the 2nd level non-verbal audiovisual elements do not resemble to those in live-action films.

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