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Is this a Joke?

The Philosophy of Humour

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UNIVERSITY OF SUSSEXALAN ROBERTS FOR DOCTOR OF PHILOSOPHYIS THIS A JOKE?THE PHILOSOPHY OF HUMOURSUMMARY

In this thesis, I address the metaphysical question ‘What is humour?’ and the ethical question ‘When is humour immoral?’ Consulting a dictionary reveals a circle of definitions between ‘amusement’, ‘funniness’, and ‘humour’. So I split the metaphysical question ‘What is humour?’ into three questions: ‘What is amusement?’, ‘What is funniness?’ and ‘What is humour?’ By critically analysing then synthesising recent research in philosophy, psychology and linguistics, I give the following answers:

- (1) x amuses y if and only if:
 - (i) y is in a non-serious, non-threatened, non-goal-directed state.
 - (ii) y simultaneously activates two incompatible interpretations of x via unsound logic.
 - (iii) (ii) sufficiently increases the psychological arousal of y .
- (2) x is funny if and only if x merits amusement.
- (3) x is humour if and only if the function of x is to merit or elicit amusement.

Similarly, I split the ethical question ‘When is humour immoral?’ into three questions: ‘When is amusement immoral?’, ‘How does immorality affect funniness?’ and ‘When is humour immoral?’ By using (1), (2) and (3), I give the following answers:

- (4) Amusement is immoral when the correct theory of normative ethics defines (1.i), (1.ii) or (1.iii) to be immoral.
- (5) Immorality negatively affects funniness.
- (6) Humour-types are not subject to moral evaluation.
- (7) Humour-tokens are immoral when the correct theory of normative ethics defines them to be immoral.

This thesis contributes to the knowledge of the subject in two ways. First, by critically analysing and synthesising recent inter-disciplinary research, (1) provides a more precisely specified definition of amusement than that in the philosophical literature. Second, research on humour, across all disciplines, conflates the three closely related but distinct concepts of humour, amusement and funniness. By providing a linear sequence of definitions, (1), (2) and (3) avoid the conceptual confusions that commonly occur.

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List of Abbreviations

ACoA: Affective Component of Amusement

CCoA: Cognitive Component of Amusement

CIT: Clark's Incongruity Theory

EA₋: Ethical Answer ₋

EQ₋: Ethical Question ₋

MQ₋: Metaphysical Question ₋

ToA: Theory of Amusement

ToF: Theory of Funniness

ToH: Theory of Humour

ToHk: Theory of Humour-tokens

ToHy: Theory of Humour-types

Introduction

A couple of New Jersey hunters are out in the woods when one of them falls to the ground. He doesn't seem to be breathing, his eyes are rolled back in his head. The other guy whips out his cell phone and calls the emergency services. He gasps to the operator: 'My friend is dead! What can I do?' The operator, in a calm soothing voice says: 'Just take it easy. I can help. First, let's make sure he's dead.' There is a silence, then a shot is heard. The guy's voice comes back on the line. He says: 'OK, now what?'

This little story was recently voted the world's funniest joke in an international poll (Wiseman 2015, 217). Famously, a *Monty Python* sketch entitled 'The Funniest Joke in the World' depicts a joke so funny that anyone who hears it promptly dies of laughter (Davies and MacNaughton 1969). Luckily, this hunter joke is not lethally laughable, but its purported status raises intriguing questions about humour. These questions are, at heart, philosophical ones.

Despite being universally and uniquely human, humour has been a surprisingly neglected topic in philosophy. So this thesis starts with the fundamental metaphysical question 'What is humour?' Consulting a dictionary on the matter reveals an uninformative circle of definitions that goes from 'humour', to 'amusement', to 'funniness' and back to 'humour'. The first job is to untangle this circle of definitions into a linear sequence of definitions. The metaphysical question 'What is humour?' then becomes the following three metaphysical questions:

Metaphysical Question 1 (MQ1): What is amusement?

Metaphysical Question 2 (MQ2): What is funniness?

Metaphysical Question 3 (MQ3): What is humour?

Addressing these three questions is the aim of chapters 1 to 6.

Chapter 1 provides the following initial answers to MQ2 and MQ3:¹

¹In these definitions and others, the universal quantifiers of 'for any object x ' and 'for any subject y '

Theory of Funniness (ToF): x is funny if and only if x merits amusement.

Theory of Humour (ToH): x is humour if and only if the function of x is to be amusing or funny.

A few words on each of these. ToH defines humour to be a functional concept because, although humour aims to elicit or merit amusement, it can fail at that function. For example, when one hears a weak joke or watches a poor comedy, one recognises humour without experiencing amusement. ToF defines funniness to be a normative concept because there exists a critical gap between what elicits amusement and what is funny. For example, if a hackneyed stand-up routine amuses an unsophisticated audience, one may still insist that the routine is not funny despite the majority response.

ToH defines humour in terms of funniness and amusement, and ToF defines funniness in terms of amusement. So providing necessary and sufficient conditions for amusement would yield a linear sequence of definitions which fully answers MQ1, MQ2 and MQ3. Providing these conditions is the aim of chapters 3 to 6, with chapters 3 and 4 focussing on the cognitive component of amusement, and chapters 5 and 6 focussing on the affective component of amusement.

Chapter 2 reviews pre-existing theories of amusement. The earliest are superiority theories, which emphasised feelings of superiority as a cause of amusement. Later, incongruity theories stressed the perception of incongruity as a cause of amusement. Later still, release theories emphasised the release of psychological energy as a function of amusement. Finally, play theories stress being in a state of play as a condition for amusement. After examination, it is clear that incongruity theories relate to the cognitive component of amusement, whilst superiority, release and play theories relate to the affective component of amusement. Each will be dealt with separately. Hence, in chapters 3 and 4, I critically analyse incongruity theories then, in chapters 5 and 6, I critically analyse superiority, release and play theories.

Chapters 3 and 4 start with a critical analysis of incongruity theories. It is plausible that all amusement involves incongruity, since if humour was merely congruous, then one would not take notice of it in the way required for amusement. However, it is less plausible that all incongruity is amusing, since there can be incongruity without amusement. For example, a Picasso painting is incongruous but not amusing. The challenge is then to give a precise definition of the cognitive component of amusement that distinguishes amusing incongruities, like a joke, from non-amusing incongruities, like a Picasso. By critically

have been left implicit in order to be concise.

analysing then synthesising modern incongruity theories, I give the following cognitive condition:

Cognitive Component of Amusement (CCoA): If x amuses y , then y simultaneously activates two incompatible interpretations of x via unsound logic.

Chapters 5 and 6 start with a critical analysis of superiority, release and play theories. Superiority theories are inadequate because there can be amusement without superiority, for example, innocent wordplay, and superiority without amusement, for example, pitying misfortune. However, superiority theory does highlight the relationship between amusement and aggressive content. Release theory is inadequate because it is based on an outdated theory of mind. However, it does highlight the relationship between amusement and sexual content. A recent version of play theory claims that amusement can only be experienced when in a non-threatened, non-goal-directed state in which high psychological arousal is experienced as pleasant. This claim accurately characterises the relationship between amusement and aggressive or sexual content, since arousing content serves to increase amusement. By critically analysing then synthesising modern play theories, I give the following affective condition:

Affective Component of Amusement (ACoA): If x amuses y , then:

- (1) x initiates or maintains y being in a non-threatened, non-goal-directed state.
- (2) Increasing the arousal of y increases the amusement of y .

Combining CCoA and ACoA via cognitive dissonance theory, I give the following necessary and sufficient conditions for amusement:

Theory of Amusement (ToA): x amuses y if and only if:

- (1) x initiates or maintains y being in a non-serious, non-threatened, non-goal-directed state.
- (2) y simultaneously activates two incompatible interpretations of x via unsound logic.
- (3) (2) sufficiently increases the arousal of y .

An example of ToA is when, in Shakespeare's (2005) *The Comedy of Errors*, Olivia mistakes Sebastian for Cesario. ToA1 is satisfied because the theatre audience is not in a

serious, threatened or goal-directed state. ToA2 is satisfied because the audience watches the scene unfold under two incompatible interpretations of Sebastian via the false premise that Sebastian is who Olivia thinks he is. ToA3 is satisfied because the case of mistaken identity leads to inappropriate and surprising consequences, which increases the psychological arousal of the audience.

As stated, replacing ‘...’ in ToA with necessary and sufficient conditions serves to fully answer the metaphysical questions MQ1, MQ2 and MQ3. Hence, in chapter 7, I turn to addressing ethical questions. Similar to how the metaphysical question ‘What is humour?’ became three questions, the ethical question ‘When is humour immoral?’ becomes the following three questions:

Ethical Question 1 (EQ1): When is amusement immoral?

Ethical Question 2 (EQ2): How does immorality affect funniness?

Ethical Question 3 (EQ3): When is humour immoral?

Addressing these three questions is the aim of chapter 7.

On EQ1, I refer to ToA and argue that amusement is immoral when ToA1, ToA2 or ToA3 is immoral. However, whether either one of ToA1, ToA2 or ToA3 is immoral is dependent on the correct definition of the term ‘immoral’. Different theories of normative ethics will have different definitions of the term ‘immoral’ and these different definitions can conflict, in particular with regard to whether either one of ToA1, ToA2 or ToA3 is immoral. However, I wish to remain neutral on which theory of normative ethics is correct. Hence, I answer EQ1 by claiming that amusement is immoral when the correct theory of normative ethics defines ToA1, ToA2 or ToA3 to be immoral.

On EQ2, I argue for comic moralism, which is the position that immorality negatively affects funniness. Specifically, I argue that if humour contains immoral elements, then those elements merit responses which impinge on a non-serious, non-threatened, non-goal-directed state. Thereby, according to ToA1, immoral elements negatively affect amusement qua amusement. Hence, by ToF, I answer EQ2 by claiming that immorality negatively affects funniness.

On EQ3, I distinguish between humour-types and humour-tokens. Since different tokens of the same humour-type can have opposing moral evaluations, only humour-tokens are apt for moral evaluation whereas humour-types are not. Moreover, given that a humour-token is a particular act performed by a particular agent with particular intentions in a particular context, humour-tokens should be morally evaluated in the same way that other such acts are morally evaluated: with reference to the correct theory of

normative ethics. Hence, I answer EQ3 by claiming that humour-types are never immoral, but humour-tokens are immoral when the correct theory of normative ethics defines them to be immoral.

Chapter 1

Amusement, Funniness and Humour

Norman Malcolm (1984, 2728) recalls how ‘Wittgenstein once said that a serious and good philosophical work could be written that would consist entirely of jokes (without being facetious)’. The notion of sitting down with a joke-book and, after a few chuckles, emerging philosophically enriched certainly sounds appealing. Though, unfortunately for the reader, I do not intend this thesis to be a philosophical work *consisting* of jokes. Rather I intend it to be a philosophical work *about* jokes - jokes and humour generally.

Wittgenstein’s remark does not preclude the possibility that a philosophical work *about* humour will be facetious. Indeed, since philosophy is often considered a weighty discipline and humour a light topic, a work about humour may seem facetious compared to more traditional works about existence, truth or knowledge. This is perhaps why the philosophical literature on humour is not as extensive as that in psychology or linguistics. But just because humour is associated with non-seriousness does not mean that it cannot qualify for serious philosophical study.

After all, humour is a widespread feature of human life. Eavesdrop on a table in any public place and one does not have to wait long to hear someone laugh (particularly down the pub). Moreover, humour is a phenomenon that has been discovered in every known human culture and can be experienced by almost everyone (Apte 1985; Lefcourt 2001). Western colonialists noted the existence of humour when they first encountered Australian aboriginals, despite their genetic isolation for at least thirty-five thousand years (Polimeni and Reiss 2006). In addition, although vocalisations resembling laughter can occur in apes, the mental sophistication required for full-blown humour means that it remains exclusively a human pleasure (Preuschoft and van Hooff 1997; van Hooff and Preuschoft 2003). Surely

the joint facts that humour is ubiquitous within humanity, universal across humanity, and unique to humanity qualifies it to furrow a few philosophical brows.¹

1.1 Metaphysical Questions

A typical starting point for the philosophy of such-and-such is to address metaphysical questions concerning the nature of such-and-such. Arguably, the most fundamental of these questions is ‘What is such-and-such?’. The thought is that only once one has a good understanding of what something *is*, can one then progress to addressing further questions about it. Applying this thinking to the philosophy of humour, I start with the fundamental metaphysical question ‘What is humour?’

Consulting a dictionary on the matter reveals an uninformative circle of definitions that goes from ‘humour’, to ‘amusement’, to ‘funny’ and back to ‘humour’. The *Oxford English Dictionary* (2004, 695, 45, 576) provides a typical example:

humour (n.) The quality of being amusing or comic, especially as expressed in literature or speech.

amusement (n.) The state or experience of finding something funny.

funny (adj.) Causing laughter or amusement; an instance of humour.

This tight circle of definitions reflects the common usage of ‘humour’, ‘amusement’ and ‘funny’ in everyday speech. One often speaks as though humour, amusement and funniness are roughly the same thing. However, I argue that humour, amusement and funniness are three closely-related but distinct concepts. Hence, in order to avoid conflation, I split the initial metaphysical question ‘What is humour?’ into three metaphysical questions:

Metaphysical Question 1 (MQ1): What is amusement?

Metaphysical Question 2 (MQ2): What is funniness?

Metaphysical Question 3 (MQ3): What is humour?

Separately addressing these three metaphysical questions allows me to untangle the uninformative circle of definitions above into a linear sequence of definitions. This linear sequence takes the definition of amusement as foundational, building on it to give the

¹Wittgenstein (2009, 98) himself certainly seemed to think that jokes were philosophically significant:

The problems arising through a misinterpretation of our forms of language have the character of depth ... Let us ask ourselves: why do we feel a grammatical joke to be deep? (And that is what the depth of philosophy is.)

definition of funniness in terms of amusement, then building on that to give the definition of humour in terms of amusement and funniness. Hence, if I am to be successful in providing this linear sequence of definitions, then I cannot make reference to funniness or humour in giving my definition of amusement, nor can I make reference to humour in giving my definition of funniness.

As far as I am aware, providing a linear sequence of definitions for amusement, funniness and humour is an original approach. I am not aware of any humour theorist, in any discipline, who explicitly distinguishes between amusement, funniness and humour. As a result, most authors fully or partially conflate the three concepts. For example, Berys Gaut (1998, 53) states at the beginning of a paper that he ‘will speak interchangeably of the humor, funniness or amusingness of jokes’. Such conflations in the literature present me with a dilemma when quoting authors whose usage of the terms ‘amusement’, ‘funny’ or ‘humor’ conflicts with my own definitions. In order to avoid misrepresentation, I have chosen to simply present the conflicting usage of other authors rather than translate it into alignment with my own. For example, if an author uses the term ‘amusing’ in such a way that, according to my definitions, they should have used ‘funny’ instead, then I will quote them using the term ‘amusing’ but then make our conflict explicit and examine their quote as if they had used ‘funny’.

In this chapter, I address MQ1, MQ2 and MQ3 by examining amusement, funniness and humour and the relationships between them. In section 1.2, I address MQ1 by examining amusement, in section 1.3, I address MQ2 by examining funniness, and, in section 1.4, I address MQ3 by examining humour.

1.2 MQ1: What is Amusement?

Everyday usage of the term ‘amusement’, as exemplified in the dictionary definition above, suggests the common conception that amusement is a state, specifically, a mental state. However, following John Morreall (1987a, 4), it is important to note that the term ‘amusement’ has a wide sense and a narrow sense. According to the wide sense, to be amused is to have one’s attention agreeably occupied in a general way. For example, if one agreeably occupies one’s attention on a rainy day with a board game, then one is being amused in the wide sense. According to the narrow sense, to be amused is to have one’s attention agreeably occupied in a particular way. To specify this particular way is to give a defini-

tion of amusement.² So, for now, I will merely illustrate the narrow sense of ‘amusement’ with the help of some examples:

To lose one parent, Mr. Worthing, may be regarded as a misfortune; to lose both looks like carelessness.

Oscar Wilde (2014, 18)

It is impossible to enjoy idling thoroughly unless one has plenty of work to do.

Jerome K. Jerome (2013, 1)

The Right Hon. was a tubby little chap who looked as if he had been poured into his clothes and had forgotten to say “When!”

P.G. Wodehouse (2011, 17)

Outside of a dog, a book is a man’s best friend. Inside of a dog it’s too dark to read.

Groucho Marx (Kanfer 2008, xv)

In the beginning the Universe was created. This has made a lot of people very angry and been widely regarded as a bad move.

Douglas Adams (2009, 1)

Hopefully, these examples have done the trick and the reader has an intuitive grasp of the mental state referred to by the narrow sense of ‘amusement’. It is this mental state that I am primarily concerned with and so, from now on, I use the term ‘amusement’ in the narrow sense.

The first specification I make about amusement is that it requires both a subject and an object.³ As a mental state, amusement necessarily requires a subject. But amusement

²Note that I cannot make reference to funniness or humour when specifying amusement in the narrow sense, since this would constitute a failure to provide a linear sequence of definitions of amusement, funniness and humour. However, making reference to humour to define the narrow sense of amusement in this way is exactly what many authors do (Scruton 1982; Martin 1987; Carroll 2014b).

³Here I use the term ‘subject’ essentially to mean ‘normal human being’, but I use the term ‘object’ in the widest possible sense. Amusement can be directed towards anything, including sentences, utterances, events, videos, images, speech acts, memories, and chimeras. So the sense of ‘object’ I use aligns with

also requires an object because it is a mental state which is always directed towards some object or about some object. Robert Sharpe (1987, 208) rightly observes that ‘to be amused at nothing at all is ... odd or possibly pathological’. Of course, it may be possible to be amused by something one mistakenly thought to be the case. For example, a misheard request may sound amusing. In these circumstances, one’s amusement is still directed towards an object, it is simply that the object is imaginary. In summary then, amusement is neither entirely dependent on subjects nor entirely dependent on objects, but arises from an interaction between subject and object. Thus, in order for there to be amusement, there must be an amused subject y and an object x towards which y ’s amusement is directed.⁴

The second specification I make about amusement is that it has both a cognitive component and an affective component.⁵ The cognitive component constitutes the *recognition* of something as an object of amusement, whilst the affective component constitutes the *appreciation* of something as an object of amusement. For an illustration of the cognitive component, consider the following example:

‘Hurry up and get to the back of the ship!’ Tom said sternly.

Amusement towards this example depends upon one’s knowledge about ships. If one does not know that ‘stern’ is the nautical name for the back of a ship, then one will probably not recognise this example as an object of amusement. Hence, in this example, amusement depends upon knowledge and thereby has a cognitive component.⁶ For an illustration of

Bertrand Russell’s (1996, 43) definition of ‘term’:

Whatever may be an object of thought, or may occur in any true or false proposition, or can be counted as one, I call a term. This, then, is the widest word in the philosophical vocabulary.

⁴Throughout this thesis, the variable x will be used to denote an object and the variable y will be used to denote a subject.

⁵This distinction between the cognitive and affective components of amusement is not a new one. In the philosophical literature, Gaut (1998; 2007) observes that amusement has both an ‘intellectual’ and an ‘affective’ aspect, whilst Noël Carroll (2014a; 2014b) also suggests that these two aspects are separable. Similarly, in the psychological literature, there is a widespread distinction between the ‘comprehension’ phase and ‘appreciation’ phase of amusement (Suls 1972; Ruch 1998; Martin 2007).

⁶It may be argued that giving one example of amusement which has a cognitive component does not prove that all amusement has a cognitive component. However, if it is assumed that amusement is a uniform mental state, then all amusement must uniformly either have or not have a cognitive component. Moreover, I do not mean the distinction between the cognitive and affective components of amusement to be a strict one. Rather, I make it in order to effectively categorise theories of amusement in later chapters.

the affective component of amusement, consider the following example:

What should you do when you have a gun with two bullets and are trapped in a room with an angry bear, a hungry lion, and Smith? Shoot Smith twice.

Amusement towards this example depends upon one's attitudes towards Smith. If one holds positive attitudes towards Smith, then one will probably not appreciate this example as an object of amusement.⁷ Hence, in this example, amusement depends upon attitudes and thereby has an affective component.

There are two points to note about this distinction between the cognitive and affective components of amusement. First, that the cognitive component precedes the affective component.⁸ After all, one must first recognise something as an object of amusement before one can appreciate it as an object of amusement. For example:

Jones' family tree must be a cactus, because everybody on it is a prick.

In this example, the affective component of amusement involves appreciating the insult of Jones, whilst the cognitive component involves recognising the insult in the first place. Clearly, one cannot appreciate an insult without first recognising it. Thus, in this example, the cognitive component of amusement must precede the affective component. This is generally the case since examples of the affective component of amusement preceding the cognitive component would have to involve the seemingly impossible feat of appreciating something as an object of amusement before recognising it as an object of amusement.

The second point to note is that I am not proposing a *strict* distinction between the cognitive and affective components of amusement. These two components are not necessarily separable. In fact, it seems that the definition of the affective component may have to make reference to the definition of the cognitive component. This is because certain features which allow one to recognise something as an object of amusement may also be features that contribute to one's appreciation of it as an object of amusement. For example, one may both recognise and appreciate something as an object of amusement because of its cleverness and ingenuity.

Support for this distinction between the cognitive and affective components of amusement can be found in recent neuroscientific research. Vinod Goel and Raymond Dolan (2001) conducted the first functional Magnetic Resonance Imaging (fMRI) study about

⁷I do not mean to suggest that negative attitudes towards Smith are necessary for amusement. Rather I am merely illustrating that one's attitudes can affect one's amusement.

⁸Specifically, the cognitive component of amusement psychologically and temporally precedes the affective component of amusement.

amusement in which they scanned fourteen participants listening to amusing stories and managed to isolate the cognitive and affective components of amusement.⁹ Another fMRI study by Joseph Moran et al. (2004) managed to dissociate recognition and appreciation in amusement responses. They exposed participants to amusing television shows and distinguished between the brain activity associated with recognition, from the brain activity associated with appreciation. Bartolo et al. (2006) conducted a further fMRI study that presented participants with amusing cartoons and found activation of different brain regions in relation to recognition and appreciation. In general, fMRI results show that amusement has a cognitive component that is associated with brain activity in frontal and temporal regions, and an affective component that is associated with brain activity in reward and emotional regions. This suggests that the subjectively intuitive distinction between the cognitive and affective components of amusement does indeed have an objective reality.

Criticism of the distinction can be found in claims that amusement does not have an affective component, but rather is a purely cognitive mental state. For example, Henri Bergson (2008, 4) makes one such claim:

Here I would point out ... the *absence of feeling* which usually accompanies laughter ... To produce the whole of its effect, then, the comic demands something like a momentary anesthesia of the heart. Its appeal is to intelligence, pure and simple.¹⁰

According to Bergson, amusement is a purely cognitive mental state and so does not have an affective component. However, this claim seems empirically false. There are many examples of amusement where attitudes, feelings or emotions affect that amusement. The above insults targeting Smith and Jones are two such examples. Here is another:

What does the sign on an out-of-business brothel say? We're closed, beat it.

Here the cognitive component of amusement centres on the phrase 'beat it', but amusement towards this example involves more than that. There is sexual content which, depending on one's attitudes towards sex, has an affect on one's amusement. If one is particularly prudish about such matters, then one may not be amused despite still recognising the example as an object of amusement. Hence, attitudes can affect amusement and Bergson

⁹fMRI is a technique to indirectly image brain activity by detecting changes associated with blood flow.

¹⁰In this quote, Bergson makes reference to 'laughter' and 'comic' - two terms which I am yet to define. However, under the assumption that Bergson takes 'laughter' and 'the comic' to be intimately linked with amusement, it seems fair to interpret him as claiming that amusement is a purely cognitive mental state.

is wrong to claim that amusement is a purely cognitive mental state which does not have an affective component.

I have started my definition of amusement by specifying, first, that amusement requires both a subject and an object, and, second, that amusement has both a cognitive and an affective component. In accordance with the first specification, my definition of amusement takes the following form:¹¹

Theory of Amusement (ToA): x amuses y if and only if ...

Of course, the ‘...’ in ToA is incomplete and needs to be replaced by conditions for amusement before ToA can constitute a proper definition. In accordance with the specification that amusement has both a cognitive and an affective component, some of the conditions that replace ‘...’ will be conditions about x ’s relation to y ’s cognitive composition, whilst others will be conditions about x ’s relation to y ’s affective composition.

Finding the correct cognitive and affective conditions to replace ‘...’ in ToA is an interesting and difficult task, the completion of which concerns the majority of this thesis. However, for now, it is best to simply state ToA in its incomplete form and then define funniness and humour in terms of amusement. This way, I can establish the relationships between amusement, funniness and humour in this chapter. Then, when I finish replacing ‘...’ in ToA with conditions in later chapters, completing my definition of amusement will also serve to complete my definitions of funniness and humour. Hence, providing an answer to MQ1 will essentially provide an answer to MQ2 and MQ3 too.

Before moving on to address MQ2, it is important to accept the following definition of ‘amusing’:

x is amusing if and only if x elicits amusement.¹²

Note that this definition depends on ToA and somewhat follows from it. According to this definition, something is amusing if and only if it elicits amusement from someone. Hence, to claim that x is amusing is to say something purely descriptive about x . It is worth clearing up any confusion over the definition of ‘amusing’ here because the term will be used occasionally throughout this thesis, most importantly in my definition of humour in section 1.4 of this chapter.

¹¹In this definition, the universal quantifiers of ‘for any object x ’ and ‘for any subject y ’ have been left implicit in order to be concise. Moreover, throughout this thesis, these universal quantifiers are to be considered implicit in any unquantified statement featuring x and y .

¹²For clarity, x elicits amusement if and only if there is some y such that x amuses y .

In this section, I have addressed MQ1 by examining amusement, which has yielded ToA. In the next section, I address MQ2 by examining funniness.

1.3 MQ2: What is Funniness?

Everyday usage of the terms ‘amusement’ and ‘funniness’, as exemplified in the dictionary definitions above, suggests the common conception that funniness is determined by what elicits amusement. This common conception can be characterised in the following:

(F) x is funny if and only if x elicits amusement.

However, contra (F), it is important to note a difference between finding something funny and something *being* funny. Compare the following:

(F1) One finds x funny if and only if x amuses one.

(F2) x is funny if and only if x amuses one.

Clearly, the right-hand sides of (F1) and (F2) are identical, whilst the left-hand sides are different. The point is that, despite having identical right-hand sides, (F1) is intuitive whilst (F2) is counter-intuitive. (F1) is intuitive because if one finds something funny, then it amuses one, and, conversely, if something amuses one, then one finds it funny. In contrast, (F2) is counter-intuitive because particular cases of amusement are not always reliable guides to what is funny. One can fail to be amused by things that, on reflection, one should be amused by - things that are funny. One can also be amused by things that, on reflection, one should not be amused by - things that are not funny.

So, everyday usage of the terms ‘amusement’ and ‘funniness’ suggests (F). But the difference between (F1) and (F2) indicates that there is a critical gap between what elicits amusement and what is funny. To give a definition in which funniness is determined by what elicits amusement would fail to accommodate this critical gap and preclude the possibility of criticising cases of amusement. Yet it is possible to criticise as not funny something which not only amuses most people, but even amuses oneself. As D. H. Monro (1963, 17-18) points out, saying ‘ x amuses them’ is not the same thing as saying ‘ x is funny’. Even if one said ‘ x amuses most people’ or ‘ x amuses me’, one could still add ‘but x is not *really* funny’, without contradicting oneself. Conversely, there are also cases in which something is funny despite the fact that it does not amuse most people.

For example, consider the definitions of ‘buffoon’ and ‘boor’ that Aristotle (2009, 77-78) gives in the following:

Those who carry humour to excess are thought to be vulgar buffoons, striving after humour at all costs, and aiming rather at raising a laugh than at saying what is becoming and at avoiding pain to the object of their fun; while those who can neither make a joke themselves nor put up with those who do are thought to be boorish and unpolished.¹³

So, according to Aristotle, a buffoon is someone who is amused by too much and a boor is someone who is amused by too little.¹⁴ Given these definitions, if a group of boors is not amused by an object, then it is possible that, even though the majority response is not one of amusement, that object is funny. Conversely, if a group of buffoons is amused by an object, then it is possible that the object is not funny, despite the majority response. Hence, there is a critical gap between what elicits amusement and what is funny. One can criticise an object of amusement as not funny and support one's criticism with reasons that may prove persuasive. To define funniness in terms of what elicits amusement would fail to accommodate such critical discourse about funniness, even though it exists.

So whether something is funny is not determined by whether it elicits amusement or from whom it elicits amusement. This is because funniness is not a descriptive concept which describes how states of affairs are, but rather a normative concept which prescribes how states of affairs ought to be. To claim that x is funny is not merely to report a response of amusement towards x , but to endorse a response of amusement towards x . It states not that x elicits amusement but that x merits amusement. Hence, I propose the following merited-response definition of funniness:

Theory of Funniness (ToF): x is funny if and only if x merits amusement.

Note that ToF explains why there is a critical gap between what elicits amusement and what is funny. Specifically, not all objects of amusement are funny because it is possible for something to elicit amusement without meriting amusement. Conversely, not all funny objects elicit amusement because it is possible for something to merit amusement without eliciting amusement.

Consider again an earlier example as an illustration of ToF:

¹³In this quote, Aristotle uses the terms 'humour', 'laugh' and 'joke' - three terms which I am yet to define. However, it is clear that, according to my definitions, by 'humour' Aristotle actually means 'amusement'. Hence, it seems fair to interpret Aristotle as claiming that buffoons are amused by too much and boors are amused by too little.

¹⁴Note that I quote Aristotle only in order to introduce his definitions of 'boor' and 'buffoon' and am not committing myself to his wider theory of amusement.

What should you do when you have a gun with two bullets and are trapped in a room with an angry bear, a hungry lion, and Smith? Shoot Smith twice.

Even if most people are amused by this example, it is still possible that the insult of Smith does not merit amusement, for whatever reason. Then the example would not merit amusement and, according to ToF, thereby would not be funny. However, note that the given reason would have to be an amusement-based one. A non-amusement-based reason, like a prudential reason, would not result in that amusement being unmerited. For example, if Smith was one's boss, then one would have a prudential reason not to be amused by the insult (regardless of whether one could choose to be amused or not). But, according to ToF, in order for the insult to be unfunny rather than merely imprudent, there must be an amusement-based reason of why amusement towards the insult is unmerited.¹⁵

The appeal of ToF can be further brought out by considering two rival views of how to define funniness: dispositionalism and realism. A dispositionalist view would define funniness in terms of what is disposed to elicit amusement. However, as established, such a definition has problems because it would fail to accommodate the critical gap between what elicits amusement and what is funny. In contrast, a realist view would define funniness without reference to amusement. On this view, an object is funny independently of whether anyone is amused by it, and if an object is funny, then one ought to be amused by it. However, such a definition also has problems because it would fail to accommodate what Max Köbel (2003) calls 'faultless disagreements'. It seems that discourse about whether an object is funny is discourse that allows for cases of genuine disagreement where, intuitively, neither of the disagreeing parties has made a mistake. Consider the following example:

Never date a tennis player. Love means nothing to them.

Suppose that I claim that this example is funny and you claim that it is not funny. Perhaps because I enjoy tennis whereas you despise the game. Then each of us would recognise

¹⁵Daniel Jacobson (1997) distinguishes three different types of reason for a response to be merited: warrant, strategic and non-strategic. First, a response is warranted when it is directed towards an object that has the evaluative property associated with that response. For example, envy is warranted when it is directed towards the enviable. Second, strategic reasons for having a response concern its effects. For example, one's friend may have an enviable new car but, to preserve the friendship, one has strategic reasons not to be envious. Third, non-strategic reasons for having a response do not concern its effects. For example, if envying a ruthless dictator for their power is immoral, regardless of the consequences of one's envy, then one has non-strategic reasons to not be envious. Whether warranted reasons include moral reasons in the case of funniness is a question that I address in chapter 7.

that we had a genuine disagreement, but neither of us would claim that the other is wrong in the sense that they had actually made a mistake. It is not a mistake to enjoy tennis rather than despise it, or vice versa. Hence, this is a case of faultless disagreement.¹⁶ That discourse on funniness allows for such faultless disagreement is problematic for realism, since the view requires that at least one of the disagreeing parties has made a mistake.¹⁷

So, a dispositionalist definition of funniness has problems because it would fail to accommodate the critical gap between what elicits amusement and what is funny. Likewise, a realist definition of funniness has problems because it would fail to accommodate faultless disagreements about funniness in which neither of the disagreeing parties has made a mistake. Hence, the appeal of a merited-response definition of funniness like ToF is that it accommodates both the critical gap and faultless disagreements. Moreover, not only does ToF avoid the weaknesses of a dispositionalist or realist definition, but it also preserves the strengths of each. By making reference to amusement, ToF manages to capture the dispositionalist intuition that funniness can only be defined in terms of amusement. But also, by making funniness a normative concept, ToF manages to capture the realist intuition that one ought to be amused by certain things because they are funny.

However, Aaron Smuts (2010, 341) raises the following criticism against merited-response definitions like ToF:¹⁸

The principal problem for [the] claim that humor is normative is that one can consistently think that if you think that a starving child on the side of the street looks like an old man, and you find the incongruity funny, then it is funny ... This might indicate a moral omission for which one may be responsible; however, it does not mean that “humorous” is a normative concept.

According to Smuts, merited-response definitions like ToF are flawed because there are examples in which funniness is determined by what elicits amusement, not what merits amusement. However, Smuts is only able to articulate his criticism because he fails to distinguish between *finding* something funny and something *being* funny. Consider his

¹⁶In contrast, Andy Egan (2014) argues that the best theory for accommodating such faultless disagreements is a response-dependent account, according to which claiming that x is funny is self-attributing a property of being disposed to experience amusement to x in certain conditions.

¹⁷In contrast, Karl Schafer (2011) argues that faultless disagreements are compatible with realist semantics by trying to show that the degree of faultlessness present in such disagreements is lesser than Köbel (2003) states.

¹⁸In this quote, Smuts makes reference to humour - a concept which I am yet to define. However, it is clear that, according to my definitions, by ‘humour’ Smuts actually means ‘funniness’. Hence, it seems fair to interpret Smuts as criticising merited-response definitions like ToF.

central example that ‘if you think that a starving child on the side of the street looks like an old man, and you find the incongruity funny, then it is funny’. Smuts is claiming that if one finds x funny, then x is funny (where x is a starving child). But, clearly, this claim fails to recognise the difference between (F1) and (F2). Hence, Smuts’s criticism is unsuccessful because his central example fails to accommodate the critical gap between finding something funny and something being funny, as outlined above.

In the philosophical literature, there are some merited-response definitions of funniness like ToF (Wright 1992; Gaut 2007; D’Arms and Jacobson 2010). However, since theorists do not distinguish between amusement and funniness, they are forced to give a merited-response definition of both concepts. This creates problems since amusement is a descriptive concept. For example, consider the following from Gaut (2007, 246):

It is important to recall that the notion of the amusing or funny is a normative one: what is amusing is not what causes amusement, but what *merits* amusement. So one can be amused by what is not amusing and not amused by what is amusing.

By not distinguishing between amusement and funniness then giving a normative account of both concepts, Gaut fails to accommodate the descriptive usage of ‘amusing’. Contra Gaut, it follows from ToA that something is amusing if and only if it elicits amusement. Conversely, consider the following from Noël Carroll (2014b, 247):

Does it really make sense to say that something is not really funny if virtually everyone is amused by it? Perhaps being comically amused is just a descriptive matter and not a normative one.

By not distinguishing between amusement and funniness, then giving a descriptive account of both concepts, Carroll fails to accommodate the normative usage of ‘funny’. Contra Carroll, it follows from ToF that something is funny if and only if it merits amusement. Thus, by conflating amusement and funniness, Gaut’s and Carroll’s accounts suffer parallel problems.

In this section, I have addressed MQ2 by examining funniness, which has yielded ToF. In the next section, I address MQ3 by examining humour.

1.4 MQ3: What is Humour?

In order to motivate my own definition of humour, I first outline and overturn a common definition of humour given in the philosophical literature. This common definition can be

outlined by starting with the common conception that humour is a quality, as suggested by everyday usage of the term ‘humour’ and the dictionary definition above. Supposing that humour is indeed a quality, an obvious philosophical distinction to evoke is that between primary and secondary qualities, famously articulated by John Locke (1996). According to Locke, primary qualities of objects are ‘utterly inseparable’ from the objects themselves and can be defined without reference to a subject (Locke 1996, 49). Often cited examples of primary qualities include shape, size and solidity. According to Locke, secondary qualities of objects are ‘nothing in the objects themselves but powers to produce various sensations in us’ and cannot be defined without reference to a subject (Locke 1996, 49). Often cited examples of secondary qualities include colour, taste and sound.¹⁹

Mark Johnston (1989) suggests that the central difference between primary and secondary qualities is reflected in a perceived difference between the following two biconditionals:²⁰

(R1) x is round if and only if x would look round to normal subjects in normal conditions.

(R2) x is red if and only if x would look red to normal subjects in normal conditions.²¹

Johnston proposes that a perceived difference between these two biconditionals is that, for (R1), the right-hand side depends on the left-hand side, whereas, for (R2), the left-hand side depends on the right-hand side. So, even if (R1) and (R2) are both true, they are true for different reasons. If (R1) is true, then it is true because whether an object looks round to normal subjects in normal conditions depends upon whether that object is round. Whereas, if (R2) is true, then it is true because whether an object is red depends upon

¹⁹There is considerable debate over the details of Locke’s account of primary and secondary qualities but, as mentioned, I am at present outlining a common definition of humour only in order to motivate my own. Hence, as will become clear, my definition presupposes neither the details of Locke’s account nor even the distinction between primary and secondary qualities.

²⁰Johnston himself did not publish the discussion in full but Wright (1992, 108-109) provides an outline.

²¹Note that it is assumed that ‘normal’ subjects and ‘normal’ conditions can together be specified so that these biconditionals are not trivially true. Simon Blackburn (1993, 273) offers the following example of such a trivially true biconditional:

x is good if and only if x would elicit astonishment from polar bears in conditions in which polar bears are astonished at good things.

Obviously, it is true that good things would elicit astonishment from polar bears in conditions in which polar bears are astonished at good things. But it is trivially true since, without a further explanation of these conditions, the biconditional is entirely uninformative about the quality of goodness.

whether that object looks red to normal subjects in normal conditions. (R1) would be true *a priori*, whilst (R2) would be true *a posteriori*.

Johnston (1989) suggests that this perceived difference between (R1) and (R2) reflects a central difference between primary qualities and secondary qualities more generally: Responses to primary qualities are dependent upon the facts about those qualities, whilst the facts about secondary qualities are dependent upon responses to those qualities. For primary qualities, like roundness, if an object is not round, then it will not look round to normal subjects in normal conditions. Normal subjects in normal conditions are said to *detect* roundness. But for secondary qualities, like redness, if an object looks red to normal subjects in normal conditions, then it is red. Normal subjects in normal conditions are said to *project* redness.

Given this distinction and the assumption that humour is a quality, the question then arises of whether humour is a primary or secondary quality. Intuitively, it seems that humour is a secondary quality since subjects seem to project humour, like redness, rather than detect humour, like roundness. So, just as whether an object is red depends upon eliciting the response of redness from subjects, whether an object is humour also depends upon the response it elicits from subjects. Following response-dependent definitions of colour, like (R2), many philosophers suggest a response-dependent definition of humour in which amusement is the subjective response (Cohen 2002; Smuts 2007; Carroll 2014b):²²

(H) x is humour if and only if x would amuse normal subjects in normal conditions.

(H) is a common definition of humour in the philosophical literature, and it may seem intuitive in the same way that (R2) seems intuitive. However, I have only outlined (H) in order to motivate my own definition of humour because my own definition arises from problems with (H).

(H) has two problems, one going from left-to-right, the other going from right-to-left. From left-to-right, (H) claims that if x is humour, then x amuses normal subjects in normal conditions. But there are cases to the contrary. Consider the following example:

What is the Karate expert's favourite hot drink? Kara-tea.

²²Smuts (2007) and Carroll (2014b) more suggest than state a response-dependent definition of humour. For example, Carroll (2014b, 5) says 'the general name for all those objects that give rise to comic amusement is humour'. However, Cohen (2002, 427) explicitly states a response-dependent definition of humour in which amusement is the subjective response.

This example is undoubtedly humour, but I doubt it elicited much amusement from you. Even if it did, I assume you can recall other examples of unsuccessful humour which you recognised as humour without experiencing amusement. Moreover, despite your lack of amusement in such cases, you would have still qualified as a normal subject in normal conditions. But it is not as if unsuccessful humour ceases to be humour simply because it is unsuccessful. Unsuccessful humour may not elicit amusement, but it is still humour nonetheless. Hence, it cannot be true that if x is humour, then x amuses normal subjects in normal conditions. From left-to-right then, (H) is false.

From right-to-left, (H) claims that if x amuses normal subjects in normal conditions, then x is humour. This amounts to claiming that all objects of amusement are humour. But there are cases to the contrary in which normal subjects in normal conditions are amused by non-humour. For example, consider when someone is amused by the antics of their pet cat, or when someone is amused by a particularly ingenious chess move. In each of these cases, the subject certainly seems to qualify as a normal subject in normal conditions. After all, my brief description does not contain any abnormal specifications. Yet, in each of these cases, one would not want to label the object of amusement ‘humour’. Neither the antics of a cat nor a move in chess can be labelled ‘humour’ in the usual sense of the term. Hence, it cannot be true that if x amuses normal subjects in normal conditions, then x is humour. From right-to-left too then, (H) is false.

These two problems with (H) overturn this common definition of humour given in the philosophical literature. Together, they show that humour is not a response-dependent concept. The left-to-right problem with (H) shows that humour is an object of amusement only when it successfully elicits amusement. Conversely, the right-to-left problem with (H) shows that objects of amusement are humour only when they are intended to amuse. Both of these problems show, not that humour is a response-dependent concept, but rather that humour is a functional concept. Hence, I propose the following functional definition of humour:

Theory of Humour (ToH): x is humour if and only if the function of x is to be amusing or funny.²³

²³According to ToA and ToF, another way to formulate ToH is as follows:

Theory of Humour: x is humour if and only if the function of x is to elicit or merit amusement.

However, I have chosen instead to formulate ToH as above in order to emphasise that ToA, ToF and ToH form a linear sequence of definitions.

Note that ToH explains the left-to-right problem with (H): Not all humour is an object of amusement because humour is a functional concept and so can fail its function of eliciting amusement. That is why, according to ToH, the ‘Kara-tea’ example is still humour even though it is not amusing. Similarly, ToH explains the right-to-left problem with (H): Not all objects of amusement are humour because an object of amusement must have the function of being amusing in order to be humour. That is why, according to ToH, the antics of a cat can be an object of amusement without being humour.

Note also that ToH features a disjunction. Humour can either have the function of being amusing *or* of being funny. An example of humour which has the function of being amusing would be when someone uses humour to ingratiate themselves with business colleagues. They would say or do things with the aim of eliciting amusement from colleagues, perhaps whether or not they actually believed their utterances and acts to be funny. Indeed, it would be possible for someone to believe an instance of humour to be not funny, but still use it all the same to ingratiate themselves. In accordance with ToH, this would still be a case of humour even though there was no intention of being funny.

Conversely, an example of humour which has the function of being funny would be when a stand-up comedian, through artistic integrity, is committed to performing routines which they believe are funny, regardless of whether they elicit amusement in the audience or not.²⁴ They may perform highly unpopular routines which are met with stony silence, but still be satisfied with their work because they strive not merely to amuse but to be funny. In accordance with ToH, this would still be a case of humour even though there was no intention of being amusing. Thus, ToH features a disjunction because humour can either have the function of being amusing or of being funny.²⁵

ToH is actually supported by the etymology of the term ‘humour’. The term ‘humour’ has its origins in the Latin *humorem*, meaning fluid. In Ancient Greece, Hippocrates thought that health was determined by the balance of four bodily fluids, or ‘humours’. The idea that unhealthy people suffered from an imbalance of these humours meant that in sixteenth century England, eccentrics and anyone else who deviated from social norms were referred to as ‘humourists’. Since these eccentrics were commonly objects of amusement, the term ‘humourist’ came to mean someone who causes amusement (Martin 2007, 20-21).

²⁴At times, Stewart Lee seems to be a good example of such a comedian.

²⁵Note though that the disjunction featured in ToH is an inclusive one, meaning that humour can have the function of being both amusing and funny. For example, a stand-up comedian may intend to be funny through artistic integrity and to be amusing through financial prudence.

People started imitating eccentrics with the intention of causing amusement and so, in the nineteenth century ‘humourist’ took on the meaning of someone who creates a product to amuse others and this product came to be known as ‘humour’ in the sense used today. Eventually, the gradual broadening of this term meant that it has come to be used for anything related to amusement (Martin 2007, 20-21). In ToH, I look to restore the sense of the term before this gradual broadening occurred - humour as the product of those intending to cause amusement. Hence, ToH is supported even by the etymology of the term ‘humour’.

A possible problem for ToH is that it conflicts with some usage of the term ‘humour’. In particular, ToH precludes the possibility of unintentional humour. For example, suppose that someone accidentally slips on a banana skin in the street, much to the amusement of passing pedestrians. Since the calamity was unintentional and it elicited amusement, one may be tempted to label this a case of unintentional humour. However, according to ToH, since the calamity does not have the function of being amusing or funny, it cannot be a case of humour. In fact, ToH renders the phrase ‘unintentional humour’ a contradiction in terms. Something cannot be humour if it is unintentional. This may seem a problem for ToH since the phrase ‘unintentional humour’ seems to be used without contradiction.

However, that ToH precludes unintentional humour need not be seen as a problem. Rather, it can be seen as an inevitable consequence of making the definition of ‘humour’ more rigorous, resulting in points where everyday speech comes apart from the rigorous definition. When used in reference to examples like slipping on a banana skin, the phrase ‘unintentional humour’ features a deviant use of ‘humour’ brought about by a common failure to distinguish between humour, amusement and funniness. To bring such deviant usage in line with ToH, examples like slipping on a banana skin should be referred to as ‘unintentional objects of amusement’. If one slips on a banana skin, then one does not unintentionally become an instance of humour, rather one unintentionally becomes an object of amusement. This claim is strengthened by the fact that although one can deny the calamity is humour, one cannot deny that the calamity elicits amusement. Thus, that ToH conflicts with some usage of the term ‘humour’ is not a problem, but an inevitable consequence of making the definition of ‘humour’ more rigorous.

In this section, I have addressed MQ3 by examining humour, which has yielded ToH. Hence, by addressing MQ1, MQ2 and MQ3, I have clarified the terms ‘amusement’, ‘funniness’ and ‘humour’. In the next section, I clarify some miscellaneous terms related to amusement, funniness and humour.

1.5 Miscellaneous Terms

There remain some miscellaneous terms which are in need of clarification. The first is ‘laughter’. Amusement is the mental response associated with humour, whilst laughter is the accompanying bodily response associated with humour.²⁶ Despite this association, I will be purposefully neglecting laughter in this thesis. This is because, firstly, it is possible to have laughter without amusement, such as that induced by tickling, nitrous oxide, intoxication, nervousness, embarrassment and epileptic fits.²⁷ In general, laughter can serve many social functions beyond expressing amusement. Robert Provine (2000, 40) recorded over one thousand cases of laughter in conversation and found that only about ten percent to twenty percent was judged to be even remotely caused by amusement.²⁸ So perhaps even most laughter occurs without amusement. Secondly, I will be neglecting laughter because it is possible to have amusement without laughter. Even without experimental support, one can recall episodes of amusement that, for some reason or another, failed to raise a laugh. Thus, it is possible to have laughter without amusement and amusement without laughter.²⁹ This is why I neglect laughter and do not offer further clarification here.

Another miscellaneous term to clarify is ‘comic’. I will be taking ‘comic’ to be synonymous with ‘funny’ as defined by ToF. This is because to claim that something is comic is equivalent to saying that it is funny. For example, if one’s friend says that they had a comic day at work, then they are saying that their day was funny, and vice versa. Hence, x is comic if and only if x is funny and thereby, according to ToF, x is comic if and only if x merits amusement.

Further miscellaneous terms to clarify are different labels for specific types of humour.

²⁶Wittgenstein (1998, 88) illustrates nicely the curious connection between amusement and laughter:

Two people who are laughing together, at a joke perhaps. One of them has said certain somewhat unusual words and now they both break out into a sort of bleating. That might appear very bizarre to someone arriving among us from a quite different background.

²⁷John McDowell (1987, 158) similarly observes that ‘projecting an inclination to laugh would not necessarily yield an apparent instance of the comic, since laughter can signal, for instance, embarrassment just as well as amusement’.

²⁸Bergson (2008, 6) thought laughter to be fundamentally social: ‘To understand laughter, we must put it back into its natural environment, which is society, and above all must we determine the utility of its function, which is a social one.’

²⁹See Carroll (2014b, 43-48) and Michael Clark (1987, 240-241) for arguments that amusement can be detached from laughter and see Morreall (2009, 58-64) and Joshua Shaw (2010, 118-123) for an argument to the contrary.

For example, ‘joke’, ‘sketch’, ‘comedy’ and ‘gag’. All these terms are labels for specific types of humour because they all have the function of being amusing or funny. If x is a joke, then x is humour in the same way that if x is a bachelor, then x is unmarried. Being a joke is a sufficient condition for being humour and being humour is a necessary condition for being a joke. This is the same for ‘sketch’, ‘comedy’ and ‘gag’ - they are all terms for specific types of humour. Characterising exactly what it means for humour to be sketch, comedy or gag is not of importance in answering MQ1, MQ2 and MQ3. However, I give here a brief characterisation of what it takes for humour to be a joke: A joke is a narrative with a set-up and a punch-line such that the set-up precedes the punch-line and the set-up and punch-line are individually necessary and jointly sufficient for the joke. To give a more detailed characterisation of a joke is to start giving a theory of amusement. So, for now, this brief characterisation is enough. In summary, jokes, sketches, comedies and gags are all types of humour, and jokes consist of a set-up and punch-line.³⁰

The final miscellaneous term to clarify is ‘sense of humour’. I will be defining this term such that y ’s sense of humour is completely determined by the group of objects which y would be amused by. For example, if x would amuse y , then x is a member of this group. This definition explains why a sense of humour is widely regarded as one of the few essential traits of a partner or friend. If two people share the same sense of humour, then they would be amused by roughly the same group of objects. Since amusement consists of both a cognitive and an affective component, this mean that those two people are cognitively and affectively similar. Hence, to share a sense of humour is to think and feel the same way about things, which is exactly the kind of connection people look for in a partner or friend. This analysis agrees with Cohen’s (1999, 26) characterisation of the failure of two people to be amused by the same joke as ‘a failure to join one another in a community of appreciation’.

In this section, I have clarified some miscellaneous terms related to amusement, funniness and humour. In the next section, I summarise the key findings of this chapter.

³⁰ A similar group of miscellaneous terms to clarify is different labels for specific genres of humour. For example, farce, satire, slapstick, black humour and parody are all genres of humour because they all have the function of being amusing or funny. Like jokes, being a farce is a sufficient condition for being humour and being humour is a necessary condition for being a farce. Hence, I will speak of farces, satires, slapsticks, black humour and parodies as genres of humour.

1.6 Chapter Summary

In this chapter, I have addressed philosophical questions about amusement, funniness and humour. In section 1.1, I raised the following three metaphysical questions:

Metaphysical Question 1 (MQ1): What is amusement?

Metaphysical Question 2 (MQ2): What is funniness?

Metaphysical Question 3 (MQ3): What is humour?

In section 1.2, I addressed MQ1 by examining amusement, which yielded the following (incomplete) definition:

Theory of Amusement (ToA): x amuses y if and only if ...

In section 1.3, I addressed MQ2 by examining funniness, which yielded the following definition:

Theory of Funniness (ToF): x is funny if and only if x merits amusement.

In section 1.4, I addressed MQ3 by examining humour, which yielded the following definition:

Theory of Humour (ToH): x is humour if and only if the function of x is to be amusing or funny.

In section 1.5, I clarified some miscellaneous terms related to amusement, funniness and humour.

In order to say anything truly substantial, further work is needed to complete Theory of Amusement. The majority of this thesis will be used to do so by providing necessary and sufficient conditions for amusement. Chapters 3 and 4 focus on the cognitive component of amusement, whilst chapters 5 and 6 focus on the affective component of amusement. But first, chapter 2 reviews early theories of amusement.

Chapter 2

Early Theories of Amusement

In this chapter, I review early theories of amusement in preparation for completing Theory of Amusement (ToA). By ‘theory of amusement’, I mean an attempt to answer Metaphysical Question 1 (MQ1): ‘What is amusement?’ A widely accepted classification, attributable to D. H. Monro (1963), divides theories of amusement into three classes: superiority theories, incongruity theories and release theories. In addition to these, I also review an extra class: play theories.¹ For each class of theories, I give a chronological review but refrain from critical analysis until later chapters. The aim of this chapter is to uncritically review theories of amusement in order to extract key claims that will be critically analysed in later chapters and inform the completion of ToA.

My classification is a grouping together of similar theories rather than schools of thought adopted by theorists consciously participating in a tradition.² Most early writings on amusement are incidental remarks that are made whilst outlining a wider theory, so it is rare that early theorists devote more than a few lines to the topic. As a result, the theories of amusement reviewed in this chapter are more collections of overlapping remarks rather than schools of thought. Nonetheless, the key claims I extract from this chapter have real heuristic value. Each theory of amusement manages to capture some of the facts about amusement even if no theory manages to capture all of the facts, so the completion

¹Note that these theories are not necessarily competing and it is possible to consistently hold some form of all four. Victor Raskin (1985, 40) says that superiority theories, incongruity theories and release theories ‘characterize the complex phenomena of humor from very different angles and do not at all contradict each other - rather they seem to supplement each other quite nicely’.

²My classification is an unavoidable simplification, tailored for the aims of this thesis. Patricia Keith-Spiegel’s (1972) classification divides theories of amusement into eight classes: superiority, incongruity, release, biological, surprise, ambivalence, configurational and psychoanalytical. That such varied classifications exist emphasises the lack of agreement not only about what theories say and how they relate but also about what a theory of amusement should say.

of ToA can be informed by combining insights from all theories reviewed in this chapter.

There is a terminological point to note for this chapter: Most early theories of amusement are given in terms of laughter as opposed to amusement. Often this is because early theorists make the mistake of assuming that all laughter is caused by and expresses amusement. As established in chapter 1, it is possible to have laughter without amusement and amusement without laughter. Laughter can be caused by embarrassment, nitrous oxide or tickling and amusement can be too mild to raise a laugh or laughter can be suppressed. So, although many early theorists present theories of laughter, they are actually, at best, theories of amusement. Thus, I present the theories of this chapter in terms of laughter, as their authors did, but when it comes to extracting key claims from the theories, I rephrase their insights in terms of amusement as opposed to laughter. The same goes for theories that are presented in terms of the comic, the ludicrous and the ridiculous.

In this chapter, I review early theories of amusement. In section 2.2, I review superiority theories, in section 2.3, I review incongruity theories, in section 2.4, I review release theories and, in section 2.5, I review play theories. Overall, the review is organised by class, but the ordering of classes is roughly chronological. To emphasise when different theories were being developed, I include the life dates of theorists in each class. But, before this review, in section 2.1, I outline and defend the essentialist approach to MQ1.

2.1 The Essentialist Approach

Traditionally, theorists have taken an *essentialist* approach to MQ1 by searching for an essence that is necessarily present in all cases of amusement and the presence of which is sufficient for being a case of amusement. The essentialist approach aims to define this essence by providing a list of individually necessary and jointly sufficient conditions. This approach can be summarised as follows:

The Essentialist Approach: Search for a list of conditions (1), (2), (3) ... about an object x and a subject y that meet the two requirements:

Necessity: If x amuses y , then (1), (2), (3), ... are satisfied.

Sufficiency: If (1), (2), (3), ... are satisfied, then x amuses y .

Since the Essentialist Approach has two requirements, there are two ways in which it can fail. First, the Necessity requirement is not met if there is a case of amusement that does not satisfy all of the conditions. Such cases are called necessity counter-examples. Second, the Sufficiency requirement is not met if there is a case of non-amusement that

does satisfy all of the conditions. Such cases are called sufficiency counter-examples. If it is possible to provide a list of conditions that manages to avoid all necessity and sufficiency counter-examples, then The Essentialist Approach is the best way to proceed. However, whether this is indeed possible depends on there actually being an essence of amusement to search for in the first place. Several theorists deny this possibility. John Morreall (2009, 64) states ‘there simply is ... no single concept of amusement for which we can list necessary and sufficient conditions’, while Ted Cohen (2002, 429) and Mike Martin (1987, 177) express similar sentiments.

A common motivation for denying the Essentialist Approach is to claim that what unites all cases of amusement under the single term ‘amusement’ is that, rather than sharing a common essence, they share a *family resemblance*. This claim makes reference to Ludwig Wittgenstein’s (2009) famous analogy between the resemblance shared by the referents of a term and the resemblance shared by the members of a family. Wittgenstein (2009, 64) uses the referents of the term ‘game’ as an example:

Consider for example the proceedings that we call “games”. I mean board-games, card-games, ball-games, Olympic games, and so on. What is common to them all? ... Look for example at board-games, with their multifarious relationships. Now pass to card-games; here you find many correspondences with the first group, but many common features drop out, and others appear. When we pass next to ball-games, much that is common is retained, but much is lost ... And the result of this examination is: we see a complicated network of similarities overlapping and criss-crossing: sometimes overall similarities, sometimes similarities of detail ... I can think of no better expression to characterize these similarities than “family resemblances”; for the various resemblances between members of a family: build, features, colour of eyes, gait, temperament, etc. etc. overlap and criss-cross in the same way.

By looking at the diverse referents of ‘game’, Wittgenstein tries to show that there is no common essence shared by all of them. However, one is still able to refer to all games by a single term because there exists a family resemblance by which each referent shares some common features with some other referents. Therefore, the referents of a term need not have a common essence which unites them all.

‘Amusement’ seems a prime candidate to be a family resemblance term since it too, like ‘game’, has many diverse referents. Michael Clark (1970, 20) articulates this point using humour as a proxy for amusement:

Humour, it will be said, is a family-resemblance concept: no one could hope to compile any short list of essential properties abstracted from all the many varieties of humour - human misfortune and clumsiness, obscenity, grotesqueness, veiled insult, nonsense, wordplay and puns, human misdemeanours and so on, as manifested in forms as varied as parody, satire, drama, clowning, music, farce and cartoons.³

If amusement is a family resemblance concept, then there is no essence shared by all cases of amusement and it is impossible for the Essentialist Approach to successfully avoid all necessity and sufficiency counter-examples. Hence, to claim that amusement is a family resemblance concept is to deny the Essentialist Approach. In defence of the Essentialist Approach, I give two responses to the claim that amusement is a family resemblance concept. The first response is to positively argue that amusement does have an essence, while the second response is to negatively argue that one does not know that amusement does not have an essence. Even if the first, more bold, response is not convincing, I trust that the second, less bold, response will be.

Starting with the more bold response, there are a couple of good reasons for positively thinking that amusement does have an essence. First, amusement is not an idiosyncratic cultural category but a phenomena that is universal across humanity. As outlined in chapter 1, amusement has been discovered in every known human culture and can be experienced by almost everyone (Apte 1985; Lefcourt 2001). Second, the mental state of amusement is a particularly distinctive one. After all, I was able to communicate the narrow sense of ‘amusement’ in chapter 1 by using only a handful of examples. There seems to be something essential about the experience of amusement that remains identical despite the diverse objects that elicit it. In particular, amusement is made all the more distinctive by the conjunction of its cognitive component with its affective component. The cognitive component may be similar to the spark of intuition when one solves a puzzle and the affective component may be similar to the sense of levity when one liberates a burden. However, nothing is similar to the conjunction of those two components together. The conjunction of these particular cognitive and affective components is unique to amusement. Thus, since amusement is a particularly distinctive mental state that is universal across humanity, it is reasonable to conclude that amusement does have an essence.

³In this quote, Clark uses the term ‘humour’ where I would use the term ‘amusement’. As outlined in chapter 1, I argue that amusement and humour are two closely related but distinct concepts. However, it is uncontroversial to take Clark’s articulation as using humour as a proxy for amusement.

Moving onto the less bold response, there is one very good reason for negatively thinking that one does not know that amusement does not have an essence. This consists of simply, but quite rightly, pointing out that one cannot know that the Essentialist Approach will fail before trying it. There are no purely theoretical reasons for thinking that amusement does not have an essence, so one cannot be sure that all essentialist approaches are necessarily doomed to fail. Earlier essentialist approaches may have indeed failed, but this does not mean that every such approach must fail. Importantly, this also does not mean that failed essentialist approaches cannot elucidate the concept of amusement. In fact, some failed essentialist approaches elucidate the concept of amusement precisely because they do fail. Even when such approaches fail, they act as a fruitful heuristic because it is illuminating to discover to what extent they are successful. Therefore, regardless of claims that amusement is a family resemblance concept, the Essentialist Approach remains a good way to elucidate the concept of amusement.

In this section, I have outlined and defended the Essentialist Approach to MQ1. In the next four sections, I review early theories of amusement taking an essentialist approach. In the next section, I review early superiority theories.

2.2 Early Superiority Theories

Superiority theories emphasise feelings of superiority as a cause of amusement or laughter. That laughter expresses feelings of superiority is an idea dating at least as far back as Ancient Greece. Plato (428 - 348 B.C.) states that ‘taken generally, the ridiculous is a certain kind of evil, specifically a vice’ (Plato 1987, 11). In particular, this vice is self-ignorance and so one laughs at people who are self-ignorant, either about their wealth, physique or wisdom. Plato explains that such self-ignorance would be cause for feelings of superiority and laughter, provided that the self-ignorant person is also relatively powerless. Self-ignorant people who are strong and powerful are not deserving of laughter but of hate, since their power makes their self-ignorance harmful to others beyond themselves.

Similar to Plato, Aristotle (348 - 322 B.C.) thought that laughter is malicious and ‘jest is a sort of abuse’ (Aristotle 2009, 78). He saw comedic characters as possessing a certain type of ugliness; ‘the ridiculous ... is a species of the ugly; it may be defined as a mistake or unseemliness that is not painful or destructive’ (Aristotle 1987, 14). One laughs at this ugliness in comedic characters because of the joy that comes from feeling superior. However, like Plato, Aristotle also observed that if the ugliness is not relatively minor, then it may arouse other strong emotions like anger or pity, in which case one would not

be moved to laugh despite still feeling superior. Agreeing with Aristotle, Cicero (106 - 43 B.C.) later said that 'the seat and province of the laughable, so to speak, lies in a kind of offensiveness and deformity, for the sayings that are laughed at the most are those which refer to something offensive in an inoffensive manner' (Cicero 1987, 17).

The idea that laughter is malicious was also strengthened by the Bible. Only a small minority of references to laughter in the Bible are expressions of joy or merriment, while the remaining are expressions of scorn or contempt. Even when God laughs in the Bible, it is scornfully:

The kings of the earth set themselves, and the rulers take counsel together, against the Lord, and against his anointed ... He that sitteth in the heavens shall laugh: the Lord shall have them in derision. (The Bible, Psalm 2)

Thou therefore, O Lord God of hosts, the God of Israel, awake to visit all the heathen ... But thou, O Lord, shalt laugh at them; thou shalt have all the heathen in derision. (The Bible, Psalm 59)

That God only ever laughs scornfully in the Bible lent support to the idea that laughter is essentially malicious. These contributions from Plato, Aristotle and the Bible meant that the view that laughter is caused by and expresses feelings of superiority subsequently dominated Western thought for two millennia.

Thomas Hobbes (1588 - 1679) later reinforced superiority theories in his account of human nature. Hobbes (2008, 66) claimed that the 'general inclination of all mankind [is a] perpetual and restless desire for Power after Power, that ceaseth only in Death'. One's naturally competitive disposition means that one relishes one's successes and the failures of others - which are equivalent to one's successes. If the realisation of a success comes over one quickly, then the sudden perception of one's superiority over someone else is enjoyed as a special kind of pleasure, namely, laughter:

I may therefore conclude, that the passion of laughter is nothing else but sudden glory arising from some sudden conception of some eminency in ourselves, by comparison with the infirmity of others, or with our own formerly ... Laughter without offence, must be at absurdities and infirmities abstracted from persons. (Hobbes 1999, 54-55)

According to Hobbes, laughter results from feelings of superiority derived from the infirmity of another person compared to oneself, or of one's past self compared to one's present self. Either way, a necessary condition for laughter is that one's present self be

superior in comparison to another. Taking Hobbes' example of folly, if you laugh at a folly of mine, then my infirmity causes you to have feelings of superiority over me and these feelings of superiority cause your laughter. Whereas if instead you laugh at the memory of one of your own follies, then your past infirmity causes you to have feelings of superiority over your past self and these feelings of superiority cause your laughter. Hobbes goes as far as to claim that even laughter that is not directed towards any particular person is directed towards some infirmity that has been abstracted from another person.

A contemporary of Hobbes, René Descartes (1596 - 1650) gives a similar explanation of all laughter as an expression of scorn or ridicule:

Derision or scorn is a sort of joy mingled with hatred, which proceeds from our perceiving some small evil in a person whom we consider to be deserving of it ... But this evil must be small, for if it is great we cannot believe that he who has it is deserving of it, unless when we are of a very evil nature or bear much hatred towards him. (Descartes 1989, 117)

So, similar to Hobbes, Descartes claims that laughter is directed towards the infirmities of others but, similar to Aristotle, he also claims that these infirmities must be relatively minor for one to take pleasure in them. Elsewhere in his theory, Descartes does admit that joy and wonder are possible causes of laughter other than hatred, although joy alone is not sufficient and must be mixed with hatred to produce laughter. Overall, since he takes all laughter to be scornful and ridicule as his paradigm case, Descartes still considers superiority engendered by hatred as the primary cause of laughter.

Throughout the nineteenth-century, the idea that laughter is caused by superiority found further support. Georg Wilhelm Friedrich Hegel (1770 - 1831) defined laughter as 'an expression of self-satisfied shrewdness' (Hegel 1920, 302). Likewise, Alexander Bain (1818 - 1903) said that 'in everything where a man can achieve a stroke of superiority, in surpassing or discomfiting a rival, is the disposition to laughter apparent', also adding that laughter only occurs 'in circumstances that excite no other strong emotion' (Bain 1859, 120, 248). Charles Baudelaire (1821 - 1867) argued that the existence of laughter is a direct consequence of grasping the notion of superiority because such a notion gives rise to both the comic and the grotesque. Laughter at the comic expresses the superiority of man over man and laughter at the grotesque expresses the superiority of man over nature. The malice inherent in laughter at the comic, said Baudelaire, is the clearest evidence of an element of the satanic in man (Baudelaire 2011).

Henri Bergson's (1859 - 1941) theory of laughter to some degree defies classification

since it has elements of both a superiority theory and an incongruity theory. It has elements of a superiority theory because Bergson claims that by expressing superiority and humiliating its object, laughter serves as a social corrective that functions to correct deviant behaviour. He argues this claim first by pointing out that laughter is a social phenomena. For Bergson, since laughter is a public display and not just a private experience, it can only be understood by considering its social function. He concludes that:

Laughter is, above all, a corrective. Being intended to humiliate, it must make a painful impression on the person against whom it is directed. By laughter, society avenges itself for the liberties taken with it. (Bergson 2008, 88)

So, Bergson's theory has elements of a superiority theory, but he also goes beyond previous superiority theories by explaining the social function of expressing feelings of superiority through laughter. It is due to this expression of superiority that laughter 'makes us at once endeavour to appear what we ought to be, what some day we shall perhaps end in being' (Bergson 2008, 10).

Early superiority theories can be characterised as making the following key claim:

Early Superiority Theory: x amuses y if and only if x causes y to experience sudden feelings of superiority.

Note that Early Superiority Theory is a biconditional claim. This is because most early superiority theorists either explicitly or implicitly claim that laughter is equivalent to sudden feelings of superiority. For example, Hobbes (1999, 54-55) claims that 'the passion of laughter' simply *is* 'nothing else but sudden glory'.⁴ Thus, I have characterised Early Superiority Theory as a biconditional claim. However, it is to be noted that Aristotle, Descartes and Bain each suggest that superiority alone is not sufficient for amusement with their specifications that the inferiorities at which one laughs are relatively minor or do not rouse any strong emotion. Such refinements to Early Superiority Theory will be considered during the critical analysis of superiority theories in chapter 5.⁵

⁴Sheila Lintott (2016) contests that neither Plato, Aristotle nor Hobbes propose an essentialist superiority theory, as is commonly attributed to them. Lintott's arguments are interesting but not strictly relevant to my purposes. In this chapter, I outline early theories of amusement merely to motivate my own essentialist theory, so even if Plato, Aristotle and Hobbes do not necessarily propose essentialist theories, I can still use their theories to motivate my own.

⁵More than anything, Early Superiority Theory is being presented as a useful starting point for critical analysis, so one need not be too concerned about exactly which early superiority theorists would or would not accept it.

Clearly, Early Superiority Theory does not capture all the facts about amusement, but it does capture some of the facts. It seems that there are cases in which an object causes both amusement and sudden feelings of superiority. Consider the scenes in Shakespeare's *Much Ado About Nothing* in which Constable Dogberry frequently uses malapropisms such as 'Our watch, sir, have indeed *comprehended* two *auspicious* persons' (Shakespeare 2009, 63) Here Dogberry's ignorance causes one to experience both amusement and sudden feelings of superiority. So, it seems that Early Superiority Theory does capture at least some of the facts about amusement. Furthermore, these seem to be primarily affective facts rather than cognitive facts.

Early Superiority Theory is relevant more to the affective component of amusement than to the cognitive component. It seems possible that sudden feelings of superiority could affect the affective component of amusement, since one's ability to appreciate humour could be affected by sudden feelings of superiority. For example, if an insult joke is directed at one's enemy, then one is more likely to be amused than if the same joke is directed at one's friend. However, it does not seem possible that sudden feelings of superiority could affect the cognitive component of amusement. One's ability to recognise humour would not be impaired regardless of how suddenly superior or inferior one was made to feel. The reason is that one must first cognitively recognise what the humour is 'saying' before one can affectively appreciate whether what the humour is 'saying' makes one suddenly feel superior. Thus, I will critically analyse Early Superiority Theory during my definition of the affective component of amusement rather than the cognitive component.

In this section, I have reviewed early superiority theories, which has yielded Early Superiority Theory. In the next section, I review early incongruity theories.

2.3 Early Incongruity Theories

Incongruity theories emphasise the perception of incongruity as a cause of amusement or laughter. Although Aristotle (348 - 322 B.C.) is best classified as a superiority theorist, the roots of incongruity theories could be traced back to a brief remark in which he says that a speaker can make an audience laugh by setting up an expectation and then presenting something 'that gives a twist' to that expectation (Aristotle 1991, 175). The example he gives is 'Onward he came, and his feet were shod with his - chilblains [foot sores]' and explains that 'one imagined the word would be "sandals"' (Aristotle 1991, 175). In these brief remarks, Aristotle gives the first hints towards an incongruity theory of amusement.

Before the articulation of a proper incongruity theory, a few other theorists also sugges-

ted that laughter is caused by an incongruity between expectations and reality. Agreeing with Aristotle, Cicero (106 - 43 B.C.) observed ‘the most common kind of joke is that in which we expect one thing and another is said; here our own disappointed expectation makes us laugh’ (Cicero 1987, 18). Much later, Blaise Pascal (1623 - 1662) similarly conjectured that ‘nothing produces laughter more than a surprising disproportion between that which one expects and that which one sees’ (Morreall 1983, 16). Most notably, Immanuel Kant (1724 - 1804) also gives a theory of laughter based on the incongruity between expectations and reality: ‘Laughter is an affection arising from the sudden transformation of a strained expectation into nothing’ (Kant 2009, 161). Kant (Kant 2009, 162) illustrates his theory with the example of a ‘merchant returning from India to Europe with all his wealth and merchandise who was forced to throw it overboard in a heavy storm and who grieved thereat so much that his wig turned grey the same night’. Kant (Kant 2009, 161) explains that ‘at this story we laugh, and it gives us hearty pleasure ... because our expectation was strained (for a time) and then was suddenly dissipated into nothing’.

A contemporary of Kant, James Beattie (1735 - 1803) gives the first articulation of a proper incongruity theory. He said that ‘laughter arises from the view of two or more inconsistent, unsuitable, or incongruous parts or circumstances considered as united in one complex object or assemblage, or as acquiring a sort of mutual relation from the peculiar manner in which the mind takes notice of them’ (Beattie 1776, 347). Beattie’s theory of laughter in terms of incongruity was likely influenced by Francis Hutcheson’s (1694 - 1746) theory of laughter:

That then which seems generally the cause of laughter is the bringing together of images which have contrary additional ideas, as well as some resemblance in the principal idea: this contrast between ideas of grandeur, dignity, sanctity, perfection and ideas of meanness, baseness, profanity, seems to be the very spirit of burlesque. (Hutcheson 1987, 32)

According to Hutcheson, laughter is caused by the union of images that are similar in some major respect but different in some minor respect. In particular, he illustrates this union with reference to the contrast between higher and lower ideas. As countrymen and contemporaries, it is possible then that Hutcheson’s theory of laughter could have influenced Beattie’s claim that laughter is caused by perceiving the union of incongruous parts.

Expanding on Beattie’s original articulation, William Hazlitt (1778 - 1830) proposed that ‘the essence of the laughable then is the incongruous, the disconnecting one idea from

another, or the jostling of one feeling against another' (Hazlitt 1969, 4). He generally construes incongruity as 'the difference between what things are, and what they ought to be' (Hazlitt 1969, 1). Hazlitt outlines three different degrees of incongruity: the laughable, the ludicrous and the ridiculous. The laughable is the lowest degree and consists of 'the accidental contradiction between our expectations and the event', next is the ludicrous which is the same as the laughable but 'heightened by some deformity or inconvenience, that is, by its being contrary to what is customary or desirable', finally, the highest degree is the ridiculous which is 'contrary not only to custom but to sense and reason' (Hazlitt 1969, 4). So, for Hazlitt, an incongruity between expectations and reality can come in varying degrees, depending on whether our expectations were founded on habit, custom or even on reason.

In the same year, Arthur Schopenhauer (1788 - 1860) published a precisely defined incongruity theory which claimed that laughter is caused by an incongruity between conceptualisation and experience. Specifically, the theory was based on Schopenhauer's account of sensory perception and abstract knowledge. According to Schopenhauer (Schopenhauer 2015, 51), abstract knowledge aims to approximate sensory perception 'as mosaic approximates to painting'. Objects are given by sensory perception and these objects fall under concepts which are given by abstract knowledge, so abstract concepts act as approximations of sensory objects. Laughter is then caused by perceiving the failure of abstract knowledge to approximate sensory perception. More specifically:

The cause of laughter in every case is simply the sudden perception of the incongruity between a concept and the real objects which have been thought through in some relation, and laughter itself is just the expression of this incongruity. (Schopenhauer 2015, 53)

According to Schopenhauer, all laughter is caused by the sudden perception of incongruity between a concept and the objects that fall under it. One example he gives is of a king finding a peasant wearing light summer clothing in the depth of winter. The peasant tells the king that 'If your Majesty had put on what I had, you would find it very warm ... My whole wardrobe!' Schopenhauer (Schopenhauer 2015, 419) explains that 'under this last conception we have to think both the unlimited wardrobe of a king and the single summer coat of a poor devil, the sight of which upon his freezing body shows its great incongruity with the conception'.

Just after Schopenhauer, Søren Kierkegaard (1813 - 1855) made the seemingly stronger claim that laughter is caused not by mere incongruity, but by contradiction:

The tragic and the comic are the same, in so far as both are based on contradiction; but *the tragic is the suffering contradiction, the comic the painless contradiction*. (Kierkegaard 2009, 431)

Kierkegaard's claim may seem stronger than Schopenhauer's, but the examples Kierkegaard gives indicate that he is considering something more akin to incongruity rather than full logical incompatibility:

When a girl applies for a permit to establish herself as a public prostitute, this is comic. We properly feel that it is difficult to become something respectable (e.g., when an applicant is turned down for the post of master of hounds, that is not comic), but to have an application refused for becoming something contemptible is a contradiction. (Kierkegaard 2009, 432)

So Kierkegaard does not offer anything new on the central notion of incongruity theories. However, he does offer something new with his specification that the incongruity be 'painless' in order to cause laughter. Herbert Spencer (1820 - 1903) makes a similar remark that 'laughter naturally results only when consciousness is unawares transferred from great things to small - only when there is what we call a *descending* incongruity' (Spencer 1987, 108). So, according to Spencer, laughter involves a shift from thinking about something serious to something non-serious.

As mentioned, Henri Bergson's (1859 - 1941) theory of laughter has elements of both a superiority theory and an incongruity theory. It has elements of an incongruity theory because, similar to Schopenhauer, Bergson claims that laughter is caused by an incongruity between conceptualisation and experience. According to Bergson, we can view the world through direct perception or represent the world through conceptual thought. Through conceptual thought we represent the world as an instantiation of concepts, but through direct perception we view the world as in the process of continuous becoming. As a result, conceptual thought is useful for scientific modelling but direct perception is better for present experience. If we misapply conceptual thought to present experience, then we treat the process of continuous becoming as a mere instantiation of concepts. This results in 'something mechanical encrusted upon the living' which, for Bergson, is the cause of all laughter (Bergson 2008, 19). As an illustration of this incongruity between conceptualisation and experience, he offers the following:

Now, take the case of a person who attends to the petty occupations of his everyday life with mathematical precision. The objects around him, however,

have all been tampered with by a mischievous wag, the result being that when he dips his pen into the inkstand he draws it out all covered with mud, when he fancies he is sitting down on a solid chair he finds himself sprawling on the floor, in a word his actions are all topsy-turvy. (Bergson 2008, 7)

In this example, Bergson (2008, 7) explains that the laughable ‘consists of a certain *mechanical inelasticity*, just where one would expect to find the wide-awake adaptability and the living pliability of a human being’.

Early incongruity theories can be characterised as making the following key claim:

Early Incongruity Theory: x amuses y if and only if y perceives an incongruity within x .

Note that Early Incongruity Theory is a biconditional claim. This is because most early incongruity theorists either explicitly or implicitly claim that laughter is equivalent to perception of an incongruity. For example, Schopenhauer (Schopenhauer 2015, 53) claims that ‘the cause of laughter in every case is simply the sudden perception of ... incongruity’, while Hazlitt and Beattie state that incongruity is the essence of the laughable. Thus, I have characterised Early Incongruity Theory as a biconditional claim. However, it is to be noted that Kierkegaard suggests that incongruity alone is not sufficient for amusement with his specification that the incongruity at which one laughs be painless. Such refinements to Early Incongruity Theory will be considered during the critical analysis of incongruity theories in chapter 3.⁶

Clearly, Early Incongruity Theory does not capture all the facts about amusement, but it does capture some of the facts. It seems that there are cases in which an object causes both amusement and is perceived to contain an incongruity. Consider the following joke:

Two nuns are driving through Transylvania when the road is blocked by a vampire. One nun says to the other ‘Step out and show him your cross!’ So the other nun steps out, gives him the finger and shouts ‘Get out the way, you stupid vampire!’

This joke causes both amusement and is perceived to contain an incongruity, specifically centred on the phrase ‘your cross’. So, it seems that Early Superiority Theory does capture

⁶More than anything, Early Incongruity Theory is being presented as a useful starting point for critical analysis, so one need not be too concerned about exactly which early incongruity theorists would or would not accept it.

at least some of the facts about amusement. Furthermore, these seem to be primarily cognitive facts rather than affective facts.

Early Incongruity Theory is relevant more to the cognitive component of amusement than to the affective component. It seems possible that the perception of incongruity could affect the cognitive component of amusement, since one's ability to recognise humour could be affected by the perception of incongruity. For example, if one does not perceive the incongruity centred on the phrase 'your cross' in the above joke, then one would not recognise the joke as humour. In contrast, if one does perceive this incongruity, then one would recognise the joke as humour. Thus, I will critically analyse Early Incongruity Theory during my definition of the cognitive component of amusement rather than the affective component.

However, although Early Incongruity Theory is most relevant to the cognitive component of amusement, it is to be noted that Early Incongruity Theory is also relevant to the affective component of amusement. It seems possible that the perception of incongruity could affect the affective component too, since, for example, compounding incongruities seems to affect one's ability to appreciate humour. Consider the Douglas Adams' line 'You can tune a guitar, but you can't tuna fish. Unless of course, you play bass'. Here we have a compound of incongruities; one centered on the word 'tuna' and the other on the word 'bass'. Arguably, the first incongruity alone would be less likely to elicit the affective component of amusement, but the inclusion of the second immediately after the first makes Adams' line more likely to elicit the affective component. Hence, it seems that, even though Early Incongruity Theory is more cognitive than affective, the perception of incongruity can affect the affective component of amusement. I incorporate this fact by first using Early Incongruity Theory to inform my definition of the cognitive component of amusement and then using my definition of the cognitive component to inform my definition of the affective component.

In this section, I have reviewed early incongruity theories, which has yielded Early Incongruity Theory. In the next section, I review early release theories.

2.4 Early Release Theories

Release theories emphasise the release of mental energy as a function of amusement or laughter. This emphasis can be traced back to an essay on wit and humour by the Earl of Shaftesbury (1671–1713). His theory is based on the the release of constrained *animal spirits*. According to Shaftesbury (2008, 31), the 'natural free spirits of ingenious men,

if imprisoned and controlled, will find out other ways of motion to relieve themselves in their constraint and whether it be in burlesque, mimicry or buffoonery, they will be glad at any rate to vent themselves'. Shaftesbury's release theory thus states that animal spirits, whilst passing through the nerves in our bodies, can become constrained and one of the ways to release them is through laughter.

In Herbert Spencer's (1820 - 1903) writings on the physiology of laughter, constrained animal spirits are replaced by pressurised nervous excitation, but the idea that laughter functions as a release is preserved. Spencer based his release theory on a hydraulic model of the nervous system, in which nervous excitation flows around the nerves much as steam flows around the pipes of a steam boiler. He explained that emotions physically manifest themselves as nervous excitation that becomes increasingly pressurised as the emotion increases. This pressurised nervous excitation 'always *tends* to beget muscular motion, and when it rises to a certain intensity, always does beget it' (Spencer 1987, 100). Hence, according to Spencer (Spencer 1987, 100-104), muscular movement serves to release pressurised nervous excitation much as a safety valve on a steam boiler serves to release pressurised steam.

According to Spencer, laughter is simply one form of muscular movement which releases nervous excitation. In particular, it is the form that has no purpose beyond the release of nervous excitation itself, it is 'the discharge of arrested feelings into the muscular system ... in the absence of other adequate channels' (Spencer 1987, 107-108). Spencer (1987, 106-7) illustrates his theory with the example of a goat interrupting a play:

You are sitting in a theatre, absorbed in the progress of an interesting drama ... And now, while you are contemplating the [drama] with a pleasurable sympathy, there appears from behind the scenes a tame kid, which, having stared round at the audience, walks up to the [actors] and sniffs at them ... A large mass of emotion had been produced; or, to speak in physiological language, a large portion of the nervous system was in a state of tension ... The excess must therefore discharge itself in some other direction; and in the way already explained, there results an efflux through the motor nerves to various classes of the muscles, producing the half-convulsive actions we term laughter.

According to Spencer, the emotion produced by the play physically manifests itself in the nervous system as nervous excitation, which becomes increasingly pressurised as the emotion increases. But once the interruption of the goat ruins the play, the pressurised

nervous excitation must be released through muscular movements which have no purpose beyond the release of nervous excitation itself, namely laughter.

Later, John Dewey (1859 - 1952) proposed a brief release theory similar to Spencer's. He said that laughter 'marks the ending ... of a period of suspense, or expectation'. Specifically, it consists of a 'sudden relaxation of strain, so far as occurring through the medium of the breathing and vocal apparatus'. Summing up his theory, Dewey observed that 'the laugh is thus a phenomenon of the same general kind as the sigh of relief' (Dewey 1894, 558-559).

Sigmund Freud's (1856 - 1939) release theory is probably the most famous and elaborate. He bases the theory on his account of the psyche as composed of three parts: the id, ego and super-ego. The id represents unconscious instinctive impulses, the super-ego represents a largely unconscious critical conscience, and the ego represents the mostly conscious mediating of the opposing demands of the id and super-ego. In mediating the opposing demands of the id and the super-ego, the ego expends psychic energy. If there is a positive discrepancy between the mobilised psychic energy and the required psychic energy, then this excess psychic energy is released through a variety of different ways, one of which is laughter.

According to Freud, there are three different causes of laughter: wit, comedy and humour.⁷ For each, the pleasure of laughter arises differently: 'The pleasure in [wit] has seemed ... to arise from an *economy in expenditure upon inhibition*, the pleasure in the comic from an *economy in expenditure upon ideation* ... and the pleasure of humor from an *economy of expenditure upon feeling*' (Freud 2014, 351). So, according to Freud, each cause of laughter involves a different mechanism by which a positive discrepancy between mobilised psychic energy and required psychic energy arises. For wit the excess is psychic energy used to repress impulses, for the comic it is psychic energy used to process understanding, and for humour it is psychic energy used to experience emotion.

Wit, in Freud's sense, refers primarily to prepared jokes and verbal quips. In these cases, puzzling 'joke-work' distracts the super-ego from making demands that oppose the demands of the id, so the psychic energy that the ego has mobilised to repress the demands of the id becomes excess. This excess psychic energy is then released through laughter. According to Freud, most jokes contain sexual or aggressive content because sexual or

⁷In particular, Freud drew a distinction between wit and humour, as was common at the time. Both were causes of laughter, but wit was associated with aggressive cleverness while humour was associated with benevolent humility. This past distinction is accurately captured in the modern distinction between 'laughing at' and 'laughing with' (Martin 2007, 23).

aggressive impulses are the most repressed demands of the id. When one laughs at a joke containing sexual content, one releases psychic energy that would have been used to repress the sexual impulses expressed in the joke. Similarly, for jokes containing aggressive content, one's laughter is a release of psychic energy that would have been used to repress aggressive impulses.

Comedy, Freud's second cause of laughter, refers to non-verbal causes such as slapstick or clowning. In these cases, the ego mobilises more psychic energy to understand something than is required. The excess psychic energy is then released through laughter. Freud gives the example of watching a circus clown's simplified performance of a task:

These two possibilities in my imagination amount to a comparison between the observed movement and my own. If the other person's movement is exaggerated and inexpedient, my increased expenditure in order to understand it is inhibited *in statu nascendi*, as it were in the act of being mobilized; it is declared superfluous and is free for use elsewhere or perhaps for discharge by laughter. (Freud 2014, 285)

According to Freud, in general, we expend more psychic energy understanding something complicated than something simple. The clown's performance of the task is a simplified version of our performance and so we require less psychic energy to understand the clown's movements than we would require to understand our own movements. Thus, since we mobilise enough psychic energy to understand ourselves performing the task, there is an excess that can be released through laughter.

Humour, Freud's third cause of laughter, occurs in adverse situations that usually elicit negative emotions like anger or sadness. The ego mobilises psychic energy to experience these negative emotions, but then the super-ego comforts the ego by reassuring 'Look here! This is all this seemingly dangerous world amounts to. Child's play - the very thing to jest about!' (Freud 1928, 6). The psychic energy that the ego mobilised to experience negative emotions then becomes excess and is released through laughter. According to Freud (Freud 2014, 339), this is what makes humour pleasurable:

If there is a situation in which, according to our usual habits, we should be tempted to release a distressing affect and if motives then operate upon us which suppress that affect *in statu nascendi* ... The pleasure of humour, if this is so, comes about ... at the cost of a release of affect that does not occur: it arises from *an economy in the expenditure of affect*.

An example of humour that Freud (Freud 1928, 1) gives is of a criminal who, whilst being led to their execution on a Monday, remarks ‘Well, this is a good beginning to the week’. He then explains that the psychic energy mobilised to experience pity for the criminal becomes excess when one realises that they are indifferent to their execution and so this energy is released through laughter.

Early release theories can be characterised as making the following key claim:

Early Release Theory: If x amuses y , then x causes y to release accumulated mental energy.⁸

Note that Early Release Theory is a conditional claim. This is because Shaftesbury, Spencer and Freud all state that laughter is only *one* of the ways to release accumulated mental energy.⁹ Note also that Early Release Theory is given in terms of amusement as opposed to laughter. As mentioned, early theorists often make the mistake of assuming that all laughter is caused by and expresses amusement so, when it comes to extracting key claims from their theories, I have been rephrasing them in terms of amusement as opposed to laughter. However, laughter may seem more central to release theories than to superiority theories or incongruity theories, since release theories focus on the expending of energy. Although, since this energy is *mental* energy, it should be relevant to amusement as well as laughter. Thus, I am able to rephrase the remarks of early release theorists in terms of amusement.¹⁰

Clearly, Early Release Theory does not capture all the facts about amusement, but it does capture some of the facts. It seems that there are cases in which an object causes both amusement and the release of accumulated mental energy. Consider the following joke:

What do you call a black man flying a plane? The pilot.

⁸Although Early Release Theory is not phrased in their terminology, it is a key claim shared by Shaftesbury, Spencer and Freud. Shaftesbury talked of releasing constrained animal spirits, Spencer talked of releasing pressurised nervous energy and Freud talked of releasing excess psychic energy. In each case, their claim can be phrased in modern terminology as releasing accumulated mental energy.

⁹Clearly, release is not sufficient for amusement since there are plentiful counter-examples of the release of accumulated mental energy without amusement. For example, consider excitedly driving to meet a friend at the airport, only to discover that their flight was cancelled. Presumably, one’s sigh of disappointment could be described as a release of mental energy in the same way that release theorists describe the laughter of amusement.

¹⁰More than anything, Early Release Theory is being presented as a useful starting point for critical analysis, so one need not be too concerned about exactly which early release theorists would or would not accept it.

This joke causes both amusement and the accumulation of mental energy for enduring a racist attitude which is then released when the racism is absent. So it seems that Early Release Theory does capture at least some of the facts about amusement. Furthermore, these seem to be primarily affective facts rather than cognitive facts.

Early Release Theory is relevant more to the affective component of amusement than to the cognitive component. It seems possible that the release of accumulated mental energy could affect the affective component of amusement, since one's ability to appreciate humour could be affected by the release of accumulated mental energy. For example, if one confused a jungle vine for a poisonous snake, then upon realisation, one's amusement would be greater than that at a more mundane mistake like confusing sugar for salt. However, it does not seem possible that the release of accumulated mental energy could affect the cognitive component of amusement. One's ability to recognise humour would not be impaired regardless of how much accumulated mental energy one released. The reason is that one must first cognitively recognise what the humour is 'saying' before one can affectively appreciate whether what the humour is 'saying' makes one release mental energy. Thus, I will critically analyse Early Release Theory during my definition of the affective component of amusement rather than the cognitive component.

In this section, I have reviewed early release theories, which has yielded Early Release Theory. In the next section, I review early play theories.

2.5 Early Play Theories

Play theories emphasise being in a state of play as a condition for amusement or laughter. Although Aristotle (348 - 322 B.C.) is best classified as a superiority theorist, he was also the first to associate amusement with play. He considered wit a trait worthy enough to be a virtue because 'life includes relaxation as well as activity, and in relaxation there is leisure and amusement' (Aristotle 2009, 76). So it's important to cultivate the virtue of wit because amusement and laughter often occur during relaxation and 'relaxation and amusement are a necessary element in life' (Aristotle 2009, 78).

Later, Thomas Aquinas (1225 - 1274) also associated amusement with play. He speculated as follows:

Now such like words or deeds wherein nothing further is sought than the soul's delight, are called playful or humorous. Hence it is necessary at times to make use of them, in order to give rest, as it were, to the soul. (Aquinas 2009, 217-218)

Following Aristotle, Aquinas thought that we need occasional respite from serious activity and during these respites amusement often occurs. This linking of amusement and play led him to comment that ‘a man who is without mirth ... is lacking in playful speech’ (Aquinas 2009, 218).

Kant (1724 - 1804) is best classed as an incongruity theorist, but he also hinted towards an association between amusement and play. He compared the pleasure of wit to that of games and music. For each, the pleasure is derived from a ‘changing free play of sensations’; in games it is ‘the play of fortune’, in music it is ‘the play of tone’ and in wit it is ‘the play of thought’ (Kant 2009, 159-160). More specifically, Kant said that the pleasure of wit comes from ‘the change of representations in the judgement; by it, indeed, no thought that brings an interest with it is produced, but yet the mind is animated thereby’ (Kant 2009, 160). So, according to Kant, we engage in wit even though it is uninformative because, as a form of play, it is worthwhile for its own sake.

Some early play theorists took an ethological approach by drawing on the evolutionary development of laughter to explain the association between amusement and play. Charles Darwin (1809 - 1882) was the first to observe that some apes emit panting vocalisations that can be interpreted as a form of laughter:

If a young chimpanzee be tickled - and the armpits are particularly sensitive to tickling, as in the case of our children, - a more decided chuckling or laughing sound is uttered; though the laughter is sometimes noiseless. (Darwin 2014, 100)

Darwin observed that ape laughter accompanies a relaxed open-mouthed expression and is emitted during playful activities such as tickling or wrestling. From such observations, some early play theorists argued that human and ape laughter share the same evolutionary origin and this explains the association between amusement and play.

Max Eastman (1883 - 1969) offered the first comprehensive play theory, based on the claim that ‘humor is play ... Therefore no definition of humor, no theory of wit, no explanation of comic laughter, will ever stand up, which is not based upon the distinction between *playful* and *serious*’ (Eastman 1936, 15). His reasons for making this claim included the facts that playful activity often results in amusement, some humour consists of a playful aggression, and both humour and play are essentially non-serious as opposed to serious. He also took an ethological approach by drawing on the evolutionary development of laughter. Eastman (1936, 45) argued that ‘we come into the world endowed with an instinctive tendency to laugh and have this feeling in response to pains presented

playfully'. As well as conjecturing that ape laughter is analogous to human laughter, he even conjectured analogous behaviour in animals other than apes. For example, he (1936, 34) stated that 'dogs laugh, but they laugh with their tails'.

George Santayana (1863 - 1952), similarly links amusement with play since both are spontaneous activities that occur in the absence of external concerns or threats (Santayana 1955, 18). To strengthen this link, he says that in amusement 'we indulge an illusion which deepens our sense of the essential pleasantness of things ... there is nothing in comedy that is not delightful, except, perhaps, the moment when it is over' (Santayana 1955, 150).

Early play theories can be characterised as making the following key claim:

Early Play Theory: If x amuses y , then y is in a state of play.

Note that Early Play Theory is a conditional claim. This is because most play theorists hold that one must be in a state of play in order to be amused, but none argue that one must be amused in order to be in a state of play.¹¹ Note also that in Early Play Theory, x occurs only on the left-hand side of the conditional. So Early Play Theory is unlike Early Incongruity Theory, Early Superiority Theory and Early Release Theory because it specifies a necessary condition for amusement that concerns only the subject y .

Clearly, Early Play Theory does not capture all the facts about amusement, but it does capture some of the facts. It seems that there are cases in which a subject is amused by an object and is in a state of play. Consider the following quip from Groucho Marx:

I never forget a face. But in your case I'll make an exception.

This quip may be considered malign and unamusing when taken seriously, but is considered benign and amusing when taken playfully. Mock aggression between friends often takes the form of a playful exchange of teasing remarks. In such cases, the subject is both amused and in a state of play. So, it seems that Early Play Theory does capture at least some of the facts about amusement. Furthermore, these seem to be primarily affective facts rather than cognitive facts.

Early Play Theory is relevant more to the affective component of amusement than to the cognitive component. It seems possible that being in a play state could affect the affective component of amusement, since one's ability to appreciate humour could be

¹¹Clearly, play is not sufficient for amusement since there are plentiful counter-examples of being in a state of play without amusement. For example, when one plays a board game, a sports match or a musical instrument, one may be in a constant state of play without being constantly amused. Johan Huizinga (2002, 6) rightly says that for most cases of play, 'in itself play is not comical for either the player or public'.

affected by being in a play state. For example, if one is sitting in a business meeting and catches a glimpse of a punning newspaper headline, then one's non-playful state would make amusement less likely than if one saw the headline during leisure time. However, it does not seem possible that being in a play state could affect the cognitive component of amusement. One's ability to recognise humour would not be impaired regardless of how non-playful one is. Returning to the business meeting example, one would still be able to recognise the headline pun as humour, despite being in a non-playful state. Thus, I will critically analyse Early Play Theory during my definition of the affective component of amusement rather than the cognitive component.

In this section, I have reviewed early play theories, which has yielded Early Play Theory. In the next section, I summarise the key findings of this chapter.

2.6 Chapter Summary

In this chapter, I have reviewed early theories of amusement in preparation for completing Theory of Amusement. In section 2.1, I outlined and defended the following approach to Metaphysical Question 1:

The Essentialist Approach: Search for a list of conditions (1), (2), (3) ... about an object x and a subject y that meet the two requirements:

Necessity: If x amuses y , then (1), (2), (3), ... are satisfied.

Sufficiency: If (1), (2), (3), ... are satisfied, then x amuses y .

In the next four sections, I reviewed early theories of amusement taking an essentialist approach. For each class of theory, I gave a chronological review but refrained from critical analysis until later chapters. In section 2.2, I reviewed early superiority theories to yield the following key claim:

Early Superiority Theory: x amuses y if and only if x causes y to experience sudden feelings of superiority.

In section 2.3, I reviewed early incongruity theories to yield the following key claim:

Early Incongruity Theory: x amuses y if and only if y perceives an incongruity within x .

In section 2.4, I reviewed early release theories to yield the following key claim:

Early Release Theory: If x amuses y , then x causes y to release accumulated mental energy.

In section 2.5, I reviewed early play theories to yield the following key claim:

Early Play Theory: If x amuses y , then y is in a state of play.

This concludes my review of early theories of amusement, so I can start completing Theory of Amusement. This involves defining both the cognitive and affective components of amusement. Since, during amusement, the cognitive components precedes the affective component, I will define the cognitive component before the affective component. In chapters 3 and 4, I define the cognitive component of amusement by critically analysing Early Incongruity Theory. Then, in chapters 5 and 6, I define the affective component of amusement by critically analysing Early Superiority Theory, Early Release Theory and Early Play Theory.

Chapter 3

The Cognitive Component of Amusement I

In this chapter, I start to define the cognitive component of amusement by critically analysing incongruity theories of amusement. In section 3.1, I critically analyse incongruity theories. In section 3.2, I critically analyse refinements suggested by early incongruity theories. In section 3.3, I critically analyse a refinement suggested by modern incongruity theories.

3.1 Incongruity Theories

In chapter 2, I uncritically reviewed early incongruity theories to extract the following biconditional claim:

Early Incongruity Theory: x amuses y if and only if y perceives an incongruity within x .

Early Incongruity Theory can be broken down into two conditional claims, as follows:

Incongruity Necessary: If x amuses y , then y perceives an incongruity in x .

Incongruity Sufficient: If y perceives an incongruity in x , then x amuses y .

Incongruity Necessary claims that the perception of incongruity is necessary for amusement, whereas Incongruity Sufficient claims that the perception of incongruity is sufficient for amusement. Hence, counter-examples to Incongruity Necessary are cases of amusement without incongruity, whereas counter-examples to Incongruity Sufficient are cases

of incongruity without amusement. In subsection 3.1.1, I critically analyse Incongruity Necessary and, in subsection 3.1.2, I critically analyse Incongruity Sufficient.

3.1.1 Incongruity Necessary

Incongruity Necessary is intuitively acceptable because it is possible to construe most any object of amusement as involving the perception of some incongruity or another. Consider a classic slapstick gag from Buster Keaton's (1928) *Steamboat Bill Jr.* in which Keaton narrowly misses being squashed by a falling house-front because the window frame falls around him. Here the incongruity is how Keaton unwittingly stands in just the right spot for this unlikely event to happen. Or consider the insult comedy of Don Rickles, who made a stand-up career out of addressing his audience members with remarks like 'Oh my God, look at you! Anyone else hurt in the accident?' The incongruity in Rickles' act consists in his wilful deviation from politeness and common courtesy. Consider also the first stanza from Lewis Carroll's (2009, 21-23) nonsense poem *Jabberwocky*:

'Twas brillig, and the slithy toves
Did gyre and gimble in the wabe:
All mimsy were the borogoves,
And the mome raths outgrabe.

Here an incongruity arises from nonsensical words which nonetheless have the appearance of sense. As Alice says of *Jabberwocky*, 'Somehow it seems to fill my head with ideas - only I don't exactly know what they are!' (Carroll 2009, 23). Or consider the old joke in which an overweight customer asks to have their cake cut into four slices instead of eight because they are on a diet. Here the incongruity occurs between the intended and actual outcome of applying the rule of thumb that fewer slices mean fewer calories. From slapstick to insults to nonsense to jokes, it seems most any object of amusement can be construed as involving the perception of some incongruity or another.

In fact, that an object of amusement must be incongruous practically follows from the dictionary definition of 'incongruous':

incongruous a. Not in harmony or keeping with the surroundings or other aspects of something.

According to this definition, for something to be non-incongruous, it must be 'in harmony or keeping with the surroundings'. Hence, a counter-example to Incongruity Necessary

would have to be an object of amusement that is ‘in harmony or keeping with the surroundings’. But surely such a counter-example cannot exist since if an object is ‘in harmony or keeping with the surroundings’, then one would never sit up and take notice of it in the way required for amusement. So nothing can be both an object of amusement and ‘in harmony or keeping with the surroundings’. Therefore, it practically follows from the dictionary definition of ‘incongruous’ that there are no counter-examples to Incongruity Necessary.

Despite the intuitive acceptability of Incongruity Necessary, some theorists still argue against it. For instance, Roger Scruton (1982, 202) asks one to consider a drawn caricature of Margaret Thatcher that exaggerates certain physical traits in order to highlight certain character traits. If one is amused because Thatcher herself does indeed possess the character traits that the caricature highlights, then, Scruton contends, the object of one’s amusement is not incongruity but congruity. One is amused by how much the physical traits of the caricature are congruent with the character traits of Thatcher. As Scruton (1982, 202) says, ‘the caricature amuses, not because it does not fit Mrs. Thatcher, but because it does fit her, all too well ... If one wishes to describe the humour of a caricature in terms of incongruity it must be added that it is an incongruity which illustrates a deeper congruity between an object and itself’. Hence, Scruton argues, the perception of incongruity is not necessary for amusement.

Another argument against Incongruity Necessary is provided by stereotype jokes. Stereotype jokes are jokes in which characters behave in accordance with a stereotype. The sociologist Christie Davies (1998) suggests that foolishness and parsimoniousness appear as stereotypes in such jokes across almost all industrial societies. For example, each society associates another society with foolishness, including the Irish in England, the Poles in the United States and the Flemings in Belgium. Similarly, each society associates another society with parsimoniousness, including the Scots in England, the Jews in the United States and the Dutch in Belgium. The argument against Incongruity Necessary goes that when one is amused by a stereotype joke, the object of one’s amusement is not incongruity but congruity since one is amused because the behaviour of characters is congruent with a stereotype. Hence, the perception of incongruity is not necessary for amusement.

One more argument against Incongruity Necessary is provided by amusing repetition. The repeated occurrence of a phrase, a word or a sound can elicit amusement. For example, in *The Simpsons* episode *Cape Feare* (Moore 1993), Sideshow Bob accidentally steps on a rake which flips up and hits him in the face with a crunch, causing him to murmur

a shuddering groan. He steps off the rake but straight onto another one which also flips up, crunches him in the face and causes him to murmur the exact same shuddering groan. This process repeats eight more times, starting off as amusing, then becoming mildly tiresome, before becoming amusing again. The argument against Incongruity Necessary goes that when one is amused by repetition, the object of one's amusement is not incongruity but congruity, since each occurrence is identical or congruent with the others. Gabriella Eichinger Ferro-Luzzi (1990) claims that, in particular, alliteration is not incongruous for the same reasons. Hence, the perception of incongruity is not necessary for amusement.

These three counter-examples of caricatures, stereotypes and repetition can all be avoided because all three focus on an aspect of congruity in cases of amusement where, nonetheless, the object of amusement is still incongruity. For the caricature, the object of amusement is the incongruity between the represented physical traits of the caricature and the actual physical traits of Thatcher. The congruity between the physical traits of the caricature and the character traits of Thatcher may enhance this amusement, but ultimately what is essential for amusement is an incongruity between represented and actual physical traits. Without this incongruity, there is no caricature and so no amusement. As Noël Carroll (2014b, 51) points out, 'one doubts that there would be comic amusement without these perceived incongruities, since revealing self portraits, such as those of Rembrandt, do not evoke comic amusement'. Moreover, even if a congruency between physical traits and character traits does enhance amusement, then it will only be because the character traits themselves are incongruous. A caricature will not elicit amusement if it exaggerates certain physical traits in order to highlight character traits that are completely normal. Thus, caricatures are not counter-examples to Incongruity Necessary.

The counter-example of stereotypes can be similarly avoided. For stereotype jokes, the object of amusement is the incongruity between the behaviour of the stereotype and what is regarded as normal behaviour. The behaviour of a joke character in congruence with the stereotype is then necessary to create this incongruity, but ultimately what is essential for amusement is an incongruity between stereotypical and normal behaviour. Behaving foolishly or behaving parsimoniously is incongruous compared to behaving normally. Without this incongruity, there is no stereotype and so no amusement. Thus, stereotype jokes are not counter-examples to Incongruity Necessary.

The counter-example of repetition can also be similarly avoided. For amusing repetitions, the object of amusement is the incongruity between occurrences being repeated and the norm for occurrences to not be repeated. The congruity between repeated occurrences

is then necessary to create this incongruity, but ultimately what is essential for amusement is an incongruity between repeated and normal occurrences. For example, Salvatore Attardo (1994, 139) argues, contra Ferro-Luzzi (1990), that alliteration is incongruous because the sound occurrences in casual language, as opposed to non-casual language, are random and do not have an identifiable pattern. Thus, amusing repetitions are not counter-examples to Incongruity Necessary.

In summary, Incongruity Necessary is intuitively acceptable because any object of amusement can be construed as incongruous and that an object of amusement must be incongruous practically follows from the definition of ‘incongruous’. Moreover, all three counter-examples of caricatures, stereotypes and repetition can be avoided because all three focus on an aspect of congruity in cases of amusement where, nonetheless, the object of amusement is still incongruity. Given all this, I accept Incongruity Necessary to inform my definition of the cognitive component of amusement.

In this subsection, I have critically analysed and accepted Incongruity Necessary. In the next subsection, I critically analyse Incongruity Sufficient.

3.1.2 Incongruity Sufficient

The first to present counter-examples to the claim that incongruity is sufficient for laughter was Alexander Bain (1865, 247-248):

There are many incongruities that may produce anything but a laugh. A decrepit man under a heavy burden ... an instrument out of tune ... a wolf in sheep’s clothing ... a corpse at a feast ... are all incongruous, but they cause feelings of pain, anger, sadness, loathing, rather than mirth.

Although Bain’s argument is given in terms of laughter, it can be reformulated in terms of amusement. For example, suppose that a child receives a wonderful present in their stocking each Christmas, except this year, they receive a lump of coal. Then the coal is certainly incongruous compared to the wonderful presents of previous years, but the perception of this incongruity does not cause amusement. Rather, it causes disappointment. Thus, Incongruity Sufficient has counter-examples because there are plentiful cases of incongruity without amusement.

One response to these counter-examples is to assume that the dictionary definition of ‘incongruity’ adequately captures the cognitive component of amusement, then aim to avoid counter-examples to Incongruity Sufficient by adding extra necessary conditions that adequately capture the affective component of amusement. For example, one could

aim to avoid the above coal-lump counter-example by adding the extra affective condition that the perceived incongruity does not cause negative emotions like disappointment. However, this response is flawed. The dictionary definition of ‘incongruity’ is too vague to adequately capture the cognitive component of amusement. So, regardless of the extra affective conditions added, Incongruity Sufficient will always have counter-examples. This flaw is best demonstrated via an example: The failure of Michael Clark’s (1970) incongruity theory illustrates that if one does not make one’s concept of incongruity less vague to more precisely capture the cognitive component of amusement, then counter-examples are inevitable regardless of the extra affective conditions added.¹

Clark’s (1970, 28-29) incongruity theory can be characterised as follows:

Clark’s Incongruity Theory (CIT): x amuses y if and only if:

- (1) y perceives x as incongruous.
- (2) y enjoys perceiving x .
- (3) y enjoys perceiving x at least partly because y perceives x as incongruous.

Clark assumes that the concept of incongruity in CIT1 adequately captures the cognitive component of amusement, then has aimed to avoid counter-examples by adding CIT2 and CIT3 in order to adequately capture the affective component of amusement. With CIT2, Clark avoids counter-examples like the coal-lump because, although the perception of the lump of coal is incongruous, the lump of coal is not enjoyed.² With CIT3, Clark avoids counter-examples in which something incongruous is enjoyed solely for some ulterior reason other than the incongruity itself, such as when the eating of some exotic food is enjoyed because it is fashionable.

However, although Clark’s Incongruity Theory is neat, Mike Martin (1987, 175-177) offers counter-examples consisting of the aesthetic enjoyment of incongruity. Clark (1970, 32) himself seems to partially anticipate such counter-examples in the following:

¹I do not mean to put too much weight on the dictionary definition of ‘incongruity’. Of course, philosophical analysis can overturn dictionary definitions. Arguably, this is exactly what is being done when, later, I make the concept of incongruity less vague to more precisely capture the cognitive component of amusement.

²Clark’s (1970) addition of CIT2 agrees with earlier remarks by Kierkegaard and Spencer. Kierkegaard (2009, 431) specifies that a contradiction must be ‘painless’ to be considered comic, whilst Spencer (1987, 108) says that ‘laughter naturally results only when consciousness is unawares transferred from great things to small - only when there is what we call a *descending* incongruity’.

Suppose a man is looking at a picture and is enjoying his experience, and suppose that he likes the picture because of the incongruity of its content. Moreover he likes the incongruity for its own sake, not for any insight, say, that the picture gives him into the nature of the world. Must we say that he finds the picture amusing? I find it difficult to say.

Martin (1987, 176) gives his first counter-example by adopting and elaborating on Clark's example of admiring a picture:

Grant Wood's *American Gothic*, for example, is a painting of a man and woman on a farm standing in a formal and rigid pose. The woman's hair is combed neatly and firmly pulled back, and yet - ironically and incongruously - there is one prominent wisp of hair curling loosely downward. The irony is enjoyable for its own sake, whether or not it seems funny.

Martin (1987, 176) then offers further counter-examples also consisting of the aesthetic enjoyment of incongruity. These include 'the stunning incongruities permeating Picasso's work', 'the delight at non-humorous incongruities experienced by connoisseurs of dissonant and atonal music' and 'the ironies present in the plot of *Oedipus Rex*'. Each case satisfies the conditions CIT1, CIT2 and CIT3 without constituting a case of amusement. Hence, Clark's Incongruity Theory has counter-examples.

Clark's Incongruity Theory has counter-examples because it fails to adequately capture the cognitive component of amusement. Clearly, the incongruity one perceives in a Picasso painting or dissonant music is not the same as the incongruity one perceives in a verbal quip or a slapstick routine. So Martin's counter-examples cannot be avoided merely by adding extra affective conditions. As long as Clark's concept of incongruity is vague enough to include the incongruities found in Picasso paintings and dissonant music as well as objects of amusement, then he will not be able to distinguish between amusement and the aesthetic enjoyment of incongruities. In a later work, Clark (1987, 244) stated that a vague concept of incongruity was all that he required in order 'to make certain points about the notion of humour that I believe are worth making'.

The failure of Clark's theory illustrates that if one does not make one's concept of incongruity less vague to more precisely capture the cognitive component of amusement, then counter-examples are inevitable regardless of the extra affective conditions added. Justin D'Arms and Daniel Jacobson (2006, 194-195) observe that if the concept of incongruity is left too vague, then 'the incongruity theory of humor is ultimately undone by the need to expand its central notion so as to accommodate more of what people find

amusing’. Similarly, Scruton (1982, 202) says that ‘to know what is meant by the “incongruous” you would have to consult, not some independent conception, but the range of objects at which we laugh’. Carroll (2013, 81, 98) expresses concerns that this would leave incongruity a ‘baggy concept’ and ‘insufferably vague’.

In summary, rather than add extra affective conditions, a better response to Incongruity Sufficient counter-examples is to more precisely capture the cognitive component of amusement. Hence, for the remainder of this chapter and chapter 4, I consider refinements that improve on the concept of incongruity provided in the dictionary definition above. Then, in chapters 5 and 6, I add extra necessary conditions in order to adequately capture the affective component of amusement.

In this subsection, I have critically analysed and rejected Incongruity Sufficient. In the next section, I critically analyse early refinements of the concept of incongruity.

3.2 Early Refinements

Early incongruity theories, reviewed in chapter 2, suggest two main refinements of the concept of incongruity. In subsections 3.2.1 and 3.2.2, I critically analyse one of these refinements and one modern variant of it, then, in subsections 3.2.3 and 3.2.4, I critically analyse the other refinement and one modern variant of it.

3.2.1 Violated Expectation

The first refinement suggested by early incongruity theories is that incongruity occurs between expectations and reality. As seen in chapter 2, this refinement is first hinted at by Aristotle’s remark that a speaker can make an audience laugh by setting up an expectation and then presenting something ‘that gives a twist’ to that expectation (Aristotle 1991, 175). The refinement is then expressed more explicitly in comments by Cicero (1987, 18) ‘the most common kind of joke is that in which we expect one thing and another is said; here our own disappointed expectation makes us laugh’; Pascal (Morreall 1983, 16) ‘nothing produces laughter more than a surprising disproportion between that which one expects and that which one sees’; Kant (2009, 161) ‘laughter is an affection arising from the sudden transformation of a strained expectation into nothing’; and Hazlitt (1969, 4) ‘the accidental contradiction between our expectations and the event ... is merely laughable’. Summarising these comments, the refinement can be characterised as follows:

Violated Expectation: If x amuses y , then x violates y ’s expectations.

Violated Expectation may initially seem to be a plausible refinement. After all, there are plenty of examples of amusement with violated expectation. Consider the following joke:

Three men are stranded on a desert island. They find a magic lantern containing a genie, who grants them each one wish. The first man wishes he was off the island and back home. The second man wishes the same. The third man says: 'I'm lonely. I wish my friends were back here with me.'

By establishing a pattern, this joke causes us to form the expectation that the third man will wish himself off the island and back home. But this expectation is then violated - not only does he not wish himself home but he also wishes the other two men back onto the island too. Similarly, Dorothy Parker's line 'One more drink and I'll be under the host', violates one's expectation for the final word in the sentence to be 'table'. In chapter 2, Aristotle's joke about foot sores and Kant's joke about a greying wig can also be seen as examples of Violated Expectation.

However, despite these examples, Violated Expectation has counter-examples consisting of amusement without violated expectations. In fact, not only is amusement possible without violated expectations, but amusement is possible with *fulfilled* expectations. One such counter-example is the aforementioned stereotype jokes in which characters behave in accordance with a stereotype. In stereotype jokes, the behaviour of characters is incongruous compared to normal behaviour, but their behaviour does not violate one's expectations; rather it fulfills them. One expects characters to conform to the stereotype and one's expectations are always fulfilled. Another counter-example of Violated Expectation is practical jokes which are anticipated with increasing excitement. Consider a scene in which Mickey Mouse steps on Donald Duck's hose pipe, causing a blockage of water to balloon. Mystified at why his hose has stopped working, Donald peers down the nozzle only for Mickey to release his foot and deliver a torrent of water into his face. One anticipates Donald getting drenched, with increasing excitement as the blockage balloons, and so the practical joke is another case of amusement with fulfilled expectation.

Some experiments have even suggested that jokes are more amusing when their punch-lines are predictable. Douglas Kenny (1955) had one group of participants rate the predictability of a series of jokes and had another group rate their amusingness. A significant positive correlation was found between the mean of these two ratings and so Kenny (1955, 648) concluded that the more predictable the punch-line of a joke, the more amusing it would be rated. However, Howard Pollio and Rodney Mers (1974) criticised Kenny's

methodology because participants had to rate the predictability of a punch-line only after having been presented with the whole joke. To avoid this problem, Pollio and Mers conducted an amended experiment in which one group of participants were presented with only the set-up of the jokes and had to write down what they predicted the punch-lines to be. Pollio and Mers themselves then gave a predictability rating to each joke by comparing these predicted punch-lines with the actual punch-lines. They then had another group of participants provide amusingness ratings and also measured their smiling and laughter in order to determine an overall amusingness rating for each joke. Like Kenny, Pollio and Mers discovered a significant positive correlation between predictability ratings and amusingness ratings.

These counter-examples and experiments directly contradict Violated Expectation. However, Morreall (2009, 11) and Carroll (2014b, 18) offer a similar defence of the claim that incongruity occurs between expectations and reality. Both make a distinction between what Carroll calls *specific* and *global* expectations. The defence goes that during the set-up of a joke, one does not generate any specific expectations about the punch-line and so when one is presented with the punch-line, it does not violate any specific expectations one has. For example, during the set-up of the above desert island joke, one does not generate any specific expectation about what the third man will say, but rather one has some global expectations about how the world is or should be and the punch-line violates these global expectations. So incongruity does not occur between specific expectations and reality, but rather between global expectations and reality. Hence Violated Expectation is not contradicted because the proposed counter-examples all violate global expectations.

The flaw with this defence is that claiming incongruity occurs between global expectations and reality does not really make the concept of incongruity more precise. This definition is at least as vague as the dictionary definition of ‘not in harmony or keeping with the surroundings’. Because it is not clear that global expectations are really expectations at all, especially if the proposed counter-examples to Violated Expectation are to be accommodated. For example, in a stereotype joke, there is no sense in which one expects characters to behave normally and is then surprised when they behave in accordance with the stereotype. If one has any expectations in any sense, then it is for the stereotype to be conformed to. So global expectations are not expectations that one *does* have about what *will* happen. Rather, they are expectations which one *would* have *if* the situation was normal. So to say that something violates global expectations is merely to say that it is not normal, that is, it is incongruous. But then talk of ‘expectations’ seems redundant

and one might as well return to the dictionary definition of incongruity.

In summary, Violated Expectation may initially seem to be a plausible refinement of the concept of incongruity. However, it is contradicted by counter-examples and experiments like Kenny (1955), and Pollio and Mers (1974). Moreover, Morreall's (2009) and Carroll's (2014b) defence against these counter-examples is flawed. Thus, Violated Expectation is not an acceptable refinement of incongruity.

In this subsection, I have critically analysed and rejected Violated Expectation. In the next subsection, I critically analyse one modern variant of Violated Expectation.

3.2.2 Norm Violation

One modern variant of Violated Expectation is that incongruity consists of the violation of a norm. This refinement was recently proposed by Peter McGraw and Caleb Warren (2010, 1142) 'anything that is threatening to one's sense of how the world "ought to be" will be humorous'; Carroll (2005; 2013, 79) 'what is key to comic amusement is a deviation from some presupposed norm'; and Matthew Kotzen (2015, 396) 'the concept of humor should be understood as involving a kind of *violation* of the norms that constitute other normative concepts'. Summarising these comments, the refinement can be characterised as follows:

Norm Violation: If x amuses y , then y perceives x to violate a norm.

Norm Violation may initially seem to be a plausible refinement. After all, there are plenty of examples of amusement with norm violation. Consider the following dialogue from Peter Sellers in *The Pink Panther Strikes Again* (Edwards 1976):

Clouseau: Does your dog bite?
 Hotel Clerk: No.
 Clouseau: [Bowing down to pet the dog] Nice doggie.
 [Dog barks and bites Clouseau in the hand]
 Clouseau: I thought you said your dog did not bite!
 Hotel Clerk: That is not my dog.

Kotzen (2015, 399) rightly points out that in this dialogue, the Hotel Clerk violates the conversational norms Paul Grice (1975) labels the Maxims of Quantity, Relation, and Manner. Hence, the dialogue is amusing and is perceived to violate a norm. Another example of an amusing violation of conversational norms would be, when asked 'Do you have the time?', replying simply 'Yes'.

Norm Violation may also seem appealing for a couple of reasons. First, norms are established relative to a particular individual or society, which could help explain why objects of amusement vary across individuals and societies. Second, norms can be violated to varying degrees, which could help explain why amusement can be experienced to varying degrees. As Robert Sharpe (1987, 209) observes, ‘amusement admits of degrees; the response to something funny may range from mild amusement to paroxysms of mirth and we may judge the intensity of somebody’s response from his behavioural reactions’.

However, despite its appeal, the fundamental flaw of Norm Violation is that, like Morreall’s (2009) and Carroll’s (2014b) defence of Violated Expectation, it does not really make the concept of incongruity more precise. This is because proponents of Norm Violation fail to provide an adequate definition of what a ‘norm’ actually is. The most widely accepted definition of a social norm is given by Cristina Bicchieri (2005), but proponents of Norm Violation use ‘norm’ in a much wider sense than that given by Bicchieri. McGraw and Warren’s (2010, 1142) examples of norms include ‘personal dignity (e.g., slapstick, physical deformities), linguistic norms (e.g., unusual accents, malapropisms), social norms (e.g., eating from a sterile bedpan, strange behaviors), and even moral norms (e.g., bestiality, disrespectful behaviors)’. Carroll (2013, 81) includes ‘logical, moral, and prudential norms’ as well as ‘many conventional norms, including not only the codes of politeness but the laws of language’. Whilst Kotzen (2015, 396) includes all ‘practical, epistemic, and aesthetic norms’. With such a diverse range of examples, it seems that almost anything can be a norm in the sense used in Norm Violation.

But if there are no real restrictions on what constitutes a norm, then a violation of a norm is nothing more than a violation of congruity, that is, an incongruity. Hence, defining incongruity as norm violation does not really make the concept of incongruity more precise, since this definition is at least as vague as the dictionary definition of ‘not in harmony or keeping with the surroundings’. For example, Carroll (2013, 79) states that ‘violations of the [norms of language] provide a source of a great deal of humor; Groucho Marx’s puns frequently derail in a single blow the rules of semantics and grammar as well as the maxims of conversation’. This specifies that Groucho’s puns violate norms, but without exactly saying how. Given this vague specification, Carroll cannot distinguish between Groucho’s puns and mere misunderstandings, which can also violate the norms of semantics, grammar and conversation.

In summary, Norm Violation may initially seem to be an appealing refinement of the concept of incongruity. However, like Morreall’s (2009) and Carroll’s (2014b) defence of

Violated Expectation, it does not really make the concept of incongruity more precise. Thus, Norm Violation is not an acceptable refinement of incongruity.

In this subsection, I have critically analysed and rejected Norm Violation. In the next subsection, I critically analyse another early refinement of the concept of incongruity.

3.2.3 Erroneous Conceptualisation

The second refinement suggested by early incongruity theories is that incongruity occurs between conceptualisation and experience. As seen in chapter 2, this refinement is first proposed in Schopenhauer's theory that laughter is caused by the failure of abstract knowledge to approximate sensory perception. More specifically, Schopenhauer (2015, 53) claims that 'the cause of laughter in every case is simply the sudden perception of the incongruity between a concept and the real objects which have been thought through in some relation'. The refinement is also proposed in Bergson's theory that laughter is caused by the misapplication of conceptual thought to situations which require direct perception. This misapplication results in 'something mechanical encrusted upon the living' and so the laughable 'consists of a certain *mechanical inelasticity*, just where one would expect to find the wide-awake adaptability and the living pliability of a human being' (Bergson 2008, 7). Summarising Schopenhauer's and Bergson's comments, the refinement can be characterised as follows:

Erroneous Conceptualisation: If x amuses y , then y perceives x to involve an erroneous conceptualisation.

Note that Erroneous Conceptualisation ambiguously states that y perceives x to *involve* an erroneous conceptualisation, without specifying whether the conceptualisation is made by the subject y or another subject besides y . This is because both Bergson and Schopenhauer allow for either case, although Schopenhauer focuses on the former whilst Bergson focuses on the latter.

Erroneous Conceptualisation may initially seem to be a plausible refinement. After all, there are plenty of examples of amusement with erroneous conceptualisation. Consider the following joke:

There was a moron astronaut who announced that he was planning to fly his rocket to the sun. When asked how he could withstand the heat, he said, 'Don't worry, I'll go at night'.

Clearly, this joke involves an erroneous conceptualisation. The moron astronaut has erroneously conceptualised nighttime as the sun extinguishing instead of as the earth rotating.

In this joke, the erroneous conceptualisation is made by someone else, but there are also examples in which it is made by oneself; such as when talking to someone in another room, only to find that they left a few minutes ago. In chapter 2, Schopenhauer's joke about the peasant's wardrobe and Bergson's description of the object-swapping prank can also be seen as examples of Erroneous Conceptualisation.

Erroneous Conceptualisation may also be appealing because it is able to accommodate the counter-examples to Violated Expectation. For example, stereotype jokes can be explained as involving an erroneous conceptualisation made by the character conforming to the stereotype. Despite being in a situation that demands something quite different, the character always behaves in accordance with the stereotype, and so their conceptualisation of the situation is erroneous. Schopenhauer would say that their abstract knowledge fails to approximate their sensory perception, whilst Bergson would say that their conceptual thought fails to adapt to their direct perception. Likewise, Erroneous Conceptualisation can explain practical jokes that are anticipated with increasing excitement, such as Mickey Mouse stepping on Donald Duck's hose pipe. Donald's behaviour of peering down the nozzle results in him getting drenched and so his conceptualisation of the situation is erroneous. According to Schopenhauer and Bergson, if Donald had successfully approximated his sensory perception or successfully adapted to his direct perception, then he would have stayed dry.

However, despite its appeal, Erroneous Conceptualisation has counter-examples consisting of amusement without erroneous conceptualisation. In fact, not only is amusement possible without erroneous conceptualisation, but it is possible with *veracious* conceptualisation. As Alexander Pope (2008, 8) said, 'True Wit is Nature to advantage dress'd, What oft was thought, but ne'er so well express'd'. Indeed, with insightful witticisms one is often presented with a conceptualisation that is at least as veracious as that held previously. Oscar Wilde (1992, 10; 2010, 5; 2015, 7) provides an abundance of good examples:

A man cannot be too careful in the choice of his enemies.

Newspapers have degenerated. They may now be absolutely relied upon.

I can resist everything except temptation.

With each of Wildes' insightful witticisms, one is presented with a conceptualisation that is certainly not more erroneous than that held previously. Quite the contrary. As the old saying goes, 'it's funny because it's true'.

Inspired by this old saying, Robert Lynch (2010) conducted an experiment investigating whether people are indeed amused by some things because they believed them to be true.

Lynch showed participants a video of stand-up comedians telling jokes which expressed certain gender and racial preferences. Participants' laughter was measured through facial muscle movement and their implicit gender and racial preferences were measured through association tests. Lynch found that participants laughed more at jokes that matched their implicit preferences and so concluded that laughter is augmented by implicit preferences. These results directly contradict the claim that all amusement involves an incongruity between conceptualisation and experience, since participants were amused exactly because they believe the proposed conceptualisation to be veracious.

In summary, Erroneous Conceptualisation may initially seem to be an appealing refinement of the concept of incongruity. However, it is contradicted by counter-examples and experiments like Lynch (2010). Thus, Erroneous Conceptualisation is not an acceptable refinement of incongruity.

In this subsection, I have critically analysed and rejected Erroneous Conceptualisation. In the next subsection, I critically analyse one modern variant of Erroneous Conceptualisation.

3.2.4 Error Detection

One modern variant of Erroneous Conceptualisation is that incongruity consists of the detection of an epistemic error. This refinement was recently proposed by Matthew Hurley, Daniel Dennett and Reginald Adams (2011, xi), who claim that amusement is the reward one receives for successfully completing a certain type of "epistemic debugging". According to Hurley et al. (2011, 4), the human mind naturally performs heuristic operations that have evolved to rapidly generate conclusions about the world. However, because these heuristic operations are performed rapidly, they generate fallible conclusions and are thereby risky. Luckily, the mind also naturally performs safeguard operations that have evolved to mitigate this risk. Amusement then arises from the mind simultaneously performing these heuristic operations and safeguard operations. Specifically, amusement occurs when safeguard operations detect a fallible conclusion generated by heuristic operations. Summarising these comments, the refinement can be characterised as follows:

Error Detection: If x amuses y , then x causes y to detect an epistemic error.

Error Detection may initially seem to be a plausible refinement. After all, there are plenty of examples of amusement with error detection. Hurley et al. (2011, 131) give the following as an archetypal example:

Imagine standing in an elevator, the door has closed, and you are distractedly typing a text message on your phone. Suddenly (when the door opens and someone gets in, or you just feel like you’ve been in the elevator quite a while), you realize you’ve forgotten to press any button for a floor and the elevator hasn’t moved at all ... *Silly me.*

Clearly, this example involves error detection. In such situations, amusement arises when one makes and then detects an epistemic error. Another example is searching high and low for one’s spectacles, only to find them on one’s head (Morreall 2016). In general, all the examples of Erroneous Conceptualisation given earlier can also be seen as examples of Error Detection.

However, despite these examples, the fundamental flaw of Error Detection is that it is essentially equivalent to Erroneous Conceptualisation. Indeed, if one detects an epistemic error, then one perceives that one has made an erroneous conceptualisation. Hence, Error Detection is essentially reducible to Erroneous Conceptualisation and all the counter-examples to Erroneous Conceptualisation also apply to Error Detection. For example, Wildes’ insightful witticisms are also counter-examples to Error Detection, since one does not detect any epistemic error in one’s amusement. As before, it is quite the contrary, one perceives Wildes’ insightful witticisms to be veracious and error-free.

In summary, Error Detection may initially seem to be a plausible refinement of the concept of incongruity. However, it is contradicted by the same counter-examples as Erroneous Conceptualisation. Thus, Error Detection is not an acceptable refinement of incongruity.

In this section, I have critically analysed and rejected Violated Expectation, Violated Norm, Erroneous Conceptualisation and Error Detection as refinements of the concept of incongruity. In the next section, I critically analyse a more acceptable refinement suggested by modern incongruity theories.

3.3 Bisociation Refinement

Modern incongruity theories suggest two main refinements of the concept of incongruity. The earliest is that incongruity consists of bisociation. In subsection 3.3.1, I uncritically review three bisociation theories. In subsection 3.3.2, I outline a theoretical synthesis of those theories. In subsection 3.3.3, I critically analyse that theoretical synthesis.

3.3.1 Bisociation Theories

The concept of bisociation was first proposed by Arthur Koestler (1964) as the mental process central to humour production, scientific discovery and artistic creativity. Koestler (1964, 35) defines bisociation as follows:

The perceiving of a situation or idea, L, in two self-consistent but habitually incompatible frames of reference, M1 and M2. The event L, in which the two intersect, is made to vibrate simultaneously on two different wavelengths, as it were. While this unusual situation lasts, L is not merely linked to one associative context, but bisociated with two.

Koestler (1964, 36) provides the following example:

At the time when John Wilkes was the hero of the poor and lonely, an ill-wisher informed him gleefully: ‘It seems that some of your faithful supporters have turned their coats.’ ‘Impossible,’ Wilkes answered. ‘Not one of them has a coat to turn.’

Koestler then explains how, in this example, the word ‘coat’ is bisociated with two contexts: one metaphorical and one literal. Puns also provide good examples of bisociation: ‘The pun is the bisociation of a single phonetic form with two meanings - two strings of thought tied together by an acoustic knot’ (Koestler 1964, 64-65).

Michael Apter (1982) proposes a variant of bisociation which he calls *cognitive synergy*. These cognitive synergies are ‘situations in which contradictory meanings coexist’ (Apter 1982, 136). Apter and Mitzi Desselles (2014, 641) provide the following characterisation:

To be humorous, a communication must assign mutually exclusive qualities or meanings to some identity (person, object, statement, etc.) ... The identity apparently escapes from logic, and more specifically from Aristotle’s law of identity, which says that an identity cannot simultaneously be both A and not-A.

Apter and Desselles (2014, 641) give the example of how a person cannot both be an adult (A) and a child (not-A) but a child dressed up as an adult can be amusing because then they have qualities of both an adult and a child (A and not-A).

Apter explains that cognitive synergies can occur elsewhere besides humour, such as in art or religion. But, in particular, the cognitive synergies that occur in humour are those in which one mutually exclusive meaning represents appearance whilst the other represents reality:

On examination it will be found that all identities which provoke feelings of humour ... involve two different levels of interpretation. One of these levels can be referred to as that of reality and the other that of appearance, so that every example of humour can be characterised as involving ‘real/apparent’ [cognitive] synergy. (Apter 1982, 177)

Apter (1982, 180-181) notes that real/apparent cognitive synergies are often exemplified by comedic characters: ‘The character of Don Quixote principally involves a continuing synergy between being dignified and undignified, and between chivalry and foolishness; Falstaff’s character a synergy between bravery and cowardice, pomp and ignominy, craftiness and stupidity; Charlie Chaplin’s ‘little tramp’ character, a synergy between such opposites as competent and incompetent, helpful and helpless, meticulous and shabby’. For each of these comedic characters, one of their mutually exclusive meanings represents appearances whilst the other represents reality.

Victor Raskin (1985) also proposes a variant of bisociation in his Semantic Script Theory of Humour (SSTH). SSTH is an influential linguistic theory of humour and, as a linguistic theory, its scope is restricted to textual jokes. The SSTH was developed by Raskin and Salvatore Attardo (1991) into the General Theory of Verbal Humour (GTVH) which extends the SSTH by providing a hierarchical system for classifying jokes according to their similarity. However, since the central bisociation concept remains the same in SSTH and GTVH, an exposition of just SSTH will suffice for my purposes.

For Raskin (1985), a *script* is a cognitive structure of semantic information, linked to a certain word and internalised by the speaker.³ For example, the script DOCTOR is a cognitive structure of all the semantic information linked to the word ‘doctor’ and represents the speaker’s knowledge of doctors. A script can be formally represented as a graph in which the nodes are lexical and the links between nodes are semantic, specifically the links ‘characterize the relations between the nodes’ (Raskin 1985, 82). For example, the script DOCTOR has as its central node the word ‘doctor’ which is linked to the node ‘physician’ by synonymy and is linked to the node ‘profession’ by hyponymy (Raskin 1985, 80-83). Reading certain words in a text then activates their corresponding script. For example, reading the word ‘doctor’ would activate the DOCTOR script.

Raskin’s (1985, 76) theory of text disambiguation involves the speaker’s scripts and a set of combinatorial rules which represent their ability to ‘derive the meaning of the

³Raskin largely takes his understanding of scripts from Roger Schank and Robert Abelson (1977) but, on Raskin’s understanding, scripts are intimately related to semantic information.

sentence out of the meanings of the words which make up the sentence'. When reading a text, a list of scripts is activated for each word and the combinatorial rules are applied recursively to these lists so that combinations are discarded after each application. The text is disambiguated when all but one combination of scripts is left un-discarded (Raskin 1985, 68, 199). However, even after this process is completed, there can be more than one combination left un-discarded (Raskin 1985, 104-107). For example, consider the following texts:

(T1) David works in a surgery and treats patients. He is a dentist.

(T2) David works in a surgery and treats patients.

During the process of applying the combinatorial rules to (T1) the script DOCTOR and the script DENTIST are un-discarded, but after the process is complete only the script DENTIST is un-discarded. (T1) is said to be *partially compatible* with the script DOCTOR and *fully compatible* with the script DENTIST. In contrast, after the process of applying the combinatorial rules to (T2) both the script DOCTOR and the script DENTIST are un-discarded. So (T2) is fully compatible with both the script DOCTOR and the script DENTIST. Thus (T1) has been disambiguated but (T2) has not.

Raskin (1985, 99) states the main hypothesis of SSTH as follows:

A text can be characterized as a single-joke-carrying text if both of the [following] conditions ... are satisfied: (i) The text is compatible, fully or in part, with two different scripts; and (ii) the two scripts with which the text is compatible are opposite in a special sense.

Raskin (1985, 99) specifies that (i) and (ii) are necessary and sufficient conditions for a text to be a joke. So not only must a text be fully or partially compatible with two scripts, but those two scripts must also be *opposite*. For example, (T2) is fully compatible with the scripts DOCTOR and DENTIST, but the scripts DOCTOR and DENTIST are not opposite, so (T2) does not contain a joke. Raskin (1985, 111) states that the most basic way that two scripts can be opposite is if one describes a real situation and the other describes an unreal situation. This basic opposition of real/unreal can be instantiated in more specific oppositions of actual/non-actual, normal/abnormal and possible/impossible, which can in turn be instantiated in even more specific oppositions of good/bad, death/life, money/no-money, etc. (Raskin 1985, 113-114).

As an example, Raskin (1985, 100, 117-27) analyses the following joke in terms of SSTH:

‘Is the doctor at home?’ the patient asked in his bronchial whisper. ‘No,’ the doctor’s young and pretty wife whispered in reply. ‘Come right in.’

According to SSTH, each word in the text activates a list of scripts which are discarded through the application of combinatorial rules until only two scripts are left un-discarded; DOCTOR and LOVER. By further application of combinatorial rules, the DOCTOR script requires the presence of the doctor and the LOVER script requires the absence of the doctor. So the text is partly compatible with DOCTOR and fully compatible with LOVER. Thus condition (i) of SSTH is satisfied. Furthermore, DOCTOR and LOVER are opposite scripts since LOVER describes the actual situation and DOCTOR describes a non-actual situation. Thus condition (ii) of SSTH is satisfied and the text can be characterised as containing a joke.

In this subsection, I have uncritically reviewed three bisociation theories. In the next subsection, I outline a theoretical synthesis of those theories.

3.3.2 Theoretical Synthesis

The various entities and relationships involved in the bisociation theories of Koestler, Apter and Raskin can be roughly represented in set-theoretic terms as follows:⁴

b : An element. For Koestler, an event. For Apter, an identity. For Raskin, a text.

B_1 : A set. For Koestler, a frame of reference. For Apter, a meaning. For Raskin, a script.

B_2 : A different set. For Koestler, a different frame of reference. For Apter, a different meaning. For Raskin, a different script.

$b \in B_1$ and $b \in B_2$: The element is a member of the two sets. For Koestler, the event is perceived in the two frames of reference. For Apter, the identity is assigned the two meanings. For Raskin, the text is compatible with the two scripts.

B_1RB_2 : The two sets are related. For Koestler, the two frames of reference are habitually incompatible. For Apter, the two meanings are mutually exclusive. For Raskin, the two scripts are opposite.

⁴In set theory, sets are essentially collections of objects called elements. In particular, if e is an element and S is a set such that S is a collection of elements that includes e , then e is called a member of S and the notation $e \in S$ is used.

In the following theoretical synthesis, I aim to provide adequate definitions of what is represented by each symbol: b , B_1 and B_2 , \in , and R . As a result, by providing these definitions, I yield my own bisociation refinement of the concept of incongruity.

First, I define b to be an object in the same sense that x in ToA is an object.⁵ This is because b is the central entity in bisociation upon which the other entities and relationships depend. So, in bisociation, amusement is directed towards b in the same way that amusement is directed towards x in ToA - b is the intentional object of amusement in bisociation and x is the intentional object of amusement in ToA. Hence I equate b in bisociation with x in ToA. This definition of b is similar to what Koestler means by ‘event’ and what Apter means by ‘identity’. Koestler (1964, 35) variously refers to an event as an ‘idea’, a ‘situation’ and a ‘mental event’, whilst Apter (1982, 366) defines an identity to be ‘a particular object, person, place, situation, or group of people, which can be identified by some relatively simple verbal formulation’. In contrast, Raskin more narrowly defines b to be a text, but this is because Raskin is searching for a theory of textual jokes, whereas I am searching for a theory of all objects of amusement.

Second, I define B_1 and B_2 to be interpretations in the sense that they assign truth-values to sentences. For example, suppose that B_1 is an interpretation under which ‘John’ refers to John Lennon, whereas B_2 is an interpretation under which ‘John’ refers to John Stuart Mill. Then both B_1 and B_2 would assign a positive truth-value of ‘true’ to the sentence ‘John was British’ because both John Lennon and John Stuart Mill were British. However, to the sentence ‘John was Liverpudlian’, B_1 would assign a positive truth-value of ‘true’, whereas B_2 would assign a negative truth-value of ‘false’, because John Lennon was Liverpudlian but John Stuart Mill was not. This definition of B_1 and B_2 is similar to what Koestler means by ‘frame of reference’, what Apter means by ‘meaning’ and what Raskin means by ‘script’.

Third, I define \in such that $b \in B_1$ means that B_1 assigns truth-values to sentences about b . For example, suppose that b is Falstaff from Shakespeare’s *Henry IV Part 1* (2008). Then $b \in B_1$ means that B_1 assigns truth-values to sentences about Falstaff, such as ‘Falstaff is cowardly’ or ‘Falstaff is lazy’. Note though that $b \in B_1$ does not necessarily mean that B_1 assigns a truth-value to every sentence about Falstaff. There could be some sentence about Falstaff to which B_1 does not assign any truth-value, such as ‘Falstaff’s

⁵In chapter 1, I specified that the term ‘object’ is being used in the widest sense. Amusement can be directed at anything, including sentences, utterances, events, videos, images, speech acts, memories, and chimeras.

favourite colour is blue'.⁶ This definition of \in is similar to that given by Koestler, Apter and Raskin in their bisociation theories.

Fourth, I define R to be incompatibility with respect to b such that there is at least one sentence about b to which one interpretation assigns a positive truth-value and the other interpretation assigns a negative truth-value.⁷ For example, in *Henry IV Part 1* (Shakespeare 2008), there is a scene in which Falstaff boasts of his bravery whilst pretending to be King Henry. During the scene, there are two interpretations of Falstaff - the one that he boasts and the one that the audience knows to be true. If b is Falstaff in this scene, then one interpretation B_1 assigns a positive truth-value to the sentence 'Falstaff is brave', whereas the other interpretation B_2 assigns a negative truth-value to the same sentence. Hence B_1 and B_2 are incompatible with respect to b because there is a sentence about Falstaff to which one interpretation assigns a positive truth-value and the other interpretation assigns a negative truth-value.⁸

In summary, my definitions of b , B_1 and B_2 , \in , and R are as follows:

b : An object.

B_1 : An interpretation.

B_2 : A different interpretation.

$b \in B_1$ and $b \in B_2$: The two interpretations assign truth-values to sentences about the object.

$B_1 R B_2$: There is at least one sentence about the object to which one interpretation assigns a positive truth-value and the other interpretation assigns a negative truth-value.

⁶Note that the assignment of truth-values to sentences is determined by the beliefs of the subject.

⁷According to Robert Steckler (1992, 292):

A pair of interpretations are compatible if and only if they could be true of the same work at the same time. They are incompatible if and only if they could not be.

The sense in which Steckler uses 'incompatible' here is not the sense in which I wish to use it. In fact, it seems that his use of the term makes a category error, since sentences can be true or false but interpretations assign truth or falsity to sentences and so cannot themselves be true or false.

⁸Note that, since B_1 and B_2 do not necessarily assign a truth-value to every sentence about b , B_1 and B_2 need not assign the same truth-value to every sentence about b in order to be compatible with respect to b . For example, if b is Falstaff, then B_1 and B_2 need not assign the same truth-value to the sentence 'Falstaff's favourite colour is blue' in order to be compatible with respect to b . One interpretation could assign a positive truth-value and the other could assign no truth-value, or one could assign a negative truth-value and the other could assign no truth-value, or even both could assign no truth-value. In each case, B_1 and B_2 would be compatible with respect to b .

These definitions then yield my own bisociation refinement of the concept of incongruity:

Bisociation Refinement: If x amuses y , then y simultaneously activates two incompatible interpretations of x .⁹

To illustrate Bisociation Refinement, consider the *Fawlty Towers* episode *The Hotel Inspectors* (Davies 1975) in which Basil mistakes an ordinary guest, Mr Hutchinson, for a hotel inspector. Here b is Mr Hutchinson, B_1 is the interpretation of him as an ordinary guest and B_2 is the interpretation of him as a hotel inspector. B_1 and B_2 are incompatible because they assign opposing truth-values to the sentence ‘Mr Hutchinson inspects hotels’. Hence, as scenes unfold, the audience simultaneously activate two incompatible interpretations of Mr Hutchinson. For another example of Bisociation Refinement, consider the following joke:

What game would you play with a wombat? Wom.

Here b is the text, B_1 is the interpretation under which the word ‘wombat’ refers to an animate object and B_2 is the interpretation under which it refers to an inanimate object. B_1 and B_2 are incompatible because they assign opposing truth-values to the sentence ‘a wombat is an animal’. Hence, in this joke, one simultaneously activates two incompatible interpretations of the word ‘wombat’.

Considering examples given earlier will help to demonstrate the wide scope of Bisociation Refinement. Recall Buster Keaton’s slapstick gag in which he narrowly misses being squashed by a falling house-front because the window frame falls around him. Here b is Keaton himself, whilst B_1 and B_2 are incompatible interpretations that assign opposing truth-values to the sentence ‘Keaton is in peril’. With the house-front falling behind him, it appears that Keaton is standing in a spot of great danger, when actually, despite appearances, he is standing in a spot of complete safety. Recall too the insult comedy of Don Rickles, who mocks his audience to their face. Here b is an utterance Rickles directs towards audience members, whilst B_1 and B_2 are incompatible interpretations that assign opposing truth-values to the sentence ‘Rickles’ utterance is offensive’. Recall too Lewis Carroll’s nonsense poetry, like the poem *Jabberwocky*. Here b is the verse, whilst B_1 and

⁹The longer and more explicit way to formulate Bisociation Refinement would be as follows:

Bisociation Refinement: If x amuses y , then y simultaneously activates two interpretations such that there is at least one sentence about x to which one interpretation assigns a positive truth-value and the other interpretation assigns a negative truth-value.

However, I have chosen instead to formulate Bisociation Refinement as above since it is shorter and more concise.

B_2 assign opposing truth-values to the sentence ‘Carroll’s verse is meaningful’. From jokes to slapstick to insults to nonsense, it seems then that the scope of Bisociation Refinement is wide enough to cover most any object of amusement.

Bisociation Refinement also finds recent support in Noah Greenstein’s (2015, 359-362) formalisation of the following pun:

It is hard to explain puns to kleptomaniacs because they take things literally.

This pun works because the phrase ‘to take things literally’ has two meanings - ‘to steal’ and ‘to use the most common definitions’. Greenstein’s formalisation provides support to Bisociation Refinement in two ways. First, it supports the claim that B_1 and B_2 are incompatible, because Greenstein (2015, 359-360) rightly points out that there would no longer be a pun if there was no difference between the two meanings of ‘to take things literally’. Second, Greenstein’s formalisation supports the claim that B_1 and B_2 are activated simultaneously, because in order to reason from the premise that someone is a kleptomaniac to the conclusion that they are hard to explain puns to requires the phrase ‘to take things literally’ to have both meanings apply simultaneously. Thus, Bisociation Refinement not only has a wide scope but also finds support in recent philosophical research.

In this subsection, I have outlined a theoretical synthesis of bisociation theories to yield Bisociation Refinement. In the next subsection, I critically analyse Bisociation Refinement.

3.3.3 Critical Analysis

Counter-examples to Bisociation Refinement can come in two types: cases of amusement with only one interpretation, or cases of amusement with two interpretations that are not incompatible. A potential counter-example of the first type is amusing obscenity in which amusement is caused by sheer disgust. For example, consider the infamous Aristocrats Joke which starts with a family act entering the office of a talent agent to perform their new routine. During the joke, the joke-teller aims to cause amusement by improvising a description of the family’s routine which is as disgusting and graphic as possible. The joke ends with the talent agent asking the family what they call their act, to which they reply ‘The Aristocrats!’ This infamous joke is a potential counter-example to Bisociation Refinement because it seems that amusement is not caused by any part of the joke supporting two interpretations.¹⁰ Rather, it seems that amusement is caused

¹⁰Arguably, the de facto punch-line ‘The Aristocrats!’ is mildly ironic and so could support two interpretations. However, the punch-line is clearly not the main cause of amusement since the joke-audience is typically most amused during the disgusting and graphic description, before the punch-line has even

by the singular interpretation of the routine as obscene. Hence, the Aristocrats Joke is a potential counter-example to Bisociation Refinement since it seems to have only one, obscene interpretation.

However, proper examination of the Aristocrats Joke reveals that it actually supports two interpretations: one obscene and one innocuous. Of course, under one interpretation, the description of the routine is obscene since the acts described are disgusting and graphic. But, under another interpretation, the description of the routine is innocuous since the acts described are fictional. If the joke-audience thought that the joke was a factual description rather than a fictional one, then they would be appalled rather than amused. Importantly, the obscene interpretation of the acts described must be coupled with an innocuous interpretation in order to elicit amusement. Thus, the Aristocrats Joke is not a counter-example to Bisociation Refinement since it actually supports two interpretations: one obscene and one innocuous.

Another potential counter-example to Bisociation Refinement is amusing ineptitude in which amusement is caused by sheer incompetence. For example, consider the case of a golfer badly missing an easy putt. Here it seems that amusement is not caused by two interpretations, but rather just one under which the golfer is seen as incompetent. Hence, amusing ineptitude is a potential counter-example to Bisociation Refinement since it seems to have only one, incompetent interpretation. However, consider which cases of ineptitude are the amusing ones. There is not much amusing about a beginner golfer missing an easy putt and even less about a toddler doing so. The putt must be missed by an intermediate golfer, better yet a professional, to be amusing. This is because ineptitude is only amusing when demonstrated by someone not normally interpreted as incompetent. It is not amusing for a toddler to miss an easy putt because there is no interpretation under which they are competent, whereas a professional golfer missing the same putt is amusing because they are normally interpreted as competent. Thus, amusing ineptitude is not a counter-example to Bisociation Refinement since it actually supports two interpretations: one incompetent and one competent.

There are then no standing counter-examples to Bisociation Refinement of the first type. Counter-examples of the second type are cases of amusement with two interpretations that are not incompatible. Suppose that there is some such case of amusement. If the two interpretations are not incompatible, then there are no sentences to which one assigns a positive truth-value and the other assigns a negative truth-value. But then it is possible

occurred.

to make a compound interpretation of both interpretations. In such a compound interpretation, any sentences that were assigned a positive or negative truth-value by either interpretation would still have that truth-value. The only sentences which would have their truth-value changed are those to which one interpretation did not assign a truth-value but the other interpretation did. However, if it is possible to make such a compound interpretation, then the case of amusement would not have two interpretations, but would have only one. But such a case of amusement would constitute a counter-example of the first type and, as demonstrated, there are no standing counter-examples of the first type. Hence, there are no standing counter-examples to Bisociation Refinement of the second type either.

There are then no standing counter-examples to Bisociation Refinement, but there is still an important criticism to consider. Graeme Ritchie (2004, 51-52) argues that Koestler's (1964) bisociation theory fails to give adequately precise definitions of its basic entities:

There is still not a clear formal definition of Koestler's terminology ('frames', 'perceive in', 'habitually incompatible') which would allow researchers to predict whether particular stimuli (e.g. specific texts) would count as manifesting bisociation or not. This is essential if bisociation theory is to become a predictive, falsifiable scientific theory, or if it is to become amenable to computer testing ... The answer to 'what is a frame?' is '(virtually) anything'.

Ritchie's criticism also applies to Apter and Raskin, since the answer to 'what is a meaning?' or 'what is a script?' is also '(virtually) anything'. Likewise, the criticism applies to Bisociation Refinement, since my definition of 'interpretation' is at least as imprecise as that given by Koestler for 'frame', by Apter for 'meaning' or by Raskin for 'script'.

In response to Ritchie's criticism, I simply concede that accepting Bisociation Refinement will not yield a predictive, falsifiable scientific ToA that is amenable to computer testing. This concession partially limits ToA but does not completely limit it. In particular, it does not mean that ToA will be entirely uninformative. In fact, that my definition of 'interpretation' is imprecise seems to be an inescapable consequence of the wide scope of ToA. I am searching for a theory of all objects of amusement; misfortune, nonsense, wordplay; satire, slapstick, farce; and so on. Hence my definition of 'interpretation' must be imprecise in order to capture everything within my wide scope. In contrast, Ritchie's scope is much narrower. He is searching for a theory of verbally expressed jokes, for which he has much better prospects of yielding a predictive, falsifiable scientific theory that is

amenable to computer testing. As outlined in this chapter, I aim to give an account of the cognitive component of amusement that improves on the dictionary definition of ‘incongruity’, hence my standards of precision are higher than Clark’s (1970). However, given my wide scope, I concede that I cannot give an account that will be amenable to computer testing, hence my standards of precision are lower than Ritchie’s (2004).

In summary, Bisociation Refinement has no standing counter-examples and conceding the main criticism against Bisociation Refinement does not preclude the possibility of providing a ToA that improves on existing theories of amusement. Thus, Bisociation Refinement is an acceptable refinement of incongruity.

In this section, I have reviewed bisociation theories, outlined a theoretical synthesis of those theories, and critically analysed that theoretical synthesis. In the next section, I summarise the key findings of this chapter.

3.4 Chapter Summary

In this chapter, I have started to define the cognitive component of amusement by critically analysing incongruity theories of amusement. In section 3.1, I critically analysed and accepted the following:

Incongruity Necessary: If x amuses y , then y perceives an incongruity in x .

In section 3.1, I also critically analysed and found counter-examples to the following:

Incongruity Sufficient: If y perceives an incongruity in x , then x amuses y .

By considering Michael Clark’s (1970) incongruity theory, I determined that the best response to the Incongruity Sufficient counter-examples is to more precisely capture the cognitive component of amusement. In section 3.3, I critically analysed and rejected the following refinements of the concept of incongruity:

Violated Expectation: If x amuses y , then x violates y ’s expectations.

Norm Violation: If x amuses y , then y perceives x to violate a norm.

Erroneous Conceptualisation: If x amuses y , then y perceives x to involve an erroneous conceptualisation.

Error Detection: If x amuses y , then x causes y to detect an epistemic error.

In section 3.4, I critically analysed and accepted the following theoretical synthesis of bisociation theories:

Bisociation Refinement: If x amuses y , then y simultaneously activates two incompatible interpretations of x .

In chapter 4, I continue to define the cognitive component of amusement by critically analysing a second refinement suggested by modern incongruity theories.

Chapter 4

The Cognitive Component of Amusement II

In this chapter, I continue to define the cognitive component of amusement. In section 4.1, I critically analyse another refinement suggested by modern incongruity theories: that incongruity requires resolution. In section 4.2, I outline and critically analyse a theoretical synthesis of resolution theories. In section 4.3, I synthesise this theoretical synthesis with Bisociation Refinement to yield a definition of the cognitive component of amusement.

4.1 Resolution Theories

In this section, I critically analyse theories which claim that incongruity requires resolution. In subsection 4.1.1, I uncritically review two resolution theories and extract three key claims. In subsections 4.1.2 to 4.1.4, I critically analyse and amend these three key claims.

4.1.1 Shultz and Suls

The modern focus on resolution started with the work of Thomas Shultz (1972; 1974a; 1976) and Jerry Suls (1972; 1983).¹ Independently, both Shultz (1972) and Suls (1972)

¹Although the modern focus on resolution started with Shultz and Suls, the refinement had been hinted at before. The first hint can be found in Aristotle's (1991, 175) remark that a 'joke is good if it fits the facts'. Another hint is in Kierkegaard's (2009, 432-433) contrast between tragedy which 'sees the contradiction and despairs of a way out' and comedy which 'evokes the contradiction or makes it manifest by having in mind the way out'. Freud (2014, 200) also hints to a 'sense in nonsense' to explain why 'even though [jokes] appear nonsensical from one point of view, [they] must appear full of meaning or at least acceptable from another'. Despite these earlier hints, it is not clear that Aristotle, Kierkegaard or Freud were proposing resolution in the same sense as Suls and Shultz.

model amusement as a two-stage process involving the perception of incongruity and the resolution of incongruity.

Shultz (1972) models amusement as a two-stage process in which the object of amusement presents the subject with some initial information and then some further information. An incongruity is perceived when the subject finds the further information to be incompatible with the most obvious interpretation of the initial information (Shultz 1976, 13).² This incongruity is resolved when the subject reassesses the initial information and finds an ambiguity that allows for a less obvious interpretation that is compatible with both the initial and further information. The ambiguity allowing for this resolution can take different forms, including lexical, syntactic, phonological and non-linguistic.

Shultz (1976, 13) illustrates his model with the following:

Consider the old W.C. Fields' joke, where someone asked, 'Mr Fields, do you believe in clubs for young people?' and he replied, 'Only when kindness fails'.

Shultz explains that here one perceives an incongruity because the answer is incompatible with the most obvious interpretation of the question. This incongruity is resolved when one reassesses the question and finds an ambiguity in the word 'clubs'. The most obvious interpretation is that 'clubs' refers to social groups, but a less obvious interpretation is that it refers to large sticks. Thus, this lexical ambiguity allows for a less obvious interpretation that is compatible with both the question and answer.

Suls (1972) models amusement as a two-stage process represented by a flow-chart. The central cycle of the flowchart involves acquiring information from a text and generating expectations about further information on that basis. An incongruity is perceived when the end of the text conflicts with a generated expectation.³ Resolution of incongruity then takes the form of finding a *cognitive rule* 'which makes the punchline follow from the main part of the joke and reconciles the incongruous parts' (Suls 1972, 82). If a cognitive rule is found, then amusement results, but if no cognitive rule is found, then puzzlement results. The final stages of Suls' (1972) flowchart can be summarised as follows:

Read text and generate expectations. Does the end of the text conflict with expectations?

- No: No surprise and no amusement.

²Given this characterisation, Shultz's (1972) concept of incongruity is essentially an instance of Bisociation Refinement. In particular, Shultz's concept of incongruity is very similar to Raskin's (1985).

³Suls' (1972, 92) notion of incongruity is essentially an instance of Violated Expectation: 'Incongruity of the joke's ending refers to how much the punch line violates the recipient's expectations'.

- Yes: Surprise. Can a cognitive rule be found?
 - No: Puzzlement.
 - Yes: Amusement.

Suls (1972, 90) illustrates his model with the following joke:

O’Riley was on trial for armed robbery. The jury came out and announced, ‘Not guilty.’ ‘Wonderful,’ said O’Riley, ‘Does that mean I can keep the money?’

According to Suls (1972, 90), one reads this joke and generates expectations until one reaches the end, at which point the text conflicts with one’s expectations. This results in surprise and causes one to search for a cognitive rule that allows the end of the text to follow from the preceding information. One finds this cognitive rule when one realises that O’Riley is guilty and the jury’s verdict was wrong. This results in amusement, but if one was unable to find a cognitive rule, then puzzlement would result instead.

The resolution refinement proposed by Shultz and Suls is essentially an extension of Incongruity Necessary and can be characterised as follows:⁴

Shultz-Suls Refinement: If x amuses y , then y perceives an incongruity in x and y resolves the incongruity in x .

Shultz-Suls Refinement refines the cognitive component of amusement by introducing the concept of resolution. However, like the concept of incongruity, this new concept of resolution must be made more precise in order to accurately capture the cognitive component of amusement. In particular, Shultz (1972; 1974a; 1976) and Suls (1972; 1983) share three key claims which make the concept of resolution more precise: resolution involves finding a consistent explanation, resolution completely removes incongruity, and incongruity temporally precedes resolution.

In this subsection, I have uncritically reviewed two resolution theories and extracted three key claims. In subsections 4.1.2 to 4.1.4, I critically analyse and amend these three key claims.

4.1.2 Consistent Explanation

Both Shultz and Suls claim that resolution involves finding a consistent explanation. Shultz (1972; 1974a; 1976) defines resolution as when the subject reassesses the initial information

⁴Recall that Incongruity Necessary is as follows:

Incongruity Necessary: If x amuses y , then y perceives an incongruity in x .

and finds an ambiguity that allows for a less obvious interpretation which is compatible with both the initial and further information. Similarly, Suls (1972; 1983) defines resolution as the finding of a cognitive rule that allows the further information to follow from the initial information. So both Shultz and Suls can be characterised as claiming the following:

Consistent Explanation: If x amuses y , then y finds a consistent explanation of the incongruity in x .

Both Shultz's anecdote about W.C. Fields and Suls' joke about O'Riley serve as examples of Consistent Explanation.

However, Consistent Explanation has counter-examples. For example, consider Charles Addams' cartoon *The Skier* in which the fresh tracks of a passing skier impossibly run either side of a tree trunk before meeting up again. Here one is amused but one does not find a consistent explanation for this impossible incongruity. John Morreall (1987b, 197) even describes the cartoon as 'based on unresolved incongruity'. Indeed, there are many other cases of amusement which involve a form of resolution that is not as comprehensive as a consistent explanation. The problem with Consistent Explanation is that it equates resolution in cases of amusement with resolution in cases of puzzle-solving such as riddles, brain-teasers and misunderstandings. But, as illustrated, the form of resolution that occurs in amusement is often not as comprehensive as the form of resolution that occurs in puzzle-solving. So, which forms of resolution give rise to amusement as opposed to puzzle-solving? Graeme Ritchie (2004, 67) says that this question could be seen as 'the central issue of much of humour research'.

According to Noël Carroll (2014b, 36), 'when we are engaged in *authentic* puzzle solving, our pleasures blossom once we achieve our commitment to really resolving the pertinent incongruities - that is, to making genuine sense and dispelling apparent nonsense'. Carroll (2014b, 36) contrasts puzzle-solving with amusement, in which 'we are not concerned to discover legitimate resolutions to incongruities, but at best, as in the case of jokes, to marvel at the appearance of sense, or the appearance of congruity, in what is otherwise recognized as palpable nonsense'. Elliott Oring (2003, 5-6) similarly maintains that 'it seems to be that the reason riddles and jokes are humorous while definitions and metaphors are not is that in jokes the engagement of the incongruity and the search for [resolution] is *spurious* rather than *genuine*'. Oring (2003, 6) offers the following example:

Why should you always wear a watch in the desert? Because a watch has springs in it.

Here, Oring explains, the resolution establishes a connection between deserts and watches via the word ‘springs’. This connection is recognised to be spurious since it is one of linguistic accident and does not connect watches and deserts in any non-linguistic way. After all, if the connection was genuine and the springs in a watch produced water that could quench thirst in a desert, then the example would not be a joke.

Another way to formulate Carroll and Oring’s point is to claim that amusing resolutions use *unsound logic*.⁵ If amusing resolutions used sound logic, then they would produce true conclusions and hence one would assign truth-values on the basis of amusing resolutions. But, clearly, one does not assign truth-values on the basis of amusing resolutions and hence the logic used must be unsound. This claim has been proposed before, but not using the same terminology. For example, Avner Ziv (1984, 98, 77) was the first to note that jokes often use logic that is not immediately acceptable because it occupies ‘... a middle position between logical and pathological thinking’ and so to be amused ‘one has to ... take momentary leave of Aristotelian logic’. Similarly, Salvatore Attardo (1994, 226) describes ‘a distorted, playful logic, that does not hold outside of the world of the joke’. Christian Hempelmann (2014, 494) likewise generalises two classes of logic used in jokes:

(1) logic that is in principle false, like the assumption underlying the mechanism in puns, namely, that the sound of a word is related to the meaning of the word; and (2) logic that could be correct but is applied in a wrong, or at least defeasible, way. Correct reasoning can fail, for example, when it is based on wrong premises.

Given Hempelmann’s classes, it seems clear that (1) roughly corresponds to invalid inferences and (2) roughly corresponds to false premises. In general, Ziv, Attardo and Hempelmann roughly propose that the logic used in amusing resolutions is unsound, though not using that terminology.

In order to distinguish between amusing resolutions and puzzle-solving resolutions, I amend Consistent Explanation to yield the following:

Unsound Explanation: If x amuses y , then y finds an unsound explanation of the incongruity in x .

Note that in Unsound Explanation, the key point is that y *believes* their explanation to be unsound and not that y ’s explanation is actually unsound. This is because if one uses unsound logic but one believes oneself to be using sound logic, then one will believe oneself

⁵In short, logic is unsound when it is based on either false premises or invalid inferences.

to be engaging in genuine puzzle-solving and thereby will not be amused. Conversely, if one believed oneself to be using unsound logic when actually using sound logic, then it would still be possible for one to be amused. Hence, the key point in Unsound Explanation is that y believes their explanation to be unsound.

However, one issue for Unsound Explanation is whether there are any restrictions on what unsound logic can be used. For example, consider the following syllogism:

Premise 1: All men are mortal.

Premise 2: Socrates is a man.

Conclusion: Santa Claus exists.

Clearly, this syllogism uses an invalid inference, but it is less clear that the same invalid inference could be used in an amusing resolution. Perhaps then there need to be restrictions put on what invalid inferences can be used. One such restriction is to claim that the only invalid inferences that can be used in amusing resolutions are those which bear a sufficient resemblance to valid inferences. This is the restriction that Ritchie (2014, 58) imposes: ‘It seems that the flawed statements, whether simple facts or implication statements, must have a close resemblance to a valid line of reasoning, differing only in small, systematic respects, so that the flawed statements are relatively similar to non-flawed versions’.

However, contra Ritchie, I argue that the invalid inferences used in amusing resolutions do not necessarily have to bear a resemblance to valid inferences. Rather, the restriction I impose focuses on salience: Even the invalid inference used in the above syllogism can be used in an amusing resolution, provided that it is made salient to the subject. It is then through this salience that the subject is able to reconstruct that particular invalid inference as opposed to any other and thereby resolve the incongruity. Making the invalid inference resemble valid inference is then just one way of making it salient. Conversely, if the invalid inference is not made salient, then the object simply will not elicit the cognitive component of amusement from the subject, that is, the subject will not ‘get the joke’. Thus, I add as a caveat to Unsound Explanation that, in order for y to find the unsound explanation, any invalid inferences must be made salient to them.

In this subsection, I have critically analysed and amended Consistent Explanation. In the next subsection, I critically analyse and amend another key claim shared by Shultz and Suls.

4.1.3 Complete Removal

Both Shultz and Suls claim that resolution completely removes incongruity. According to Shultz (1976, 12-13), resolution ‘renders incongruity meaningful or appropriate by resolving or explaining it’. Similarly, Suls (1972, 88) states that if a cognitive rule is found, then ‘the punch line is then perceived to make sense ... the apparent incongruity has been made congruous’. So both Shultz and Suls can be characterised as claiming the following:

Complete Removal: If x amuses y , then y ’s resolution completely removes the incongruity in x .

Note that Complete Removal does not amount to claiming that resolution removes all incongruity, but only that it removes all incongruity which is directly relevant to amusement. This is because objects of amusement often involve incongruities like talking animals or walking vegetables which are not themselves directly relevant to amusement. So Complete Removal claims that resolution completely removes only that incongruity which is directly relevant to amusement.

Contra Complete Removal, Mary Rothbart and Diana Pien (1977) argue that there are cases of amusement in which incongruity is not completely removed. They (1977, 37) offer the following example:

Why did the elephant sit on the marshmallow? Because he didn’t want to fall into the hot chocolate.

Pien and Rothbart claim that, in this joke, the question introduces an incongruity, and the answer resolves this incongruity but also introduces a new incongruity. It has been explained why the elephant sat on the marshmallow, but it has not been explained why the elephant may fall into the hot chocolate. Thus, according to Pien and Rothbart, some incongruity is removed but some remains and so the joke is a case of partial removal rather than complete removal.

It seems that Pien and Rothbart (1977) are right, but they do not use the best examples. For instance, in the elephant joke, although the question may introduce the incongruity of an elephant sitting on a marshmallow, it is not this incongruity that is directly relevant to amusement. As mentioned, jokes often involve incongruities like talking animals or walking vegetables which are not themselves directly relevant to amusement. In the elephant joke, surely the incongruity relevant to amusement is that the answer is interpreted both as informative and as uninformative. As per Bisociation Refinement, the

answer is informative in the sense that it answers the question, but is uninformative in the sense that it raises further questions.

However, although Pien and Rothbart (1977) do not use the best examples, they are still right to argue that there are cases of amusement in which incongruity is not completely removed. For example, consider the following absurd joke:

What's the difference between the sparrow? No difference whatsoever: The two sides of the sparrow are perfectly identical, especially the left one. (Raskin 2014, 676)

The incongruity relevant to amusement here is not only to do with interpreting the answer as both informative and uninformative. The answer itself introduces a further incongruity that is also relevant to amusement: If the two sides of the sparrow are identical, then the left side cannot be more anything than the right. So the incongruity introduced by the answer is that the two sides are interpreted both as identical and as non-identical. This incongruity is relevant to amusement but it is not completely removed, even by the end of the joke. Hence, this is a case of amusement in which some incongruity is removed but some remains and there is not complete removal.

In order to accommodate cases of amusement in which incongruity is not completely removed, I amend Complete Removal to yield the following:

Partial Removal: If x amuses y , then y 's resolution partially removes the incongruity in x .

Note that Partial Removal essentially follows from Unsound Explanation. This is because, since resolution uses unsound logic, the removal of incongruity can only ever be partial. The complete removal of incongruity would require using sound logic which would then result in puzzle-solving as opposed to amusement. So resolution that uses unsound logic cannot completely remove incongruity. There will always be some incongruity remaining precisely because the resolution uses unsound logic.

Given Partial Removal, I propose a three-way distinction between puzzlement, amusement and problem-solving. In puzzlement, resolution removes no incongruity, in amusement, resolution partially removes some incongruity and, in problem-solving, resolution completely removes all incongruity.⁶ Within this distinction, I further propose that amusing resolutions can come in different degrees which determine the degree to which incongruity is removed. The resolution in Shultz and Suls is at one end of this scale of partial

⁶This three-way distinction comes from Shultz's (1976, 12-13) two-way distinction between nonsense as 'pure or unresolvable incongruity' and humour as 'resolvable or meaningful incongruity'.

removal, namely that nearest to but distinct from complete removal. Amusing resolutions never completely remove incongruity because the logic used is unsound. Meanwhile, the resolution in nonsense humour is at the opposite end, namely that nearest to but distinct from no removal. Amusing resolutions always remove some incongruity because at least some explanation is provided, even if it is an unsound one.⁷ Thus, I add as a caveat to Partial Removal that the removal of incongruity can only ever be partial because amusing resolutions use unsound logic.

In this subsection, I have critically analysed and amended Complete Removal. In the next subsection, I critically analyse and amend another key claim shared by Shultz and Suls.

4.1.4 Temporal Ordering

Both Shultz and Suls claim that incongruity temporally precedes resolution. Shultz (1972) conducted a series of experiments in which children provided explanations of single-frame cartoons containing either incongruity, or resolution, or both. Based on the children's explanations of cartoons containing both incongruity and resolution, Shultz concluded that there is a temporal ordering in which the first stage is the perception of incongruity and the second stage is the resolution of incongruity. Similarly, Suls (1977, 41) states that 'incongruity is only the first stage and resolution of the incongruity is necessary for eliciting humor responses'. So both Shultz and Suls can be characterised as claiming the following:

Temporal Ordering: If x amuses y , then y perceives the incongruity in x before resolving it.

To examine Temporal Ordering, Shultz (1974b) conducted further experiments in which participants were presented with a series of jokes and reported the order in which they noticed incompatible elements in the punch-line (corresponding to incongruity) and ambiguous elements in the set-up (corresponding to resolution). Shultz found that, in support of Temporal Ordering, participants reported that it was only after noticing incompatible elements in the punch-line that they would return to the set-up and notice ambiguous elements.

⁷For example, the incongruity in the nonsense poetry of Lewis Carroll is that the verse is interpreted both as meaningful and as meaningless. The resolution is the unsound explanation that, since the nonsense words are phonetically similar to real words, they must also be semantically similar. Such an explanation is absent in cases of unamusing, puzzling nonsense.

However, contra Temporal Ordering, Ritchie (2004) argues that there are cases of amusement in which the information required for resolution is acquired before the incongruity is perceived. As an example, he (2004, 56) offers a longer version of the following joke:

A traffic cop pulls over a car of old ladies driving at 22mph. The driver says 'Officer, what seems to be the problem? I was driving exactly the speed limit.' The cop chuckles and explains to her that '22' is the route number, not the speed limit. A bit embarrassed, the woman thanks him. But before she drives off he asks 'Ma'am, is everyone in this car ok? These women seem awfully shaken.' 'Oh, they'll be alright in a minute, officer,' she replies. 'We just got off Route 119.'

In this joke, the reasoning of matching driving speed with route number is established, then this reasoning subsequently leads to the incongruity of a car of old ladies driving at high speed. Hence, the information required for resolution is acquired before the incongruity is perceived. So, in this case, incongruity cannot be said to temporally precede resolution. Another example occurs in Mike Myers' *Austin Powers 2* (Roach 1999), when Austin and Felicity cast their shadows on the side of a tent. The shadows are such that, when Felicity is removing a variety of objects from a bag, it appears to those outside that the objects are being removed from Austin's behind. Here too the information required for resolution is acquired before the incongruity is perceived, because the audience sees the actual situation before seeing the apparent situation.

In order to accommodate these cases of amusement, I draw a distinction between the receipt of information required for resolution and the actual act of resolution itself.⁸ Although the information required for resolution may be received before perceiving the incongruity, the actual act of resolution consists of the application of this information to the incongruity, and so must occur after perceiving the incongruity. For example, in the traffic cop joke, although the line of reasoning is established before the incongruity is perceived, the act of applying that line of reasoning occurs afterwards. Thus, although the receipt of information required for resolution can temporally precede the perception of incongruity, the perception of incongruity must temporally precede the actual act of resolution itself.

⁸This distinction comes from Attardo's (1997, 409-410) distinction between information that allows for resolution as a 'static component of the text' and the resolution itself as a 'dynamic phenomenon'. Ritchie (2009, 320) even makes a three-way distinction between the content of the text, the generalisations applied to this content, and the act of applying those generalisations to the content.

By applying this distinction, I amend Temporal Ordering to yield the following:

Non-temporal Ordering: If x amuses y , then y perceives the incongruity in x via resolving it.

Note that Non-temporal Ordering uses the word ‘via’ because it does not impose any temporal ordering on incongruity and resolution: If the perception of incongruity temporally precedes the receipt of resolution information, then one perceives an incongruity and subsequently finds an unsound explanation of it. But if the receipt of resolution information temporally precedes the perception of incongruity, then one is led by an unsound explanation to perceive an incongruity. Either way, the incongruity exists because of and is explained by the resolution, so either way the incongruity is perceived ‘via’ the resolution.

In this section, I have uncritically reviewed two resolution theories and extracted three key claims, then critically analysed and amended these three key claims. In the next section, I outline and critically analyse a theoretical synthesis of these three amended key claims.

4.2 Resolution Refinement

In this section, I outline and then critically analyse a theoretical synthesis of Shultz-Suls Refinement, Unsound Explanation, Partial Removal and Non-temporal Ordering. In subsection 4.2.1, I outline the theoretical synthesis, then, in subsection 4.2.2, I critically analyse it.

4.2.1 Theoretical Synthesis

Shultz and Suls share three key claims which can be characterised by Consistent Explanation, Complete Removal and Temporal Ordering. I have amended these three key claims to Unsound Explanation, Partial Removal and Non-temporal Ordering. These three amended key claims and Shultz-Suls Refinement can be synthesised as follows:

Resolution Refinement: If x amuses y , then y perceives an incongruity in x via unsound logic.

Resolution Refinement is a refinement of Incongruity Necessary because it specifies that incongruity is perceived via unsound logic. Hence, incongruity is resolved in the sense that it has an explanation, albeit an unsound one. In Resolution Refinement, Unsound Explanation is included because the logic used is unsound, Partial Removal is included because

using unsound logic means that the removal of incongruity can only ever be partial, Non-temporal Ordering is included because the incongruity is perceived ‘via’ unsound logic, and Shultz-Suls Refinement is included because resolution is necessary for amusement.

For an example of Resolution Refinement, first consider Hempelmann’s (2008, 344-345) description of the syllogism behind puns:

Premise 1: The sound of a word is determined by its meaning.

Premise 2: The sound of two words is identical.

Conclusion: The meaning of those two words is identical.

Here the inference from Premises 1 and 2 to the Conclusion is valid and Premise 2 is true in the case of a pun. But, clearly, Premise 1 is not true. There are many words which share the same sound without sharing the same meaning. For example, the financial ‘bank’ and the river ‘bank’. Hence, Premise 1 is false and Hempelmann’s syllogism is unsound.

Given Hempelmann’s syllogism, Oring’s (2003, 6) earlier pun provides an example of Resolution Refinement:

Why should you always wear a watch in the desert? Because a watch has springs in it.

This pun works because the word ‘springs’ refers both to tightly wound coils and to sources of water. According to Hempelmann’s syllogism, tightly wound coils must then be sources of water. So, since a watch contains tightly wound coils and sources of water are useful in the desert, one can deduce that a watch contains something that is useful in the desert. Thus, Oring’s pun is an example of Resolution Refinement because one perceives the incongruity in it via unsound logic (given by Hempelmann’s syllogism).

Considering examples given earlier will help to demonstrate the wide scope of Resolution Refinement. Recall Buster Keaton’s slapstick gag in which he narrowly misses being squashed by a falling house-front because the window frame falls around him. Here the incongruity is perceived via unsound logic which assumes the false premise that Keaton will be squashed. Recall too the insult comedy of Don Rickles, who mocks his audience to their face. Here the incongruity is perceived via unsound logic which assumes the false premise that Rickles sincerely means what he says. Recall too Lewis Carroll’s nonsense poetry, like the poem *Jabberwocky* (Carroll, 2009). Here the incongruity is perceived via unsound logic which uses the invalid inference that if nonsense words are phonetically similar to real words, then they are also semantically similar. From puns to slapstick to insults to nonsense, it seems then that the scope of Resolution Refinement is wide enough to cover most any object of amusement.

Resolution Refinement, like Shultz-Suls Refinement, claims that resolution is necessary for amusement. To examine this claim, Shultz (1972) conducted experiments in which children were presented with single-frame cartoons, selected on the basis that they contained both incongruity and resolution. In the first experiment, the children were presented with the original cartoons and edited cartoons in which the incongruity had been removed but the resolution remained. In the second experiment, the children were presented with original cartoons and edited cartoons in which the resolution had been removed but the incongruity remained. Based on the children's responses to the original and edited cartoons, Shultz concluded that the original cartoons were more effective at eliciting amusement than either of the edited cartoons. As per Resolution Refinement, these results were taken to support the claim that resolution is necessary for amusement.

Shultz and Horibe (1974) conducted similar experiments in which children were presented with jokes as well as incongruity-removed and resolution-removed versions of those jokes. For example, the following was one of the original jokes:

Mother: 'Doctor, come at once! Our baby swallowed a fountain pen!'

Doctor: 'I'll be right over. What are you doing in the meantime?'

Mother: 'Using a pencil.' (Shultz and Horibe 1974, 14)

This original version was selected on the basis that it contains both incongruity in the mother's reply and resolution through ambiguity in the doctor's question. In the incongruity-removed version, the mother's second line was changed to: 'We don't know what to do.' In the resolution-removed version, the mother's first line was changed to: 'Doctor, come at once! Our baby swallowed a rubber band!' In the experiment, children were presented with the three series of jokes, their laughter responses were recorded and they were asked to provide an amusingness rating of each joke. The results showed that, for older children, the original versions elicited the most laughter and were rated the most amusing, the resolution-removed versions elicited less laughter and were rated less amusing, and the incongruity-removed versions elicited the least laughter and were rated the least amusing. As per Resolution Refinement, these results were taken to support the claim that both incongruity and resolution are necessary for amusement.

In this subsection, I have synthesised Shultz-Suls Refinement, Unsound Explanation, Partial Removal and Non-temporal Ordering to yield Resolution Refinement. In the next subsection, I critically analyse Resolution Refinement.

4.2.2 Critical Analysis

Göran Nerhardt (1977) objected to the methodology of experiments like Shultz (1972) and Shultz and Horibe (1974) in which participants are presented with incongruity-removed and resolution-removed versions of jokes and cartoons. Nerhardt argued that experimenters cannot be sure that removing incongruity or resolution does not affect other elements relevant to amusement, so they cannot assume that it is possible to isolate the effect of removing incongruity or resolution for experimentation. In particular, Nerhardt criticized the use of jokes and cartoons to elicit responses from participants in experiments, since the entangled linguistic and emotional elements involved make it difficult to isolate the effects of particular elements on participant responses. Furthermore, Nerhardt objected to using jokes and cartoons because then participants know they are participating in an experiment on amusement, which may influence their responses.

To avoid these issues, Nerhardt (1970) developed a methodology in which participants were not told they were participating in an experiment on amusement but were asked to lift a series of visually identical weights, one after another. The first few weights in the series had a similar mass of between 450g and 550g, but then there was a much lighter or heavier weight with a mass of either 50g or 3000g. When participants would lift this divergent weight, they would frequently exhibit behaviour expressing amusement, such as smiling or laughing. In addition, Nerhardt (1970, 1976) found that increasing the divergence from the average mass of the preceding weights would increase the participant's expressions of amusement. Overall, Nerhardt (1976) argued that these weight lifting experiments showed that it is possible for incongruity to elicit amusement without resolution and hence resolution is not necessary for amusement.

However, I argue that if what is meant by 'resolution' is characterised by unsound logic, as per Resolution Refinement, then resolution is present even in Nerhardt's weight lifting experiments. This is because, in Nerhardt's experiments, participants arrive at the incongruity via invalid *inductive* inference. What makes an inductive inference invalid is intuitively explained by Nelson Goodman (1983, 73) in the following:

That a given piece of copper conducts electricity increases the credibility of statements asserting that other pieces of copper conduct electricity, and thus confirms the hypothesis that all copper conducts electricity. But the fact that a given man now in this room is a third son does not increase the credibility of statements asserting that other men now in this room are third sons, and so does not confirm the hypothesis that all men now in this room are third

sons ... The difference is that in the former case the hypothesis is a *lawlike* statement; while in the latter case, the hypothesis is a merely contingent or accidental generality.

Goodman distinguishes between *lawlike* hypotheses which are capable of being confirmed by their instances, and *accidental* hypotheses which are not. That a given piece of copper conducts electricity confirms the hypothesis that all pieces of copper conduct electricity. Whereas, that a given man in a room is a third son does not confirm the hypothesis that all men in that room are third sons. The key way to characterise Goodman's distinction is to say that lawlike hypotheses constitute *valid* inductive inferences, because they can be projected from a sample of a population to the whole of that population, whereas accidental hypotheses constitute *invalid* inductive inferences because they cannot.

Goodman's intuitive distinction between lawlike and accidental hypotheses can be used to specify the invalid inductive inference present in Nerhardt's weight lifting experiments. In Nerhardt's experiments, suppose that participants first lift weight 1, then weight 2, and so on until they reach the divergent weight n (suppose that in this case weight n is divergently heavier). Then, as participants lift weights 1 to $n-1$, they make the following inductive inference:

Premise 1: Weight 1 has appearance a and is light.

...

Premise $n-1$: Weight $n-1$ has appearance a and is light.

Conclusion: Weight n has appearance a and is light.

This inductive argument is invalid because it is a coincidence, contrived by the experimenters, that the weights all have the same appearance. Actually, there is no lawlike connection between their appearance and their mass, rather the connection is accidental. So, the inductive inference to the Conclusion is actually invalid. Hence, if what is meant by 'resolution' is characterised by unsound logic, as per Resolution Refinement, then resolution is present even in Nerhardt's weight lifting experiments.

Besides more elaborate objections like Nerhardt's weight lifting experiments, it may be argued that Resolution Refinement has simpler counter-examples consisting of amusement without unsound logic. For example, consider amusement at a calculated prank, like leaving a bucket of water balancing above a door. When one is amused by someone falling victim to such a prank, one does not seem to perceive an incongruity via unsound logic. Indeed, one does not seem to assume any false premises or make any invalid inferences

when one is amused by a bucket of water falling on someone. Hence, arguably, amusement at such calculated pranks are counter-examples to Resolution Refinement.

However, this potential counter-example and others like it can be avoided by distinguishing between the audience's perspective and the victim's perspective. It is from the victim's perspective that the unsound logic occurs because, in the bucket of water prank, they assume the false premise that there is nothing balancing above the door. The audience then perceive the incongruity of the falling bucket of water via the unsound logic from the victim's perspective. Hence, such calculated pranks are not actually counter-examples to Resolution Refinement. Similarly, in a comedy of errors, when a character misunderstands a situation, the audience does not assume the false premise nor make the invalid inference that gives rise to this misunderstanding, but rather they are amused by perceiving the incongruities that arise via the unsound logic from the character's perspective.

Actually, it is possible to show that, according to Bisociation Refinement, there will be no counter-examples to Resolution Refinement. This is because Bisociation Refinement states that an incongruity is perceived when two incompatible interpretations are activated. But incompatible interpretations can only be activated via unsound logic since if one's logic is sound, then one cannot activate incompatible interpretations. When using sound logic, one can only activate compatible interpretations and, as shown in chapter 3, Bisociation Refinement is acceptable because there are no cases of amusement with compatible interpretations. Hence, there cannot be cases of amusement via sound logic. But counter-examples to Resolution Refinement are exactly that - cases of amusement in which an incongruity is perceived via sound logic. Thus, according to Bisociation Refinement, there are no counter-examples to Resolution Refinement.

In summary, Resolution Refinement has no standing counter-examples, neither in the form of Nerhardt's (1970; 1976; 1977) weight lifting experiments nor in the form of simpler potential counter-examples consisting of amusement without unsound logic. Thus, Resolution Refinement is an acceptable refinement of the concept of incongruity.

In this section, I have outlined, critically analysed and accepted a theoretical synthesis of Shultz-Suls Refinement, Unsound Explanation, Partial Removal and Non-temporal Ordering. In the next section, I synthesise Bisociation Refinement and Resolution Refinement to yield a definition of the cognitive component of amusement.

4.3 The Cognitive Component of Amusement

There is one potential objection to the very possibility of a synthesis of bisociation and resolution theories. In general, bisociation theories understand amusement as deriving from incongruity itself; specifically, they have a *simultaneous* activation view where two interpretations are activated simultaneously. In contrast, resolution theories understand amusement as deriving from the removal of incongruity; specifically, they have a *successive* activation view where one interpretation is successively activated after another. So, the potential objection is that there cannot be a synthesis of bisociation and resolution theories because that would require having both a simultaneous and successive activation view.

Jyotsna Vaid et al. (2003) conducted an experiment investigating these two views. Vaid et al. aimed to investigate whether the less obvious interpretation of a joke became activated during the set-up or during the punch-line, and whether there was any point at which both the more obvious and less obvious interpretations were activated simultaneously. For each joke, experimental participants were sequentially presented with the first half of the set-up, then the second half of the set-up, and then the punch-line. After each of these three parts, participants were presented with a mixture of words and non-words and asked to discriminate between the two. Each mixture had been designed to involve words that were semantically related to either the more obvious interpretation or the less obvious interpretation. Analysis was then based on the assumption that a shorter than normal reaction time for discriminating a particular word indicated that the interpretation semantically related to that word was activated during that part of the joke. The results indicated that during the first half of the set-up only the more obvious interpretation was activated, during the second half of the set-up both the more obvious and less obvious interpretations were activated, and during the punch-line neither interpretation was activated.

Vaid et al. (2003) suggest that the results concerning the second half of the set-up support the simultaneous activation view rather than the successive activation view, but the results concerning the punch-line support neither the simultaneous activation view nor the successive activation view. To further investigate these results, Vaid et al. (2003) conducted a second experiment in which they used the same methodology but asked participants to discriminate between words and non-words only once, specifically four seconds after the punch-line. The aim was to allow participants to finish fully processing the joke before testing them. The results showed that four seconds after the punch-line, only the less obvious interpretation was activated. In contrast to the first experiment, Vaid

et al. (2003) suggest that these results support the successive activation view. Overall then, the results of Vaid et al. (2003) can not be taken as conclusive evidence in support either of the simultaneous activation view or of the successive activation view.

Since the results of Vaid et al. (2003) do not necessarily support either view, I argue that their results can be taken to support a synthesis simultaneous-successive activation view in which there is a successive activation of interpretations but during this succession there is a brief period during which both interpretations are activated simultaneously. Under this view, simultaneous activation occurs but it cannot occur without successive activation. Essentially, bisociation theories are right that amusement derives from incongruity itself and resolution theories are wrong that amusement derives from the removal of incongruity. But incongruity cannot occur without resolution since, as per Resolution Refinement, incongruity occurs ‘via’ resolution. So resolution theories need not be rejected because they are right that resolution is necessary for amusement. Thus, a bisociation-resolution synthesis is possible with a simultaneous-successive activation view that understands amusement to derive from incongruity but also understands resolution to be necessary for amusement.

It is this bisociation-resolution synthesis with a simultaneous-successive activation view that I propose in the following:

Cognitive Component of Amusement (CCoA): If x amuses y , then y simultaneously activates two incompatible interpretations of x via unsound logic.

Note that CCoA is a synthesis of Bisociation Refinement and Resolution Refinement. In particular, it is the use of unsound logic in Resolution Refinement that allows the incompatible interpretations to be activated in Bisociation Refinement. Sound logic cannot be used to assign incompatible interpretations since one can activate incompatible interpretations only via unsound logic. So, as per the simultaneous-successive activation view, amusement derives from incongruity but resolution is necessary for amusement. Moreover, incongruity is resolved in the sense that it has an explanation, albeit an unsound one.

For an example of CCoA, recall Oring’s (2003, 6) pun:

Why should you always wear a watch in the desert? Because a watch has springs in it.

Here one simultaneously activates two interpretations of the text: one interpreting the word ‘springs’ as ‘tightly wound coils’ and the other interpreting ‘springs’ as ‘sources of

water’. These two interpretations are incompatible because they assign opposing truth-values to the sentence ‘a watch has springs in it’. Moreover, these interpretations are activated via the use of unsound logic: if words with the same sound have the same meaning, then tightly wound coils must be sources of water. This logic is unsound because it assumes the false premise that the sound of a word is determined by its meaning. Hence, Oring’s pun is an example of CCoA.

Considering examples given earlier will help to demonstrate the wide scope of CCoA. Recall Buster Keaton’s house-front gag. Here one simultaneously activates two incompatible interpretations that assign opposing truth-values to the sentence ‘Keaton is in peril’, and these interpretations are activated via unsound logic which assumes the false premise that Keaton will be squashed. Recall too the insult comedy of Don Rickles. Here the two incompatible interpretations assign opposing truth-values to the sentence ‘Rickles’ utterance is offensive’, and are activated via unsound logic which assumes the false premise that Rickles sincerely means what he says. Recall too Lewis Carroll’s nonsense poetry. Here the two incompatible interpretations assign opposing truth-values to the sentence ‘Carroll’s verse is meaningful’, and are activated via unsound logic which uses the invalid inference that if nonsense words are phonetically similar to real words, then they are also semantically similar. From puns to slapstick to insults to nonsense, it seems then that the scope of CCoA is wide enough to cover most any object of amusement.

Not only does CCoA have many examples, but any potential counter-examples have been dealt with in previous sections when critically analysing Bisociation Refinement and Resolution Refinement. This is because CCoA does not claim anything that Bisociation Refinement and Resolution Refinement do not. Bisociation Refinement proposes one necessary condition for amusement, Resolution Refinement proposes another necessary condition and CCoA proposes merely the conjunction of these two necessary conditions. Hence, if neither Bisociation Refinement nor Resolution Refinement face any standing counter-examples, then neither does CCoA.

In particular, recall that Clark’s Incongruity Theory (1970) faced counter-examples from Mike Martin (1987) because it failed to adequately capture the cognitive component of amusement. However, CCoA more precisely captures the cognitive component of amusement and thereby avoids Martin’s potential counter-examples. For example, one of Martin’s (1987, 176) potential counter-examples was ‘the stunning incongruities permeating Picasso’s work’. CCoA avoids this potential counter-example because, although when one admires a Picasso one perceives it as incongruous, one does not simultaneously

activate two incompatible interpretations of it. Another of Martin's (1987, 176) potential counter-examples was 'the delight at non-humorous incongruities experienced by connoisseurs of dissonant and atonal music'. CCoA avoids this potential counter-example because, although when one appreciates dissonant music one perceives it as incongruous, one does not perceive this incongruity via unsound logic. Thus, CCoA avoids Martin's potential counter-examples because it more precisely captures the cognitive component of amusement and so can distinguish between amusement and the aesthetic enjoyment of incongruity.

In summary, CCoA has many examples and no standing counter-examples. Thus, CCoA is an acceptable definition of the cognitive component of amusement.

In this section, I have synthesised Bisociation Refinement and Resolution Refinement to yield CCoA. In the next section, I summarise the key findings of this chapter.

4.4 Chapter Summary

In this chapter, I have continued to define the cognitive component of amusement. In section 4.1, I critically analysed the refinement that incongruity involves resolution. In subsection 4.1.1, I uncritically reviewed two resolution theories to yield the following:

Shultz-Suls Refinement: If x amuses y , then y perceives an incongruity in x and y resolves the incongruity in x .

Like the concept of incongruity, the concept of resolution needed to be made more precise, so I critically analysed and amended three key claims. In subsection 4.1.2, I made the following amendment:

Consistent Explanation: If x amuses y , then y finds a consistent explanation of the incongruity in x .

Unsound Explanation: If x amuses y , then y finds an unsound explanation of the incongruity in x .

In subsection 4.1.3, I made the following amendment:

Complete Removal: If x amuses y , then y 's resolution completely removes the incongruity in x .

Partial Removal: If x amuses y , then y 's resolution partially removes the incongruity in x .

In subsection 4.1.4, I made the following amendment:

Temporal Ordering: If x amuses y , then y perceives the incongruity in x before resolving it.

Non-temporal Ordering: If x amuses y , then y perceives the incongruity in x via resolving it.

In section 4.2, I outlined, critically analysed and accepted the following theoretical synthesis of Shultz-Suls Refinement, Unsound Explanation, Partial Removal and Non-temporal Ordering:

Resolution Refinement: If x amuses y , then y perceives an incongruity in x via unsound logic.

In section 4.3, I synthesised Bisociation Refinement and Resolution Refinement to yield the following definition of the cognitive component of amusement:

Cognitive Component of Amusement (CCoA): If x amuses y , then y simultaneously activates two incompatible interpretations of x via unsound logic.

Since CCoA completes my definition of the cognitive component of amusement, I can start to define the affective component of amusement. In chapter 5, I will start by critically analysing superiority and release theories of amusement.

Chapter 5

The Affective Component of Amusement I

In this chapter, I start to define the affective component of amusement by critically analysing superiority, release and play theories of amusement. In section 5.1, I critically analyse superiority theories. In section 5.2, I critically analyse release theories. In section 5.3, I critically analyse play theories.

5.1 Superiority Theories

In chapter 2, I uncritically reviewed early superiority theories to extract the following biconditional claim:

Early Superiority Theory: x amuses y if and only if x causes y to experience sudden feelings of superiority.

Early Incongruity Theory can be broken down into two conditional claims, as follows:

Superiority Sufficient: If x causes y to experience sudden feelings of superiority, then x amuses y .

Superiority Necessary: If x amuses y , then x causes y to experience sudden feelings of superiority.

In subsection 5.1.1, I critically analyse Superiority Necessary and Superiority Sufficient. In subsection 5.1.2, I review and critically analyse modern superiority theories. In subsection 5.1.3, I extract acceptable points that superiority theories highlight in order to inform my definition of the affective component of amusement.

5.1.1 Early Superiority Theory

Francis Hutcheson (1987, 27-29) was the first to give counter-examples to Superiority Necessary and Superiority Sufficient. Against Superiority Sufficient, Hutcheson (1987, 29) remarked that ‘if we observe an object in pain while we are at ease, we are in greater danger of weeping than laughing’. So, according to Hutcheson, in some cases of pity one experiences sudden feelings of superiority without experiencing amusement. This is certainly true in some cases. For example, consider sitting in comfort on a winter’s evening and looking out the window to see an unfortunate vagrant enduring a bitter rain shower. Certainly, one would experience sudden feelings of superiority, but one would certainly not be amused. More likely, one would feel pity and perhaps even guilt. Hence, Superiority Sufficient has counter-examples.¹

In defence of Superiority Sufficient, these counter-examples may be avoided by specifying that the inferiorities which are amusing are those which do not rouse any strong negative emotions like pity, fear or anger. This is effectively what Aristotle (1987), René Descartes (1989) and Alexander Bain (1859) specify in chapter 2. However, contra this defence, Hutcheson (1987, 29) notes that there are further counter-examples in which amusement is not precluded by a strong negative emotion:

Strange! - that none of our [superiority theorists] banish all canary birds and squirrels, and lap-dogs, and pugs, and cats out of their houses, and substitute in their place asses, and owls, and snails, and oysters, to be merry upon ...
An orthodox believer, who is very sure that he is in the true way to salvation, must always be merry upon heretics, to whom he is so much superior in his own opinion.

As Hutcheson points out, people feel superior to oysters and the believer feels superior to the heretic, but in neither case is there amusement. Moreover, in these counter-examples, there is no strong negative emotion precluding amusement. Hence, these counter-examples cannot be avoided by Aristotle’s, Descartes’ and Bain’s specification.

Further counter-examples to Superiority Sufficient include winning a competitive game of tennis. Here the winner experiences feelings of superiority over the loser and there is no strong negative emotion precluding amusement, yet the winner is rarely amused by their win. Another counter-example is when teaching a child to read. Clearly the teacher

¹Note that there are different ways in which one can feel superior, including morally superior, physically superior and intellectually superior. Hence, the superiority involved in cases of amusement and in counter-examples can differ.

has feelings of superiority over the child with respect to reading and there is no strong negative emotion precluding amusement, but no teachers are amused by the learning process. Given these many counter-examples without a convincing defence, Superiority Sufficient is unacceptable.

For a counter-example to Superiority Necessary, Hutcheson (1987, 27) gave the following simile from Samuel Butler:

And like a lobster boil'd, the morn
From black to red began to turn.

Although Butler's simile may not be particularly amusing nowadays, there are certainly other examples of amusement without superiority. Consider the following joke:

What do Alexander the Great and Winnie the Pooh have in common? They
have the same middle name.

In the case of innocuous humour like this, one experiences amusement but without experiencing sudden feelings of superiority. One does not feel superior to the characters in the above joke, nor does one feel superior to the creator of the joke. If anything, the creator's cleverness makes one feel inferior. This certainly seems the case when we are amused by insightful witticisms, such as the following from Voltaire (2013, 12, 83):

The best is the enemy of the good.
Common sense is not so common.

When one is amused by such insightful witticisms, one does not experience feelings of superiority but is rather beholden to their creator's cleverness.

In defence of Superiority Necessary, it may be argued that when one is amused by innocuous humour or insightful witticisms, one experiences feelings of superiority coming from one's sophisticated ability to recognise and appreciate the humour. However, contra this defence, there are further counter-examples in which sophistication is not required to recognise and appreciate humour. For example, in Buster Keaton's (1928) *The General*, Keaton is sitting on the front of a moving train when a railway sleeper appears on the track before him. He cannot lift the sleeper since he is already holding one, so, with ingenuity and skill, Keaton throws his sleeper and knocks the other off the track. Here one's amusement cannot be caused by feelings of superiority because Keaton's stunt is mentally and physically beyond our ability. Moreover, recognising and appreciating the humour does not require sophistication of any sort. Hence, there cannot be feelings of superiority coming from one's sophisticated ability either.

Further counter-examples to Superiority Necessary include Göran Nerhardt's (1970, 1976) weight lifting experiments in which participants would express amusement upon lifting an unexpectedly heavy or light weight. In these experiments, participants did not feel superior to the experimenters, nor could they feel superior to themselves. Another counter-example is how young children are often amused by peekaboo games even though they do not seem to feel superior to anyone, especially since it is debateable whether they have a sense of self to feel superior about. Given these many counter-examples without a convincing defence, Superiority Necessary is unacceptable.

In this subsection, I have critically analysed and rejected Superiority Sufficient and Superiority Necessary. In the next subsection, I review and critically analyse modern superiority theories.

5.1.2 Modern Superiority Theories

Superiority theories are less popular in modern times, but there are some contemporary proponents. Although best classified as an incongruity theorist, Arthur Koestler (1964, 51, 52) specified that amusement requires 'an impulse, however faint of aggression or apprehension' and this gives humour an 'aggressive-defensive or self-asserting tendency'. Similarly, Dolf Zillman and Joanne Cantor (1976, 101) state that all amusement involves disparagement, specifically 'something malicious and potentially harmful must happen, or at least, the inferiority of someone or something must be implied, before a humor response can occur'.

Some modern superiority theorists characterise amusement in terms of devaluation rather than superiority. Roger Scruton (1982, 208) conjectures that 'if people dislike being laughed at, it is surely because laughter devalues its object in the subject's eyes'. He analyses amusement to be a kind of 'attentive demolition' either of someone's identity or of something connected to their identity (Scruton 1982, 209).² Although best classified as an incongruity theorist, Michael Apter (1982, 179-180) proposed that in all humour 'the reality should in some way be 'less than' the appearance' and that 'the 'less than' relationship may be of various kinds: lower in status, less in monetary value, weaker, and so on'. For example, in Charlie Chaplin's (1931) *City Lights*, Chaplin purports to be rich despite being a tramp, so reality devalues appearance because in reality Chaplin is less in

²Scruton (1982, 209) himself denies being a superiority theorist since his 'attentive demolition' can be such that it 'causes us to laugh at its object only by laughing at ourselves'. However, I include Scruton here as a superiority theorist because the devaluation of an object almost always makes the subject feel superior, even if indirectly.

monetary value than he appears.

Charles Gruner (1978, 1997) gives the most detailed modern superiority theory. He concedes that not all feelings of superiority cause amusement and so Superiority Sufficient is unacceptable. But Gruner (1978, 1997) tries to render Superiority Necessary acceptable by claiming that all humour fundamentally involves a ‘playful aggression’. Humour involves aggression because it is directed towards making one person superior, but this aggression is playful because there is no serious harm intended. Gruner (1997, 9) thereby construes humour as a contest with winners and losers: ‘successful humor, like enjoying success in sports and games (including the games of life), must include *winning* (“getting what we want”), and *sudden* perception of that winning’. According to Gruner (1997, 109) then, all humour follows ‘the formula of a contest, resulting in both a winner and a loser’.

Gruner’s superiority theory can be characterised as follows:

Gruner’s Superiority Theory: If x amuses y , then x causes y to suddenly experience a playful sense of winning.

Gruner’s Superiority Theory is supported by an evolutionary story that takes competitiveness and aggressiveness as key to human survival. Gruner (1978, 43) says that humans have an evolutionarily beneficial tendency for competitiveness which means that when a victory is particularly hard-won, the victor ‘bares his teeth, pumps his shoulders, and chops up his breath into grunts and moans, with appropriate grimaces’. Gruner (1978, 52) conjectures that ‘the many generations of men who responded to their sudden victories in violent encounters with roars of triumph, over hundreds of thousands of years, wore a groove, a riverbed, into the collective human unconscious’. Over time, he claims, this ‘roar of triumph’ eventually became laughter.³ This evolutionary story is, of course, based on an outdated understanding of evolution. To be consistent with contemporary understanding, Gruner’s evolutionary story would have to explain how amusement constitutes an advantage in survival or reproduction. However, since Gruner’s evolutionary story is not essential to his superiority theory, it does nothing to discredit his theory even though it also does nothing to support it.

As demonstrated, innocuous humour involving wordplay provides counter-examples to Superiority Necessary. In order to avoid such counter-examples, Gruner claims that wordplay originates from contests in which people competed for intellectual superiority

³Gruner takes this evolutionary story from Albert Rapp (1951, 21), who likewise claimed that laughter developed from ‘the roar of triumph in an ancient jungle duel’.

through verbal dexterity. According to Gruner (1997, 145), wordplay remains a way of ‘winning’ a conversation today: ‘creators of puns and punning riddles do so in order to “defeat” their targets/publics with brilliant verbal expressionism’.

Gruner (1997, 136) offers the following as an example of when two people compete in conversation by exchanging puns:

Bob: The cops arrested a streaker yesterday.

Rob: Could they pin anything on him?

Bob: Naw. The guy claimed he was hauled in on a bum wrap.

Rob: You’d think the case was supported by the bare facts.

However, with this example, it seems that Gruner is confusing a game centred on making puns with punning itself being a game. Just because people engage in a competitive game in which the aim is to produce more puns than your opponent does not mean that what makes a pun amusing is that it is part of a competitive game. Games can be centred on all sorts of linguistic phenomena but this does not lend support to the idea that those phenomena are necessarily competitive. Hence, there is no real evidence for Gruner’s claim that wordplay is always competitive.

Ultimately then, Gruner’s Superiority Theory faces counter-examples in innocuous humour like the following:

Why was the scarecrow given an award? Because he was outstanding in his field.

With such innocuous humour, one experiences amusement without a sense of winning or playful aggression. Gruner (1997) tries to provide explanations of how various cases of innocuous humour contain some sense of winning, but his explanations inevitably become contrived. For example, in one case, he examines a cartoon in which a plumber has water squirting out his ear because he plugs a hole with his finger. Gruner (1997, 162) explains that the cartoon gives one a sense of winning and playful aggression because one considers the damaging effect the water would have on the plumber’s brain cells. Such contrived explanations indicate that Gruner is not actually able to account for innocuous humour, and hence Gruner’s Superiority Theory has counter-examples.

Besides innocuous humour, Gruner’s Superiority Theory also faces problems in self-deprecatory humour. If all amusement involves a sense of winning, then one should not be able to be amused at oneself, since ‘winning over’ is an irreflexive relation.⁴ But yet

⁴An irreflexive relation is a relation which cannot be held between an object and itself.

there are cases in which the amused subject and the object of amusement are one and the same. Noël Carroll (2014b, 11-12) gives the following example:

We often laugh at ourselves precisely at the moment when we find that we are in the process of doing something foolish, such as putting sugar instead of parmesan cheese on our spaghetti when we are tired. In that case, we are not laughing at some former self but at the guy with the spaghetti in his mouth.

Similarly, one is often amused when one's shortcomings are affectionately teased by friends or even when one puts oneself down for comic effect. Such self-deprecatory humour is a problem for Gruner because his theory rules it out as impossible. In his initial response to this problem, Gruner follows Hobbes (1999) and points out that his theory permits amusement towards some past versions of oneself. However, this does not solve the problem for when one is amused at one's present self, as in Carroll's spaghetti example.

To avoid these counter-examples, Gruner (1997) proposes a distinction between different parts of oneself. For example, when one is lazy, one can be amused at the part of oneself that is energetic, and when one is energetic, one can be amused at the part of oneself that is lazy. However, this distinction is problematic. Presumably, Gruner intends for the amusement ascribed to partial identities to be full and not partial amusement, otherwise he would not be avoiding the counter-examples. So then partial identities should be able to be amused at themselves. For example, the lazy part of oneself being amused at the lazy part of oneself. But this contradicts Gruner's Superiority Theory which prohibits the subject and object of amusement being one and the same thing. For Gruner to then propose a distinction between different parts of partial identities would be to enter an infinite regress. Thus, if Gruner is to avoid the problem of self-deprecatory humour without being ad hoc, then he must provide a credible account of what partial identities are and why they differ from whole identities in not being able to be amused at themselves.

In contrast, the problem of self-deprecatory humour does not arise for Scruton (1982) and Apter (1982) since they characterise amusement in terms of devaluation rather than superiority. This is because devaluation is not an irreflexive relation like superiority. It is not possible for one to feel superior to oneself, but it is perfectly possible for one to devalue oneself. As Scruton (1987, 169) observes, 'to lower the object is not necessarily to raise the subject; it might be to lower both together'. So self-deprecatory humour is not a problem for devaluation theories like Scruton's and Apter's. However, innocuous humour does remain a counter-example. For example, consider the following

What did the duck say when he bought lipstick? Put it on my bill.

In this joke, nothing is devalued: not the joke creator, nor the joke audience, nor the joke characters. Hence, devaluation theories still face counter-examples in innocuous humour.⁵

In this subsection, I have reviewed and critically analysed modern superiority theories. In the next subsection, I extract acceptable points that superiority theories highlight in order to inform my definition of the affective component of amusement.

5.1.3 Acceptable Points

Superiority theories may explain well some sources of amusement, such as mocking or derisive humour, but ultimately cannot explain other sources of amusement, such as innocuous and self-deprecatory humour. Because of these counter-examples, I do not accept Superiority Necessary, Superiority Sufficient, nor Gruner's Superiority Theory to inform my definition of the affective component of amusement. However, there are some acceptable points that superiority theories highlight which can be used to inform my definition. First, although not all amusement involves superiority, some amusement does involve superiority. For example, in *The Simpsons* episode *Bart vs. Thanksgiving* (Silverman 1990), Homer picks up the telephone and exclaims 'Hello? Operator, give me the number for 911!' Here Homer's stupidity causes one to experience both amusement and sudden feelings of superiority. Hence my definition of the affective component of amusement must be at least compatible with feelings of superiority. The first acceptable point highlighted by superiority theories is then as follows:

Superiority Compatibility: Amusement is compatible with feelings of superiority.

Superiority theories also highlight the relationship between amusement and aggressive content. Gruner (1997, 110) proposes that 'usually, everything else being equal, the more hostile the humor, the funnier'. Indeed, a positive correlation between aggression and amusement has been found in various experiments. For example, Clark McCauley et al. (1983) showed participants a series of cartoons and asked them to rate each on a scale of aggressiveness and amusingness. The median ratings of aggressiveness and amusingness showed significant positive correlation across participants from different age, social and

⁵Robert Wyer and James Collins (1992, 667) broaden Apter's devaluation theory to be applied not just to the content of information but also to the information itself. For example, in shaggy dog stories, it is not the content of the information that is devalued, but rather the information itself, since the story appears to be leading to a conclusion but in reality there is none. This allows Wyer and Collins to accommodate a wider range of humour, but it still does not solve the problem of innocuous humour, since even the information itself is not devalued in the above joke.

economic groups. Similarly, Jeffery Mio and Arthur Graesser (1991) conducted an experiment in which participants rated the amusingness of a series of metaphors, some of which were disparaging and some of which were complimentary. Consistent with McCauley et al., Mio and Graesser found that the disparaging metaphors received higher amusingness ratings than the complimentary ones. These experiments were taken to suggest that amusement is linearly related to aggressive content.⁶

However, further experiments suggest that the relationship between amusement and aggressive content is non-linear. Specifically, that the relationship can be graphically represented with an inverted-U. For example, Dolf Zillmann et al. (1974) showed participants a series of cartoons which directed varying degrees of aggression towards political figures. They found that cartoons with a moderate degree of aggression received higher amusingness ratings than cartoons with a low or high degree of aggression. Likewise, Zillmann and Jennings Bryant (1974) conducted an experiment in which participants witnessed an aggressor receiving a humorous retaliation. Consistent with Zillmann et al., Zillmann and Bryant found that participant amusingness ratings were highest when the retaliation was moderate as opposed to low or high. Indeed, that amusement and aggressive content have an inverted-U relationship rather than a linear one certainly seems intuitive. Often one's amusement drops off sharply when humour 'crosses the line' and becomes too aggressive, offensive or nasty.⁷ The second acceptable point highlighted by superiority theories is then as follows:

Aggression Inverted-U: Amusement has an inverted-U relationship with aggressive content.

Superiority theories also highlight the relationship between amusement and dispositions. Zillman and Joanne Cantor (1976) analyse disparagement humour as involving an attacker, a victim and an audience, where all three labels could refer to groups as well as individuals. Zillman and Cantor (1976, 100-101) further propose that the degree of amusement elicited from the audience is determined by their dispositions towards the victim and the attacker: '[amusement] varies inversely with the favorableness of the disposition toward the agent or entity being disparaged, and varies directly with the favorableness of

⁶Two variables are linearly related when their relationship can be graphically represented with a straight line.

⁷Here and throughout this thesis, I use the phrase 'crosses the line' to refer to when something goes outside the bounds of acceptable behaviour. I often use 'crosses the line' in inverted commas as opposed to 'going outside the bounds of acceptable behaviour' since 'crosses the line' more concisely and intuitively conveys the situation.

the disposition toward the agent or entity disparaging it.’ This proposal certainly seems intuitive. After all, it is undeniable that one responds differently to disparagement humour depending on whether it is directed at a friend or directed at an enemy.

To support their proposal, Zillmann and Cantor (1972) conducted an experiment in which students and professionals were shown jokes involving either a superior disparaging a subordinate or a subordinate disparaging a superior. The students were assumed to hold more favorable dispositions towards the subordinates whilst the professionals were assumed to hold more favorable dispositions towards the superiors. Given this assumption, the results supported Zillmann and Cantor’s proposal: students rated most amusing those jokes that involved a subordinate disparaging a superior, whilst professionals rated most amusing those jokes that involved a superior disparaging a subordinate. Similarly, Paul McGhee and Sally Lloyd (1981) and McGhee and Nelda Duffey (1983) each conducted experiments which found that children expressed more amusement when disparagement humour is directed at an adult rather than a child. The third acceptable point highlighted by superiority theories is then as follows:

Dispositions Affect: Amusement is affected by dispositions.

In this subsection, I have extracted acceptable points that superiority theories highlight in order to inform my definition of the affective component of amusement. In the next section, I critically analyse release theories.

5.2 Release Theories

In chapter 2, I uncritically reviewed early release theories to extract the following conditional claim:

Early Release Theory: If x amuses y , then x causes y to release accumulated mental energy.

In subsection 5.2.1, I critically analyse Early Release Theory. In subsection 5.2.2, I review and critically analyse modern release theories. In subsection 5.2.3, I extract acceptable points that release theories highlight in order to inform my definition of the affective component of amusement.

5.2.1 Early Release Theory

Counter-examples to Early Release Theory are cases of amusement without the release of accumulated mental energy. For example, consider the following placid humour from P.G.

Wodehouse (2008, 9):

I could see that, if not actually disgruntled, he was far from being grunted.

Even though energy may be expended when experiencing amusement at such placid humour, there is neither the accumulation of mental energy nor the release of mental energy. Indeed, Freud (2014, 136) may have been conceding the counter-example of placid humour when he suggested that amusement at some jokes may purely derive from the cognitive ‘joke-work’ and not from any affective elements. Other counter-examples of amusement without release include unexpectedly stumbling upon something amusing, such as a short fat man next to a tall skinny man or a cloud formation that resembles the Pope.

In defence of Early Release Theory, it may be argued that even placid humour involves the release of some small amount of mental energy. However, explanations of how exactly this mental energy is released would inevitably become contrived. For example, it would be contrived to explain that when one is amused by Wodehouse’s lines above, one releases mental energy that was accumulated before reading them. Perhaps then it may be argued that Wodehouse’s wordplay presents one with an incongruity and the resolution of this incongruity involves the release of some small amount of mental energy. However, although it is clear that mental energy is expended in resolving an incongruity, it is not at all clear that this constitutes a release of mental energy. This point leads onto the fundamental problem with Early Release Theory.

The fundamental problem with Early Release Theory is that the claim that mental energy can be accumulated and released is based on an outdated theory of mind. This hydraulic theory of mind postulates mental energy that behaves like steam which requires release when it accumulates pressure. From the perspective of contemporary theories of mind, such postulations are at best metaphorical. There is little scientific support for the claim that there is such a thing as mental energy, much less that it can be accumulated and released. Even on a charitable interpretation, the exact metaphysical status of ‘mental energy’ is dubious. It is clear that laughing involves expending energy throughout many muscle groups and areas of the nervous system. But it is not clear that laughing or amusement involves the release of accumulated mental energy.

In defence of Early Release Theory, it may be argued that its postulations are not literal but rather metaphorical. Ludwig Wittgenstein (1966, 44) makes a similar point when he claims that Freud’s theory of mind should abandon its scientific pretensions rather than embrace them. According to Wittgenstein, although Freud is attempting to provide a literal theory of mind, he is actually providing a metaphorical one. So the

criteria against which one should assess Freud's theory is not whether it is scientifically accurate but whether it is phenomenologically accurate. Similarly, it may be argued that it does not matter that Early Release Theory is based on an outdated theory of mind, as long as it is accurate with regard to the phenomenology of amusement. However, given the scientific aim of my thesis, this line of defence is equivalent to conceding defeat. In addressing Metaphysical Question 1, I aim to provide a literal definition of amusement, not a metaphorical one. Thus, to claim that Early Release Theory is metaphorical rather than literal amounts to conceding that it is unacceptable.

In summary, Early Release Theory is unacceptable because it has counter-examples and is based on an outdated theory of mind. In order to avoid this problem, modern release theories have focussed on psychological and physiological arousal as a basic variable instead of mental energy. In the next subsection, I review and critically analyse these modern release theories.

5.2.2 Modern Release Theories

Daniel Berlyne's (1960, 1969, 1972) modern release theory claims that one's degree of amusement is a function of one's degree of psychological and physiological arousal. In specifying the exact relationship between amusement and arousal, Berlyne followed the 'optimal arousal theory' of Donald Hebb (1959). Hebb conducted experiments in which participants in sensory deprivation experienced low arousal as unpleasant boredom. These results contradicted the then accepted 'minimal arousal theory' that low arousal is always more pleasant than high arousal because high arousal is experienced as anxiety and low arousal is experienced as relaxation. As a result, Hebb proposed his optimal arousal theory that arousal has an inverted-U relationship with pleasantness. According to this theory, moderate arousal is more pleasant than low arousal or high arousal, so there is an optimal degree of arousal at which pleasantness is highest and to increase or decrease arousal would result in a decrease in pleasantness.

Following Hebb's (1959) optimal arousal theory, Berlyne (1960) proposed that amusement has an inverted-U relationship with arousal. This means that the highest degree of amusement is associated with an optimal degree of arousal and lower degrees of amusement are associated with higher or lower degrees of arousal. Berlyne proposed two mechanisms that governed the degree of arousal during a joke: the arousal-boost mechanism and the arousal-jag mechanism. The arousal-boost mechanism operates during the set-up of the joke and increases the degree of arousal from low to optimal. When the degree of arousal

then increases from optimal to high, the degree of arousal becomes less pleasant and the arousal-jag mechanism takes over from the arousal-boost mechanism. The arousal-jag mechanism operates during the punch-line of the joke and decreases the degree of arousal from high to optimal. This release and return to optimal arousal results in an increase in pleasantness which is experienced as amusement.

The central claim of Berlyne's release theory can be characterised as follows:

Berlyne's Release Theory: Amusement has an inverted-U relationship with arousal.

To examine Berlyne's Release Theory, Michael Godkewitsch (1976) conducted experiments in which the heart rate and skin conductance (sweating) of participants was measured during the set-up and punch-line of a series of jokes. The results showed that the jokes which participants gave the highest amusingness ratings were associated with higher increases of heart rate during the punch-line and with higher increases of skin conductance during both the punch-line and the set-up. Taking heart rate and skin conductance as a measure of arousal, Godkewitsch's results were taken to support Berlyne's arousal-boost mechanism but not his arousal-jag mechanism. Rather than the punch-line decreasing the degree of arousal to optimal, as per Berlyne's Release Theory, Godkewitsch's results indicated that the punch-line increased the degree of arousal beyond that reached in the set-up.

Godkewitsch's (1976) results were repeated in other experiments in which participants were shown humour whilst measuring physiological variables associated with arousal. James Averill (1969) measured the heart rate and skin conductance of participants watching comedy films and found both to be positively correlated with amusement. Similarly, Hy Day and Ronald Langevin (1972) showed participants cartoons whilst measuring their heart rate and skin conductance and found both to be positively correlated with participant amusingness ratings. Likewise, Nicole Giuliani, Kateri McRae and James Gross (2008) found that participants had an increased respiration and heart rate when watching comedy films rather than neutral films. In general, experimental research shows no support for Berlyne's Release Theory, but rather shows support for a linear relationship between amusement and arousal.

Other experiments also showed support for a linear relationship between amusement and arousal. For example, Stanley Schachter and Ladd Wheeler (1962) conducted an experiment in which they injected participants either with an arousal-increasing drug (epinephrine), or an arousal-decreasing drug (chlorpromazine), or a placebo (saline). Participants were then shown a slapstick comedy film whilst having their amusement measured

and providing amusingness ratings. The results showed that arousal-increased participants expressed the highest degree of amusement and provided the highest amusingness ratings compared to the placebo participants, who in turn expressed a higher degree of amusement and provided higher amusingness ratings compared to the arousal-decreased participants. These results were taken to show that amusement increased linearly with arousal, even when arousal was increased by a drug.

In this subsection, I have reviewed and critically analysed modern release theories. In the next subsection, I extract acceptable points that release theories highlight in order to inform my definition of the affective component of amusement.

5.2.3 Acceptable Points

Given the problems release theories face explaining placid humour and an outdated theory of mind, I do not accept Early Release Theory nor Berlyne's Release Theory to inform my definition of the affective component of amusement. However, there are some acceptable points that release theories highlight which can be used to inform my definition. First, early release theories highlight the relationship between amusement and sexual content. One hypothesis Paul Kline (1977) derived from Freud's release theory was that subjects who repress their sexual impulses will be more amused by humour with sexual content. However, experiments testing this hypothesis revealed that sexual humour was most amusing to participants that expressed sexual impulses rather than those who repressed them. For example, Willibald Ruch and Franz-Josef Hehl (1988) had participants rate the amusingness of sexual jokes and cartoons, then compared these ratings to the participants' reported sexual experience, dispositions towards sex and sexual libido. For both male and female participants, the results showed that participants who expressed their sexual impulses were more likely to rate sexual humour as more amusing. This contradicts Kline's hypothesis but also highlights the relationship between amusement towards sexual humour and dispositions towards sex.

Ruch and colleagues (Hehl and Ruch 1985; Ruch 1988; Ruch, McGhee and Hehl 1990) have examined this relationship using factor analysis. In short, factor analysis is a statistical method for describing the variance among a large number of correlated variables in terms of a smaller number of variables, called factors. Ruch's approach was to obtain a large number of humour samples, such as jokes and cartoons, then have a large number of participants provide amusingness ratings. These ratings were then factor analysed such that humour samples that have correlated ratings fall into the same factor, whilst

humour samples that have uncorrelated ratings fall into different factors. By examining the common characteristics of the humour samples that fall into each factor, Ruch could then identify the characteristics that determine amusingness ratings.

To ensure that his factor analyses were representative, Ruch (1992) obtained 600 jokes and cartoons from a diverse range of sources (e.g. magazines, joke books, humour research) and presented them to a large number of participants from a diverse range of backgrounds (e.g. age, social class, nationality). Through factor analysis, Ruch and colleagues identified three factors under which humour samples with correlated amusingness ratings consistently fell: 'incongruity-resolution', 'nonsense' and 'sex'. Humour samples falling under the 'incongruity-resolution' factor introduced an incongruity which could be resolved, whereas humour samples falling under the 'nonsense' factor introduced an incongruity which could not be resolved. Humour samples falling under the 'sex' factor contained sexual content, indicating that participants were consistent in their high or low amusingness ratings of sexual humour.⁸ This indicates that amusement towards sexual humour is affected by dispositions towards sex. The first acceptable point highlighted by release theories is then as follows:

Sexual Dispositions: Amusement towards sexual humour is affected by dispositions towards sex.

Release theories also highlight the relationship between amusement and arousal. The experiments which contradict Berlyne's Release Theory also suggest that amusement is linearly related to arousal. Indeed, further experiments have shown support for the claim that an increase in arousal always increases amusement, regardless of how the arousal is generated. For instance, Arthur Shurcliff (1968) elicited different levels of anxiety in participants by informing them that they were required to either hold a docile rat (low anxiety), use a small syringe to extract blood from a normal rat (moderate anxiety), or use a large syringe to extract blood from a hostile rat (high anxiety). However, when participants opened the cage to remove the rat, they discovered that it was a plastic toy. Afterwards, they rated the experiment for degrees of anxiety and amusingness. The results showed a strong positive correlation between anxiety ratings before discovering the rat was a toy and amusingness ratings after the discovery. Likewise, Thomas Kuhlman (1985) found that participants rated jokes as more amusing when they were in the middle of an exam, as compared to just before taking an exam or in a normal classroom setting.

⁸The occurrence of a 'sex' factor has also been found in earlier, though less representative, factor analyses (Eysenck 1942; Herzog and Larwin 1988).

These results were taken to support the claim that an increase in arousal, even from anxiety, will serve to increase amusement.

In another experiment, Cantor, Bryant, and Zillmann (1974) examined whether an increase in arousal from other strong emotions can serve to increase amusement. They assigned each participant to one of four groups: low arousal by negative content, low arousal by positive content, high arousal by negative content or high arousal by positive content. For low arousal by negative content participants read a newspaper article reporting countryside pollution, for low arousal by positive content they read a newspaper article reporting countryside flourishing, for high arousal by negative content they read a novel extract describing a torture scene, and for high arousal by positive content they read a novel extract describing an erotic scene. Each participant subsequently rated the amusingness of the same series of jokes and cartoons that did not contain any aggressive or sexual content. The results showed that the high arousal participants rated the amusingness of the jokes and cartoons much higher than the low arousal participants, regardless of whether arousal was increased by positive or negative content. This was also taken to support the claim that arousal always increases amusement, regardless of how arousal is generated. The second acceptable point highlighted by release theories is then as follows:

Arousal Linear: Amusement has a linear relationship with arousal.

In this subsection, I have extracted acceptable points that release theories highlight in order to inform my definition of the affective component of amusement. In the next section, I critically analyse play theories.

5.3 Play Theory

In chapter 2, I uncritically reviewed early play theories to extract the following conditional claim:

Early Play Theory: If x amuses y , then y is in a state of play.

In subsection 5.3.1, I critically analyse Early Play Theory. In subsection 5.3.2, I review and critically analyse modern play theories. In subsection 5.3.3, I extract acceptable points that play theories highlight in order to inform my definition of the affective component of amusement.

5.3.1 Early Play Theory

Early Play Theory seems intuitive. After all, amusement almost always seems to occur during periods of playful relaxation. Play theorists often support this observation with an ethological explanation. For example, Brian Boyd (2004) argues that amusement consists in the triggering of one's startle reflex whilst in a context of play. Likewise, Matthew Gervais and David Wilson (2005) characterise amusement as evolving from social play between primates during brief periods of safety and satiation. This ethological approach can be traced back to Charles Darwin (1871), who was the first to observe that chimpanzees and orangutans emit a form of laughter during playful activities such as tickling, chasing or wrestling. More recently, Jan van Hooff (1972), Signe Preuschoft and van Hooff (1997) and van Hooff and Preuschoft (2003) made similar observations of other apes, including baboons, bonobos and gorillas.⁹ Van Hooff and Preuschoft (2003, 267) describe the 'relaxed open-mouthed expression' which occurs during playful aggression, whereas during real aggression the mouth is tensed and prepared to bite.

From observations that ape laughter mostly occurs during play, play theorists argue that it must function as a social indicator that prevents playful activity from being mistaken for serious activity. Robbins Burling (1993) conjectures that ape laughter is a pre-verbal 'gesture-call' which has evolutionary origins predating verbal communication. So, as van Hooff (1972) and Gervais and Wilson (2005) suggest, although ape laughter differs audibly from human laughter, there is evidence to indicate that human and ape laughter share the same evolutionary origin and so serve the same social functions. Thus, human laughter must also function as a play signal and thereby, as per Early Play Theory, play is necessary for laughter and amusement.

This ethological approach has a couple of explanatory advantages. First, it explains the association between amusement as a mental state and laughter as a bodily state. If laughter was a less distinctive bodily state or even just a mental state, then it could not serve its evolutionary function as a social indicator. Second, the ethological approach explains why laughter is an inextricably social phenomenon. Henri Bergson (2008, 6) thought society to be the 'natural environment' of laughter. Similarly, Robert Provine and Kenneth Fischer (1989) estimated that people are up to 30 times more likely to laugh when in a group. Provine (2000) further suggests that the function of laughter is not only to communicate that oneself is in a play state, but also to induce a play state in

⁹Jaak Panksepp and Jeff Burgdorf (2000; 2003) have shown that even rats emit ultrasonic vocalizations during tickling which are neurally and functionally analogous to primitive human laughter.

others. If laughter evolved as a social indicator, then that would explain why it occurs more frequently in social situations.

However, despite its advantages, the ethological approach does have flaws. First, that ape laughter mostly occurs during play does not *necessarily* mean it functions as a play signal or even an expression of play. Second, even assuming that human and ape laughter share the same evolutionary origins, that does not necessarily mean that they also serve the same social functions. Human's degree of self-consciousness relative to apes could mean that human laughter has lost or adapted its prior social function. Third, even if being in a play state is a necessary condition for laughter, that does not necessarily mean that it is also a necessary condition for amusement. Laughter and amusement may be associated but they are conceptually distinct. Hence, the ethological approach does have flaws. However, despite these flaws, it still provides some support to Early Play Theory.

Against Early Play Theory, Carroll (2014b, 43) raises the following counter-example of amusement without play:

How are we to define [play]? One temptation is to stipulate that play is disengaged from life - that it is not serious. But if that is what is meant by *play* then humour is not necessarily play, ... since some (much) humour, like satire, is engaged and serious.

Carroll argues that if one defines 'play' as 'disengaged from life' or 'not serious', then Early Play Theory has counter-examples because satire is a form of humour that is both engaged and serious. Hence, Carroll says, either one requires a better definition of 'play' or Early Play Theory is unacceptable. However, I argue contra Carroll that, although satire can be both amusing and seriously engaging, it cannot be simultaneously amusing and seriously engaging.

I concede to Carroll that being in a play state precludes serious engagement, but I also contend that one is never simultaneously amused and seriously engaged. Although satire can be amusing to one person at one time and seriously engaging to another person at another time, it cannot be amusing and seriously engaging to the same person at the same time. To show this, I first clarify that to 'seriously engage' with satire is to change one's attitudes towards something.¹⁰ Consider then Stanley Kubrick's (1964) *Dr. Strangelove or: How I Learned to Stop Worrying and Love the Bomb* which satirises the use of nuclear

¹⁰Exactly how this is achieved is not important, but it is a common proposal that an artwork encourages one to adopt an attitude whilst engaging with it and thereby also to adopt the same attitude after engaging with it (Young 2001, Graham 2005).

deterrents in international politics. Whilst watching the film, people who agreed with the presented view of nuclear deterrents would not change their attitudes and so would not be seriously engaged. Hence, amused or not, these people would not be simultaneously amused and seriously engaged.

Conversely, people who disagreed with the presented view may be seriously engaged but they would not be amused. If they did not change their attitudes, then they would not be amused because the film presents attitudes which conflict with their own. But if they did change their attitudes, then they still would not be amused because they would instead be embarrassed by their folly or astounded by their discovery. Over time, this embarrassment or astonishment may fade, and they may become able to be amused by the film. But the embarrassment or astonishment must come first, and the stronger their commitment to their attitudes the longer this process will take.¹¹ Hence, these people too would not be simultaneously amused and seriously engaged.

So Carroll is right when he claims that satire can be both amusing and seriously engaging, because satire can amuse one person whilst seriously engaging another. But this does not mean that satire is a counter-example to Early Play Theory, because satire cannot amuse and seriously engage the same person at the same time. Hence, Carroll's counter-example is unsuccessful. However, it does highlight Carroll's (2014b, 43) point that 'in order for some version of the play theory of comic amusement to succeed we would need a better idea of what kind of play is germane to humour'. Currently, the concept of play in Early Play Theory is rather vague. If Early Play Theory is to be acceptable, then the concept of play, like the concept of incongruity, must be made more precise in order to accurately capture the affective component of amusement. In the next subsection, I uncritically review modern play theories which aim to do exactly that.¹²

5.3.2 Modern Play Theories

In support of Early Play Theory, John Morreall (2009, 34) points out that when one jokes about a topic, one does not use different vocabulary or grammar to when one discusses the same topic. Rather, one uses the same vocabulary and grammar, but uses it in a playful way. Victor Raskin (1985) calls this playful way the 'non-bona-fide' mode of communic-

¹¹For example, consider watching a play which satirises the belief that altruism is praiseworthy. If one holds this belief and the play changes one's attitudes, then one would be embarrassed or astounded and may eventually become amused, but at the exact moment one changes one's attitudes and seriously engages with the play, one would not be amused.

¹²Note that the extracted claims from modern play theories will be critically analysed in chapter 6.

ation. Raskin (1985, 100-101) contrasts the non-bona-fide mode of communication with ‘the earnest, serious, information-conveying mode of verbal communication’. In particular, Raskin (1985, 103) notes that the non-bona-fide mode of communication uses a cooperative principle that is distinct from the cooperative principle used in regular conversation, as given by Paul Grice (1975).

According to Grice (1975, 46), the cooperative principle used in regular conversation specifies that the speaker is committed to the truth and relevance of their speech and, by assuming this commitment, the hearer is able to understand the speaker’s speech. However, according to Raskin (1985, 103), the cooperative principle used in non-bona-fide communication does not specify that the speaker is committed to the truth and relevance of their speech. Rather, it specifies that the speaker has the intention to elicit amusement and, by assuming this intention, the hearer is able to understand the speaker’s speech. For example, if one hears a joke about a Martian, then one does not assume the speaker to be committed to saying something true, nor something relevant. Rather, one assumes that the speaker is saying something in order to be amusing. In support of Early Play Theory, Raskin claims that all joking takes place against this assumption of non-bona-fide communication, where speakers are not committed to truth or relevance but rather are committed to eliciting amusement.

Michael Apter (1982, 2001) gives a modern play theory which more precisely defines the play state as the ‘paratelic state’. According to Apter (2001, 6), all subjective experience is structured such that one is always aware of achieving some end and aware of the means for achieving that end. There are two mutually exclusive and jointly exhaustive ways of experiencing this means-end structuring. The first way is so that the end is of primary concern and the means is of secondary concern. For example, when one plays snooker in order to win a bet. The second, opposite, way of experiencing means-end structuring is so that the means is of primary concern and the end is of secondary concern. For example, when one plays snooker for sheer enjoyment. This is not to say that the end has no value, but rather that the value of the end is derived from the value of the means. For example, when placing a bet on one’s snooker game enhances one’s enjoyment of the game.

Informally, these two ways of experiencing means-end structuring could be referred to as ‘serious’ and ‘playful’. However, the everyday usage of these terms sometimes comes apart from the distinction that Apter (1982) wants to make, so he introduces the specialised terminology ‘telic’ (from the Greek *telos* meaning end) and ‘paratelic’ (from the Greek *para* meaning alongside).¹³ Apter (2001, 40) offers the following summary of the

¹³‘Telic’ and ‘paratelic’ come apart from ‘serious’ and ‘playful’ because it is possible to be in a serious

telic and paratelic dichotomy:

The telic-paratelic pair deals with the experience of goals-and-means. In the telic state, the goal is of overriding importance, with the means being chosen in the attempt to achieve the goal. In the paratelic state, the ongoing behavior and experience are of paramount importance, with any goals being seen as ways of facilitating or enhancing the behavior or experience.

Apter (1982) gives an example in which two drivers are speeding down a motorway, one doing so because they have to reach a particular destination by a particular time whilst the other simply because they enjoy doing so. Apter (1982, 6-7) points out that ‘the behavior of the two drivers may be identical, but the feelings and meanings associated with the behavior are entirely different’.

The paratelic state is then primarily defined as a non-goal-directed state.¹⁴ But, according to Apter, this also means that the paratelic state is a non-threatened state. Apter (2001, 27) argues that, if one feels threatened, then one inevitably becomes directed towards reducing that threat and thereby switches into a goal-directed state. So an inevitable consequence of a non-goal-directed state is a non-threatened state. As a result, when in the paratelic state, one will ‘create a small and manageable private world ... into which the outside world of real problems cannot properly impinge’ (Apter 1991, 14) and ‘experience the world through a “protective frame,” feeling safe from danger or serious consequences’ (Apter and Desselles 2014, 641).

Like Berlyne’s Release Theory, Apter’s play theory focusses on psychological and physiological arousal as a basic variable. But the key difference is that Apter proposes that arousal is experienced differently in the telic and paratelic state. In the telic state, low arousal is experienced as relaxation and preferred to high arousal, which is experienced as anxiety. In the paratelic state, high arousal is experienced as excitement and preferred to low arousal, which is experienced as boredom. This is why some people enjoy arousal-increasing activities which can also elicit anxiety. For example, the risks of hang-gliding or the frights of horror films would elicit anxiety if in the telic state, but people enjoy these activities as exciting by remaining in the paratelic state whilst doing them.

paratelic state (such as when a board game enthusiast meticulously engages with complicated rules), and it is possible to be in a playful telic state (such as when a professional footballer plays a game with their career in mind).

¹⁴This point is supported by Scruton’s (1982, 211) observation that amusement is ‘not a motive to action (it does not regard its object as the focus of any project or desire)’.

According to Apter (1982), amusement occurs in the paratelic state such that increasing the degree of arousal increases the degree of amusement. This is why arousal-increasing content, such as aggressive or sexual content, serves to increase amusement. Apter even suggests that arousal-increasing content which is disgusting or perilous serves to increase amusement, provided that one remains in the paratelic state. As Apter and Mitzi Desselles (2014, 641) explain:

The trick of humor is to remain within the protective frame when presented with arousing material. The higher the arousal is under these conditions, the funnier the situation will seem to be - hence, the frequent use of sexual, violent, racist, religious, personal, and other arousing content. Such content must not, however, destroy the protective frame.

So, whereas Berlyne's Release Theory proposed an inverted-U relationship between amusement and arousal, Apter's play theory proposes a linear relationship when in the paratelic state. As seen when critically analysing Berlyne's Release Theory, all experimental evidence supports Arousal Linear (Averill 1969; Day and Langevin 1972; Godkewitsch 1976; Giuliani, McRae and Gross 2008). Hence, Apter's play theory successfully captures the relationship between arousal and amusement.

Two central claims of Apter's play theory can be characterised as follows:

Paratelic Necessary: If x amuses y , then x initiates or maintains y being in the paratelic state.¹⁵

Arousal Necessary: If x amuses y , then increasing the arousal of y increases the amusement of y .

Note that these two claims are not the only central claims of Apter's play theory. As seen in chapter 3, another of Apter's (1982, 136) central claims is that amusement involves 'situations in which contradictory meanings coexist', called cognitive synergies. However, this is a claim related to the cognitive component of amusement. With regard to the affective component of amusement, Paratelic Necessary and Arousal Necessary are Apter's central claims. Hence, these are the only two claims outlined in this chapter. In chapter 6, I critically analyse Paratelic Necessary and Arousal Necessary.

¹⁵In Paratelic Necessary, I incorporate the claim that y 's paratelic state is either initiated or maintained by x . This is to highlight that the paratelic state is often induced by external cues introducing humour, such as 'have you heard the one about ...'. Sven Svebak and Apter (1987) found that introducing a comedy film would likely induce the paratelic state, even in experimental participants who were more frequently in the telic state.

In this subsection, I have reviewed modern play theories and extracted two central points. In the next subsection, I demonstrate how these two central points capture the acceptable points extracted from superiority and release theories.

5.3.3 Acceptable Points

In section 5.1, I extracted Superiority Compatibility, Aggression Inverted-U and Dispositions Affect as acceptable points highlighted by superiority theories. Paratelic Necessary and Arousal Necessary capture these three points. For Superiority Compatibility, both Paratelic Necessary and Arousal Necessary allow amusement to be compatible with feelings of superiority. Moreover, according to Arousal Necessary, if feelings of superiority increase arousal, then this increases amusement. For example, if amusement at a joke relying on sophisticated knowledge gives one feelings of superiority, then those feelings of superiority increase arousal and thereby increase amusement. As seen in chapter 3, experiments conducted by Douglas Kenny (1955) and Howard Pollio and Rodney Mers (1974) found a positive correlation between the predictability rating of jokes and participant amusement ratings. This led Pollio and Mers (1974, 232) to conclude that ‘laughter is a partial exclamation of achievement rather than an expression of surprise over incongruity’. Hence, there is experimental support for the claim that feelings of superiority can increase amusement via increasing arousal.

For Aggression Inverted-U, Paratelic Necessary and Arousal Necessary jointly capture the inverted-U relationship between amusement and aggressive content. Low to moderate aggressive content increases arousal and thereby increases amusement, but high aggressive content breaches a threshold and becomes threatening. A non-threatened state is an inevitable consequence of the paratelic state. So, when one feels threatened by high aggressive content, one inevitably switches into a goal-directed, telic state in which the high arousal is experienced as unpleasant anxiety. This explanation certainly agrees with cases of insult comedy which start off amusing, then ‘cross the line’ and become unamusing as a result.

For Dispositions Affect, Paratelic Necessary and Arousal Necessary jointly capture how amusement is affected by dispositions. As per Arousal Necessary, one’s dispositions affect amusement because they determine what one finds arousal-increasing, and thereby amusement-increasing in the paratelic state. But, as per Paratelic Necessary, one’s dispositions also determine what one finds threatening, and thereby amusement-decreasing in the telic state. For example, in disparagement humour, if one has an unfavorable disposi-

tion towards the victim, then one would remain in the paratelic state and the aggressive content would increase amusement via increasing arousal. Alternatively, if one has a favorable disposition towards the victim, then one would switch to the telic state and the aggressive content would decrease amusement via increasing arousal. In particular, this may explain why women are less amused by sexist jokes, since they are more likely to be the victims of sexism.

In section 5.2, I extracted Sexual Dispositions and Arousal Linear as acceptable points highlighted by release theories. Paratelic Necessary and Arousal Necessary also capture these two points. For Arousal Linear, Arousal Necessary captures how amusement has a linear relationship with arousal because, in the paratelic state, increased arousal is experienced as increased amusement. For Sexual Dispositions, Paratelic Necessary and Arousal Necessary jointly capture how amusement towards sexual humour is affected by dispositions towards sex. This is because if one has favorable dispositions towards sex, then one would remain in the paratelic state and the sexual content would increase amusement via increasing arousal. Alternatively, if one has unfavorable dispositions towards sex, then one would switch to the telic state and the sexual content would decrease amusement via increasing arousal.

In this subsection, I have demonstrated how Paratelic Necessary and Arousal Necessary capture the acceptable points extracted from superiority and release theories. Hence, if Paratelic Necessary and Arousal Necessary are acceptable, then they are all I need to inform my definition of the affective component of amusement. In the next section, I summarise the key findings of this chapter.

5.4 Chapter Summary

In this chapter, I have started to define the affective component of amusement by critically analysing superiority, release and play theories of amusement. In section 5.1, I critically analysed and rejected the following:

Superiority Necessary: If x amuses y , then x causes y to experience sudden feelings of superiority.

Superiority Sufficient: If x causes y to experience sudden feelings of superiority, then x amuses y .

Gruner's Superiority Theory: If x amuses y , then x causes y to suddenly experience a playful sense of winning.

In section 5.1, I also extracted the following acceptable points that superiority theories highlight:

Superiority Compatibility: Amusement is compatible with feelings of superiority.

Aggression Inverted-U: Amusement has an inverted-U relationship with aggressive content.

Dispositions Affect: Amusement is affected by dispositions.

In section 5.2, I critically analysed and rejected the following:

Early Release Theory: If x amuses y , then x causes y to release accumulated mental energy.

Berlyne's Release Theory: Amusement has an inverted-U relationship with arousal.

In section 5.2, I also extracted the following acceptable points that release theories highlight:

Sexual Dispositions: Amusement towards sexual humour is affected by dispositions towards sex.

Arousal Linear: Amusement has a linear relationship with arousal.

In section 5.3, I decided to make more precise the concept of play after critically analysing the following:

Early Play Theory: If x amuses y , then y is in a state of play.

In section 5.3, I also extracted the following points that play theories highlight:

Paratelic Necessary: If x amuses y , then x initiates or maintains y being in the paratelic state.

Arousal Necessary: If x amuses y , then increasing the arousal of y increases the amusement of y .

In chapter 6, I continue to define the affective component of amusement by critically analysing Paratelic Necessary and Arousal Necessary.

Chapter 6

The Affective Component of Amusement II

In this chapter, I continue to define the affective component of amusement. In section 6.1, I critically analyse Paratelic Necessary and Arousal Necessary to yield a definition of the affective component of amusement. In section 6.2, I propose how to combine my definitions of the cognitive and affective components of amusement. In section 6.3, I complete Theory of Amusement, Theory of Funniness and Theory of Humour.

6.1 The Affective Component of Amusement

In chapter 5, I extracted the following central points from play theories of amusement:

Paratelic Necessary: If x amuses y , then x initiates or maintains y being in the paratelic state.

Arousal Necessary: If x amuses y , then increasing the arousal of y increases the amusement of y .

The paratelic state is analysable into a non-goal-directed state and a non-threatened state. So Paratelic Necessary is analysable into the following:

Non-goal-directed Necessary: If x amuses y , then x initiates or maintains y being in a non-goal-directed state.

Non-threatened Necessary: If x amuses y , then x initiates or maintains y being in a non-threatened state.

Hence, I will critically analyse Paratelic Necessary by critically analysing Non-goal-directed Necessary and Non-threatened Necessary. In subsection 6.1.1, I critically analyse Non-

goal-directed Necessary. In subsection 6.1.2, I critically analyse Non-threatened Necessary. In subsection 6.1.3, I critically analyse Arousal Necessary. In subsection 6.1.4, I synthesise Paratelic Necessary and Arousal Necessary to yield a definition of the affective component of amusement.

6.1.1 Non-goal-directed Necessary

There are many examples of Non-goal-directed Necessary. Considering examples given earlier will help to demonstrate its wide scope. Recall Buster Keaton's slapstick gag in which he narrowly misses being squashed by a falling house-front because the window frame falls around him. Recall too the insult comedy of Don Rickles, who mocks his audience to their face. Recall too Lewis Carroll's nonsense poetry, like the poem *Jabberwocky* (Carroll 2009). Whether watching Keaton, listening to Rickles or reading Carroll one is not in a goal-directed state at the exact moment of amusement. One's attention is not directed towards anything besides the gag, comedy or poem and one's motivations for directing it thus are solely to do with amusement and not with any goal beyond one's immediate amusement. From slapstick to insults to nonsense, there are many examples of Non-goal-directed Necessary.

Counter-examples to Non-goal-directed Necessary would be cases of amusement in a goal-directed state. One potential counter-example is how people are often amused whilst playing a goal-directed game. For example, one may be amused with self-satisfied delight when one skillfully scores a goal in football or one plays an ingenious move in chess. It may be argued that in such cases, one is amused and in a goal-directed state. In response to these potential counter-examples, first it should be noted that whether the delighted self-satisfaction described does indeed constitute amusement is slightly controversial. However, even assuming that it does, these potential counter-examples can be avoided by pointing out that the amusement and goal-directed state do not occur simultaneously. Whilst one is skillfully scoring in football or ingeniously playing in chess, one is in a goal-directed state but is not yet amused. After one has scored the goal or played the move, one is amused but is no longer in a goal-directed state. Hence, in these potential counter-examples, one is goal-directed and amused successively but not goal-directed and amused simultaneously.

Another potential counter-example is when the passenger of a car amuses the driver whilst they remain directed towards the goal of driving the car. It may be argued that in such cases, the driver is amused and in a goal-directed state. However, note that if the driver was required to perform a demanding task like changing lanes or swerving

evasively, then they would not be able to perform it whilst amused. So if the driver directs themselves towards a *conscious* goal, then they would no longer be amused. This is because being directed towards unconscious goals, like inertial driving or respiratory breathing, is compatible with amusement, but being directed towards conscious goals is incompatible with amusement. This refinement of the paratelic state is intuitively acceptable because claiming that unconscious goals are incompatible with amusement would mean that one cannot be amused whilst doing things like breathing or blinking, which is clearly false. Hence, this case is not a counter-example to Non-goal-directed Necessary.

One final potential counter-example to Non-goal-directed Necessary is humour that requires cognitive effort. For example, consider the following mathematical joke:

What is the integral of $1/\text{cabin}$? Log cabin. Or houseboat, if you include the C.

This joke requires cognitive effort (and specialist knowledge) to work out that, since the integral of ' $1/x$ ' is ' $\log(x) + C$ ', the integral of ' $1/\text{cabin}$ ' is ' $\log(\text{cabin}) + C$ '. Such humour is a potential counter-example to Non-goal-directed Necessary because it may be argued that the cognitive effort required means that one is both amused and in a goal-directed state. To respond to these potential counter-examples, I use the distinctions raised by the previous two potential counter-examples between simultaneous and successive, and conscious and unconscious. In this case, one is not simultaneously amused and directed towards a conscious goal. This is because, depending on how conscious one's cognitive effort is, one is either successively directed towards a conscious goal and then amused, or simultaneously amused and directed towards an unconscious goal. The former case is akin to the football player in the first potential counter-example, whilst the second case is akin to the car driver in the second potential counter-example. Either way, humour that requires cognitive effort does not constitute a counter-example to Non-goal-directed Necessary.

In addition to having no standing counter-examples, Non-goal-directed Necessary has experimental support. Recall Göran Nerhardt's (1970, 1976) weight lifting experiments in which participants expressed amusement upon lifting an unexpectedly heavy or light weight. Nerhardt (1976) describes how he initially conducted the experiments at a train station under the pretence of a consumer survey which asked passengers to lift a series of suitcases. However, unlike the laboratory experiments, Nerhardt found that train passengers did not express amusement upon lifting an unexpectedly heavy or light suitcase. Non-goal-directed Necessary can explain these results as a consequence of the train pas-

sengers being less likely to be in a non-goal-directed state since it is likely that they would be arriving or departing under time constraints. In contrast, the laboratory participants were more likely to be in a non-goal-directed state since they were undergraduate students who were familiar with their setting and efforts were made to relax them.

Robert Wyer and James Collins (1992) had a similar finding in their experiment in which participants were asked either to read a series of stories in order to rate their amusingness, or to read the same stories normally. Afterwards all participants were asked to rate the amusingness of the stories. The results showed that the participants who read the stories with the goal of rating their amusingness actually rated the stories less amusing than those participants who read the stories normally. Non-goal-directed Necessary can explain these results on the basis that the participants who were given a goal were more likely to be in a goal-directed state, even though this goal was to provide amusingness ratings. In contrast, the participants who read the stories without a specific goal were more likely to be in a non-goal-directed state.

In summary, Non-goal-directed Necessary has no standing counter-examples and has experimental support, and thus is acceptable. In the next subsection, I critically analyse Non-threatened Necessary.

6.1.2 Non-threatened Necessary

Non-threatened Necessary is a commonly proposed claim across many disciplines. Evolutionary biologists, Matthew Gervais and David Wilson (2005, 414) state that proto-humour amongst primates, such as wrestling and tickling, would have ‘inherently indicated that a situation was safe and conducive to positive emotion and social play’. Likewise, neuroscientist Vilayanur Ramachandran (1998) proposed a ‘false-alarm’ theory in which amusement consists of a gradual build-up of expectation followed by a sudden violation, but only as long as the updated expectation is non-threatening. In their benign violation theory, behaviour scientists Peter McGraw and Caleb Warren (2014, 75-6) similarly specify that ‘for a violation to produce humor, it also needs to seem OK, safe, acceptable, or, in other words, benign’. Psychologist Mary Rothbart (1977) also states that in order for an incongruity to be amusing, it must be processed in a setting that is ‘safe’. Likewise, philosopher Noël Carroll (2014b, 29) proposes that ‘in order for comic amusement to obtain, the percipient must feel unthreatened by it’. Hence, Non-threatened Necessary is a commonly proposed claim across many disciplines.

The non-threatened state in Non-threatened Necessary is often extended beyond per-

sonal threat to include threat to others. Carroll (2014b, 30) gives the following example:

When someone is killed in a joke - as so many lawyers are - we are not treated to the gruesome details of their demise. Thus, when the lawyer in the outhouse in *Jurassic Park* is stomped to death by the T. Rex, the audience howls with glee. Had they been treated to a view of his broken body, accompanied by sobs of pain, their laughter probably would have been silenced.

In general, if a comedic character is depicted as suffering, then this suffering is rendered non-threatening in order to not impinge on Non-threatened Necessary. There are a number of ways in which this can occur. When one dislikes the comedic character, such as in Carroll's lawyer example, often the suffering is not dwelt upon or is represented as deserved. When one likes the comedic character, such as in cartoon violence or Harold Lloyd's (Newmeyer and Taylor 1923) *Safety Last!*, often they are depicted as a clown-figure who can withstand the suffering inflicted upon them. So, in general, there are a number of ways used to render suffering as non-threatening in order to not impinge on Non-threatened Necessary applied to others.

Considering examples given earlier will help to demonstrate the wide scope of Non-threatened Necessary. Recall Buster Keaton's house-front gag. Here, although there is an apparent threat to a comedic character one likes, this threat disappears when Keaton narrowly misses being squashed because the window frame falls around him. Recall too the insult comedy of Don Rickles. Here again, although there is an apparent threat to the audience, this threat disappears when one realises that Rickles does not sincerely mean what he says. Recall too Lewis Carroll's nonsense poetry. Here one has no reason to be in a threatened state because there is not any threat to begin with. From slapstick to insults to nonsense, there are many examples of Non-threatened Necessary.

Counter-examples to Non-threatened Necessary would be cases of amusement in a threatened state. One potential counter-example is black humour since, rather than not dwell upon suffering, black humour positively relishes it. For example, consider the following black joke:

An orphan is diagnosed with cancer. They ask, 'How much time do I have left, doctor?' 'Ten,' answers the doctor. 'Years or months?' '... Nine. Eight...'

Clearly, this joke depicts suffering but, rather than not dwell upon it, the joke positively relishes it. No reason is given to dislike the orphan so the suffering is not represented as deserved. Moreover, the orphan is not depicted as a clown-figure who can withstand the

suffering. Such jokes are then a potential counter-example to Non-threatened Necessary because it may be argued that black humour is both threatening and amusing.

However, I argue that this potential counter-example misunderstands the nature of black humour, which is based on a distinction between representation and reality. The suffering depicted in black humour serves to increase arousal and one is able to enjoy this arousal-increase as amusement only because one bears in mind that the suffering depicted is merely a representation and not reality. There are many people who would be amused by the above orphan joke but would, of course, be mortified if they encountered the depicted scene in reality. So, in black humour, all amusing suffering is represented suffering and it is because the suffering is represented as opposed to real that allows it to be rendered non-threatening.¹ Hence, black humour is not amusement in a threatened state because, in black humour, suffering is represented as opposed to real and is thereby not threatening.

Of course, when representations of suffering are particularly gratuitous, black humour can ‘cross the line’. But even these cases are not counter-examples to Non-threatened Necessary. This is because, once black humour ‘crosses the line’, it becomes threatening but is no longer amusing. Conversely, before black humour ‘crosses the line’, it is amusing but not threatening. Exactly where ‘the line’ lies will depend on the subject’s dispositions. But whatever the subject’s dispositions, once black humour ‘crosses the line’, they will switch to the telic state and go from experiencing high arousal as pleasant excitement to experiencing it as unpleasant anxiety. This explanation certainly agrees with cases of black humour which start off amusing, then ‘cross the line’ and become unamusing as a result. Thus, black humour is not a counter-example to Non-threatened Necessary after all.

In summary, Non-threatened Necessary is a commonly proposed claim across many disciplines and has no standing counter-examples, so it is acceptable. In the next subsection, I critically analyse Arousal Necessary.

6.1.3 Arousal Necessary

Arousal Necessary is not so much a necessary condition for amusement as a claim about the effects of arousal during amusement. This is indicated by the term ‘amusement’ itself appearing on the right-hand side of the conditional. Despite this, Arousal Necessary plays

¹Although the suffering in Carroll’s lawyer example is also represented and not real, in that case, the suffering is not dwelt upon because the audience are encouraged to suspend their disbelief in *Jurassic Park* (Spielberg 1993) and thereby treat the suffering as real. However, crucial to one relishing suffering in black humour is that one bear in mind that the suffering is represented and not real.

a central role in combining the cognitive and affective components of amusement.

There are many examples of Arousal Necessary and the linear relationship between amusement and arousal. If humour includes arousal-increasing content that does not impinge on Non-threatened Necessary, then generally this serves to increase one's amusement. Consider the following examples of humour with aggressive content and sexual content respectively:

A priest asks a convicted murderer on the electric chair 'Do you have any last requests?' 'Yes,' replies the murderer, 'Can you please hold my hand?'

What is long and hard and full of semen? A submarine.

With such humour, it seems that amusement is increased by the arousal-increasing aggressive and sexual content. Moreover, even arousal-increasing content which is disgusting or perilous serves to increase amusement. For example, when Mr Creosote explodes from over-eating in Monty Python's (Jones and Gilliam 1983) *The Meaning of Life*, the disgusting content increases arousal and thereby amusement. Likewise, when Charlie Chaplin's cabin teeters on the edge of a cliff in *The Gold Rush* (Chaplin 1925), the audience's amusement is increased by the arousal-increasing perilous content.

Considering examples given earlier will help to demonstrate the wide scope of Arousal Necessary. Recall Buster Keaton's house-front gag. Here the perilous content increases arousal and thereby amusement. Recall too the insult comedy of Don Rickles. Here the audience's amusement is increased by the arousal-increasing offensive content. Recall too Lewis Carroll's nonsense poetry. Here the absurd content of apparently meaningful meaninglessness serves to increase arousal which in turn increases amusement. From slapstick to insults to nonsense, there are many examples of Arousal Necessary.

Counter-examples to Arousal Necessary would be cases of amusement in which increasing arousal does not increase amusement. One potential counter-example is when something shocking immediately happens whilst one is amused. For example, in Quentin Tarantino's (1992) *Reservoir Dogs*, Mr Blonde does an amusing little dance to the radio immediately before slashing his hostage's face with a razor blade. Here the audience have their arousal increased whilst amused, but this increase in arousal does not serve to increase amusement. Rather, Mr Blonde's violent attack increases arousal but decreases amusement. Hence, this scene is a potential counter-example to Arousal Necessary because it may be argued to have amusement and increased arousal without increased amusement.

In response to this potential counter-example, I argue that actually, when Mr Blonde violently attacks, the scene is no longer a case of amusement because it impinges upon

Non-threatened Necessary. So the audience switch to the telic state and this is why the increase in arousal serves to decrease amusement, since in the telic state increased arousal is experienced as unpleasant anxiety. So, rather than be a case of amusement and increased arousal, the scene is a case of non-amusement and increased arousal. More generally, cases of increased arousal and decreased amusement are always better explained as an impingement upon Non-threatened Necessary rather than counter-examples to Arousal Necessary. Thus, there are no standing counter-examples to Arousal Necessary.

In addition, Arousal Necessary has experimental support. In chapter 5, Berlyne's Release Theory proposed that amusement has an inverted-U relationship with arousal. However, this proposal was then contradicted by many experiments which indicated that, as per Arousal Necessary, the relationship between amusement and arousal is linear. These experiments included James Averill (1969), Hy Day and Ronald Langevin (1972), Michael Godkewitsch (1976), and Nicole Giuliani, Kateri McRae and James Gross (2008), who all found positive correlation between physiological arousal and amusement in response to jokes, comedy films and cartoons. Stanley Schachter and Ladd Wheeler (1962) also found that by injecting participants with an arousing-increasing or arousal-decreasing drug, their amusement would respectively increase and decrease. Likewise, Arthur Shurcliff (1968), Thomas Kuhlman (1985), and Joanne Cantor, Jennings Bryant and Dolf Zillmann (1974) found evidence that arousal always increases amusement, even when generated via negative emotions like anxiety.

In summary, Arousal Necessary has no standing counter-examples and has experimental support, and thus is acceptable. In the next subsection, I synthesise Paratelic Necessary and Arousal Necessary to yield a definition of the affective component of amusement.

6.1.4 Theoretical Synthesis

Since Paratelic Necessary and Arousal Necessary are two conditional claims, they can be synthesised simply as follows:

Affective Component of Amusement (ACoA): If x amuses y , then:

- (1) x initiates or maintains y being in the paratelic state.
- (2) Increasing the arousal of y increases the amusement of y .

Note that ACoA is logically equivalent to the conjunction of Paratelic Necessary and Arousal Necessary. As such, it is the simplest and purest theoretical synthesis possible.

For an example of ACoA, consider the following joke:

An Eton boy meets a girl from a state school, who asks him ‘Where are you from?’ The boy says ‘I come from a place where we know not to end a sentence with a preposition.’ To which the girl replies ‘Oh, beg my pardon. Where are you from ... arsehole?’

This joke satisfies both ACoA1 and ACoA2. ACoA1 is satisfied because the introduction of the joke as a joke acts as an external cue for one to either initiate or maintain the paratelic state. Non-goal-directed Necessary is not impinged upon because one does not have any specific goal whilst reading the joke besides sheer enjoyment. Also, Non-threatened Necessary is not impinged upon because, although the joke has aggressive content, the recipient of that aggression is represented as deserving of it. ACoA2 is satisfied because amusement-increasing arousal is generated by the aggressive content, the strong language and feelings of superiority over the snobbish Eton boy.

Considering examples given earlier will help to demonstrate the wide scope of ACoA. Recall Buster Keaton’s slapstick gag. Here ACoA1 is satisfied because one is neither goal-directed nor threatened whilst watching Keaton, and ACoA2 is satisfied because the perilous content increases arousal. Recall too the insult comedy of Don Rickles. Here ACoA1 is satisfied because one is neither goal-directed nor threatened whilst listening to Rickles, and ACoA2 is satisfied because the offensive content increases arousal. Recall too Lewis Carroll’s nonsense poetry. Here ACoA1 is satisfied because one is neither goal-directed nor threatened whilst reading Carroll, and ACoA2 is satisfied because the absurd content increases arousal. From jokes to slapstick to insults to nonsense, it seems then that the scope of ACoA is wide enough to cover most any object of amusement.

Not only does ACoA have many examples, but any potential counter-examples have been dealt with in previous subsections when critically analysing Paratelic Necessary and Arousal Necessary. Since ACoA is logically equivalent to the conjunction of Paratelic Necessary and Arousal Necessary, ACoA does not claim anything that Paratelic Necessary and Arousal Necessary do not. Hence, if neither Paratelic Necessary nor Arousal Necessary have any standing counter-examples, then neither does ACoA. In summary, ACoA has many examples and no standing counter-examples. Thus, ACoA is an acceptable definition of the cognitive component of amusement.

In this section, I have critically analysed Paratelic Necessary and Arousal Necessary to yield a definition of the affective component of amusement. In the next section, I propose how to combine Cognitive Component of Amusement (CCoA) and Affective Component

of Amusement (ACoA).

6.2 Combining CCoA and ACoA

In subsection 6.2.1, I propose combining CCoA and ACoA via cognitive dissonance theory. In subsection 6.2.2, I critically analyse this proposal. In subsection 6.2.3, I list some techniques by which the cognitive component of amusement can increase amusement by increasing arousal.

6.2.1 Cognitive Dissonance

To recap, my definitions of the cognitive and affective components of amusement are as follows:

Cognitive Component of Amusement: If x amuses y , then y simultaneously activates two incompatible interpretations of x via unsound logic.

Affective Component of Amusement: If x amuses y , then (1) x initiates or maintains y being in the paratelic state, and (2) increasing the arousal of y increases the amusement of y .

Completing Theory of Amusement (ToA) involves combining CCoA and ACoA. However, as outlined in chapter 1, the cognitive and affective components of amusement are not necessarily separable.² So completing ToA is not as simple as claiming that CCoA and ACoA are two individually necessary and jointly sufficient conditions for amusement. Moreover, as mentioned for Arousal Necessary, ACoA2 cannot serve as a necessary condition because the term ‘amusement’ appears on the right-hand side of the conditional. Despite this, ACoA2 plays a central role in combining the cognitive and affective components of amusement. This is because, I argue, the cognitive component of amusement, as characterised by CCoA, must itself increase arousal. In the telic state, this arousal would be experienced as anxiety but, according to ACoA1 and ACoA2, in the paratelic state this arousal is experienced as amusement.

²As outlined in chapter 1, it seems that a definition of the affective component may have to make reference to the definition of the cognitive component. This is because certain features which allow one to recognise something as an object of amusement may also be features that contribute to one’s appreciation of it as an object of amusement. For example, one may not just recognise something as an object of amusement because of its cleverness, one may also appreciate it as an object of amusement because of its cleverness.

What is crucial to engendering amusement is that the cognitive component of amusement *itself* increases arousal and not merely that arousal is increased via some other means, such as arousal-increasing content or arousal-increasing drugs. So the central connection between the cognitive and affective components of amusement is not merely the conjunction of the cognitive component and increased arousal, but the causal chain of increased arousal *via* the cognitive component. It is then the occurrence of this causal chain in the paratelic state that makes amusement the distinctive mental state that it is. This specification echoes other theories of amusement, such as Michael Clark's (1970, 28-29) incongruity theory which specifies that 'the apparent incongruity is not enjoyed just for some ulterior reason' but 'for its own sake'. Similarly, Carroll's (2014b, 36) incongruity theory specifies that 'with comic amusement the pleasure focuses upon the incongruity itself'.

So, I argue that a necessary condition for amusement is increased arousal via the cognitive component of amusement. Though, in addition to this, I further argue that the cognitive component of amusement, as characterised by CCoA, *inherently* increases arousal. Berlyne (1960) and Apter (1982) have similarly claimed that the cognitive component of amusement inherently increases arousal. Berlyne characterised the cognitive component of amusement as 'collative variables', that is, a set of properties that compare and contrast each other. Whereas, Apter characterised the cognitive component of amusement as 'cognitive synergy', that is, two mutually exclusive meanings assigned to one identity. Despite these different characterisations, both Berlyne and Apter claimed that the cognitive component of amusement inherently increases arousal. According to Berlyne, this is because the cognitive component of amusement motivates opposing processes in the nervous system. Whereas, according to Apter, it is because the cognitive component of amusement involves some element of puzzle or paradox. I too claim that the cognitive component of amusement inherently increases arousal, but for a different reason than those offered by Berlyne and Apter. The reason I offer is that simultaneously activating two incompatible interpretations via unsound logic, as per CCoA, serves to create cognitive dissonance.

Leon Festinger (1957) first proposed the theory of cognitive dissonance. The theory states that any two cognitions (beliefs, ideas or values) are either relevant or irrelevant to one another, and if two cognitions are relevant to one another, then they are either consonant or dissonant. More precisely, any two cognitions c_1 and c_2 are related to one

another one of three ways:³

Consonance: Either c_1 follows from c_2 , or c_2 follows from c_1 . For example, the belief that Smith is a bachelor is consonant with the belief that Smith is unmarried.⁴

Dissonance: Either the negation of c_1 follows from c_2 , or the negation of c_2 follows from c_1 . For example, the belief that Smith is a bachelor is dissonant with the belief that Smith is married.

Irrelevance: c_1 and c_2 are neither consonant nor dissonant. For example, the belief that Smith is a bachelor is irrelevant to the belief that the sky is blue.

Given these definitions, it becomes clear that simultaneously activating two incompatible interpretations via unsound logic, as per CCoA, serves to create cognitive dissonance. This is because if two interpretations are incompatible, then there is at least one sentence to which one interpretation assigns a positive truth-value and the other assigns a negative truth-value. Hence there are two cognitions where the negation of one follows from the other, that is, there is cognitive dissonance.⁵

In cognitive dissonance theory, it is well established that cognitive dissonance increases arousal. For example, Robert Croyle and Joel Cooper (1983) conducted two experiments in which they measured the skin conductance of participants writing essays expressing attitudes counter to their own. Participants wrote the essays either under high-choice conditions, in which they were instructed that the essay writing was optional, or low-choice conditions, in which they were instructed that the essay writing was mandatory. Earlier experiments of the same format had shown that participants in the low-choice conditions would experience less cognitive dissonance since their counter-attitudinal writing was made more consonant by the fact that it was mandatory (Linder, Cooper, and Jones, 1967). The results showed that participants in the high-choice condition had a higher degree of skin conductance, supporting the proposal that cognitive dissonance increases arousal. Roger Elkin and Michael Leippe (1986), and Mary Losch and John Cacioppo (1990) conducted a similar experiment and produced similar results in which cognitive dissonance was associated with increased skin conductance. Likewise, Michael Etgen and

³For general overviews of the vast literature on cognitive dissonance, see Eddie Harmon-Jones and Judson Mills (1999), Jack Brehm (2007), and Eddie Harmon-Jones and Cindy Harmon-Jones (2007).

⁴For clarity, I have chosen an example where one cognition deductively follows from another. However, the examples Festinger (1957) himself uses also include cases where ‘follows from’ means ‘inductively follows from’.

⁵Remember that ‘follows from’ can mean ‘inductively follows from’ as well as ‘deductively follows from’.

Ellen Rosen (1993) produced results indicating that cognitive dissonance is associated with an increase in heart rate. Hence, in cognitive dissonance theory, it is well established that cognitive dissonance increases arousal.

Given that the cognitive component of amusement creates cognitive dissonance and cognitive dissonance increases arousal, it follows that the cognitive component of amusement inherently increases arousal. So the cognitive component of amusement, as characterised by CCoA, must itself increase arousal. In the telic state, this arousal would be experienced as anxiety but, according to ACoA, in the paratelic state this arousal is experienced as amusement. Therefore, the central connection between the cognitive and affective components of amusement is not merely the conjunction of the cognitive component and increased arousal, but the causal chain of increased arousal via the cognitive component.

In this subsection, I have proposed combining CCoA and ACoA via cognitive dissonance theory. In the next subsection, I critically analyse this proposal.

6.2.2 Critical Analysis

One potential objection to my proposed combination of CCoA and ACoA is to point out that Festinger (1957) states that, because one naturally strives for consistency amongst one's cognitions, cognitive dissonance is psychologically uncomfortable. Hence the cognitive component of amusement cannot create cognitive dissonance because amusement is not psychologically uncomfortable. In response to this objection, I argue that if cognitive dissonance occurs in the paratelic state, then it is not necessarily psychologically uncomfortable. According to Apter (1982), arousal is unpleasant in the telic state and so if cognitive dissonance occurs in the telic state, then the increase of arousal would be unpleasant. However, conversely, arousal is pleasant in the paratelic state and so if cognitive dissonance occurs in the paratelic state, then the increase of arousal would be pleasant. So Festinger is right to state that cognitive dissonance is psychologically uncomfortable when in reference to the telic state. But, in the paratelic state (the state in which amusement occurs), cognitive dissonance can be pleasant. This would explain why some people seek out cognitive dissonance whilst in the paratelic state, by sharing riddles, solving puzzles, reading murder mysteries, watching magic shows, or telling jokes.

Similar to this objection is what John Morreall (2009, 13-14) calls 'the irrationality objection' to incongruity theories. The irrationality objection argues that amusement cannot involve the violation of rationality because humans are psychologically incapable

of finding such a violation pleasant. Immanuel Kant (2009, 162) implicitly raised the irrationality objection when he asked ‘how could a delusive expectation gratify?’ More explicitly, George Santayana (1955, 152) formulated the irrationality objection thus:

The comic accident falsifies the nature before us, starts a wrong analogy in the mind, a suggestion that cannot be carried out. In a word, we are in the presence of an absurdity, and man, being a rational animal, can like absurdity no better than he can like hunger or cold.

However, contra the irrationality objection, the characterisation of amusement in CCoA and ACoA explains how a violation of rationality actually can be pleasant: The cognitive component of amusement violates rationality by creating cognitive dissonance. This cognitive dissonance increases arousal, but in the paratelic state this arousal is experienced as pleasant excitement. Thus, contra the irrationality objection, amusement can be both irrational and pleasant.

Counter-examples to my proposed combination of CCoA and ACoA would be cases of amusement in which the cognitive component of amusement does not increase arousal. One potential counter-example is humour for which amusement seems to derive solely from extremely arousal-increasing content. For example, the Aristocrats Joke involves describing the routine of a family act, during which the joke-teller aims to cause amusement by improvising a description which is as disgusting and graphic as possible. Here amusement seems to derive solely from the extremely arousal-increasing content and arousal is not increased via the cognitive component of amusement. Hence, it is a potential counter-example to my proposed combination of CCoA and ACoA.

However, I argue that this potential counter-example misunderstands the nature of the Aristocrats Joke. Like black humour, the Aristocrats Joke is based on a distinction between representation and reality. The cognitive component of amusement in the Aristocrats Joke relates to the simultaneous activation of two incompatible interpretations, one under which the acts performed by the family are disgusting and the other under which they are not disgusting because they are merely representations. If the joke audience was to encounter the family’s routine in reality, then they would be disgusted rather than amused. Importantly then the representation and reality interpretations of the acts described must be coupled together in order to elicit amusement. So, although amusement towards the Aristocrats Joke primarily derives from the extremely arousal-increasing content, there is a fundamental way in which arousal is also increased via the cognitive component of amusement. Thus, the Aristocrats Joke is not a counter-example to my proposed

combination of CCoA and ACoA.

In this subsection, I have critically analysed my proposed combination CCoA and ACoA and found that it has no standing objections or counter-examples. Specifically, my proposal is that the cognitive component of amusement inherently increases arousal by creating cognitive dissonance. In the next subsection, I list some techniques by which the cognitive component of amusement can increase amusement by further increasing arousal.

6.2.3 Increasing Arousal via CCoA

In chapter 1, I gave the following example of unsuccessful humour:

What is the Karate expert's favourite hot drink? Kara-tea.

In cases of unsuccessful humour, one recognises humour without experiencing amusement. But how then can my proposed combination of CCoA and ACoA explain unsuccessful humour? The answer is: because if one recognises unsuccessful humour as humour, then it elicits the cognitive component of amusement. Plus, according to my combination of CCoA and ACoA, eliciting the cognitive component of amusement inherently increases arousal. But then, assuming one is in the paratelic state, why is amusement not engendered by the causal chain of increased arousal via the cognitive component of amusement? It is because, I argue, in order for amusement to be engendered, the cognitive component of amusement must increase arousal by a *sufficient degree*. In the case of unsuccessful humour then, one does not experience amusement because the cognitive component of amusement does not increase arousal by a sufficient degree.

Exactly what degree of arousal constitutes a sufficient degree will be different for different people with different psychological and physiological compositions. Moreover, on the continuum from low to medium to high arousal, there may not even be a strict dividing line between amusement and non-amusement. So, in ToA, I cannot specify an exact degree of arousal that will necessarily be sufficient for engendering amusement because the distinction is subject-relative and vague. However, in this section, I list some techniques by which the cognitive component of amusement can increase arousal and thereby contribute towards a sufficient degree of arousal.⁶ It is then by applying some of these techniques that successful humour can secure a sufficient degree of arousal, or by not applying some of these techniques that unsuccessful humour can fail to secure a sufficient degree of arousal.

⁶However, it should be noted that this list is by no means exhaustive and there are potentially more techniques available.

One technique by which CCoA can increase arousal is via cognitive dissonance. Specifically, Festinger (1957) outlines two factors contributing to the magnitude of cognitive dissonance between two cognitions c_1 and c_2 :

Importance: The greater the subjective value attributed to c_1 or c_2 , the greater the magnitude of cognitive dissonance.

Ratio: The greater the number of dissonant relationships besides that between c_1 and c_2 , the greater the magnitude of cognitive dissonance.

Importance and Ratio suggest two sub-techniques by which arousal can be increased via cognitive dissonance. First, as per Importance, by attributing a greater subjective value to one of the two incompatible interpretations in CCoA. This sub-technique explains why one is more likely to be amused by humour referencing current events rather than historical events or by humour referencing friends rather than strangers. Because one attributes greater subjective value to current events rather than historical events and to friends rather than strangers.⁷ Second, as per Ratio, arousal can be increased via cognitive dissonance by contriving the two incompatible interpretations in CCoA to create a greater number of dissonant relationships. This sub-technique explains why one is more likely to be amused by humour in which the contrasts are greater. For example, when a nun is portrayed as promiscuous, the chaste interpretation of a nun creates a greater number of dissonant relationships with an interpretation of promiscuity than does the non-chaste interpretation of a regular woman.

The sub-technique suggested by Ratio is also suggested throughout the literature. For example, Arthur Schopenhauer (2015, 53) states that:

The more correct the subsumption of such objects under a concept may be from one point of view, and the greater and more glaring their incongruity with it, from another point of view, the greater is the ludicrous effect which is produced by this contrast.

More recently, in an explanation of Apter's (1982) play theory, Andrew Coulson (2010, 244) describes how amusement can be increased by 'the use of multiple [cognitive] syn-

⁷This explanation agrees with Clark's (1970, 21) following observation:

Why are we amused by the behaviour of our own children and not by the same behaviour in other people's children? Presumably because our own children are more endearing to us. Many jokes are effective because of their topicality and are completely unfunny when their references cease to be topical.

ergy, in which a number of comic synergies occur simultaneously or within a short space of time and may also become interconnected or play off each other to produce further comic effects'. Likewise, Justine Kao, Roger Levy and Noah Goodman (2015) claim that an essential characteristic of puns is that both interpretations are distinctively supported. For example, in the pun 'The magician got so mad he pulled his hare out', both interpretations are supported by distinct words: the interpretation 'hare' is supported by the word 'magician' and the interpretation 'hair' is supported by the word 'mad'. Kao, Levy and Goodman (2015) build a formal model to represent the degree to which each interpretation is distinctively supported and find this to be positively correlated with experimental participant amusingness ratings. Overall, all these suggestions are similar to the sub-technique suggested by Ratio, in which arousal is increased via cognitive dissonance by creating a greater number of dissonant relationships.

Another technique by which CCoA can increase arousal is via violated expectations. As established with Violated Expectation in chapter 3, violated expectations are not necessary for amusement. However, they do often feature in humour. This is because violated expectations cause surprise and increased arousal which in turn increases amusement. In particular, the degree of surprise caused by a violated expectation can be roughly estimated using conditional probability.⁸ For example, consider the following joke:

Who supports Tony Blair? Oh, nobody. He's still able to walk on his own.

Here the word 'supports' has two interpretations: 'politically support' and 'physically support'. After the set-up, the probability that 'supports' means 'politically support' is greater than the probability that it means 'physically support':

$$P(\text{politically supports} \mid \text{set-up}) > P(\text{physically supports} \mid \text{set-up})$$

Of course, after the punch-line, this inequality flips and the probability that 'supports' means 'politically support' is lesser than the probability that it means 'physically support'. However, after the set-up, the degree of certainty that 'supports' means 'politically support' is given by:

$$P(\text{politically supports} \mid \text{set-up}) - P(\text{physically supports} \mid \text{set-up})$$

Plausibly, it is this degree of certainty that determines the degree of surprise elicited. The greater this degree of certainty, the more certain one is that 'supports' means 'politically

⁸If a and b are events such that $P(a)$ is the probability of event a , then $P(a \mid b)$ is the conditional probability of event a given event b .

supports’ and so the more surprised one is when one realises that it actually means ‘physically supports’. More generally, the greater one’s degree of surprise, the greater one’s degree of arousal. Hence, violated expectations causing surprise is another technique by which the cognitive component of amusement can increase arousal.

One final technique by which CCoA can increase arousal is via violated norms. As established with Violated Norm in chapter 3, violated norms are not necessary for amusement. However, they do often feature in humour. This is because violated norms cause inappropriateness and increased arousal which in turn increases amusement. For example, consider the following joke:

A woman went into a clothing store and asked ‘May I try on that dress in the window?’ ‘Well,’ replied the sales clerk, ‘don’t you think it would be better to use the dressing room?’

Here the phrase ‘try on that dress in the window’ has two incompatible interpretations: ‘try on that dress which is in the window’ and ‘try on that dress whilst in the window’. This latter interpretation violates the norm proscribing public nudity, so when this interpretation is activated the norm violation increases arousal and thereby increases amusement. In contrast, consider the same joke but altered so that the woman refers to a dress in the store room. Such an altered joke would be less amusing because the latter interpretation no longer violates the norm proscribing public nudity. More generally, as long as a norm violation does not impinge upon Non-threatened Necessary, then the increased inappropriateness serves to increase amusement. Hence, violated norms causing inappropriateness is another technique by which the cognitive component of amusement can increase arousal.

Note that my specification of how norm violations figure in humour is more precise than those given by Peter McGraw and Caleb Warren (2010), Carroll (2013) or Matthew Kotzen (2015) in chapter 3.⁹ This is because I explain exactly how norm violations figure in humour whereas they vaguely specify that humour ‘involves’ norm violations. For example, Carroll (2013, 79) states that ‘violations of the [norms of language] provide a source of a great deal of humor; Groucho Marx’s puns frequently derail in a single blow the rules of semantics and grammar as well as the maxims of conversation’. This specifies that Groucho’s puns violate norms, but without exactly saying how. Given this vague specification, Carroll cannot distinguish between puns and mere misunderstandings, which

⁹Specifically, McGraw and Warren (2010, 1142) say ‘anything that is threatening to one’s sense of how the world “ought to be” will be humorous’; Carroll (2013, 79) says ‘what is key to comic amusement is a deviation from some presupposed norm’; and Kotzen (2015, 396) says ‘the concept of humor should be understood as involving a kind of *violation* of the norms that constitute other normative concepts’.

can also violate the norms of semantics, grammar and conversation. In contrast, I specify more precisely that a norm is violated by one of the two incompatible interpretations in CCoA. Given this more precise specification, I can distinguish between puns and misunderstandings in a way that Carroll cannot.

In this subsection, I have argued that a necessary condition for amusement is not merely that the cognitive component of amusement increase arousal, but that the cognitive component of amusement *sufficiently* increase arousal. I have also listed some techniques by which CCoA can sufficiently increase arousal, including via cognitive dissonance, violated expectation and violated norm. In the next section, I combine CCoA and ACoA to complete Theory of Amusement (ToA), Theory of Funniness (ToF) and Theory of Humour (ToH).

6.3 Completing ToA, ToF and ToH

In subsection 6.3.1, I combine CCoA and ACoA to complete ToA. In subsection 6.3.2, I critically analyse ToA. In subsection 6.3.3, I complete ToF and ToH.

6.3.1 Completing ToA

Given my proposed combination CCoA and ACoA, I can tentatively suggest three individually necessary and jointly sufficient conditions for x to amuse y : First, x initiates or maintains y being in the paratelic state. Second, y simultaneously activates two incompatible interpretations of x via unsound logic. Third, this simultaneous activation sufficiently increases the arousal of y (via cognitive dissonance or violated expectation or violated norm etc). These three conditions are almost the exact theory of amusement I propose. But the first condition must be tweaked because there are sufficiency counter-examples which satisfy all three conditions without being cases of amusement.

One counter-example is the revelatory scenes one often finds at the end of a detective story. The first condition is satisfied because, when one enjoys the detective story, one is in a paratelic state. The second condition is satisfied because the revelations simultaneously activate two incompatible interpretations via unsound logic. For example, one may discover that the apparently mild tempered butler is actually a raging psychopath via some false premise about his character. The third condition is satisfied because this simultaneous activation increases one's arousal both via cognitive dissonance and violated expectation. However, despite satisfying the three conditions, these revelatory scenes are astonishing or astounding but they are not amusing. Another counter-example is the

scenes in *Oedipus the King* (Sophocles 2014) during which one interprets Jocasta both as Oedipus' mother and as his wife. One is in a paratelic state, one simultaneously activates two incompatible interpretations via unsound logic, and this simultaneous activation raises one's arousal via cognitive dissonance and violated norm. But one is not amused, rather one is aghast and appalled.

In order to avoid these counter-examples, I tweak the first condition by specifying that y is in a *non-serious* paratelic state.¹⁰ In a serious state, events hold a significance such that consequences seem to matter, whereas, in a non-serious state, events do not hold such significance. So specifying that y is in a non-serious paratelic state avoids the counter-examples because, although one may engage with detective stories and *Oedipus the King* in the paratelic state, one engages with them seriously. The events in detective stories or *Oedipus the King* hold some significance such that consequences seem to matter. This fact gives rise to the 'paradox of fiction', which questions whether it is possible for one to have genuine emotional responses to events that one knows are fictional (Levinson 1997). However, there is no corresponding paradox of amusement since it is perfectly possible to have genuine amusement towards events one knows are fictional. This is because amusement does not require that one is in a serious state, rather amusement requires that one is in a non-serious state. So I can distinguish amusement at humour from astonishment at detective stories or appal at *Oedipus the King* because astonishment and appal occur in a serious state, whereas amusement occurs in a non-serious state.

Counter-examples to this specification of non-seriousness would be cases of amusement in a serious state. However, such counter-examples seem impossible to conceive of since to be simultaneously amused and serious seems contradictory.¹¹ Indeed, Schopenhauer (2015, 423) states that 'the opposite of laughter and joking is *seriousness*'. The only potential counter-example is raised by Carroll (2014b, 43) against Play Necessary in the following:

How are we to define [play]? One temptation is to stipulate that play is ... not serious. But if that is what is meant by *play* then humour is not necessarily play, ... since some (much) humour, like satire, is ... serious.

¹⁰In chapter 5, I stated that it is possible to be in a serious paratelic state, such as when a board game enthusiast meticulously engages with complicated rules. But, of course, this does not preclude the possibility of a subject being in a non-serious paratelic state.

¹¹Note that this does not mean that my specification of non-seriousness renders ToA uninformative. Rather, it is merely that non-seriousness is an essential aspect of amusement which until now has not been included in ToA.

Here Carroll argues that if one defines ‘play’ as ‘not serious’, then Play Necessary has counter-examples because satire is a form of humour that is serious. However, as outlined in chapter 5, I argue contra Carroll that, although satire can be amusing to one person at one time and seriously engaging to another person at another time, it cannot be amusing and seriously engaging to the same person at the same time. Thus my specification of non-seriousness does not have any standing counter-examples.

Given this specification of non-seriousness, I complete ToA as follows:

Theory of Amusement (ToA): x amuses y if and only if:

- (1) x initiates or maintains y being in a non-serious, non-threatened, non-goal-directed state.
- (2) y simultaneously activates two incompatible interpretations of x via unsound logic.
- (3) (2) sufficiently increases the arousal of y (via cognitive dissonance or violated expectation or violated norm etc).

Note that, for clarity, ToA1 references a ‘non-threatened, non-goal-directed state’ rather than the paratelic state. Note also that ToA3 references ToA2 (a condition of ToA) rather than x (a variable of ToA). This is because, as outlined in subsection 6.2.1, what is distinctive about amusement is that arousal is increased *via* the cognitive component of amusement. So it would not engender amusement merely for x to increase the arousal of y via some other means, such as arousal-increasing content.

In this subsection, I have combined CCoA and ACoA to complete ToA. In the next subsection, I critically analyse ToA.

6.3.2 Critical Analysis

For an example of ToA, consider the following joke from Wyer and Collins (1992, 667):

A young Catholic priest is walking through town when he is accosted by a prostitute. ‘How about a quickie for twenty dollars?’ she asks. The priest, puzzled, shakes her off and continues on his way, only to be stopped by another prostitute. ‘Twenty dollars for a quickie,’ she offers. Again, he breaks free and goes up the street. Later, as he is nearing his home in the country, he meets a nun. ‘Pardon me, sister,’ he asks, ‘what’s a quickie?’ ‘Twenty dollars,’ she says, ‘The same as it is in town.’

Here x is the joke and y is the joke audience. ToA1 is satisfied because the introduction of x as a joke acts as an external cue for y to switch to a non-serious, non-threatened, non-goal-directed state. ToA2 is satisfied because y simultaneously activates two incompatible interpretations of the nun: one chaste and one promiscuous. These interpretations are activated via the false premise that a person cannot be both a nun and a prostitute. ToA3 is satisfied because the cognitive dissonance and violated norm created by ToA2 increases the arousal of y . Moreover, the sexual content of x increases y 's arousal, which in turn serves to increase y 's amusement.¹²

Arthur Shurcliff (1968) provides another example of ToA. Shurcliff elicited differing levels of anxiety in experimental participants by informing them that they were required to handle either a docile, normal or hostile rat, but when participants opened the cage to remove the rat, they discovered that it was a plastic toy. The results showed a strong positive correlation between anxiety ratings before discovering the rat was a toy and amusingness ratings after the discovery. In this case, x is the rat and y is a participant. ToA1 is satisfied because the discovery that the rat is a toy acts as an external cue for y to switch to a non-serious, non-threatened, non-goal-directed state. ToA2 is satisfied because y simultaneously activates two incompatible interpretations of the rat: one real and one fake. These interpretations are activated via the false premise that the rat is not a toy. ToA3 is satisfied because the cognitive dissonance and violated expectation created by ToA2 increases the arousal of y . Moreover, the strong positive correlation between the anxiety ratings and amusingness ratings indicates that increased arousal served to increase amusement.

Another example of ToA is provided by Nerhardt's (1970; 1976) weight lifting experiments in which participants expressed amusement upon lifting an unexpectedly heavy or light weight. Here x is the divergent weight and y is a participant. ToA1 is satisfied because the discovery that the divergent weight is unexpectedly heavy or light acts as an external cue for y to switch to a non-serious, non-threatened, non-goal-directed state. ToA2 is satisfied because y simultaneously activates two incompatible interpretations of the divergent weight: one expected weight and one actual weight. These interpretations are activated via the invalid inference that all the weights have the same mass because they have the same appearance. ToA3 is satisfied because the cognitive dissonance and violated expectation created by ToA2 increases the arousal of y .

¹²Note also that if either ToA1, ToA2 or ToA3 was not satisfied, then x would not amuse y . For example, if ToA1 was not satisfied because y was in a threatened state, then y would not be amused by x .

Considering examples given earlier will help to demonstrate the wide scope of ToA. Recall Buster Keaton's house-front gag. Here x is Keaton and y is the audience. ToA1 is satisfied because y is in a non-serious, non-threatened, non-goal-directed state whilst watching Keaton. ToA2 is satisfied because y simultaneously activates two incompatible interpretations of Keaton: one perilous and one non-perilous. These interpretations are activated via the false premise that Keaton will be squashed. ToA3 is satisfied because the cognitive dissonance and violated expectation created by ToA2 increases the arousal of y . Moreover, the perilous content increases y 's arousal and thereby y 's amusement. Recall too the insult comedy of Don Rickles. Here x is Rickles' utterance and y is the audience. ToA1, ToA2 and ToA3 are all satisfied, in particular, y simultaneously activates one offensive and one inoffensive interpretation of x and this activation increases the arousal of y via cognitive dissonance and violated norm. Recall too Lewis Carroll's nonsense poetry. Here x is Carroll's verse and y is the reader. ToA1, ToA2 and ToA3 are all satisfied, in particular, y simultaneously activates one meaningful and one meaningless interpretation of x and this activation increases the arousal of y via cognitive dissonance. From jokes to experiments to slapstick to insults to nonsense, it seems then that the scope of ToA is wide enough to cover most any object of amusement.

The necessity of ToA1, ToA2 and ToA3 has been established over chapters 3 to 6. So I will not consider potential necessity counter-examples to ToA, rather I will only consider potential sufficiency counter-examples consisting of potential cases of non-amusement that satisfy ToA1, ToA2 and ToA3. One potential sufficiency counter-example is the Liar Paradox:¹³

(L) (L) is false.

The Liar Paradox arises from attempting to assign a truth-value to (L): If (L) is true, then (L) must be false because (L) states that (L) is false. Conversely, if (L) is false, then (L) must be true because (L) states that (L) is false. Hence, (L) is true if and only if (L) is false. It seems then that (L) satisfies ToA2, since one simultaneously activates two incompatible interpretations of (L): one under which (L) is true and one under which (L) is false. It may then be argued that (L) also satisfies ToA1 and ToA3, and so it is a sufficiency counter-example to ToA because (L) is not amusing.

¹³The fact that the Liar Paradox is a potential counter-example to ToA explains the striking resemblance of Russell's Paradox to Groucho Marx's famous line 'I would never want to belong to any club that would have someone like me for a member'.

In response to this potential counter-example, I argue that actually none of ToA1, ToA2 or ToA3 are satisfied by (L). ToA1 is not satisfied because (L) is a genuine puzzle and so one searches for a solution to (L) in a puzzle-solving, goal-directed state. ToA2 is not satisfied because the logic via which one activates the incompatible interpretations of (L) is not unsound. That one's logic is not unsound is what makes (L) paradoxical: one simultaneously activates two incompatible interpretations of (L) without identifying any false premises or invalid inferences in one's logic. ToA3 is then not satisfied simply because ToA2 is not satisfied. Thus, (L) is clearly not a sufficiency counter-example to ToA.¹⁴

Another potential sufficiency counter-example to ToA is magic. For example, suppose one witnesses a magician perform an illusion in which they appear to levitate. Then ToA1 seems to be satisfied because one seems to be in a non-serious, non-threatened, non-goal-directed state. ToA2 seems to be satisfied because one seems to simultaneously activate two incompatible interpretations: one based on appearances and one based on reality. These interpretations are activated via the false premise that the magician is defying gravity. ToA3 seems to be satisfied because the cognitive dissonance created by these interpretations increases the arousal of *y*, as does the astonishing content. So magic seems to satisfy ToA1, ToA2 and ToA3 without being amusing and thereby is a sufficiency counter-example to ToA.

In response to this potential counter-example, I concede that astonishment towards magic and amusement towards humour are very closely related. After all, magic does often elicit laughter and other expressions of amusement. However, I argue that magic does not properly satisfy the conditions of ToA. ToA1 is not properly satisfied because magic demands a degree of seriousness. Events in magic must hold significance and seem to matter in order for an illusion to be effective. ToA2 is not properly satisfied because magic does not create proper cognitive dissonance as the cognitive component of amusement does. When one witnesses an illusion, one knows that what appears to be happening is not actually happening.

Jason Leddington (2016, 257) gives a definition of magic which stresses that it does not create proper cognitive dissonance:

¹⁴I concede that should one believe that the Liar Paradox is not a genuine puzzle, then one may be amused by (L). ToA1 could be satisfied because one does not search for a solution to (L), ToA2 could be satisfied because one believes one's logic to be unsound, and ToA3 could be satisfied because the cognitive dissonance increases one's arousal. Indeed, I agree that approaching (L) under these conditions could plausibly elicit amusement.

The experience of magic is neither an experience of forced fantasy nor an experience of inadvertent self-contradiction. There is cognitive dissonance, but it is not the sort that demands resolution on pain of irrationality. The audience never really believes that [David] Copperfield is flying - that magic is real - any more than the frightened audience of *The Exorcist* really believes that Regan is possessed by the demon Pazuzu.

Leddington (2016, 257, 254) goes on to give a definition of magic that involves ‘an account of cognitive dissonance that is not a matter of conflicting beliefs’ but rather a ‘belief-discordant alief’. Hence, magic does not properly satisfy ToA2 because it does not create proper cognitive dissonance as the cognitive component of amusement does. Moreover, since ToA2 is not properly satisfied, neither is ToA3. Thus, magic is not a sufficiency counter-example to ToA.

In summary, ToA has many examples and no standing counter-examples, and so is acceptable. In this subsection, I have critically analysed ToA. In the next subsection, I complete ToF and ToH.

6.3.3 Completing ToF and ToH

Completing ToA serves to complete ToF and ToH as they are stated in chapter 1. So I restate them here merely as a reminder:

Theory of Funniness (ToF): x is funny if and only if x merits amusement.

Theory of Humour (ToH): x is humour if and only if the function of x is to be amusing or funny.

These formulations of ToF and ToH in terms of amusement were critically analysed and accepted in chapter 1. So, provided that ToA is an acceptable definition of amusement, ToF and ToH are acceptable definitions of funniness and humour, and do not require critical analysis. Though, for clarity, I will further explain ToF and ToH in light of completing ToA.

According to ToF, x is funny if and only if x merits amusement. Given ToA, meriting amusement means meriting ToA1, ToA2 and ToA3. ToF can then be more explicitly stated as follows:

Theory of Funniness: x is funny if and only if:

- (1) x merits being in a non-serious, non-threatened, non-goal-directed state.

- (2) x merits the simultaneous activation of two incompatible interpretations via unsound logic.
- (3) (2) merits a sufficient increase in arousal (via cognitive dissonance or violated expectation or violated norm etc).

This more explicit statement of ToF makes it clear that x can fail to be funny by not satisfying ToF1, ToF2 or ToF3. To elucidate ToF, I consider each of these possibilities in more detail.

If x does not satisfy ToF1, then x does not merit being in a non-serious, non-threatened, non-goal-directed state. For example, if x is something solemn, like a memorial service, then it merits a serious state. Or if x is something threatening, like a wild tiger, then it merits a threatened state. Or if x is something goal-directed, like a driving test, then it merits a goal-directed state. This would explain why memorials, tigers and tests are not funny, since they merit a state which precludes meriting amusement.¹⁵ Conversely, if x is funny, then x merits being in a non-serious, non-threatened, non-goal-directed state. For example, in P.G. Wodehouse's (2008) *Right Ho Jeeves*, Gussie Fink-Nottle becomes accidentally inebriated and delivers a drunken speech during an award ceremony at Market Snodsbury Grammar School. Given how Wodehouse sets the scene, this speech merits being in a non-serious, non-threatened, non-goal-directed state. Therefore, Gussie's speech satisfies ToF1 and can be funny.

If x does not satisfy ToF2, then x does not merit the simultaneous activation of two incompatible interpretations via unsound logic. For example, the sentence 'Snow is white' has only one interpretation in English, specifically that snow is white. So 'Snow is white' does not merit the simultaneous activation of two incompatible interpretations. This would explain why such sentences are not funny, since they do not merit an interpretation which merits amusement. Conversely, if x is funny, then x merits the simultaneous activation of two incompatible interpretations via unsound logic. For example, Gussie Fink-Nottle's speech merits the simultaneous activation of two incompatible interpretations: one sober and one inebriated. This activation is merited via the false premise, assumed by the audience at the Market Snodsbury Grammar School, that Gussie is sober. Therefore, Gussie's speech satisfies ToF2 and can be funny.

¹⁵Occasionally children are amused by things which do not merit amusement and need to have their amusement corrected by an adult. For example, if one child falls and injures themselves to the amusement of another child, then an adult has to explain to the amused child that the incident is not amusing because the fallen child is actually injured.

If x satisfies ToF2 but does not satisfy ToF3, then x 's satisfaction of ToF2 does not merit a sufficient increase in arousal. This is often the case for unsuccessful humour. For example, consider again the following example:

What is the Karate expert's favourite hot drink? Kara-tea.

This joke may satisfy ToF2 by meriting the simultaneous activation of two incompatible interpretations of 'Kara-tea': one of martial arts and one of hot drinks. However, this activation does not merit a sufficient increase in arousal. The two interpretations of 'Kara-tea' do not merit sufficient subjective value, nor do they create a sufficient number of dissonant relationships, nor do they sufficiently violate an expectation, nor do they sufficiently violate a norm. Hence x 's satisfaction of ToF2 does not merit a sufficient increase in arousal. This would explain why unsuccessful humour is not funny, since it does not merit a sufficient arousal-increase to merit amusement.¹⁶ Conversely, if x is funny, then x 's satisfaction of ToF2 merits a sufficient increase in arousal. For example, Gussie Fink-Nottle's speech satisfies ToF2 in a way that merits a sufficient increase in arousal via cognitive dissonance and violated norms of etiquette. Therefore, Gussie's speech satisfies ToF1, ToF2 and ToF3, and thereby is funny.

According to ToH, x is humour if and only if the function of x is to be amusing or funny. Given ToA, being amusing means satisfying ToA1, ToA2 and ToA3. Whilst, given ToF, being funny means satisfying ToF1, ToF2 and ToF3. ToH can then be more explicitly stated as follows:

Theory of Humour: x is humour if and only if the function of x is either:

(1) There is some y such that:

(1.1) x initiates or maintains y being in a non-serious, non-threatened, non-goal-directed state.

(1.2) y simultaneously activates two incompatible interpretations of x via unsound logic.

(1.3) (1.2) sufficiently increases the arousal of y (via cognitive dissonance or violated expectation or violated norm etc).

(2)

¹⁶Although unsuccessful humour is not funny, children are often amused by examples such as the 'Kara-tea' joke. This is perhaps because children's inexperience means that even unsuccessful humour causes a sufficient increase in arousal via cognitive dissonance, violated expectation or violated norm etc.

(2.1) x merits being in a non-serious, non-threatened, non-goal-directed state.

(2.2) x merits the simultaneous activation of two incompatible interpretations via unsound logic.

(2.3) (2.2) merits a sufficient increase in arousal (via cognitive dissonance or violated expectation or violated norm etc).

This more explicit statement of ToH makes it clear that if x is humour, then x can fail at its function by not satisfying ToH1.1, ToH1.2, ToH1.3, ToH2.1, ToH2.2 or ToH2.3. Failure to satisfy ToH1.1, ToH1.2 and ToH1.3 has been covered when completing ToA, whereas failure to satisfy ToH2.1, ToH2.2 and ToH2.3 has been covered when completing ToF. So I do not consider each of these possibilities in more detail.

In summary, ToA constitutes my answer to Metaphysical Question 1 (MQ1), ToF constitutes my answer to Metaphysical Question 2 (MQ2), and ToH constitutes my answer to Metaphysical Question 3 (MQ3). I do not claim that these answers are perfect and, in particular, that ToA is a perfect definition of amusement. However, I do claim that ToA significantly improves on pre-existing definitions of amusement, as reviewed and critically analysed in chapters 2 to 6. In particular, ToA appears to have no standing counterexamples.

In this section, I have completed Theory of Amusement, Theory of Funniness and Theory of Humour. In the next section, I summarise the key findings of this chapter.

6.4 Chapter Summary

In this chapter, I continued to define the affective component of amusement. In section 6.1, I critically analysed and accepted the following:

Non-goal-directed Necessary: If x amuses y , then x initiates or maintains y being in a non-goal-directed state.

Non-threatened Necessary: If x amuses y , then x initiates or maintains y being in a non-threatened state.

Arousal Necessary: If x amuses y , then increasing the arousal of y increases the amusement of y .

In section 6.1, I also synthesised Non-goal-directed Necessary, Non-threatened Necessary and Arousal Necessary to yield the following definition of the affective component of

amusement:

Affective Component of Amusement (ACoA): If x amuses y , then:

- (1) x initiates or maintains y being in the paratelic state.
- (2) Increasing the arousal of y increases the amusement of y .

In section 6.2, I proposed combining Cognitive Component of Amusement (CCoA) and ACoA via cognitive dissonance theory, and listed some techniques by which CCoA can increase amusement by increasing arousal. In section 6.3, I combined CCoA and ACoA to complete the following:

Theory of Amusement (ToA): x amuses y if and only if:

- (1) x initiates or maintains y being in a non-serious, non-threatened, non-goal-directed state.
- (2) y simultaneously activates two incompatible interpretations of x via unsound logic.
- (3) (2) sufficiently increases the arousal of y (via cognitive dissonance or violated expectation or violated norm etc).

Theory of Funniness (ToF): x is funny if and only if x merits amusement.

Theory of Humour (ToH): x is humour if and only if the function of x is to be amusing or funny.

These definitions of amusement, funniness and humour constitute my answers to my original metaphysical questions ‘What is amusement?’, ‘What is funniness?’, and ‘What is humour?’. In chapter 7, I turn to ethical questions about amusement, funniness and humour.

Chapter 7

The Ethics of Amusement

As outlined in chapter 1, a typical starting point for the philosophy of such-and-such is to address metaphysical questions concerning the nature of such-and-such. However, in addition to these metaphysical questions, the philosophy of such-and-such also typically addresses ethical questions concerning the moral value of such-and-such. Arguably, the most fundamental of these questions is ‘When is such-and-such immoral?’. Applying this thinking to the philosophy of humour, I turn to the fundamental ethical question ‘When is humour immoral?’

As outlined in chapter 1, I argue that humour, amusement and funniness are three closely-related but distinct concepts. So, in order to avoid conflation, I split the initial ethical question ‘When is humour immoral?’ into three ethical questions:

Ethical Question 1 (EQ1): When is amusement immoral?

Ethical Question 2 (EQ2): How does immorality affect funniness?

Ethical Question 3 (EQ3): When is humour immoral?

Note that EQ1 and EQ3 are different in form to EQ2. This is because amusement and humour are both descriptive concepts, whereas funniness is a normative concept. Theory of Amusement and Theory of Humour both describe a state of affairs, whereas Theory of Funniness prescribes a state of affairs. Hence, rather than question when funniness is immoral, I question the relationship between funniness and immorality because immorality is also a normative concept.

In this chapter, I address EQ1, EQ2 and EQ3. In section 7.1, I address EQ1, in section 7.2, I address EQ2, and, in section 7.3, I address EQ3.

7.1 EQ1: When is Amusement Immoral?

In subsection 7.1.1, I specify a point about the term ‘immoral’ in EQ1, EQ2 and EQ3. In subsection 7.1.2, I critically analyse Ronald de Sousa’s (1990) answer to EQ1. In subsection 7.1.3, I give my own answer to EQ1.

7.1.1 Defining ‘Immoral’

The two key terms to define in EQ1 are ‘amusement’ and ‘immoral’. In chapter 6, ‘amusement’ has been defined as follows:

Theory of Amusement (ToA): x amuses y if and only if:

- (1) x initiates or maintains y being in a non-serious, non-threatened, non-goal-directed state.
- (2) y simultaneously activates two incompatible interpretations of x via unsound logic.
- (3) (2) sufficiently increases the arousal of y (via cognitive dissonance or violated expectation or violated norm etc).

In contrast, I use the term ‘immoral’ as a placeholder. This is because different theories of normative ethics have different definitions of what it means for something to be immoral. Three broad families of such theories are virtue theories, duty theories and consequential theories.

Virtue theories are associated with Plato (2007; 2009) and Aristotle (2009) and emphasize the importance of acquiring virtuous character traits. According to virtue theories, what it roughly means for something to be immoral is that it is the product of viceful character traits. For example, if cowardliness is considered a viceful character trait, then it would be immoral for one to perform an act out of cowardliness, such as failing to save a drowning child for fear of drowning oneself.

Duty theories are associated with Immanuel Kant (2012; 2015) and emphasize the importance of abiding by principles of duty. According to duty theories, what it roughly means for something to be immoral is that it is a breach of a principle of duty. For example, if telling the truth is considered a principle of duty, then it would be immoral for one to lie about even the smallest matters, such as whether it raining outside.

Consequential theories are associated with Jeremy Bentham (2007) and John Stuart Mill (2002) and emphasize the importance of weighing the value of consequences. According to consequential theories, what it roughly means for something to be immoral is that

its negative consequences outweigh its positive consequences. For example, if a decrease in overall happiness is considered a negative consequence, then it would be immoral for one to perform an act that consequentially brought about a decrease in overall happiness, such as accidentally knocking a child's ice cream onto the ground.

This extremely brief review is meant to illustrate that different theories of normative ethics have different definitions of what it means for something to be immoral. Hence, these different definitions can conflict. For example, consider again the following joke:

Jones must have been born on a highway, because that's where most accidents happen.

Suppose that a particular telling of this joke, by insulting Jones, breaches a principle of duty to never treat people as a means rather than as an end in themselves. Then, according to duty theories, the joke telling was immoral. But further suppose that the same telling, by amusing the majority of people present, has positive consequences which outweigh its negative consequences. Then, according to consequential theories, the same joke-telling was moral rather than immoral. Given that such conflicts can occur between duty theories and consequential theories, it cannot be the case that both theories have the correct definition of what it means for something to be immoral.

In this chapter, I do not aim to contribute to the debate over which theory of normative ethics has the correct definition of 'immoral'. Rather, I aim to address EQ1, EQ2 and EQ3 such that I remain neutral on the matter. Hence, when I address EQ1, EQ2 and EQ3, the term 'immoral' is used as a placeholder such that my it can be replaced by the definition provided by any theory of normative ethics. My theory will thus be consistent with whatever theory of normative ethics is in fact correct and should be understood as such.¹

In this subsection, I have specified that the term 'immoral' is used as a placeholder in EQ1, EQ2 and EQ3. In the next subsection, I critically analyse Ronald de Sousa's (1990) answer to EQ1.

7.1.2 Attitudinal Endorsement

De Sousa's (1990) answer to EQ1 is an 'attitudinal endorsement' theory which states that amusement towards sexist or racist jokes is immoral because it necessitates the endorse-

¹Note that by remaining neutral on which theory of normative ethics is correct, I am not advocating the position that no theory of normative ethics is correct, rather I am merely not committing myself to the correctness of any one theory.

ment of sexist or racist propositions.² Roughly, his argument is as follows: If a subject is amused by a joke, then they must endorse the propositions which that joke relies on. Sexist and racist jokes are those jokes which rely on sexist or racist propositions, so being amused by sexist or racist jokes means that one endorses sexist or racist propositions. Since endorsing sexist or racist propositions is immoral, being amused by sexist or racist jokes is also immoral.

De Sousa (1990, 290) offers the following example to illustrate his theory:³

Margaret Trudeau visits the hockey team. When she emerges she complains that she has been gang-raped. Wishful thinking.

According to de Sousa (1990, 290), the propositions that this joke relies on include the following sexist propositions:

That rape is just a variant form of sexual intercourse; that women's sexual desires are indiscriminate; and that there is something intrinsically objectionable or evil about a woman who wants or gets a lot of sex.

De Sousa argues that in order to be amused by the joke, one must endorse these sexist propositions. He argues that, because genuine endorsement is necessary for amusement, one cannot hypothetically endorse the necessary sexist propositions such that one can be amused by the joke. In fact, de Sousa (1990, 291-292) states that 'attitudes are beliefs that one cannot hypothetically adopt'. Thus, if one is amused by the joke and endorsing these sexist propositions is immoral, then one's amusement is immoral.

It may be argued that de Sousa uses a bad example. First, the Trudeau joke has little cognitive appeal and so seems skewed in favour of de Sousa's theory. Of course one must endorse sexist propositions to be amused by this joke, but only because one must endorse sexist propositions to be amused by this joke at all. Second, de Sousa does not demonstrate that the joke does actually rely on the sexist propositions he claims it does. Aaron Smuts (2010, 336) describes these propositions as 'a host of beliefs that [de Sousa] thinks are necessary for getting the joke, many of which are exaggerations of the underlying propositions necessary for understanding it'. For example, it seems clear that the joke insults Trudeau but it is not clear that this means that the joke relies on the

²Early answers to EQ1 are given by Plato (2007), Aristotle (2009), Cicero (1987), Epictetus (2004), Søren Kierkegaard (2009), William Hazlitt (1969) and Henri Bergson (2008). However, word-count limitations prevent me from examining them in this thesis.

³Merrie Bergmann (1986) also uses a revised version of this example to make a similar argument to De Sousa in her analysis of sexist humour.

proposition ‘women’s sexual desires are indiscriminate’. Certainly, de Sousa could have used a better example. But, for the sake of argument, I grant de Sousa that his example does indeed rely on the sexist propositions he says it does.

De Sousa’s answer to EQ1 can then be characterised as follows:

Attitudinal Endorsement: If joke-token j relies on proposition p and holding positive attitudes towards p is immoral, then it is immoral to be amused by j .

Note that since Attitudinal Endorsement is a conditional and not a biconditional, this claim is not meant to be an exhaustive answer to EQ1 which details all the objects towards which amusement is immoral.

Smuts (2007, 51; 2010, 336) summarises de Sousa’s (1990) argument for Attitudinal Endorsement as follows:⁴

Stipulation: Joke-token j relies on proposition p and holding positive attitudes towards p is immoral.

Premise 1: If subject S holds negative attitudes towards p , then j cannot amuse S .

Premise 2: If S does not hold positive attitudes towards p , then j cannot amuse S . (By Premise 1)

Premise 3: If j amuses S , then S holds positive attitudes towards p . (By Premise 2)

Conclusion: Therefore, it is immoral for S to be amused by j . (By Stipulation and Premise 3)

If Premise 1 is true, then the argument is sound and Attitudinal Endorsement is true. Smuts (2010, 336), Gaut (1998, 56-7) and Laurence Goldstein (1995, 29) all attribute a form of Premise 1 to de Sousa.⁵

However, I argue that Premise 1 is either empirically false or trivially true, depending on the definition of ‘relies on’ being used in Stipulation. For instance, under one understanding, ‘ j relies on p ’ is taken to mean ‘knowledge of p is required for amusement at j ’. Then, if a sexist joke relies on a sexist proposition, simply having knowledge of that proposition is all that is necessary for amusement. Jeffrey Goldstein, Jerry Suls and Susan Anthony (1972) refer to this view as the ‘salience hypothesis’ since the purpose of sexist

⁴I have rewritten Smuts’ summary in order to use the reformulated Attitudinal Endorsement and in order to give prominence to the controversial first premise

⁵According to Percival (2005, 94, 97), this attribution is mistaken.

or racist propositions is merely to make salient the information required for amusement. For example, consider the following joke:

Today I got my wife one of those handy little safety devices specifically designed to help women drivers avoid accidents. A bus pass.

To be amused by this joke, one needs to know the sexist proposition that all women are bad drivers. So this joke would be classified as sexist when ‘*j* relies on *p*’ is taken to mean ‘knowledge of *p* is required for amusement at *j*’.⁶

However, if ‘*j* relies on *p*’ is taken to mean ‘knowledge of *p* is required for amusement at *j*’, then counter-examples to Premise 1 are simple to find, particularly in the form of anti-racist jokes. Consider the following line from the black comedian Lenny Henry:

Enoch Powell wants to give black people a thousand pounds to go back home, which suits me fine - it only costs me 20p on the bus.

To be amused at this joke, one would have to know of the proposition that all black people are unwanted immigrants. However, even though this is a proposition that a non-racist may have negative attitudes towards, it is clear that those attitudes would not prevent them from being amused by the joke. It seems then that, if ‘*j* relies on *p*’ is understood to mean ‘knowledge of *p* is required for amusement at *j*’, then Premise 1 has counter-examples and is empirically false.⁷

In defence of Premise 1, de Sousa may claim that actually ‘*j* relies on *p*’ does not merely mean ‘knowledge of *p* is required for amusement at *j*’. Knowledge of the proposition is not enough, rather there needs to be some endorsement of the proposition for the joke to rely on it. So ‘*j* relies on *p*’ means rather ‘endorsement of *p* is required for amusement at *j*’. This may avoid counter-examples of anti-racist jokes, but then Premise 1 becomes trivially true. Of course one cannot be amused by a joke when amusement requires holding positive attitudes towards a proposition which one holds negative attitudes towards. Hence, under

⁶Note that to ‘know of’ a proposition is not the same as to ‘know’ a proposition, since knowing a proposition implies justified true belief, whereas knowing of a proposition implies none of these three.

⁷Ted Cohen (2001, 81) is sceptical that a definition of racist or sexist joke-tokens is even possible, but other philosophers are more optimistic. Michael Philips (1984) and David Benatar (1999) each present an act-centred view in which whether a joke-token is racist is primarily determined by the harm it is intended or expected to inflict. Whereas, Bergmann (1986) presents an agent-centred view in which whether a joke-token is sexist is primarily determined by the sexist beliefs it presupposes on the part of the audience. Luvell Anderson (2015) has recently summarised these views and suggested that they could be improved by not presupposing a binary opposition of racist versus non-racist.

this second understanding of ‘ j relies on p ’, Premise 1 and Attitudinal Endorsement 2 become true. But they also become trivial as a result.

In particular, if ‘ j relies on p ’ means ‘endorsement of p is required for amusement at j ’, then Attitudinal Endorsement becomes:

Attitudinal Endorsement: If holding positive attitudes towards proposition p is required for amusement towards joke j and holding positive attitudes towards p is immoral, then it is immoral to be amused by j .

So Attitudinal Endorsement would become a platitude which is true, but trivially true. It does not mean that one cannot be amused by jokes which require *knowledge of* propositions one holds negative attitudes towards. It means merely that if one genuinely holds negative attitudes towards a proposition and a joke genuinely requires endorsement of that proposition, then one cannot be amused by that joke. Seeming counter-examples are either cases in which one does not genuinely hold those negative attitudes or the joke does not genuinely require positive attitudes towards the proposition in question.

In this subsection, I have critically analysed arguments against Attitudinal Endorsement. In summary, it seems that the debate over de Sousa’s attitudinal endorsement theory collapses once one distinguishes between the two senses of ‘relies on’ used in Stipulation. Once this distinction has been made, Attitudinal Endorsement becomes either empirically false or trivially true. In the next subsection, I give my own answer to EQ1.

7.1.3 Answering EQ1

My answer to EQ1 is based on ToA. According to ToA, ToA1, ToA2 and ToA3 are necessary and sufficient conditions for amusement. So EQ1 can be analysed from ‘When is amusement immoral?’ to ‘When are ToA1, ToA2 or ToA3 immoral?’. Since ToA1, ToA2 and ToA3 are each necessary conditions for amusement, only one of them needs to be immoral in order for amusement to be immoral. So EQ1 can be split into three questions:

Ethical Question 1.1 (EQ1.1): When is ToA1 immoral?

Ethical Question 1.2 (EQ1.2): When is ToA2 immoral?

Ethical Question 1.3 (EQ1.3): When is ToA3 immoral?

On EQ1.1, ToA1 is immoral when it is immoral for y to be in a non-serious, non-threatened, non-goal-directed state towards x . So EQ1.1 has three answers:

Ethical Answer 1.1.1 (EA1.1.1): When being in a non-serious state towards x is immoral.

Ethical Answer 1.1.2 (EA1.1.2): When being in a non-threatened state towards x is immoral.

Ethical Answer 1.1.3 (EA1.1.3): When being in a non-goal-directed state towards x is immoral.

Since the term ‘immoral’ is being used as a place-holder, I will give examples to EA1.1.1, EA1.1.2 and EA1.1.3 in terms of different theories of normative ethics.

For an example of EA1.1.1, suppose that x is a joke about a recent natural disaster. Then, according to duty theories, having a non-serious state towards x is immoral because it breaches a duty to treat the bereaved as an end in themselves.⁸ For an example of EA1.1.2, suppose that x is a hostile joke made by a military dictator about one’s safety in their country. Then, according to consequential theories, visiting their country anyway and adopting a non-threatened state towards x is immoral because it would result in the negative consequences of one meeting a grisly end. For an example of EQ1.1.3, suppose that x is a practical joke in which the victim gets seriously injured. Then, according to virtue theories, not rushing to help the injured and adopting a non-goal-directed state towards x is immoral because it is the product of the viceful character trait of unkindness.⁹

On EQ1.2, ToA2 is immoral when it is immoral for y to simultaneously activate two incompatible interpretations of x via unsound logic. So EQ1.2 has one answer:

Ethical Answer 1.2 (EA1.2): When it is immoral to simultaneously activate two incompatible interpretations of x via unsound logic.

Examples of EA1.2 are more difficult to conceive since it focuses on the cognitive component of amusement, but they do exist. Suppose that x is a graffiti joke that has one innocuous interpretation and one malicious interpretation which is apparent only to members of a cruel gang. Then, according to virtue theories, simultaneously activating the two incompatible interpretations of x is immoral because it is the product of the viceful character trait of meanness.

⁸John Morreall (2009, 101-110) proposes an ethics of amusement similar to EA1.1.1. Morreall’s proposal is based on the playful disengagement of sincere language and actions. Specifically, he claims that if x amuses y , then y does not have to believe that x is real as opposed to fictional. However, this claim has counter-examples, such as when one is amused by an anecdote at a dinner party because one believes the anecdote to be real.

⁹Jointly, EA1.1.1, EA1.1.2 and EA1.1.3 combine to provide a point similar to Bergson’s (2008, 4) quote that ‘the comic demands something like a momentary anesthesia of the heart’.

On EQ1.3, ToA3 is immoral when it is immoral for the satisfaction of ToA2 to sufficiently increase the arousal of y (via cognitive dissonance or violated expectation or violated norm etc). Although there are more, EQ1.3 then has three main answers:

Ethical Answer 1.3.1 (EA1.3.1): When it is immoral for the two interpretations of x to increase arousal via cognitive dissonance.

Ethical Answer 1.3.2 (EA1.3.2): When it is immoral for the two interpretations of x to increase arousal via violated expectation.

Ethical Answer 1.3.3 (EA1.3.3): When it is immoral for the two interpretations of x to increase arousal via violated norm.

For an example of EA1.3.1, suppose that x is a servant whom their master jokingly uses as a chair. Suppose further that the master experiences cognitive dissonance by activating two interpretations of the servant as a person and as furniture. Then, according to duty theories, the increase in arousal via the master's cognitive dissonance would be immoral because it arises from breaching a duty to not treat people as a means to an end. For an example of EA1.3.2, suppose that x is a joke which is predicated on the sexist assumption that all physicians are male. Suppose further that this joke violates a sexist's expectations by activating two interpretations of a physician as male and female. Then, according to virtue theories, the increase in arousal via this violated expectation would be immoral because it arises from the viceful character trait of narrowmindedness. For an example of EA1.3.3, suppose that x is a sitcom scene where one male character misleadingly appears to be proposing to another. Suppose further that this scene violates the homophobic norm that same-sex marriage is inappropriate by activating two interpretations of the situation as a proposal and a non-proposal. Then, according to virtue theories, the increase in arousal via this violated norm would be immoral because it also arises from the viceful character trait of narrowmindedness.

My answer to EQ1 consists of a disjunction of EA1.1.1 to EA1.3.3. If one wants to determine whether amusement towards x is immoral, for any x , then one need only consult EA1.1.1 to EA1.3.3 and the correct theory of normative ethics. For example, suppose x is a particular slapstick gag and the correct theory of normative ethics is a consequential theory which defines the term 'immoral' to mean 'resulting in negative consequences'. Then one can first consult EA1.1.1 and inquire into whether being in a non-serious state towards the slapstick gag results in negative consequences. If the answer is 'yes', then amusement towards the gag is immoral, and if the answer is 'no', then one must consult another of EA1.1.1 to EA1.3.3. If after consulting all of EA1.1.1 to EA1.3.3 the slapstick

gag is not immoral, then the gag is not immoral. Ultimately, EA1.1.1 to EA1.3.3 is the most informative answer one can give to EQ1 whilst remaining neutral on the matter of which theory of normative ethics has the correct definition of ‘immoral’.¹⁰

In this section, I have addressed EQ1. In the next section, I address EQ2.

7.2 EQ2: How Does Immorality Affect Funniness?

In subsection 7.2.1, I outline three broad answers to EQ2 and an argument for one of them. In subsections 7.2.2 to 7.2.5, I defend this argument. In subsection 7.2.6, I give my answer to EQ2.

7.2.1 Comic Moralism

EQ2 arises because some humour plausibly contains both an element of immorality and an element of funniness. Consider the following:

Why can’t Stevie Wonder read? Because he’s black.

Clearly, this joke employs the racist stereotype that black people are unintelligent, and hence plausibly contains an immoral element. But, also clearly, the joke employs a form of violated expectation that when employed by other jokes, serves to make them funny. In this case, the violated expectation occurs because Stevie Wonder is famously blind and so one expects his alleged illiteracy to be attributable to that fact. Hence, the joke also plausibly contains an element that makes it funny. This raises the question of whether jokes can be funny despite moral flaws and, more generally, how immorality affects funniness.

In general, there are three broad answers to EQ2:

Comic Amoralism: Immorality does not affect funniness.¹¹

Comic Immoralism: Immorality positively affects funniness.

Comic Moralism: Immorality negatively affects funniness.¹²

¹⁰Recall that by remaining neutral on which theory of normative ethics is correct, I am not advocating the position that no theory of normative ethics is correct, rather I am merely not committing myself to the correctness of any one theory.

¹¹Note that this answer is different to that which Noël Carroll (2014a; 2014b) labels ‘comic amoralism’. Due to his conflation of humour, amusement and funniness, what Carroll labels comic amoralism amounts to the claim that humour cannot be moral or immoral, a claim which Gaut (2007, 245) calls ‘comic autonomism’.

¹²Which of these three answers is right will be of relevance to the relationship between immorality and aesthetic value in general. For example, the more general analogue of comic immoralism is aesthetic

The two key terms to define in these answers is ‘immorality’ and ‘funniness’. In chapter 1, ‘funniness’ has been defined as follows:

Theory of Funniness (ToF): x is funny if and only if x merits amusement.

In contrast, ‘immorality’ is left to be defined with reference to the correct theory of normative ethics.

However, even though different theories of normative ethics disagree on the definition of ‘immorality’, they all agree that immorality merits moral disapproval. Whether immorality is defined in terms of breaching principles, negative consequences or manifesting vices, the merited response to immorality is always moral disapproval. Funniness merits amusement whilst immorality merits moral disapproval. The simplest way then to examine answers to EQ2 is to examine how moral disapproval affects amusement. If moral disapproval does not affect amusement, then Comic Amoralism is the right answer; if moral disapproval positively affects amusement, then Comic Immoralism is the right answer; and, if moral disapproval negatively affects amusement, then Comic Moralism is the right answer.

Since Comic Amoralism, Comic Immoralism and Comic Moralism are mutually exclusive positions, a positive argument for one position is also a negative argument against the other two. So my answer to EQ2 consists of demonstrating the success of a positive argument for Comic Moralism, which also doubles as a negative argument against Comic Amoralism and Comic Immoralism.¹³

The positive argument for Comic Moralism which I defend is the following ‘merited-response argument’:¹⁴

(P1) x is funny if and only if x merits amusement.

(P2) Immoral elements in x negatively affect whether x merits amusement.

(C) Immoral elements in x negatively affect whether x is funny.

immoralism - the position that the immorality of an artwork positively affects its aesthetic value. Daniel Jacobson (1997) even argues for aesthetic immoralism by way of analogy to comic immoralism.

¹³Positive arguments for Comic Immoralism are given by Daniel Jacobson (1997), Scott Woodcock (2015) and Ted Nanicelli (2014). However, word-count limitations prevent me from examining them in this thesis.

¹⁴Berys Gaut (1998, 51-68; 2007, 227-252) gives a version of this merited-response argument in defence of his specific brand of Comic Moralism, called ‘comic ethicism’. Comic ethicism is the position that each immoral element will negatively affect funniness and *if* their cumulative effect is sufficient, then funniness is eliminated. This is not necessarily to claim that any immoral element in humour will eliminate funniness. Hence, comic ethicism can grant that some humour with immoral elements is still funny, because the cumulative negative effect of those immoral elements is not sufficient to completely eliminate funniness. Nonetheless, to the extent that any humour contains immoral elements, it is not funny. Hence, comic ethicism can also grant that some humour is so immoral that it is not funny at all.

Clearly, this merited-response argument is a defence of Comic Moralism because (C) is equivalent to Comic Moralism. Since the inference from (P1) and (P2) to (C) is valid, the two main ways that theorists have objected to the merited-response argument is to deny (P1) and deny (P2). In the next two subsections, I will look at each of these objections individually. In subsection 7.2.2, I critically analyse arguments for denying (P1). In subsection 7.2.3, I outline arguments for denying (P2). In subsection 7.2.4, I outline a ‘bottom-up’ defence of (P2). In subsection 7.2.5, I outline a ‘top-down’ defence of (P2).

7.2.2 Denying (P1)

One line of possible objection to the merited-response argument is to deny (P1). Note that (P1) is exactly like ToF, which states that something is funny if and only if it merits amusement. The comic moralist holds (P1) for the same reasons that I hold ToF: because it is possible to judge humour to be unfunny even when many people, or even most people, are amused by it.

Carroll (2014a, 246-247) tentatively suggests denying (P1) in the following:

But does it really make sense to say that something is not really funny if virtually everyone is amused by it? Perhaps being comically amused is just a descriptive matter and not a normative one.

Likewise, Smuts (2010, 341) also argues that funniness is not a normative concept:

One might note that there does seem to be a normative sense to “humor,” given that we have all said, if not heard, “That’s not funny.” However, we can raise doubts about this conclusion, by unpacking the sentence. It plausibly means something like this: “You should have had another reaction,” or that humor might be inappropriate for some reason.¹⁵

The problem with Carroll’s and Smut’s claims that funniness is a non-normative concept is that they are failing to accommodate the critical gap between what elicits amusement and what merits amusement. As outlined in chapter 1, it is possible to criticise as not funny something which not only amuses most people, but even amuses oneself. So, there are cases in which something is not funny despite the fact it amuses most people. Conversely,

¹⁵In my terminology, it is unclear whether by ‘humour’ Smuts means amusement, humour or funniness. This is because Smuts, as many others do, uses ‘humour’ as an umbrella term to refer to all three. If he is trying to show that amusement is a non-normative concept, then he is right. But, as I demonstrate, if he is trying to show that funniness is a non-normative concept, then he is wrong.

there are also cases in which something is funny despite the fact that it does not amuse most people. Hence there is a critical gap between what elicits amusement and what is funny. This is because, contra Carroll and Smuts, funniness is a normative concept.¹⁶

Smuts (2010, 341) also raises, contra Gaut (1998; 2007), a direct objection to funniness being a normative concept:

The principal problem for Gaut's claim that humor is normative is that one can consistently think that if you think that a starving child on the side of the street looks like an old man, and you find the incongruity funny, then it is funny ... This might indicate a moral omission for which one may be responsible; however, it does not mean that "humorous" is a normative concept just because amusement is inappropriate in some situations.

However, Smuts is only able to articulate this criticism by failing to distinguish between humour, amusement and funniness. He uses 'humour' as an umbrella term to ambiguously refer to humour, amusement and funniness, so one cannot be sure to which concept normativity is being assigned when Smuts talks of 'Gaut's claim that humor is normative'. I argue that if Smuts means that amusement is normative, then the claim is false. But if Smuts means that funniness is normative, then the claim is true.

First, I pick apart Smuts' (2010, 341) main criticism that 'if you think that a starving child on the side of the street looks like an old man, and you find the incongruity funny, then it is funny'. This conflates *finding x funny*, that is, amusement, with *x being funny*. This is only possible because Smuts fails to distinguish between amusement and funniness. Smuts wants to draw a seeming contradiction out of Gaut's position by saying that if one is amused by a starving child, then the starving child is funny. I agree that being amused by the child may warrant one to claim 'I *find* that child funny', meaning 'that child amuses me'. But I argue that merely being amused by the child does not warrant the claim 'that child *is* funny'. Even if one were amused by a starving child, it would still be coherent for someone to then tell one 'that is not funny', because they would be telling one that the child does not merit amusement.

Next, I pick apart Smuts' (2010, 341) claim that 'it does not mean that "humorous" is a normative concept just because amusement is inappropriate in some situations'. Again, Smuts can only articulate this claim because he fails to distinguish between humour, amusement and funniness. One can ask 'What does Smuts mean by the term 'humorous'?'

¹⁶Carroll's and Smuts' argument that one is speaking figuratively when one says 'that's not funny' about something which amuses most people is an argument that will be examined in subsection 7.2.3.

If he means ‘is humour’, then he is right that it is non-normative, but his criticism then misses his target since Comic Moralism is about funniness. Similarly, if Smuts means ‘is amusing’, then he is right but misses his target too. However, if Smuts means funniness, then he is wrong that it is non-normative, since one is able to critique the amusement of others via the critical gap between amusement and funniness, as outlined above. Hence, Smuts’ denial of (P1) is ill-founded because he does not distinguish between humour, amusement and funniness.

In this subsection, I have critically analysed and rejected arguments for denying (P1). In the next subsection, I outline arguments for denying (P2).

7.2.3 Deny (P2)

Rather than deny (P1), an alternative objection to the merited-response argument is to deny (P2). Carroll (2014a, 247) takes this line of argument by claiming that ‘the comic ethicist has begged the question by including moral appropriateness as a necessary condition for comic appropriateness’.¹⁷ His claim is that (P1) seems true only if the term ‘merits’ means ‘comically merits’, whereas (P2) seems true only if ‘merits’ means ‘morally merits’. But (C) follows from (P1) and (P2) only if ‘merits’ has the same meaning in both (P1) and (P2). So the merited-response argument seems sound only if one conflates comic merit with moral merit. Carroll’s (2014a, 246) criticism is that such a conflation is illegitimate because ‘a comically appropriate response - finding something funny - does not in everyday parlance require moral appropriateness’.

According to Justin D’Arms and Daniel Jacobson (2000, 6590), this conflation amounts to committing what they call the ‘moralistic fallacy’. To commit the moralistic fallacy is to infer from the fact that it would be immoral to have a particular attitudinal response towards a particular object that that object does not have the evaluative property associated with that attitudinal response. One of the supposed examples D’Arms and Jacobson give is inferring from the fact that it would be immoral to be amused towards a particular joke that that joke is not funny. They (2000, 80) maintain that ‘a joke can be funny even though it is wrong to be amused by it’. Contra D’Arms and Jacobsen, Gaut (2007, 237-241) argues that there is no conflation in the merited-response argument and so it does not commit the moralistic fallacy.¹⁸

¹⁷Note that Carroll presents the criticism as made by critics of comic moralism but, for stylistic ease, I refer to the criticism as Carroll’s and to Carroll himself as a critic of comic moralism. The criticism is similar to that raised by Daniel Jacobson (1997, 155-199).

¹⁸Also contra D’Arms and Jacobsen, Andrew Jordan and Stephanie Patridge (2012) argue that moral

Carroll (2014a, 246) continues his criticism of the merited-response argument by claiming that the only defence for the comic moralist is flawed:

In response, the comic [moralist] may put his cards on the table and say outright that it is not our ordinary concept of comic amusement that is at stake, but one in which the appropriateness of an amused response requires that the response be morally appropriate. Yet this seems to beg the question, for, then, moral appropriateness appears to be built into the very criteria of comic amusement.

In short then, Carroll's criticism of the comic moralist is that they should be proving that comic merit includes moral merit rather than simply assuming it. Smuts (2010, 342) similarly argues as follows:

[The comic moralist] needs to give us some reason to think that this is how we use the term "humor" and not just stipulate a new use, since whether or not the ethical dimensions of a joke do affect its humorousness is exactly what is at issue.

Contra Carroll, I argue that the merited-response argument, and hence Comic Moralism more generally, is vulnerable to Carroll's criticism only if the comic moralist fails to distinguish between three closely-related but distinct concepts: humour, amusement and funniness. For example, in one defence of comic moralism, Gaut (1998, 53) specifies 'I will speak interchangeably of the humor, funniness or amusingness of jokes'. However, once the comic moralist distinguishes between these three concepts, it becomes clear that Carroll's criticism is unsuccessful.

Carroll's criticism is that the merited-response argument seems sound only if one conflates comic merit with moral merit, but this conflation is illegitimate. Carroll (2014a, 246) gives a fuller characterisation in the following:

Critics of [comic moralists] complain about the legitimacy of [their] conception of comic amusement. Certainly it does seem to be at odds with our ordinary concept of comic amusement, which, roughly speaking, seems to be thought of

considerations can be relevant for ascribing funniness. On their view, a joke is funny only if an appropriate subject takes themselves to have a contributory reason to be amused, and sometimes the absence of such a reason is best explained in terms of moral considerations. However, I do not consider their view because it conflicts with Theory of Amusement, Theory of Funniness and Theory of Humour, as established in chapter 1.

as a matter of enjoying certain perceived incongruities (including moral ones). But the comic [moralist], in addition, requires, as a criterion of appropriateness for an amused response, that the humour not be morally defective despite the fact that a comically appropriate response - finding something funny - does not in everyday parlance require moral appropriateness.

So Carroll says that the ordinary concept of amusement roughly seems to be the enjoyment of perceived incongruity. Under this conception, something merits amusement if and only if it is an enjoyable incongruity. But, since being an enjoyable incongruity does not imply moral rectitude, Carroll (2014a, 246) then criticises the comic ethicist for claiming that comic merit includes moral merit:

Whether, for instance, a joke-candidate merits comic amusement, it can be argued, depends upon whether, with reference to the prototypical case, it engenders pleasure through its manifestation of certain perceived incongruities - which, of course, may extend to moral incongruities.

However, by distinguishing between humour, amusement and funniness, it becomes clear that Carroll's criticism of the merited response argument is unsuccessful. Carroll's criticism is based on the claim that comic merit does not include moral merit and, according to ToA and ToF, there are two approaches for determining whether this is right. The first is a 'bottom-up' ordinary language approach; according to ToF, one way to find out what merits amusement is to look at usage of the term 'funny'. The second is a 'top-down' conceptual analysis approach; according to ToA, another way to find out what merits amusement is to look at the concept of amusement as given by ToA1, ToA2 and ToA3. In the next two subsections, I argue that both the bottom-up and the top-down approach indicate that comic merit includes moral merit.

7.2.4 The Bottom-up Approach

The bottom-up approach indicates that comic merit includes moral merit because usage of the term 'funny' seems to be sensitive to moral rectitude. For example, consider the following:

What should you do when you have a gun with two bullets and are trapped in a room with an angry bear, a hungry lion, and person *P*? Shoot *P* twice.

Whether this joke amuses a particular subject will depend upon their attitudes towards *P*. If they hold positive attitudes towards *P*, then the joke will probably not elicit amusement.

But if they hold negative attitudes towards *P*, then the joke probably will elicit amusement. However, suppose the derision of *P* is immoral, for whatever reason. Perhaps *P* deserves sympathy as opposed to scorn, perhaps insulting *P* reinforces systemic oppression, or perhaps disrespecting *P* leads to some bad consequences. If the derision of *P* was grossly immoral, then one would be inclined to claim ‘that’s not funny’, regardless of who is amused by the joke. But then one’s usage of ‘funny’ would be sensitive to moral rectitude because, with respect to comic merit, the above joke is identical to other jokes that do not target *P*. Thus, according to ToF, the meritedness of amusement is sensitive to moral rectitude.

However, Carroll (2014a, 247) anticipates this line of argument and objects that usage of the term ‘funny’ is not necessarily faithful to the meritedness of amusement:

Of course, we do sometimes say ‘that’s not funny’ about something that everyone else seems to enjoy - perhaps when an ethnic slur is advanced. Yet in these cases we may simply be voicing our moral disapproval and, thereby, intending to dampen our own response and those of others. However, that does not establish that the humour in question is not comically amusing for others, and even, if we are honest, for ourselves.

According to Carroll, when speakers use ‘funny’ in reference to immoral humour their meaning comes apart from the meaning of the sentence they utter. What speakers mean when they say ‘that’s not funny’ is not ‘that does not comically merit amusement’ but rather ‘that does not morally merit amusement’. They are not literally expressing their comic disapproval but rather figuratively expressing their moral disapproval. So the meritedness of amusement is not actually sensitive to moral rectitude after all.

This argument is suspicious. First, it is not at all obvious that speaker meaning does indeed come apart from sentence meaning when ‘funny’ is used in reference to immoral humour. Carroll should be providing an argument to this end rather than just stating that it is a possibility. Moreover, by claiming that comic merit does not include moral merit, Carroll is committed to an oddly disjunctive usage of ‘funny’ in which speaker meaning and sentence meaning align, except when used in reference to immoral humour, in which case the two diverge.

In contrast, by claiming that comic merit does include moral merit, the comic moralist can say simply that speaker meaning and sentence meaning align in all cases. They are not committed to a usage of ‘funny’ with odd exceptions in which all speakers suffer from the same habit of uttering something different to what they mean. If Carroll is claiming

that these exceptions exist, then he has to offer an explanation of why speakers suffer from this collective habit, yet no explanation is offered. The unexplained complexity of Carroll's position makes it suspicious and so the burden of proof is with him to show that usage of the term 'funny' is not sensitive to moral rectitude. Therefore, I maintain that the bottom-up approach indicates that comic merit includes moral merit.

In this subsection, I have found that the bottom-up approach indicates that comic merit includes moral merit. In the next subsection, I argue that the top-down approach indicates that comic merit includes moral merit.

7.2.5 The Top-down Approach

Like the bottom-up approach, the top-down approach indicates that comic merit includes moral merit. As outlined, the crucial issue is whether an absence of moral disapproval is necessary for amusement. Carroll (2014a) argues that the ordinary concept of amusement roughly seems to be the enjoyment of perceived incongruity. Supposing he is right, then comic merit would not include moral merit because an absence of moral disapproval is not necessary for the enjoyment of perceived incongruity. This is the basis of Carroll's criticism.

I argue that Carroll's criticism has appeal only because the concept of amusement has been philosophically under-researched. That is why it seems plausible that amusement consists merely of the enjoyment of perceived incongruity. But, once a fuller conceptual analysis is started, like that in chapters 2 to 6, this idea loses its plausibility. For example, Carroll (2014b, 49-50) himself states the following as provisional necessary and sufficient conditions for amusement:

- (i) The object of one's mental state is a perceived incongruity which (ii) one regards as non-threatening or otherwise anxiety producing, and (iii) not annoying and (iv) towards which one does not enlist genuine problem-solving attitudes (v) but which gives rise to enjoyment of precisely the pertinent incongruity and (vi) to an experience of levity.

A benign-appraisal condition, like (ii), is commonly proposed as a necessary condition for amusement (Apter 1982; Gervais and Wilson 2005; McGraw and Warren 2010). Such a condition states that in order for a perceived incongruity to elicit amusement and not anxiety, the incongruity must be appraised to be benign. For example, play fighting with a child will elicit anxiety from them as opposed to amusement if they appraise one's incongruous behaviour to be malign as opposed to benign. It is Carroll's acceptance of

a benign-appraisal condition, like (ii), which means that, even on Carroll's own analysis, an absence of moral disapproval is necessary for amusement and thereby that comic merit includes moral merit.

Accepting a benign-appraisal condition means that immoral elements negatively affect the meritedness of amusement. That immoral elements merit responses which are incompatible with a benign appraisal is an idea that is even suggested by Carroll (2014b, 29, 32, 113) in his discussion of (ii):

Cases of found humour, then, require that the situations that comically amuse us not be ones in which we feel personal threat ... nor will we be comically amused if we perceive the situation as in some other way dangerous, for example as threatening harm to others; for that will produce anxiety.

In fact, invented humour generally trades in fictional worlds that are devoid of sustained acknowledgements of pain in such a way that our normal empathetic and moral responses remain in abeyance, thereby divesting the situation of the potential to provoke anxiety.

Where the perceptible evil of [humour] is itself a predictable source of anxiety, it seems reasonable to conjecture that the immorality in question can contribute to the alienation of comic amusement.

According to Carroll, humour which threatens harm or conveys pain to oneself or others will merit anxiety and so infringe on a benign-appraisal condition, like (ii). Hence Carroll's (2014b, 32) suggestion that anxiety is detrimental to amusement becomes the suggestion that empathy and moral responses are detrimental to amusement. If immoral elements merit responses that are incompatible with a benign appraisal, then they cannot be appraised to be benign. So, to the extent that humour contains immoral elements, amusement towards it is unmerited (*qua* amusement). Then immoral elements negatively affect the meritedness of amusement. Therefore, even on Carroll's own conceptual analysis of amusement, the top-down approach indicates that comic merit includes moral merit.

Note that ToA too has its own version of a benign-appraisal condition in ToA1. In chapters 5 and 6, I argued that, in the paratelic state, increased arousal is experienced as increased amusement but, in the telic state, the same increase in arousal is experienced as increased anxiety. This bi-stable relationship is exactly in line with Carroll's claim that humour which is not appraised to be benign will merit anxiety. In general, moral disapproval can impinge upon ToA1 in three ways. First, as outlined by Carroll above, immoral elements in humour can threaten harm or convey pain and thereby impinge upon

a non-threatened state. Second, moral disapproval can impinge upon a non-goal-directed state by causing one to experience an obligation.¹⁹ Usually this is an obligation to actively address the perceived immorality, but it is not necessarily an obligation to be active and could be an obligation to be passive.²⁰ Third, moral disapproval can impinge upon a non-serious state by making one engage seriously with the immoral elements in humour. In general, it seems that non-seriousness and moral disapproval are incompatible since to non-seriously morally disapprove of something suggests that one does not really morally disapprove at all. Hence, ToA has its own version of a benign-appraisal condition and more in ToA1.

Furthermore, acceptance of a benign-appraisal condition, like (ii), would also allow the comic moralist to answer another criticism Carroll (2014a, 247) makes of the merited-response argument, as characterised in the following:

It grades humour as comically defective if it is morally defective, but it does not find humour funnier if it is morally inspiring. Wouldn't the Merited Response Argument predict that more morality should make a joke more merited in terms of comic amusement, if less morality makes it less funny? Unfortunately, the [comic moralist] never explains this asymmetry between the satanic and angelic potentials of humour, though surely it is worthy of comment.²¹

Accepting a benign-appraisal condition allows the comic moralist to explain this asymmetry of comic merit. Immoral elements in humour merit responses that, according to a benign-appraisal condition, negatively affect its funniness. However, moral elements in humour may not merit these responses, but this does not then mean that they merit other responses that positively affect funniness. A benign-appraisal condition is proscriptive but not prescriptive: it specifies only what negatively affects funniness and not what positively affects it. So it makes sense for comic merit to be asymmetrical.

In this subsection, I have found that the top-down approach indicates that comic merit includes moral merit. In the next subsection, I give my answer to EQ2.

¹⁹Note that in order to experience an obligation, one does not need to necessarily *fulfil* that obligation, nor indeed even need to *have* such an obligation.

²⁰For example, suppose that one overhears a group of sexists share humour that endorses sexist stereotypes and one, understandably, morally disapproves of that humour. Then one may experience an active obligation to confront the group, or one may experience a passive obligation to avoid giving the impression that one endorses those stereotypes.

²¹Contra Carroll, Gaut (1998, 65-66) does argue that moral elements can positively affect funniness, provided that there is already some humour to make funnier.

7.2.6 Answering EQ2

So, both the bottom-up approach and the top-down approach indicate, contra Carroll, that comic merit includes moral merit. So Carroll's criticism of the merited-response argument is unsuccessful and the merited-response argument is a sound argument in favour of Comic Moralism.

Incidentally, this also has consequences for D'Arms and Jacobson's (2000, 65-90) exposition of the moralistic fallacy. Recall that to commit the moralistic fallacy is to infer from the fact that it would be immoral to have a particular attitudinal response towards a particular object that that object does not have the evaluative property associated with that attitudinal response. One of the supposed examples D'Arms and Jacobson (2000, 80) give is how 'a joke can be funny even though it is wrong to be amused by it'. However, the failure of Carroll's criticism means that it does not necessarily amount to committing the moralistic fallacy to infer from the fact that it would be immoral to be amused towards a particular joke that that joke is not funny. This does not mean that D'Arms and Jacobson cannot claim that the moralistic fallacy exists and is committed in other inferences. Merely, it means that they cannot use funniness as an example to illustrate the moralistic fallacy in their exposition of it.

In this section, I have argued that, by accepting ToA and ToF, it becomes clear that Comic Moralism is the right answer to EQ2. Therefore, my answer to EQ2 is as follows:

Ethical Answer 2 (EA2): Immorality negatively affects funniness.

Note that the merited-response argument for EA2 cannot easily be extrapolated from amusement to aesthetic appreciation. Such an extrapolation would conveniently solve a long running dispute in the philosophy of art about the relationship between aesthetics and morality (Jacobson 1997; D'Arms and Jacobson 2000; Gaut 2007; Carroll 2000). However, this extrapolation cannot be easily made because there are good reasons to believe that ToA1 is a precondition for amusement, but no parallel reasons for believing that ToA1 is also a precondition for aesthetic appreciation. First, ToA1 specifies a state of non-seriousness, yet much art is engaged with seriously. Second, ape laughter and involuntary human laughter occurs in a social context of play, which strongly suggests that the evolution and existence of amusement presupposes a non-threatened, non-goal-directed state. But there is no ethological argument for aesthetic appreciation necessitating a non-threatened, non-goal-directed state. Hence, to change the merited-response argument for EA2 from amusement to aesthetic appreciation would yield a far more dubious argument. This is a topic for another occasion.

In this section, I have addressed EQ2. In the next section, I address EQ3.

7.3 EQ3: When is humour immoral?

EQ3 asks when humour is immoral. The two key terms to define in this question are ‘immorality’ and ‘humour’. As in section 7.1, ‘immorality’ is left to be defined with reference to the correct theory of normative ethics. However, in addition, there are also two possible definitions of ‘humour’ which can be brought out using the type-token distinction.

In subsection 7.3.1, I outline the distinction between humour-tokens and humour-types. In subsection 7.3.2, I use this distinction to give my answer to EQ3.

7.3.1 Humour-Types and Humour-Tokens

Charles Sanders Peirce (1906) introduced the type-token distinction between a general abstract concept and the particular concrete objects that instantiate it. For example, consider how many letters are in the word ‘humorous’. In one sense of ‘letter’, there are eight: ‘h’, ‘u’, ‘m’, ‘o’, ‘r’, ‘o’, ‘u’ and ‘s’. In another sense of ‘letter’, there are six: ‘h’, ‘u’, ‘m’, ‘o’, ‘r’ and ‘s’. According to the type-token distinction, letters in the first sense are tokens whilst letters in the second sense are types. So, in the word ‘humorous’ there are eight letter tokens and six letter types. Types are considered to be general and abstract, whilst tokens are considered to be particular and concrete.

Richard Wollheim (1980) made an influential application of the type-token distinction, in which an artwork itself is a type and the instantiations of that artwork are tokens. For example, Beethoven’s *Symphony No. 9* is a musical artwork that can be thought of as a type such that each performance of *Symphony No. 9* is a token of that type. For artworks that the type-token distinction applies to, there are some artworks for which the type is an artwork but the token is not. For example, the type of Leo Tolstoy’s (2003) novel *Anna Karenina* is an artwork, but each printed paperback token is not. In contrast, there are other artworks for which both the type and tokens are artworks. For example, the choreographic type of Tchaikovsky’s *Swan Lake* is an artwork and so is each performative token of it. As Wollheim argued, the type-token distinction seems applicable for at least some artworks, but not necessarily for all artworks. For example, Da Vinci’s *Mona Lisa* is a painted artwork where it seems that one cannot distinguish between the instantiation of the artwork and the artwork itself.

Berys Gaut (1998, 53-54) and Noël Carroll (2014a, 243-244; 2014b, 90-92) make a further application of the type-token distinction, in which humour-tokens are instantiations

of humour-types. For example, consider the joke:

A farmer counted 196 cows in his field, but when he rounded them up he had 200.

Any instantiation of this joke, including the inscription of it here, is a humour-token of the humour-type *A farmer counted 196 cows in his field, but when he rounded them up he had 200*. Humour-types are then general abstract concepts, whilst humour-tokens are particular concrete objects. Hence, humour-types lack causal powers because they are abstract and not concrete, whereas humour-tokens do not.

To clarify the distinction between humour-types and humour-tokens, I explain how it relates to ToA, ToF and Theory of Humour (ToH). According to ToA, something can elicit amusement only if it has the causal powers to satisfy ToA1, ToA2 and ToA3. So, since humour-types lack causal powers, they cannot cause amusement. Rather, amusement can only be caused by humour-tokens. This explains why the same joke-type can cause amusement when tokened on one occasion, yet fail to cause amusement when tokened on another occasion because amusement is caused by humour-tokens rather than humour-types. Similarly, this explains why performance largely determines whether a humour-token successfully elicits amusement or not. As Carroll observes (2014b, 91), ‘whether a humour-type is effectively mobilized depends on its token execution, which relies on such performance factors as the comic’s intonation and gestures’.

According to ToF, something can be funny only if it can merit amusement. To merit amusement is to be a fitting object of amusement. But if humour-types cannot be objects of amusement, then they cannot be fitting objects of amusement and thereby cannot merit amusement. So then, according to ToF, humour-types cannot be funny. Only humour-tokens can be fitting objects of amusement and, hence, only humour-tokens can be funny. This explains why one token of a joke-type can be praised as funny whilst another token of the same joke-type can be criticised as unfunny. So, only humour-tokens can be amusing or unamusing and funny or unfunny, whilst humour-types cannot.

According to ToH, something can be humour only if it can have the function of being funny or amusing. But, as established, only humour-tokens can be amusing or unamusing and funny or unfunny. Hence, the term ‘humour’ in ToH refers to humour-tokens. This fact can be made explicit by splitting ToH into a theory of humour-types and a theory of humour-tokens, as follows:

Theory of Humour-types (ToHy): *x* is a humour-type if and only if all tokens of *x* have the function of being funny or amusing.

Theory of Humour-tokens (ToHk): x is a humour-token if and only if x is a token of a humour-type.

Note that Theory of Humour-token is essentially equivalent to ToH, since to be token of a humour-type is to have the function of being funny or amusing. This is because, as stated, the term ‘humour’ in ToH refers to humour-tokens.

It is important to be clear which properties can be attributed to humour-types and which to humour-tokens. Doing so avoids conflation, such as that made by D’Arms and Jacobson (2010, 587-588) in the following:

Funniness seems a relatively stable property of good jokes, comic situations and witty remarks ... Common sense thus presupposes that funniness belongs to the joke, so to speak, in that it will be there to be appreciated when the joke is repeated to a new audience.

Here D’Arms and Jacobson conflate joke-types and joke-tokens. Funniness cannot ‘be there’ in a joke-type to be appreciated when it is tokened to a new audience because funniness can only be attributed to joke-tokens. So it is important to be clear what can be attributed to humour-types and humour-tokens in order to avoid such conflation.

In this subsection, I have outlined the distinction between humour-tokens and humour-types. In the next subsection, I use this distinction to give my answer to EQ3.

7.3.2 Answering EQ3

Given ToHy and ToHk, EQ3 can be split into two questions:

Ethical Question 3.1 (EQ3.1): When are humour-types immoral?

Ethical Question 3.2 (EQ3.2): When are humour-tokens immoral?

I answer EQ3 by answering EQ3.1 and EQ3.2. Specifically, I argue that humour-tokens can be immoral whilst humour-types cannot. Moreover, a humour-token, like any act, is immoral when the correct theory of normative ethics defines it to be immoral.

Humour-types are not apt for moral evaluation because they have no causal powers, whereas humour-tokens do have causal powers and as such are apt for moral evaluation. Humour-tokens are acts that occur in a context and, as such acts, can be moral or immoral. In particular, two humour-tokens of the same humour-type can have different moral evaluations, so the humour-type cannot have a singular moral evaluation itself. Carroll (2014b, 89) gives the example of how ‘one Jew might give a pass to another Jew telling a joke about a financially savvy rabbi, but she will not be open to a skinhead reciting with

transparent malice a token of the same story type'. Carroll (2014a, 243) also describes how the following joke-type was tokened both by civil rights activists and Southern white supremacists:

What does a Southern policeman call a Negro with a Ph.D. who teaches at Harvard? Dr. N...

The civil rights activists would have tokened this joke-type with the intention of highlighting the ignorance of their oppressors, whereas the Southern white supremacists would have tokened it with the intention of highlighting their superiority as oppressors. So different joke-tokens of the same joke-type can have different moral evaluations. According to Carroll (2014a, 243), 'when it comes to evaluating humour morally, it matters who is telling the joke, in what context, and with what intention'.

Humour-tokens are apt for moral evaluation since they involve an agent performing a particular action in a particular context and with a particular intention. Such acts are apt for moral evaluation because they can cause harm, or can be intended to cause harm, or manifest viceful character traits. Even a joke written down on a page was written with particular intentions and has particular consequences, and those intentions and consequences can be morally evaluated. So humour-tokens can be moral or immoral because, as acts, they can be morally evaluated. However, humour-types can be tokened with different intentions, consequences and character and thus have different moral evaluations. Moreover, humour-types lack causal powers and so cannot themselves cause harm, or be intended to cause harm, or manifest viceful character traits. Hence, only humour-tokens can be moral or immoral, whilst humour-types cannot.²² Hence, the answer to EQ3.1 is simply as follows:

Ethical Answer 3.1 (EA3.1): Humour-types are not subject to moral eval-

²²That humour-types cannot be immoral is actually contested by Smuts (2009, 160) in the following:

One does not often hear someone object to a racist joke by saying that it should not have been told in the presence of a member of the offended group, but rather that it should not have been told, because the joke itself (the type) is morally objectionable.

Although people often speak as if humour-types are morally objectionable, Gaut (1998, 54) offers an intuitive explanation of what people actually mean when they seem to morally evaluate humour-types:

Talk of a joke-type as sexist can be captured by holding that the attitude manifested by the implicit utterer of the joke is sexist, where the implicit utterer is the utterer we would on reasonable epistemic grounds assign to the joke, if we lacked knowledge of the actual utterer and context.

uation.

As outlined, a humour-token is an act performed by a particular agent with a particular intention in a particular context. Hence, the simple answer to EQ3.2 is that a humour-token, as such an act, is immoral when it is immoral as defined by the correct theory of normative ethics. A humour-token is an act and so should be morally evaluated the same way that any other act is morally evaluated - by holding it up to the correct theory of normative ethics. According to duty theories, a humour-token is immoral when it breaches a principle. For example, an insulting joke-token may be immoral according to duty theorists because it breaches the principle to not treat people as a means to an end. According to consequential theories, a humour-token is immoral when it results in negative consequences. For example, a controversial joke-token may be immoral to consequential theorists because it results in the negative consequences of offending more people than it amuses. According to virtue theories, a humour-token is immoral when it manifests a vice. For example, a vindictive joke-token may be immoral to virtue theorists because it manifests the vice of meanness.

So the simple answer to EQ3.2 is that humour-tokens are immoral if and only if they are immoral according to the correct theory of normative ethics. Although it may seem uninformative, this answer tells one everything one needs to know in order to morally evaluate any humour-token on a case-by-case basis. Given humour-token x , one simply evaluates x in light of the correct theory of normative ethics. If the correct theory of normative ethics emphasises the importance of intentions, then one looks at the intentions behind x . Or, if the correct theory of normative ethics emphasises the importance of consequences, then one looks at the consequences of x . Instead, if the correct theory of normative ethics emphasises the importance of character, then one looks at the character of x 's creator.

So, ultimately the simple and correct answer to EQ3.2, although it seemed uninformative, is perhaps the most informative answer one can give whilst remaining neutral on the matter of which theory of normative ethics has the correct definition of 'immoral'. This simple answer can be characterised as follows:

Ethical Answer 3.2 (EA3.2): A humour-token is immoral when the correct theory of normative ethics defines it to be immoral.

In this section, I have addressed EQ3. In the next section, I summarise the key findings of this chapter.

7.4 Chapter Summary

In this chapter, I have addressed the following ethical questions:

Ethical Question 1 (EQ1): When is amusement immoral?

Ethical Question 2 (EQ2): How does immorality affect funniness?

Ethical Question 3 (EQ3): When is humour immoral?

In section 7.1, I critically analysed the following modern answer to EQ1:

Attitudinal Endorsement: If joke j relies on proposition p and holding positive attitudes towards p is immoral, then it is immoral to be amused by j .

In section 7.1, I also gave the following answers to EQ1:

Ethical Answer 1.1.1 (EA1.1.1): When being in a non-serious state towards x is immoral.

Ethical Answer 1.1.2 (EA1.1.2): When being in a non-threatened state towards x is immoral.

Ethical Answer 1.1.3 (EA1.1.3): When being in a non-goal-directed state towards x is immoral.

Ethical Answer 1.2 (EA1.2): When it is immoral to simultaneously activate two incompatible interpretations of x via unsound logic.

Ethical Answer 1.3.1 (EA1.3.1): When it is immoral for the two interpretations of x to increase arousal via cognitive dissonance.

Ethical Answer 1.3.2 (EA1.3.2): When it is immoral for the two interpretations of x to increase arousal via violated expectation.

Ethical Answer 1.3.3 (EA1.3.3): When it is immoral for the two interpretations of x to increase arousal via violated norm.

In section 7.2, I rejected the following two answers to EQ2:

Comic Amoralism: Immorality does not affect funniness.

Comic Immoralism: Immorality positively affects funniness.

In section 7.2, I also defended the following answer to EQ2:

Ethical Answer 2 (EA2): Immorality negatively affects funniness.

In section 7.3, I applied the type-token distinction in order to address EQ3, which yielded the following:

Theory of Humour-types: x is a humour-type if and only if a token of x has the function of being funny or amusing.

Theory of Humour-tokens: x is a humour-token if and only if x is a token of a humour-type.

In section 7.3, I also gave the following answers to EQ3:

Ethical Answer 3.1 (EA3.1): Humour-types are not subject to moral evaluation.

Ethical Answer 3.2 (EA3.2): A humour-token is immoral when the correct theory of normative ethics defines it to be immoral.

Together with EA1.1.1 to EA1.3.3 and EA2, EA3.1 and EA3.2 constitute my answers to the ethical questions ‘When is amusement immoral?’, ‘How does immorality affect funniness?’, and ‘When is humour immoral?’.

Conclusion

In chapter 1, I addressed philosophical questions about amusement, funniness and humour.

In section 1.1, I raised the following three metaphysical questions:

Metaphysical Question 1 (MQ1): What is amusement?

Metaphysical Question 2 (MQ2): What is funniness?

Metaphysical Question 3 (MQ3): What is humour?

In section 1.2, I addressed MQ1 by examining amusement, which yielded the following (incomplete) definition:

Theory of Amusement (ToA): x amuses y if and only if ...

In section 1.3, I addressed MQ2 by examining funniness, which yielded the following definition:

Theory of Funniness (ToF): x is funny if and only if x merits amusement.

In section 1.4, I addressed MQ3 by examining humour, which yielded the following definition:

Theory of Humour (ToH): x is humour if and only if the function of x is to be amusing or funny.

In section 1.5, I clarified some miscellaneous terms related to amusement, funniness and humour.

In chapter 2, I reviewed early theories of amusement in preparation for completing ToA. In section 2.1, I outlined and defended the following approach to MQ1:

The Essentialist Approach: Search for a list of conditions (1), (2), (3) ... about an object x and a subject y that meet the two requirements:

Necessity: If x amuses y , then (1), (2), (3), ... are satisfied.

Sufficiency: If (1), (2), (3), ... are satisfied, then x amuses y .

In the next four sections, I reviewed early theories of amusement taking an essentialist approach. In section 2.2, I reviewed early superiority theories to yield the following key claim:

Early Superiority Theory: x amuses y if and only if x causes y to experience sudden feelings of superiority.

In section 2.3, I reviewed early incongruity theories to yield the following key claim:

Early Incongruity Theory: x amuses y if and only if y perceives an incongruity within x .

In section 2.4, I reviewed early release theories to yield the following key claim:

Early Release Theory: If x amuses y , then x causes y to release accumulated mental energy.

In section 2.5, I reviewed early play theories to yield the following key claim:

Early Play Theory: If x amuses y , then y is in a state of play.

In chapter 3, I started to define the cognitive component of amusement by critically analysing incongruity theories of amusement. In section 3.1, I critically analysed and accepted the following:

Incongruity Necessary: If x amuses y , then y perceives an incongruity in x .

In section 3.1, I also critically analysed and found counter-examples to the following:

Incongruity Sufficient: If y perceives an incongruity in x , then x amuses y .

By considering Michael Clark's (1970) incongruity theory, I determined that the best response to the Incongruity Sufficient counter-examples is to more precisely capture the cognitive component of amusement. In section 3.3, I critically analysed and rejected the following refinements of the concept of incongruity:

Violated Expectation: If x amuses y , then x violates y 's expectations.

Norm Violation: If x amuses y , then y perceives x to violate a norm.

Erroneous Conceptualisation: If x amuses y , then y perceives x to involve an erroneous conceptualisation.

Error Detection: If x amuses y , then x causes y to detect an epistemic error.

In section 3.4, I critically analysed and accepted the following theoretical synthesis of bisociation theories:

Bisociation Refinement: If x amuses y , then y simultaneously activates two incompatible interpretations of x .

In chapter 4, I continued to define the cognitive component of amusement. In section 4.1, I critically analysed the refinement that incongruity involves resolution. In subsection 4.1.1, I uncritically reviewed two resolution theories to yield the following:

Shultz-Suls Refinement: If x amuses y , then y perceives an incongruity in x and y resolves the incongruity in x .

Like the concept of incongruity, the concept of resolution needed to be made more precise, so I critically analysed and amended three key claims. In subsection 4.1.2, I made the following amendment:

Consistent Explanation: If x amuses y , then y finds a consistent explanation of the incongruity in x .

Unsound Explanation: If x amuses y , then y finds an unsound explanation of the incongruity in x .

In subsection 4.1.3, I made the following amendment:

Complete Removal: If x amuses y , then y 's resolution completely removes the incongruity in x .

Partial Removal: If x amuses y , then y 's resolution partially removes the incongruity in x .

In subsection 4.1.4, I made the following amendment:

Temporal Ordering: If x amuses y , then y perceives the incongruity in x before resolving it.

Non-temporal Ordering: If x amuses y , then y perceives the incongruity in x via resolving it.

In section 4.2, I outlined, critically analysed and accepted the following theoretical synthesis of Shultz-Suls Refinement, Unsound Explanation, Partial Removal and Non-temporal Ordering:

Resolution Refinement: If x amuses y , then y perceives an incongruity in x via unsound logic.

In section 4.3, I synthesised Bisociation Refinement and Resolution Refinement to yield the following definition of the cognitive component of amusement:

Cognitive Component of Amusement (CCoA): If x amuses y , then y simultaneously activates two incompatible interpretations of x via unsound logic.

In chapter 5, I started to define the affective component of amusement by critically analysing superiority, release and play theories of amusement. In section 5.1, I critically analysed and rejected the following:

Superiority Necessary: If x amuses y , then x causes y to experience sudden feelings of superiority.

Superiority Sufficient: If x causes y to experience sudden feelings of superiority, then x amuses y .

Gruner's Superiority Theory: If x amuses y , then x causes y to suddenly experience a playful sense of winning.

In section 5.1, I also extracted the following acceptable points that superiority theories highlight:

Superiority Compatibility: Amusement is compatible with feelings of superiority.

Aggression Inverted-U: Amusement has an inverted-U relationship with aggressive content.

Dispositions Affect: Amusement is affected by dispositions.

In section 5.2, I critically analysed and rejected the following:

Release Sufficient: If x causes y to release accumulated mental energy, then x amuses y .

Release Necessary: If x amuses y , then x causes y to release accumulated mental energy.

Berlyne's Release Theory: Amusement has an inverted-U relationship with arousal.

In section 5.2, I also extracted the following acceptable points that release theories highlight:

Sexual Dispositions: Amusement towards sexual humour is affected by dispositions towards sex.

Arousal Linear: Amusement has a linear relationship with arousal.

In section 5.3, I critically analysed and rejected the following:

Play Sufficient: If y is in a state of play, then x amuses y .

In section 5.3, I also decided to make more precise the concept of play after critically analysing the following:

Play Necessary: If x amuses y , then y is in a state of play.

In section 5.3, I also extracted the following points that play theories highlight:

Paratelic Necessary: If x amuses y , then x initiates or maintains y being in the paratelic state.

Arousal Necessary: If x amuses y , then increasing the arousal of y increases the amusement of y .

In chapter 6, I continued to define the affective component of amusement. In section 6.1, I critically analysed and accepted the following:

Non-goal-directed Necessary: If x amuses y , then x initiates or maintains y being in a non-goal-directed state.

Non-threatened Necessary: If x amuses y , then x initiates or maintains y being in a non-threatened state.

Arousal Necessary: If x amuses y , then increasing the arousal of y increases the amusement of y .

In section 6.1, I also synthesised Non-goal-directed Necessary, Non-threatened Necessary and Arousal Necessary to yield the following definition of the affective component of amusement:

Affective Component of Amusement (ACoA): If x amuses y , then:

- (1) x initiates or maintains y being in the paratelic state.
- (2) Increasing the arousal of y increases the amusement of y .

In section 6.2, I proposed combining CCoA and ACoA via cognitive dissonance theory, and listed some techniques by which CCoA can increase amusement by increasing arousal. In section 6.3, I combined CCoA and ACoA to complete the following:

Theory of Amusement (ToA): x amuses y if and only if:

- (1) x initiates or maintains y being in a non-serious, non-threatened, non-goal-directed state.
- (2) y simultaneously activates two incompatible interpretations of x via unsound logic.
- (3) (2) sufficiently increases the arousal of y (via cognitive dissonance or violated expectation or violated norm etc).

Together with ToF and ToH, this completed version of ToA constituted my answers to MQ1, MQ2 and MQ3.

In chapter 7, I addressed the following ethical questions:

Ethical Question 1 (EQ1): When is amusement immoral?

Ethical Question 2 (EQ2): How does immorality affect funniness?

Ethical Question 3 (EQ3): When is humour immoral?

In section 7.1, I critically analysed the following modern answer to EQ1:

Attitudinal Endorsement: If joke j relies on proposition p and holding positive attitudes towards p is immoral, then it is immoral to be amused by j .

In section 7.1, I also gave the following answers to EQ1:

Ethical Answer 1.1.1 (EA1.1.1): When being in a non-serious state towards x is immoral.

Ethical Answer 1.1.2 (EA1.1.2): When being in a non-threatened state towards x is immoral.

Ethical Answer 1.1.3 (EA1.1.3): When being in a non-goal-directed state towards x is immoral.

Ethical Answer 1.2 (EA1.2): When it is immoral to simultaneously activate two incompatible interpretations of x via unsound logic.

Ethical Answer 1.3.1 (EA1.3.1): When it is immoral for the two interpretations of x to increase arousal via cognitive dissonance.

Ethical Answer 1.3.2 (EA1.3.2): When it is immoral for the two interpretations of x to increase arousal via violated expectation.

Ethical Answer 1.3.3 (EA1.3.3): When it is immoral for the two interpretations of x to increase arousal via violated norm.

In section 7.2, I rejected the following two answers to EQ2:

Comic Amoralism: Immorality does not affect funniness.

Comic Immoralism: Immorality positively affects funniness.

In section 7.2, I also defended the following answer to EQ2:

Ethical Answer 2 (EA2): Immorality negatively affects funniness.

In section 7.3, I applied the type-token distinction in order to address EQ3, which yielded the following:

Theory of Humour-types: x is a humour-type if and only if a token of x has the function of being funny or amusing.

Theory of Humour-tokens: x is a humour-token if and only if x is a token of a humour-type.

In section 7.3, I also gave the following answers to EQ3:

Ethical Answer 3.1 (EA3.1): Humour-types are not subject to moral evaluation.

Ethical Answer 3.2 (EA3.2): A humour-token is immoral when the correct theory of normative ethics defines it to be immoral.

Together with EA1.1.1 to EA1.3.3 and EA2, EA3.1 and EA3.2 constitute my answers to the EQ1, EQ2 and EQ3.

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