A humor typology to identify humor styles used in sitcoms

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Abstract

The sitcom genre is one of the most enduringly popular, yet we still know surprising little about their specific elements. This study aimed to develop a typology of humor techniques that best describe the components comprising the sitcom genre. New original techniques were added to applicable techniques from previous schemes to propose a sitcom-specific humor typology. This typology was tested with another coder for inter-coder reliability, and it was revealed the typology is theoretically sound, practically easy, and reliable. The typology was then used to code four well-known US sitcoms, with the finding that the techniques used aligned with the two most prominent theories of humor – superiority and incongruity.

Keywords: humor styles, sitcoms, humor theory, psychology of humor, humor typology

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Introduction

The sitcom genre is phenomenally successful at attracting broad audiences to television networks. In the mid-1950s, the number one hit was the CBS sitcom, *I Love Lucy* (Brooks and Marsh 2007). When the popularity of Westerns diminished in the 1950s, sitcoms began to dominate ratings in only a matter of seasons (Hamamoto 1989). Since then, the sitcom has become the widest reaching comedy form, with remarkable popularity and longevity (Mills 2005). In fact, it is the only genre to make the Top 10 highest rating programs every year since 1949 (Campbell et al. 2004). Surprisingly, however, research carried out on sitcoms specifically is scant. The aim of this article is to help accelerate sitcom research by developing a typology of sitcom humor techniques, to identify the key components of sitcoms.

A variety of reasons can be seen as contributing to the current lack of sitcom research. Firstly, and sadly, there is a perception that comedy is not complex enough for serious study (Mills 2005). Secondly, there is apprehension about studying the mechanics underneath sitcom humor (Curtis 1982; Olson 2001), exemplified in a well-known quote: "Analyzing humor is like dissecting a frog. Few people are interested and the frog dies of it" (Mankoff cited in Morreall 2009). Finally, there is no focused fundamental theory of humor and laughter, as researchers from fields including psychology, philosophy, sociology, literature and mathematics have put forward equally valid but different descriptions of what makes us laugh (Mills 2005). Add to this the fact that a sense of humor is a very personal and subjective trait, lending itself to a potentially huge range of experimental responses (Mills 2005).

Despite these obstructions, there are a number of valuable reasons to study sitcoms. First,

why people find things funny illuminates psychological and sociological aspects of individuals and groups. For example, analyzing sitcoms can be useful in illuminating aspects of specific nations or cultures (Mills 2005). Secondly, writers, producers, and television networks would benefit from sharing a typology of techniques for describing and comparing sitcoms. For example, investigating the types of humor that appeal to certain audiences could assist in the targeting and production of programs.

This article adds to previous research on humor and humor typologies by devising a typology specifically for coding humor techniques used in sitcoms. As no one theory or technique is likely to be the explanation, it is logical to draw from a combination. The article begins by reviewing previous humor coding schemes by Berger (1976) and Buijzen and Valkenburg (2004), identifying their shortcomings for capturing humor contained in sitcoms. Next, the process of devising a new sitcom-specific typology is detailed. For this, Berger's typology was used as a basis, over three phases of development. Phase 1 involved adopting appropriate techniques from both Berger and Buijzen and Valkenburg. Phase 2 involved the addition of new original sitcom-specific techniques, and in Phase 3 the resulting typology was tested with another coder for inter-coder reliability. Finally, the typology is tested to identify the key components of four US sitcoms. The article concludes with a discussion of the theoretical and practical implications of this new sitcom humor typology.

Literature review

Despite the lack of research into the specific techniques of humor, scholars, psychologists, and philosophers have tried to understand what makes people laugh. As a result, various humor theories have been developed and although scholars may not

agree on which is the most viable, there is current consensus that these theories may be complementary (Buijzen and Valkenburg 2004). In order to investigate the relationship between theories it is necessary to identify humor types derived from all the main theories contained in works of humor. However, to date, research using categorized humor types is limited. The most extensive typology was originally put forth by Berger (1993) in 1976. Berger's typology is unique in that it uses techniques from across the main humor theories. The basis of Berger's typology is that individual humor techniques may be used not only on their own, but also in combination with others regardless of which theory they stem from. In fact, rather than being contradictory, it is the combination of humor types that serves to generate humor (Buijzen and Valkenburg 2004).

Berger's aim was to identify humor types in order to categorize them, and for this purpose he analyzed jokes. He cites two reasons for this; the first being for ease and simplicity, the second being that jokes enable direct and immediate use of humor (1993). Berger asserts that because humor is incredibly complex, many mechanisms may be active at one time, and while some techniques may not be funny when used in isolation, they work when used in combination with other techniques. However, he points out that one mechanism is usually dominant. Berger's method was to name as many humor techniques as possible; with emphasis on what is generating humor rather than why it is funny (1993). Berger focused on techniques because he asserts it is not the content or subject matter that is funny, but rather the way that content is presented.

In Berger's classification scheme, reversals (or opposites) of techniques were treated

as the original humor technique. For example, both exaggeration and its reversal, understatement, were coded as the technique "exaggeration." The typology comprises four basic categories – language (verbal humor), logic (ideational humor), identity (existential humor), and action (physical or nonverbal humor), with individual humor techniques contained within these categories. Berger insists his typology is comprehensive, and that the 45 humor techniques are mutually exclusive.

When Buijzen and Valkenburg (2004) were looking to identify humor used in audio-visual material, they found it necessary to adapt and amend Berger's typology. Berger claimed that he elicited his techniques by way of a "content analysis of all kinds of humor in various media" (p.18, 1993). (He does not distinguish which kinds of media.) Nevertheless, Buijzen and Valkenburg dropped a number of items from Berger's original typology to make it more appropriate for television commercials.

Buijzen and Valkenburg's typology contained 8 categories, which are defined as follows (the number of individual items contained within each category is in parenthesis):

- Slapstick (9) – Physical pie-in-the-face humor, often degrading.
- Surprise (4) – Sudden changes of concepts and images.
- Irony (6) – Meaning the opposite to what is being expressed.
- Clownish behavior (6) – Exaggerated physical behavior.
- Misunderstanding (4) – Misinterpreting a situation.
- Parody (5) – Imitating a style or genre.
- Satire (5) – Making fun of well-known things, situations, or people.
- Miscellaneous (8)

Specifically, the purpose of Buijzen and Valkenburg's typology was to distinguish humor techniques used in television advertisements aimed at different audience groups. The adaptation process from Berger's typology involved two stages. The first was a review of research into the humor preferences of various age and gender groups, and the second was an inductive analysis similar to Berger's method, this time analyzing audiovisual media instead of jokes. The researchers considered commercials the audiovisual equivalent of jokes in that they are short with complete storylines that can be accessed directly.

For the purposes of coding sitcom humor, the main shortcoming of Berger's typology is that audiovisual media may contain a much wider variety of humor types and techniques than verbal narratives. The definitions of techniques also change when shifting from verbal narratives to audiovisual material. In addition, Berger's study focused on humor aimed at adults, whereas Buijzen and Valkenburg aimed to address humor aimed at all age groups. Consequently, Buijzen and Valkenburg's revised typology contains a number of marked changes – 16 techniques from the original typology were discarded, 12 new techniques were added, and categories were completely revised. In sum, the transition from the original typology saw a reduction from 45 to 41 techniques, and an expansion from 4 to 8 categories.

Development of new humor categories

The humor categories created by Berger were used as the foundation on which to develop an instrument to code sitcoms. As discussed above, the purpose of Berger's original typology was to analyze jokes and, as a result, it needed to be adapted for coding television programs. Applicable humor techniques from the Buijzen and Valkenburg typology were added into appropriate categories and new techniques were developed. In this way, the new instrument would be a blend of the two typologies

in methodology, while being aimed at coding humor techniques unique to the sitcom format.

Berger categorized techniques into language, logic, identity and action, and developed these categories by way of a top-down, inductive analysis of humorous material. Buijzen and Valkenburg, on the other hand, used bottom-up statistical analysis to investigate how their techniques clustered into higher order categories. Over a number of principle component analyses for categorical variables (CATPCA), seven humor categories were arrived at, with six items that did not load exclusively onto a category placed into a miscellaneous group.

Berger's top-down method ensured techniques were grouped logically and theoretically. As a result, his original typology does not contain a miscellaneous category as in the Buijzen and Valkenburg typology. This suggests that a bottom-up approach can categorize humor techniques differently from how they would be grouped logically, from the perspective of both the creator and the audience. For this reason, Berger's four theoretical categories were used as the basis for the current typology, with the addition of techniques that capture humor in audio-visual media. To accomplish this, techniques from Buijzen and Valkenburg's typology were added, as well as new original techniques.

Phases of development

Phase 1

In phase 1 of the development of the new typology for sitcoms, the Berger techniques considered relevant were kept. A total of 17 techniques were not included because they either

were considered not relevant to coding sitcoms, or represented by other techniques. For instance, three of Berger's four Action techniques – Chase, Slapstick, and Speed – were grouped convincingly by Buijzen and Valkenburg under the category "clownish humor," and this category can be summarized by a single technique, Clumsiness, identifying the presence of physical humor ("lacking dexterity or grace," see Table 4). Another problem applying Berger's joke techniques to sitcoms is that images are necessarily moving images, involving action as well as appearance. For example, one Berger technique from the Identity category, Grotesque appearance, was renamed Repulsive behavior, and because it now related to behavior, it was relocated to the Action category.

Six techniques developed by Buijzen and Valkenburg (Conceptual surprise, Outwitting, Malicious pleasure, Peculiar face, Peculiar music, and Clumsiness) were added into appropriate categories bringing the total number of techniques to 17.

Phase 2

At this stage, there were still areas that needed capturing, so five new original sitcom-specific techniques were added – Wit, Caught out, Condescension, Deceitful behavior, and Self-deprecation. Caught out ("unexpectedly get caught while wrongdoing or saying something reprehensible") was added as it reflected sitcom behavior not covered, in Berger's sense, by the reverse of Buijzen and Valkenburg's technique, Outwitting ("outsmarting someone or the establishment by retort, response, or comeback"). Both of these were included in Berger's Logic category. Definitions of all these new techniques are included in Table 1. The final typology (Table 2) included four categories and 22 techniques, which were tested for reliability during the next phase of development.

Table 1: Definitions of techniques used in the new sitcom humor typology.

Humor Technique	**Short Description**
Absurdity	Nonsense, a situation that goes against all logical rules
Allusion	Indirect reference
Caught out	Unexpectedly get caught while wrongdoing or saying something reprehensible
Clumsiness	Lacking dexterity or grace
Coincidence	A coincidental and unexpected occurrence
Conceptual surprise	Misleading the audience by means of a sudden unexpected change of concept
Deceitful behavior	Being deliberately misleading, concealing or distorting the truth
Irony	Saying one thing and meaning something else or exactly the opposite of what you're saying
Malicious pleasure	Taking pleasure in other people's misfortune; victim humor
Misunderstanding	Misinterpreting a situation
Outwitting	Outsmarting someone or the establishment
Parody	Imitating a style or a genre of literature or other media
Peculiar face	Making a funny face, grimace
Peculiar music	Funny, unusual music (when not as part of program structure)
Pun	Playing with the meaning of words
Reparteee	Verbal banter, usually in a witty dialogue
Repulsive behavior	Offensive, aversive, disgusting behavior
Ridicule	Making a fool of someone, verbally or nonverbally
Rigidity	Someone who thinks along straight lines, who is conservative and inflexible
Self-deprecation	Expressing something negative about oneself
Wit	Ingenious humor

Table 2: New typology for sitcoms – 4 categories/22 techniques.

Language	**Logic**	**Identity**	**Action**
Allusion	Absurdity	Parody	Peculiar face†
Irony	Coincidence	Rigidity	Peculiar music†
Puns	Conceptual surprise†	Malicious pleasure†	Clumsiness†
Repartee	Outwitting†	Condescension*	Repulsive behavior
Ridicule	Caught out*	Deceitful behavior*	
Wit*	Misunderstanding	Self-deprecation*	

Notes:

*New technique created for this study.

†Buijzen & Valkenburg technique.

Phase 3

In phase 3 of development, another coder was enlisted to test the typology for inter-coder reliability. A variety of popular US sitcoms aired over the period 2007–2009 were used as stimuli. To begin with, the two coders coded a selection of sitcoms together while discussing the humor observed in the sitcoms in relation to its representation on the coding sheet. When an instance of humor appeared that contained multiple techniques, the program was paused while the coders discussed the humor techniques in relation to their representation on the coding sheet. The unit of analysis was also discussed. Throughout this process, amendments were made to the coding sheet before the coders went away to separately code a number of programs. The coders then separately coded this first batch of programs. Agreement on the independently coded techniques was calculated to evaluate the reliability of the final coding scheme.

Table 2 shows the final version of the coding scheme that was used in the third (reliability testing) phase of this process. The final scheme has four categories (adopted from Berger), as opposed to the eight used by Buijzen and Valkenburg (2004). The scheme has 22 techniques, 19 less than the 41 used by Buijzen and Valkenburg (2004). Six Buijzen and Valkenburg techniques were adopted for this scheme, while five new techniques were added, developed specifically for this study to code unique aspects of sitcom humor. The following section describes in more detail the reliability testing process used in Phase 3.

Reliability testing

Sitcom selection

Two sitcoms, *Modern Family* (ABC) and *The Office* (NBC) were used for the first stage of Phase 3, identifying the average level of reliability for the codes refined in Phase 2. After revising the code definitions, the final reliability test involved coding two episodes each of four different sitcoms: *Scrubs* (NBC/ABC), *Will and Grace* (NBC), *How I Met Your Mother* (CBS), and *Two and a Half Men* (CBS). All programs were 20 minutes long.

Unit of analysis

To analyze the coding sheet for reliability, thought had to be given to its unit of analysis, that is, the units of sitcom time that would be coded. Coding every single instance of humor over a 20-minute program was impractical for analysis and the resulting data would only represent frequency of technique use. Units less than 10 seconds in duration would be difficult to use in conjunction with other methods of analysis, such as skin conductance, because of the 3-second delay generally involved in psychophysiological measures (Potter and Bolls 2012). Furthermore, from a theoretical view, it is questionable how much underlying meaning can be contained in such small segments.

Beats

The first unit of analysis considered was "beats." According to McKee (1997), beats are exchanges of 'action/reaction in character behavior' (p.258). McKee, who uses beats as a component of scene analysis, qualifies each beat's sub textural action with a verb or active phrase, such as 'begging' or 'wanting her to stay'. The moment this sub textural action changes, for example, from 'begging' to 'threatening to leave', the beat is over. Originally, it

was decided separating sitcoms into beats for the unit of analysis was less problematic and less ambiguous than marking each humor technique. However, once segmenting the shows had begun, it was evident this was not the case as faster paced shows such as *Modern Family* and, in particular, *The Office*, contained many more beats than humor techniques. This posed an issue for psychophysiological analysis, as many beats were less than 10 seconds long.

Scenes

The next level of analysis from a beat, according to McKee, is a scene. Beats are contained within scenes. McKee (1997) defines a scene as "an action (…) in more or less continuous time and space" (p.35). But using scenes by this definition for humor technique analysis is ambiguous because there are sometimes a few different stories (and related humor techniques) that can occur in the same time and space within a scene. For example, in the sitcom *Friends*, overlapping stories often occur simultaneously as the cast sit down to coffee in their usual café. This is because sitcoms have a history of being filmed on a set in front of a live audience.

Apart from the issue of multiple stories happening in the same time and space, there lies the problem of the same story (and related humor techniques) carrying over into multiple times or spaces. For example, at the beginning of the 'Todd Packer' episode of *The Office*, one character mockingly asks another a question in the staff lunchroom while the other staff members are present. He repeats this question over a number of time frames until they are alone and it is much later. In this case, the topic is the same but time changes as a part of the joke. The humor revolves around this time change, so to class each time-changed setting as a new scene serves no purpose theoretically and only complicates the data analysis.

Scenes-by-topic

To address this problem, the shows were segmented into scenes by topic. That is, as long as the characters were talking about or the scene revolved around the same topic, it was classed as a scene. This also makes sense for the humor techniques, as jokes relate to a particular topic. In this article, topic segments were named scenes by this definition.

When sectioning sitcoms into scenes by topic, there were problems again to do with very short scenes. *The Office* and *Modern Family* often have short bursts (a couple of seconds long) of a theme that continues throughout the show incidentally thrown in among other longer scenes. A way around this was to keep the main scene by topic as a whole, and make a note if these contained short topic bursts when coding humor techniques.

Coding procedure

Programs were divided into their appropriate scenes before the coders analyzed each scene for humor techniques. Each scene could contain many instances of humor, but were only coded for each type of humor once. Each type of humor was coded as being present (1) or absent (0).

Results

To ascertain inter-coder reliability statistically, Krippendorf's alpha was selected because it is widely recognized as the most rigorous test for content analysis as it incorporates agreement by chance as well as the magnitude of non-agreements (Krippendorf 2011). For robust reliability, Krippendorf's alpha requires a cut off level of 0.8, with items achieving outcomes between 0.667 - 0.8 considered for tentative conclusions (Krippendorf 2004). After coding the first two programs (two episodes each of *Modern Family* and *The Office*) the coders came

together to assess their findings. For the two episodes of *Modern Family* the percentage agreement was 96 %. However, the Krippendorf's alpha level was only 0.58. Likewise, for the two episodes of *The Office*, the percentage agreement was 96 %, with a Krippendorf's alpha level of 0.66. These alpha levels are not considered satisfactory for reliability, so discussion was carried out between the coders and amendments were made until consensus was achieved.

Coding then commenced of a new batch of shows, comprising 215 scenes across 8 programs (listed above). The overall percentage agreement calculated was 96 %. Table 3 displays the statistics for each technique coded in the final analyses. No technique fell below the .667 cutoff for exploratory analysis (the lowest was Conceptual surprise, $\alpha = .67$). Half (11) of the 22 techniques had reliabilities above the recommended.80 level.

At this point the typology was considered ready for use in the main analysis. Table 1 displays the final 22 techniques with definitions. Some of the definitions derived directly from the original typology by Buijzen and Valkenburg (2004), while others were produced from observations and discussions made during the coding process.

Table 3: Inter-coder reliability statistics for scenes coded by each individual program (8 programs, 215 scenes coded in total).

Humor technique	**Percent agreement**	**Krippendorf's ∝**
Malicious pleasure	98%	0.89
Ridicule	94%	0.72
Condescension	98%	0.88
Deceitful behavior	94%	0.79
Peculiar face	99%	0.85
Peculiar music	99%	0.75
Clumsiness	99%	0.82
Repulsive behavior	98%	0.79
Conceptual surprise	93%	0.67
Coincidence	100%	1.00
Irony	96%	0.75
Absurdity	97%	0.82
Outwitting	97%	0.76
Caught out	98%	0.90
Misunderstanding	98%	0.74
Parody	95%	0.68
Rigidity	97%	0.76
Self-deprecation	100%	0.89
Sexual allusion	97%	0.88
Pun	98%	0.87
Repartee	99%	0.82
Wit	95%	0.68

Method

The previous section discussed the identification of humor techniques relevant to television sitcoms, and the process of developing a reliable way of coding for the presence/absence of these techniques. These techniques were then evaluated for their potential usefulness as independent variables in future research by using them to code for the presence and absence of humor techniques in four well-known US sitcoms.

Programs

Programs used in this study were the four highest-rating comedy programs across the four primary US networks (ABC, CBS, NBC, FOX). Two episodes of each program were coded. Each episode was segmented into scenes based on topic – as long as the characters were talking about (or the scene revolved around) the same topic; it was classed as a scene. Scenes could vary in duration. Also, scenes could contain no humor techniques, or one or more humor techniques.

Coding

Based on theory and coding procedures outlined in the previous section, 22 individual humor techniques were established as being potentially instrumental in the use of humor in sitcoms (Table 2). These techniques were distributed across four humor categories adopted from Berger's original humor typology (1976). Techniques were mutually exclusive, and more than one technique could appear during any scene.

Using a spreadsheet, sitcoms were first segmented into scenes by topic, and then each scene was coded for the presence or absence of the 22 humor techniques. Scenes were coded for

humor techniques with techniques coded only once if they appeared. Additional information such as plotlines, characters and narrative structure was recorded.

Results

Unit of analysis – Scenes by topic

As discussed in the previous two sections, scenes-by-topic were chosen as the most appropriate level of analysis for this study. Table 4 displays descriptive information about the average scene, for each program individually, and aggregating across the four programs. The total dataset consists of 169 scenes (rows), equally contributed from all four programs (χ^2 (3, N = 169) = 4.99, exact p = .174). Each episode contained an average of 21 scenes, and since each episode was 21 minutes long (without ads), each scene lasted just under 1 minute on average (M = 57.61 s). Each scene featured on average just over 3 different humor techniques (M = 3.38).

Prevalence of humor techniques

The frequency of use of each humor technique across programs can be seen in Table 5. As can be seen, humor technique use varied significantly across programs. Discussion of the top 5 humor techniques used in each program follows.

Table 4: Descriptive statistics of scenes (standard deviations in parentheses).

Program	**The Big Bang Theory**	**Family Guy**	**Modern Family**	**The Office**	**Total**
Scenes	31	42	45	51	169
Scene duration (secs)	76.03	56.00	53.36	51.49	57.61
Scene duration min (secs)	19	10	11	9	12.25
Scene duration max (secs)	168	121	178	207	168.50
Humor techniques per scene ($\bar{x}$)	2.90	1.57	1.31	1.27	3.38
Humor techniques min	0	0	0	0	0
Humor techniques max	6	5	4	4	4.75

Table 5: Frequencies of individual humor techniques (by category) used in 2 episodes of each program. Category totals included.

Humor Technique	***The Big Bang Theory***	***Family Guy***	***Modern Family***	***The Office***	**Total**	***p***
1. Language						
1.1 Allusion	5	8	3	10	26	
1.2 Irony	5	0	6	1	12	
1.3 Pun	3	0	6	0	9	
1.4 Repartee	6	0	0	0	6	
1.5 Ridicule	9	2	7	4	22	
1.6 Wit	7	4	4	4	19	
	35	14	26	19	94	.000
2. Logic						
2.1 Absurdity	2	12	0	1	15	
2.2 Coincidence	0	1	0	1	2	
2.3 Surprise	8	8	4	3	23	
2.4 Outwitting	2	0	4	9	15	
2.5 Caught out	4	2	4	4	14	
2.6 Misunderstanding	1	0	4	1	6	
	30	28	24	19	75	.000
3. Identity						
3.1 Parody	3	17	1	2	23	
3.2 Rigidity	11	1	0	1	13	
3.3 Malicious Pleasure	6	0	3	2	11	
3.4 Condescension	6	0	3	7	16	
3.5 Deceitful behavior	3	2	4	8	17	
3.6 Self-deprecation	1	0	1	0	2	
	30	20	12	20	82	.000
4. Action						
4.1 Peculiar face	3	1	1	0	5	
4.2 Peculiar music	2	0	1	0	3	
4.3 Clumsiness	1	1	3	4	9	
4.4 Repulsive behavior	2	7	0	3	12	
	8	9	5	7	29	.026
Total techniques	179	165	123	132	599	.000

The Big Bang Theory ("The Boyfriend Complexity"; "The Toast Derivation")

This program contained the highest use of techniques overall from three categories – Language, Logic, and Identity. In fact, for the use of humor techniques from the Language category, *The Big Bang Theory* was considerably higher in comparison to the other three shows. Most-used techniques from this category include Ridicule, Repartee, and Wit. *The Big Bang Theory* also scored considerably higher in techniques from the Identity category, with Rigidity being its highest scoring technique overall. Since these techniques revolve around wit (Language) and character-based situations (Identity), these findings suggest the show derives most of its humor from witty dialogue, and its characters' idiosyncrasies.

Modern Family ("Regrets Only"; "Two Monkeys and a Panda")

In comparison to the other shows, humor techniques used in *Modern Family* were spread more evenly across categories, indicating that the show includes a range of humor types rather than being focused on any particular type. In contrast to *The Big Bang Theory*, which recurrently uses character-based humor techniques, the humor in *Modern Family* arises from storylines as well as characters.

Family Guy ("Family Goy"; "Business Guy")

Three techniques in particular were prominent in *Family Guy* in comparison to the other shows – Parody, Absurdity, and Repulsive behavior. Since these techniques are all derisive in nature, much of this show's humor can be explained by superiority theory: deriding others' moral and social standards (Berger 2010; Keith-Spiegel 1972; Martin 2007; Meyer 2000; Mulder and Nijholt 2002; Veatch 1998). Absurdity and Parody featured notably higher in *Family Guy* than in the other shows. This result highlights the absurd nature of many of the show's themes and storylines. Perhaps this finding relates to the fact this was the only

animated program in the study, allowing for these types of themes.

The Office ("China"; "Todd Packer")

Most prominently used techniques in *The Office* included Allusion (Language), Outwitting (Logic), and Deceitfulbehavior (Identity). Techniques such as Deceitful behavior, Condescension, and Ridicule denote derisive humor. Considering this show is set in the workplace, these results suggest much of its humor derives from facetiousness in workplace relationships.

Summary

In sum, these analyses of differences in humor technique usage between these four programs revealed:

1. *Family Guy* derives much of its humor from themes related to moral and social standards.
2. *The Big Bang Theory* contains humor that is mostly character-based.
3. *The Office* frequently uses malicious humor.
4. *Modern Family* features a range of techniques across categories, but fewer humor techniques related to moral and social standards.
5. The three highest scoring humor techniques overall across programs were Allusion (Language category), Surprise (Logic category), and Parody (Identity category), with the latter being mostly due to its use in *Family Guy*.

In conclusion, analysis has revealed that despite the small sample of sitcoms used in this study, there is sufficient range and variability in humor technique use across the four humor

categories to suggest the utility of the proposed sitcom humor typology. Although not all techniques were used by all shows, each technique was used at least once in one program.

Discussion

The aim of the current study was to identify key components of sitcoms in terms of the prevalence of various humor techniques. This aim was achieved. As would be expected, the prevalence of humor techniques was found to vary across sitcoms. These variations are discussed below, as well as their theoretical and practical implications.

Four categories of humor techniques were adopted from Berger's original humor typology for jokes (1976). Each category was represented by several specific techniques. Altogether, a total of 22 individual humor techniques were investigated. The results of this study suggest that the proposed typology may be useful for investigating which specific humor techniques improve program enjoyment. First, this study identified the most appropriate unit of time for coding sitcoms: individual scenes within programs, related by topic, rather than shorter "beats" or programs in their entirety. Second, the results show that while only four programs were coded in the main study, these programs featured instances of every type of humor technique, suggesting that the proposed typology is exhaustive. All four humor categories, although not all 22 techniques, were represented in the four sitcoms analyzed, suggesting that the producers of all four programs shared lay theories about the importance of these categories.

Theoretical implications

Currently, the superiority and incongruity theories of humor are recognized as the most influential (Berger 1987; Martin 2007). Firstly, superiority theory offers an emotional aspect to humor by citing the boosting of self-esteem as its function (Buijzen and Valkenburg 2004). Historically, this theory dates back the longest, existing in various forms. Much of this humor is aggression-based, ranging in malevolence from benign and playful to hurtful and malicious. Zillman and Cantor (1976) theorized that appreciation of this humor is dependent upon how the disparaging group is perceived.

Secondly, incongruity theory is heralded as the most influential and widely accepted of all humor theories (Berger 1987; Martin 2007). This theory focuses solely on cognition (Buijzen and Valkenburg 2004; Martin 2007; Meyer 2000). The idea that incongruity lies at the heart of the humor experience has been discussed by philosophers and theorists for over 250 years (Martin 2007). However, it is argued that while some form of incongruity is required in the humor process, it is not enough on its own. It has been theorized that incongruity in isolation is not necessarily funny, but that it facilitates humor (Martin 2007; McGhee 1972; Mulder and Nijholt 2002).

Logic category

The Logic category of humor techniques derives from the incongruity theory of humor. The prevalence results in the current study are in line with the proposition that this theory only addresses the structure of humor, and that Logic techniques occur in combination with other techniques.

Identity category

Interestingly, out of the four shows, *The Big Bang Theory* contained more techniques from the Identity category than the other three shows. Theoretically, the Identity category has mixed underpinnings, incorporating aspects from both incongruity and superiority theories. In this study, techniques in the Identity category derive their humor from idiosyncratic behaviors, which are surprising and outside the norm (incongruity theory). In addition, these characters assert their superiority with behaviors such as Malicious pleasure and Condescension, and inferiority with behaviors such as Self-deprecation (superiority theory). Theories originally put forth in the 1960s and 70s (La Fave 1961; La Fave et al. 1973; Zillman and Cantor 1976) cite group identification and group attitudes as key in appreciation of such humor. Historically, both the incongruity and the superiority theories have been widely influential, but logically humor derives from their combination, and this study's prevalence results reflect this.

Language category

Techniques from this category are devices that play with words or situations. This type of humor relates most closely to incongruity theory as the appearance of these techniques elicits humor by way of surprise in the pattern of events.

Action category

According to Buijzen and Valkenburg, incongruity theory explains the more innocuous types of humor, which includes the techniques in this category. Berger (1987), however, saw the slapstick style of humor as being derived from superiority theory, as humor is seen in clownishly inferior behavior. Therefore, humor resulting from this category can also be seen as deriving from the combined operation of the two theories. Alternatively, the

same theoretical explanations may apply as those for the Identity category, which also stems from both incongruity and superiority theory.

Practical Implications

The results of this study also suggest some practical implications for producers of sitcoms. This study's prevalence analysis revealed that Action techniques ("slapstick") were used just as frequently as techniques from the other categories across the four sitcoms. This could indicate that on its own, this category does not ensure program enjoyment, but does contribute to enjoyment in combination with other techniques. One Identity technique, Parody, was featured most frequently in *Family Guy*. Logic techniques also featured across the four sitcoms analyzed in this study, and so could be seen as an important component of sitcoms, but, theory suggests, only in combination with other categories.

Limitations and future research

A limitation of this study was its use of only four US network shows. In addition, only successful shows were tested; that is, shows that made it to television and screened for more than a few seasons. It is conceivable that many of the low-prevalence techniques in the shows sampled are highly prevalent in other, less successful shows. Also, the styles of the sitcoms used differed. For instance, *Family Guy* is animated, whereas *The Office* and *Modern Family* showcase a docu-style aesthetic, which would affect the type of humor used. Finally, the four sitcoms that were analyzed used a relatively sophisticated level of humor. If comedies based more on the use of physical humor had been analyzed, such as *Funniest Home Videos* or classic silent films, the prevalence of Action category techniques would have varied

more across programs. However, these shows are not sitcoms.

Future research should use the humor techniques typology developed in this study on a wider variety and higher number of sitcoms. Further investigation of effective techniques should consider, not only the frequency of techniques, but the rhythm, incidence and combinations of techniques that are most effective. As stated, a technique may be most effective when it is used rarely, and in combination with other specific techniques. No doubt, there are also contextual factors that contribute to program enjoyment.

Future research should analyze cable and niche shows, and comparisons between groups (such as cultural differences) in the use of humor types (e. g., US humor and UK humor). Furthermore, other forms of comedy, not only sitcoms, may be analyzed using the typology, or adaptations of the typology. For instance, live stand-up comedy would be an interesting arena for investigating the use of humor techniques and categories, especially as live performance is much easier to manipulate than video production (Russell 2002).

Conclusion

In conclusion, the sitcom genre is the widest reaching comedy form, yet sitcom specific research is surprisingly scant (Mills 2005). The aim of the current study was to develop a humor typology to identify key components of sitcoms. This aim was achieved, with the finding that significant categories and techniques aligned with the two most prominent theories of humor – superiority and incongruity. To develop the typology, new techniques were added to those previously adapted to code humor in television content. This typology was tested and found to be theoretically

sound, practically easy, and reliable. This new typology is ready to be used in future research into the prevalence and effects of humor techniques in sitcoms.

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Bionotes

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