Universität Tübingen Neuphilologische Fakultät Seminar für Englische Philologie Dozentin: PD Dr. Susanne Winkler 25.05.2007

Phonetic, Phonological and Prosodic Triggers for Mondegreens

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Abstract

The challenges for the explanations for Mondegreens are the questions how the listener recovers the sung lyrics and why he or she mishears them. I propose the Phonetic Ambiguity Hypothesis which states that the original song's lyrics are phonetically ambiguous and that this phonetic ambiguity then triggers the act of mondegreening. I further argue that the theories that have hence tried to explain this phenomenon, namely the Metrical Segmentation Strategy and the Syllable Onset Segmentation Hypothesis, clearly lack substance in their argumentation. They depend on rather problematic conditions that have to be fulfilled in order for them to be the plausible triggers for Mondegreens. It is thus neither stress assignment, nor syllabification that leads to the necessary ambiguity and that triggers the mishearing. To support my hypothesis, I present an overview of these theories and apply them to a corpus of 20 Mondegreens.

0. Introduction

Surely everyone who was singing along with songs encountered, if only years later, that he or she had been mistaken all along and that some songs, or at least some of their lyrics, had an altogether different intended meaning. In the English language, these mishearings are called "Mondegreens". The topic of this work is to answer the question why we mondegreen.

To achieve that, I will apply various linguistic theories that try to explain the act of mondegreening to a corpus of 20 self chosen Mondegreens. First of all, however, I will define the term Mondegreen and clarify how it came into existence. I will then go on to explain the various theories. In doing so, I will lay out the grounds for the examination of my corpus. I will start with phonetic similarity, the phenomena of allophonic variation and of assimilation, as well as their role in connected speech. These will help to understand why the original song's lyrics are phonetically ambiguous. On these grounds, I will propose the Phonetic Ambiguity Hypothesis. I will then go from the *small* syllable to the *bigger* words. To do that, I will lay out three different cues to segment speech, namely the Maximal Onset Principle, the Metrical Segmentation Strategy and the Syllable Onset Segmentation Hypothesis. These will then give insight into syllable structure and stress assignment, as well as their role in speech segmentation. Finally, I will take a short look at the Japanese Mora and the Possible-Word

Constraint. This essay's task will then be to find the triggers for the Mondegreens in question. To accomplish that, I will examine the Mondegreens separately and compare the results.

In this paper, I argue for the Phonetic Ambiguity Hypothesis. It states that the original song's lyrics are phonetically ambiguous and that this phonetic ambiguity then triggers the act of mondegreening. My hypothesis is further that neither the Maximal Onset Principle, nor the Syllable Onset Segmentation Hypothesis, nor the Metrical Segmentation Strategy can account for possible explanations for Mondegreens: firstly, because syllable structure and stress assignment are only minor sources of ambiguity; secondly, because the *sequence* of conditions that have to apply in order for them to be able to explain the triggers for Mondegreens are too problematic.

1. Mondegreens: Definition and Examples

The term Mondegreen was coined by the writer and columnist Sylvia Wright in her article titled "The Death of Lady Mondegreen", published in the *Harper's Magazine* in 1954. In it, she confessed to mishearing a line in the old Scottish ballad called "The Bonny Earl of Murray" by Thomas Percy:

Ye highlands, and ye lawlands,
 Oh! whair hae ye been?
 They hae slaine the Earl of Murray,
 And layd him on the green.

She misheard the last two lines as:

2) They hae slaine the Earl of Murray
And Lady Mondegreen. (Wright 1954)

The term Mondegreen is thus a Mondegreen itself. A Mondegreen is, in general, a mishearing of a phrase or, in particular, of a song lyric that thus acquires new meaning, as for example in:

- 3) The Hooters, "Lucy in the Sky with Diamonds"
 - a) "The girl with kaleidoscope eyes" (original)
 - b) "The girl with colitis goes by" (mishearing)

Mondegreens are obviously the result of "an all-too-human desire to give meaning to seemingly random information [... and] owe their continued existence to the inability to come up with anything more meaningful." (BBC h2g2 2006). This is, then, the main problem that underlies an examination of the triggers for the act of mondegreening: why can we not come up with anything "more meaningful[?]"(BBC h2g2 2006). Why do we mondegreen? It is clear that a listener who suffers from colitis, this "illness in which the colon becomes inflamed" (*Collins Cobuild Advanced Learner's Dictionary*, 263), is more likely to mishear the lyrics as in example 3) than someone who is not suffering from it or who is even completely unfamiliar with it. It is thus clear that the listeners' prerequisites determine the understanding of lyrics. What is also clear, is that the original song's lyrics are necessarily ambiguous - at least to those who committed the mondegreening. The questions then are: why are they ambiguous and how can we disambiguate them?

As Mondegreens are usually *sung*, a number of cues that help listeners disambiguate them in spoken language can and will necessarily disappear. Singers make use of a rather different, modified type of pronunciation, which thus makes the lyrics harder to understand: short vowels may be lengthened and long ones shortened, for example, contractions may be necessitated by the rhythm, or stressed syllables may be unstressed and vice versa. Therefore, mishearings that occur in a sung phrase *may* not appear in its spoken counterpart. Yet, "[w]e have no reason to think that the mishearings shown up by sung Mondegreens would not [equally] arise in the spoken language", as well. (Kjellmer 2000, 201)

Although the problems that arise if one is trying to understand and attach meaning to song lyrics sung in a foreign language are clear to every second or third language learner, it is not only them who mondegreen, but native speakers do so likewise. It remains, however, by far more difficult for non-native speakers to understand the sung words correctly, as they do normally not have a perfect command of the target language and often lack grammatical and/ or lexical competence, as shows the following example:

- 4) José Feliciano, "Feliz navidad"
 - a) "Feliz navidad" (original)
 - b) "Police naughty dog" (mishearing)

It remains unknown, however, where exactly in a song (line) the mishearing took place and which of the then altered line is a logical result of the former mishearing. The mistaken listener is trying to attach meaning to either what follows in the song or to what came before. He or she is trying to bring it into coherence with his or her mishearing, as is the case in:

- 5) Bob Dylan, "Blowin' in The Wind"
 - a) "The answer my friend, is blowin' in the wind" (original)
 - b) "Dead ants are my friends, they're blowin' in the wind" (mishearing)

Here, it can be said that the "they're" is the result of the mishearing of "Dead ants" for the correct "The answer" and the wish to come up with a grammatical coherent sentence. The singular "is" is therefore turned into the plural "they're", although they do not sound equal at all.

It is important to note that many lines are misheard, although they should be clear from the song's context. The problem in trying to find out about the possible reasons for Mondegreens is, therefore, that many people who submit Mondegreens to the internet only try to make fun out of songs. Many times there does not appear to be a logical reason for the mishearing, as for example in:

- 6) Elton John, "Someone saved my life tonight"
 - a) "Someone saved my life tonight" (original)
 - b) "Someone shaved my wife tonight" (mishearing)

It can and should not be said, however, that the mishearings did not take place - however farfetched they might be or appear. It cannot be this work's task to prove that these Mondegreens cannot have appeared. Two triggers for the huge material available on Mondegreens in the internet are already clear: both the tendency of the human mind to try to make sense out of seemingly random information and the desire to laugh about one's own mistakes, especially if one cannot really tell the difference between the mishearing and the original, as would be the case in the following example:

- 7) Jimmy Hendrix, "Purple Haze"
 - a) "Excuse me, while I kiss the sky" (original)
 - b) "Excuse me, while I kiss this guy" (mishearing)

It remains to be discussed in this work if phonetic ambiguity is the only trigger for Mondegreens or whether there can be found other reasons, as well, that will be explained by linguistic approaches concerning syllable structure and stress assignment. I will therefore explain these linguistic approaches in chapter 2. The application of these theories to the Mondegreens selected will then be part of chapter 3.

2. Linguistic Approaches to Mondegreens

Up to this point, we have noted that Mondegreens are mishearings of song lyrics that are necessarily ambiguous. What we do not know, yet, is what makes them ambiguous and what triggers the mondegreening. In order to answer these questions, I will discuss various approaches to Mondegreens that will then be used as the foundation for the examination of the corpus of my 20 Mondegreens in the following chapter. Welby states that "[l]isteners have tacit knowledge for a wide range of patterns in their native language to help them segment speech. [...] They exploit, for example, their knowledge of regularities in allophonic variation, phonological pattern frequencies and constraints, [syllable structure], and prosodic information such as duration, stress, and intonation patterns." (Welby 2003, 132) These cues should then also help the listeners to disambiguate the song's lyrics. To lay out these cues is the task of this chapter. Before doing so, it is important to bear in mind that these cues to speech segmentation are apparently rather language-specific than language-universal. Also, most cues to speech segmentation do not determine word-boundaries, but identify possible word-boundaries. It is important to note, as well, that "listeners employ their native language strategies in listening to a foreign language, even when these strategies are ineffective and lead the listener to hypothesize inappropriate word boundaries." (Welby 2003, 154)

2.1 Phonetic Approach

According to Kjellmer (2000, 199), "[M]ondegreens are characterized by the mishearing of one phoneme for another [that] leads to a reinterpretation of the sentence or phrase in which it occurs." It is indeed true, that many words are *simply* homophones of each other: They are pronounced in the same way, but have different meanings and/ or spellings. For example:

8) I scream – Ice-cream, /aIskxi:m/ - /aIskxi:m/ (Smith 2003, 114)

Others are just as easy to pronounce exactly the same way:

9) stuff he knows – stuffy nose. /stafhi:nəuz/ - /stafinəuz/ (Smith 2003, 114)

Even in spoken language, they can only be distinguished by context. Those phonemes that have a high degree of similarity are very vulnerable to be misheard. So are the voiced and voiceless alveolar plosives /d/ and /t/ very easy to confuse with each other, for example:

- 10) Tori Amos, "Silent All These Years"
 - a) "Saved again by the garbage truck" (original) /seIvd\(\partial\)gen/
 - b) "Safety can by the garbage truck" (mishearing) /seIftIkən/

It is also important to take the sounds' surrounding(s) into consideration. Another aspect that might lead to the mishearing of a phrase is therefore allophonic variation, that is the variation in the pronunciation of phonemes in different positions. Sounds often vary a little bit in pronunciation, depending on what other sounds precede or follow them. This is the case in following example, in which two sounds assimilate and thus become more similar to each other. Compare:

11) Wouldn't you - Wooden shoe. /wodntju:/ - /wodnsu:/ (Harley 2003, 89)

When spoken carefully, the distinction above is clearly perceivable. In normal speech,

however, the pronunciation of "Wouldn't you" changes: the voiceless alveolar plosive /t/ is softened as it is followed by the palatal glide /j/. They get "smeared together" into the voiceless postalveolar fricative /ʃ/, which then leads to the pronunciation /woudntʃu:/. (Harley 2003, 89) This pronunciation is then more similar to /woudnʃu:/ than to /woudntju:/ and thus more likely to be misheard. While allophonic variation usually helps the listener to distinguish an otherwise potentially difficult-to-hear-contrast, it does sometimes have the opposite effect, as for example in:

- 12) Jimmy Hendrix, "Purple Haze":
 - a) "Excuse me while I kiss the sky" (original) /ðəskaI/
 - b) "Excuse me while I kiss this guy" (mishearing) /ðIsgaI/

Here, we also find allophonic variation, in this case of the voiceless velar plosive /k/. Usually, voiceless plosives are aspirated, as is the case in *coat*, for example. If voiceless plosives form part of a complex syllable onset, however, they are, just like voiced plosives, unaspirated. Such is the case in "sky": The voiceless velar plosive /k/ is unaspirated. This then makes it sound much more like the unaspirated voiced velar plosive /g/ in "guy". It is therefore easy to mistakenly hear "this guy" instead of "the sky". (Harley 2003, 90)

2.1.1 The Phonetic Ambiguity Hypothesis

As stated before, singers make use of a rather different, modified type of pronunciation. This makes the lyrics even harder to understand and thus leads to phonetic ambiguity. I believe that this phonetic ambiguity is the actual trigger for the act of mondegreening. I therefore propose the *Phonetic Ambiguity Hypothesis* (henceforth abbreviated PAH). It is based on two ideas:

13) PAH:

- a) The original song's lyrics are phonetically ambiguous
- b) This phonetic ambiguity triggers the act of mondegreening.

To find out whether the original song's lyrics are indeed phonetically ambiguous, I will compare the phonetic transcriptions of the original song's lyrics with those of the Mondegreen. I thereby want to find out to what degree they are phonetically similar. For, if the original and the Mondegreen are indeed phonetically similar, the original has to be phonetically ambiguous.

2.1.2 The International Phonetic Alphabet

The International Phonetic Alphabet (IPA) is a system of phonetic representation and can thus be used to transcribe sounds phonetically. In Appendix A you find the full chart of the symbols used to represent the sounds that I will use to transcribe the lyrics of the original song and those of the mishearing. In it, vowels and consonants are classified along the following lines: vowels are classified by the part of the tongue used (front, central, back), by the degree of raising of the tongue (close, close-mid, open-mid, mid), by the position of the lips (rounded, neutral, unrounded) and their length (short, long). Consonants are classified by their place of articulation (bilabial, labiodental, dental, alveolar, postalveolar, retroflex, palatal, velar), their manner of articulation (plosive, nasal, approximant, lateral approximant), and the vibration of the vocal chords (voiced, voiceless). It is clear that the more qualities two or more sounds share, the more they sound alike. In comparing the transcriptions of the original song's lyrics and those of the mishearing, I want to see how phonetically similar they are, or if there are even homophones to be found. As it is admittedly hard to draw the line between phonetic similarity and phonetic difference, I will also make use of Soundex to check phonetic similarity.

2.1.3 The Soundex Indexing System

The Soundex Indexing System (henceforth called Soundex) is a phonetic algorithm for indexing (sur)names by their sound when pronounced in English, rather than the way they are spelled (National Archives and Records Administration 1995). Names that sound the same but are spelled differently, as do for example Smith and Smyth, have thus the same index. Every Soundex code consists of four characters: one letter and three numbers. While the letter always refers to the first letter of the name, the three numbers are assigned to the remaining

letters according to table 1 below. If necessary, zeros are added to fill up to the four character code. In giving various letters the same number, Soundex assigns them also a phonetic similarity. In giving the letters $\langle b \rangle$, $\langle f \rangle$, $\langle p \rangle$ and $\langle v \rangle$ all the same number (1), for example, Soundex states that they are phonetically equal. Soundex thereby neglects the phonetic differences between those letters that receive the same number. This leads to imprecision. What Soundex further lacks is to state a degree of phonetic similarity between the various numbers. It is unclear why $\langle b \rangle$, $\langle f \rangle$, $\langle p \rangle$ and $\langle v \rangle$ should be given the number (1), while $\langle c \rangle$, $\langle g \rangle$, $\langle j \rangle$, $\langle k \rangle$, $\langle q \rangle$, $\langle s \rangle$, $\langle x \rangle$, and $\langle x \rangle$ are given (2) and $\langle x \rangle$ are given (3). It is also unclear if Soundex implies that the phonetic similarity between the two letters is higher if the numbers are closer to each other. The question is thus if $\langle b \rangle$, $\langle f \rangle$, $\langle p \rangle$ and $\langle v \rangle$ (1) are phonetically more similar to $\langle x \rangle$, $\langle x$

Table 1: Soundex Coding Guide

Letter	Number
b, f, p, v	1
c, g, j, k, q, s, x, z	2
d, t	3
1	4
m, n	5
r	6
a, e, i, o, u, h, w, y	disregarded,
	unless name's first letter

Just two examples to quickly explain and illustrate how Soundex works in praxis:

- 14) Lee: L000 (L for the first letter <L>, 000 added, as <e> is disregarded)
- 15) Washington: W252 (W for the first letter <W>, 2 for the <s>, 5 for the <n>, 2 for the <n>, the remaining letters are disregarded), but:
- 16) Washington in a ten character code: W252350000.

2.2 Phonological Approach

2.2.1 Speech Segmentation Approach

In this chapter, I will go away from the bare likeness of sound between the original song's lyrics and those of the corresponding Mondegreen. I will rather take a look at the cues that help segmenting speech. I will begin by an examination of the syllable and its structure, as well as their underlying *phonotactic* constraints. After that I also want to consider the role of sonority in syllable structure. In laying out these approaches, I hope to be able to make clearer what listeners got wrong in the song lyrics and why; it is a question of what cues they fell prey to – *if they did*.

2.2.1.1 The Syllable and its Structure

As we have already seen above, the detection of a valid syllable can help to detect words. The role of the syllable in speech is, however, complex: It is both segmental, that is regarding individual sounds and their pronunciations, and supra segmental, that is regarding prosody. All words can be divided into one or more syllables.

Syllables can be viewed as groupings of segments: a vowel nucleus with up to three consonants before and 4 consonants following it; V stands for vowel, C for consonant, brackets indicate optionality. This is represented below:

Take a look at some example words:

- 18) *string* (Harley 2003, 64)
- 19) *spleen* (Harley 2003, 69)
- 20) *lamp* (Harley 2003, 72)
- 21) *spammed* (Harley 2003, 73)
- 22) texts (Harley 2003, 64)

Normally, only two consonants are allowed in an onset (-cluster), that is the "beginning" of the syllable before the vowel nucleus (Harley 2003, 64). The phoneme /s/, however, behaves in an unusual fashion as it can combine with almost any onset to form a cluster of up to three consonants. (Radford et al. 1999, 90) It is important to note that language specific *phonotactic constraints*, or phonotactics, restrict sound combinations and thus limit the possible sequences of consonants in clusters. Phonotactics then account for the ungrammaticality of the following examples:

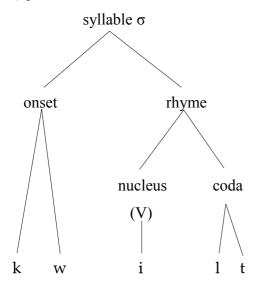
- 23) **rtuck* (Harley 2003, 67)
- 24) **jlam* (Harley 2003, 66)
- 25) **chlink* (Harley 2003, 66)
- 26) **dzell* (Harley 2003, 68)

One of these phonotactics is the *Substring Rule*, which states that "[E]very subsequence contained within a sequence of consonants must obey all the relevant phonotactic rules." (Harley 2003, 69-70) If one knows the phonotactic constraints, they may help him or her to recognize syllable-boundaries and hence possible word-boundaries: if one knows that a certain sequences cannot occur in one syllable, there has to be a syllable-boundary and hence a possible word-boundary. The consonant sequence <kf> is not a possible syllable onset or coda, for example. I. e. there must be a syllable-boundary and possibly even a word-boundary (Harley 2003, 77-8).

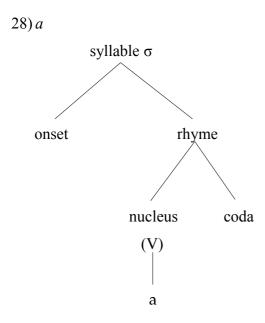
2.2.1.1.1 Tree Structure: The Maximal Onset Principle

Generally, the consonant (-cluster) before the vowel nucleus of a syllable is called the syllable's onset, while the consonant (-cluster) that it follows is called the syllable's coda. Together, vowel nucleus and coda form the syllable's rhyme (Radford et al. 1999, 88). This structure is illustrated in the following tree structure:

27) quilt



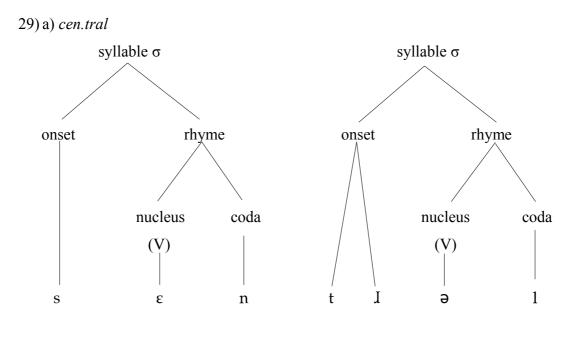
Bear in mind that a syllable can consist of 1 single vowel only. In this case, it only consists of a nucleus, as is the case of the indefinite article for example:

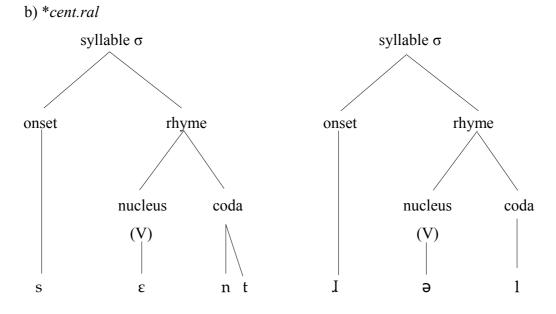


In the case of the syllabic consonants /l/, /m/, /n/, and /ŋ/, a syllable can also consist of a consonant only instead of a vowel. They have "vocalic qualities". (Dretzke 1998, 64)

When we break a polysyllabic word like *central*, for example, into syllables, there may be uncertainty as to where to place a consonant, more precisely, whether to put it in the

onset (of the following syllable) or in the coda. In this case, whether to put the /t/ in the onset (29a) or in the coda (29b).





As studies showed that "onsets have priority over codas cross-linguistically" (Radford et al. 1999), 91), we put the consonant in the onset (of the following syllable), rather than the coda when there is a choice as to where to place it. This principle was called the *Maximal Onset Principle* (Radford et al. 1999, 92; henceforth abbreviated MOP).

30) MOP:

When there is a choice as to where to place a consonant, we put it in the onset rather than the coda. (Radford et al. 1999, 92)

From that follows that (29a) is correct, while (29b) is incorrect.

2.2.1.2 The Sonority Principle

Speech segments vary along a continuum of sonority values, with vowels being most sonorant and voiceless stops less sonorant. Mid/high values of sonority are provided by liquids and nasals. In this concept, syllables are depicted as sonority waves with their nuclei as the sonority peak and the syllable boundaries as sonority troughs. The *Sonority Principle* makes constraints on consonant sequencing:

31) The Sonority Principle:

The sonority profile of a legitimate syllable must rise continuously to a peak and fall continuously after that peak (Radford et al. 1999, 90). If it doesn't, it is not a legitimate syllable.

The Sonority Principle can thus help to detect valid syllables and possibly words, as well. Compare Figure 1 and Figure 2 for *quilt* and *wkitl (Radford et al. 1999, 89):

Figure 1: Sonority wave of *quilt*:

Figure 2: Sonority Wave of *wkitl (Radford et al. 1999, 89-90):

5			*			vowels
4	*		$/\!\!/$		*	approximants
3						nasals
2		$\backslash /$		\mathbb{N}		fricatives
1		*		*		plosives
Degree of sonority/ phonetic transcription	W	k	i	t	1	

As *wkitl violates the Sonority Principle, it is no legitimate word.

Bear in mind that the phoneme /s/ behaves in unusual fashion as it can combine with almost any onset to form a cluster. /skæm/, for example, is a legitimate syllable, although its sonority profile does not rise continuously to a peak. It should therefore not be a legitimate syllable, as it violates the Sonority Principle:

Figure 3: Sonority Wave of *scam*:

5			*		vowels
4				*	approximants
3					nasals
2	*	\bigcup			fricatives
1		*			plosives
Degree of sonority/ phonetic transcription	s	k	æ	m	

2.3 Prosodic Approach

2.3.1 The Metrical Segmentation Strategy

Generally speaking, stress can be defined as the relative degree of emphasis on a word or a syllable. It is usually perceived as greater loudness and/or longer duration and/or better quality and/or higher pitch than the other words or syllables that surround it. "Within words, some syllables seem to be 'strong syllables', i.e. they receive a stress, and others seem to be 'weak syllables', i.e. they receive a weak stress or no stress at all." (Dretzke 1998, 72).

In a stress-based language, namely those that have a strong syllable-weak syllable pattern, like English, listeners are said to use these metrical cues to segment speech. In English, content words such as nouns, verbs, adjectives, and adverbs, as well as most multisyllabic words tend to begin with a stressed syllable, as do for example:

- 32) WAIter /'weItə/
- 33) $PANther / pan \theta \theta$
- 34) GIFted /'gIftId/
- 35) PAralyze /'pæɪəlaIz/

Function words (grammatical words) such as auxiliaries, articles, pronouns, on the other hand, usually tend to be unstressed, unless they form part of a longer utterance and unless they are stressed for emphasis, as for example:

- 36) *will* /wIl/
- 37) $must / m \Lambda st /$
- 38) we /wi:/

It is important to bear in mind, however, that there are exceptions to these generalizations. *Horizon*, for example, is a content word stressed on its second syllable:

39) hoRIzon /hə'.aIzn/

In this respect, "the stress pattern of English words is fixed, in the sense that the main stress [always] falls on a particular syllable of any given word, but free in the sense that the main stress is not tied to any particular position in the chain of syllables constituting a word." (Dretzke 1998, 74). What this means is that it is hard to know which syllable or syllables of an English word must be stressed, as the stress pattern is rather unpredictable.

Nevertheless, evidence to the fact that listeners tend to hypothesize a word-boundary to the left of the strong syllable comes from a study by Cutler and Norris (1988) which shows

that listeners were able to recognize *mint* in /'mintef/, but not in /min'tef/. Welby (2003, 136) also states that "[s]tudies showed that when English listeners missegment speech, their errors reflect the stress pattern of the language." Cutler and Norris (1988) dubbed this use of stress information the *Metrical Segmentation Strategy* (henceforth abbreviated MSS):

40) MSS:

Listeners hypothesize a word-boundary to the left of every strong syllable

This metrical segmentation also bears its difficulties, however, as seen in 36) or as in the following example:

- 41) a) The speaker said: The parade was ilLEgal. /I'li:gl/ (Garnes and Bond 1980)
 - b) The listener heard: The parade was an EAgle. /ən'i:gl/ (Garnes and Bond 1980)

Listeners are indeed able to recognize word beginnings with weak syllables, as is the case in *horizon* in 39) and in *illegal* in 41) for example, although these words would not be identified by the MSS. Still, the MSS can explain why the listener mistakenly assumes a word-boundary in 41) b). The assignment of stress is the source of an ambiguity that leads to the mishearing.

It is important to note that "[w]hen words are used in a sentence, the stress pattern [...] is determined by a number of factors. These are usually grammar, the general rhythm of the sentence, the context, the individual speakers and the listeners." (Dretzke 1998, 84). When looking at Mondegreens, the stress assignment is furthermore highly influenced by the song's rhythm which might lead to deviations from the "normal" stress pattern. As stated before, singers make use of a modified type of pronunciation in which contractions may be necessitated by the rhythm, or in which stressed syllables may be unstressed and vice versa. These deviations might lead to an ambiguity of the original song's lyrics and irritate the listener. They might then be the reason for the mishearing. He or she might further wrongly believe in a word-boundary to the left of a stressed syllable, as posts the MSS. It is interesting to note in this respect that "[i]n clear speech, there [is ...] no effect of stress. [...L]isteners rely on stress only in the presence of noise." (Welby 2003, 159) This is the case in songs.

2.3.2 The Syllable Onset Segmentation Hypothesis

Especially in languages which do not have the type of stress which would be important in word-segmentation, speakers and listeners have to use other language-specific prosodic cues to segment speech. It was argued for French, a language without contrastive word stress for example, that listeners use the syllable as a speech-segmentation unit: French listeners use syllable-boundaries to hypothesize potential word-boundaries. (qtd. in Welby 2003, 139) In this respect, Cutler et al. (1986, 397) note that speakers of a language with clearly bounded regular syllables show syllabification effects, while speakers of a language with irregular, hard-to-segment syllables should not. For English, syllable-based segmentation strategy is insufficient, as it has a greater diversity of syllable-types and as it lacks clear syllable-boundaries. Cutler et al. (1974, 387) add in this respect:

In French, the syllabification is clear – there is a syllable boundary between *pa* and *lace*. In English, however, the syllable boundary falls neither before nor after the /l/. [... In English,] the /l/ properly belongs to both first and second syllables. Segments which belong to two syllables at once are said to be ambisyllabic. In stress languages, intervocalic consonants preceding an unstressed vowel are frequently ambisyllabic.

Cutler et al. (1986, 397) therefore claim that "English listeners do not use syllabification even when the words they are listening to can be easily syllabified [... whereas] French listeners do employ syllabification even when some words they are listening to [...] are hard to syllabify." Content et al. (2000, 39) argue on the other hand that "syllable structure may help listeners avoid mondegreening every sentence they hear." They claim further that "syllable structure provides one source of constraint on lexical segmentation and more precisely, that *syllable onsets* constitute potential alignment points [...; S]yllable structure determines the privileged alignment points." In this respect, Content et al. (2001, 634) also argue for the *Syllable Onset Segmentation Hypothesis* (also called the *Syllable Onset Segmentation Heuristic*; henceforth abbreviated SOSH). It is based on two ideas:

42) SOSH:

a) Onsets, relative to offsets, constitute more reliable segmentation points; They are the privileged alignment point. Listeners should therefore show greater sensitivity to onset than to offset misalignment.

b) Syllable-boundaries tend to coincide with word-boundaries.

Thus, the SOSH depends heavily on the likelihood that word-boundaries and syllable onsets coincide, which is frequently not the case, however. Most words have more than one syllable; many syllable-boundaries are in fact word-internal. Still, van der Lugt (1999, 46) also claims that "[m]any studies have confirmed that the beginnings of words are particularly important for the fast recognition of words in continuous speech." Welby (2003, 146) adds that listeners use disharmonious initial contexts as cues to segmentation. As English listeners are said not to use these syllabification cues, it will be interesting to see if the SOSH can nevertheless explain some of the Mondegreens under consideration.

Dumay et al. (2002, 157) note that the SOSH "is not incompatible with the Metrical Segmentation Strategy", as "[s]egmenting the speech stream at strong syllables [...] necessarily entails some syllable onset segmentation". After all, Content et al. (2000, 41-2) admit that "syllable reorganizations occur at word junctures [and that] phonetic cues inform syllabification, and syllabification informs lexical segmentation [... Yet,] it remains to be determined whether phonetic cues distinguish *Lady Mon* from *laid him on*."

2.3.3 The Mora

Some researchers have argued that the syllable may be an important speech segmentation unit, but that in Japanese, the mora, rather than the syllable is the relevant unit in speech-segmentation. McCawley (1978, 114) defines the mora as "that which short syllables have one of, and long syllables have two of". In Japanese, a short syllable (CV, as for example *ga* or *ko*) is written with one kana symbol (writing system), while a long syllable (CVV, as for example *gaa*) takes two symbols: one for the CV and one "for the extra bit", the second V (Hartmann 2006). Generally, a mora is a subsyllabic unit and formed as follows: a syllable onset does not represent a mora, whereas the syllable nucleus represents one mora in the case of a short (unstressed) vowel, and two morae in the case of a long (stressed or lengthened) vowel or a diphthong. In most Japanese dialects, as well as in the standard use, morae, rather than syllables, are the basis of the sound system. The claim is that segmentation is biased by the kana writing system which represents moraic structure: Each kana corresponds to a mora.

(Welby 2003, 153) Studies by McQueen, Otake and Cutler (2001) showed that Japanese listeners could spot words quickly if word- and mora-boundary were aligned and that they had difficulties in cases where these boundaries were misaligned. They therefore claim that "segmentation in Japanese is based on the mora." (McQueen, Otake and Cutler 2001, 123) Also, some believe that Japanese listeners have tacit knowledge of possible syllable onsets and codas (phonotactics) and that they use this knowledge in their parsing decision. (Welby 2003, 152) A moraic nasal cannot appear syllable-initially for example. It can therefore not appear word-initially, either. (Welby 2003, 152)

In English, stressed (lengthened) syllables represent two morae (*cat*, for example is bimoraic), but it is unclear, if unstressed syllables do so, as well (the second syllable of *rabbit* might be monomoraic). Still, if sounds are lengthened, as is the case in Outkast's "Hey Ya!" the singer also gives them more morae.

2.3.4 The Possible-Word Constraint: An Evaluation of the Outlined Theories

Before finally going over to examining the Mondegreens, I want to finalize the chapter with a short look at the *Possible-Word Constraint* (henceforth abbreviated PWC) to bring the various cues mentioned in this chapter more or less together:

43) PWC:

- a) Listeners in all languages have the same types of cues to hypothesize wordboundaries
- b) Cues to speech-segmentation are redundant. (Norris et al. (1997))

The extent to which listeners rely on the cues is, however, said to differ from language to language (Welby 2003, 155). In addition to phonotactic and prosodic cues, cues include presence of leading or falling silence, as well as knowledge of the distribution of allophones. (Welby 2003, 155) There have to be, therefore, multiple cues that interact.

In this work, I believe that phonetic ambiguity of the original song's lyrics is the principle trigger for Mondegreens. The question is: Why should a listener come up with a Mondegreen if there is no phonetic ambiguity that makes this Mondegreen possible in the first place? I thus argue for the PAH. I further believe that neither syllabification nor stress

assignment play a decisive role in mondegreening: the various conditions that have to apply in order for them to be the triggers for Mondegreens are too problematic. Neither the SOSH, nor the MSS can therefore account for possible explanations for Mondegreens.

In order to check the phonetic similarity between the original song's lyrics and those of the Mondegreen, I will compare their IPA transcriptions. I wanted to use the IPA transcription system because of its accuracy. Additionally, I will also make use of Soundex. Although Soundex is not as exact as an IPA transcription, it will nevertheless give useful results. As will get clear, an examination of phonetic similarity does not always have to be as exact as a comparison between IPA transcriptions. Soundex is thus an effective ally of the IPA transcriptions.

After that, I want to make use of the Sonority Principle to better illustrate the syllable-(and possible word-) boundaries of the original song's lyrics and those of the mishearing. Although it would indeed be possible, I do not want to use it as a further means to check the phonetic similarity between the original song's lyrics and those of the mishearing. Compared to an IPA transcription and Soundex, I believe it to be too imprecise. As I make use of a comparison between the two IPA transcriptions and Soundex codes already, it is not important.

After that, I will take a look at the MOP to examine the differences in the alignment of syllable-boundaries and in the syllable-structures further. The tendency of the MOP to put the consonant in question in the syllable's onset rather than its coda makes it more probable to mistake a *simple* syllable-boundary for a word-boundary, however. This is its problem: Although the model can account for syllable-boundaries, it cannot do so for word-boundaries, as well. Nevertheless, it shall give us a first insight into the possible differences between the alignment of syllable- and word-boundaries and the syllable structures of the original song's lyrics and those of the Mondegreen.

These will then be further examined by the SOSH. As stated above, its two crucial assumptions are, firstly, that syllable onsets are the privileged alignment points and, secondly, that syllable-boundaries tend to coincide with word-boundaries. Yet, the latter is clearly not always the case. The questions to be addressed are, therefore: Are there differences between the syllable structures of the original song's lyrics and those of the Mondegreen? Do these result in the misalignment of syllable- and word-boundaries? Can these be explained by the SOSH? And: Do these then lead to the mishearing? Only if all these four questions can be

answered by "yes", syllabification triggers the Mondegreen. In my examination, I will thus make use of the SOSH to compare the syllable structures of the original song's lyrics and those of the Mondegreen.

The possible differences between the alignment of syllable- and word-boundaries and the syllable structures of the original song's lyrics and those of the Mondegreen will then also be further examined by the MSS. As stated above, the crucial assumption of the MSS is that there is a word-boundary to the left of each strong syllable. Yet, this is clearly not always the case. The questions to be addressed are, therefore: Are there deviations from the regular stress pattern in the song? Do these result in the misalignment of syllable- and word-boundaries? Can these be explained by the MSS? And: Do these then lead to the mishearing? Only if all these three questions can be answered by "yes", stress assignment triggers the Mondegreen. In my examination, I will thus make use of the MSS to compare the stress-pattern of the song with the stress patterns of the normal, spoken counterparts of both the original and the Mondegreen.

As can be seen, the *sequence* of conditions of the MOP, the SOSH and the MSS that they need in order for them to work and to be able to explain the triggers for Mondegreens are rather problematic. I thus cannot believe that they should actually trigger Mondegreens.

Whether the mora is or can be a reason for the act of mondegreening in English is a question rather hard to tackle. If one word begins with the same sound the preceding word ended with, the listener might believe in a (possibly) mistaken word-boundary, although the singer *only lengthened* the sound, thereby giving it more morae. The listener would then mistake a simple mora-boundary for a word-boundary. What role the mora plays in overall theory of speech-segmentation, needs yet to be further researched on, however. An examination of the morae of the original song's lyrics and those of the Mondegreen will thus not form part of my examination.

3. Empirical Investigation

The choice of Mondegreens for a valid corpus of linguistic research is admittedly rather difficult to make, if not even impossible. The huge bulk of material available on the internet has to be examined very closely to make the encounter of useful examples possible. In this respect, I want to point out again that everyone can submit Mondegreens to the internet,

however far-fetched they may be. In this work, I have chosen to select, apart from the *original* Mondegreen, those that are most mentioned in current web-lore, as well as some mentioned by my friends and committed by my own. Further, I have included one example in Spanish to quickly point out the difficulties a non-native speaker encounters when listening to song lyrics and trying to attach meaning. In this chapter I will examine 20 Mondegreens according to the approaches mentioned. I will analyse them in groups according to the theories, yet one-by-one to be able to come up with an explanation for each single Mondegreen. I will then point out which of the approaches worked for which of these 20 Mondegreens in the next chapter. The corpus' 20 Mondegreens are listed alphabetically hereafter. The lyrics in question are transcribed in the transcription system of the IPA.

- 44) ABC, "The Look Of Love": "There's one thing that turns this grey sky to blue" /gxeIskaI/
- 45) Bob Dylan, "Blowin' In The Wind" (Live Version)
 "The answer my friend" /ði:ænsəɹ/
- 46) Carsten Diekmann, "Robert De Niro's Waiting"

 "Watching a film or a face on the wall" /ɔɹafeIsɒnðəwɔl/
- 47) Crystal Gayle, "Don't It Make My Brown Eyes Blue" "Don't it make my brown eyes blue" /ændonIt/
- 48) Elvis Presley, "(You're The) Devil In Disguise"
 "You're the devil in <u>disguise</u>, oh yes you are" /dIsgaIz/
- 49) "Gladly, the Cross I'd Bear" "Gladly, the <u>cross I'd bear</u>" /kJosaidbeəJ/
- 50) Happymen Vs Gala, "Freed From Desire"

 "My lover's got no money, he's got his strong beliefs" /hi:sgpthisstxongbeli:fs/
- 51) Jimmy Hendrix, "Purple Haze"

 "Excuse me, while I kiss the sky" /ðəskai/
- 52) John Fogerty, "Bad Moon Rising" (Live Version)
 "There's a bad moon on the rise" /bædmun/

- 53) José Feliciano, "Feliz Navidad" "Feliz Navidad" /fəliθnaβiðað/
- 54) Keane, "Crystal Ball"
 "Oh <u>crystal ball</u>" /kxIstlbo:l/
- 55) "Mondegreen" "and <u>laid him on the green</u>" /leidhimənðəgxi:n/
- 56) Pink Floyd, "Another Brick In The Wall Part 2" (Live Version) "All in all, you're just another <u>brick in the wall"</u> /bxlkInðəwɔl/
- 57) The Four Tops, "Ain't No Woman Like the One I've Got" "Ain't no woman like the one I've got" /wʌnaIvgɑt/
- 58) The Hooters, "Lucy In The Sky With Diamonds"

 "A girl with <u>kaleidoscope eyes</u>" /kəlai:dəskəupais/
- 59) The Monkees, "The Monkees (Theme From)"

 "We're the young generation and we've got something to say" /samθIntu:seI/
- 60) The Rascals, "Groovin"

 "Life would be ecstasy, you and me endlessly" /endlesll/
- 61) Tori Amos, "Silent All these Years"

 "Saved again by the garbage truck" /seIvdƏgɛn/
- 62) U2, "Sunday Bloody Sunday"

 "Sunday, bloody Sunday" /sʌndeIblʌdIsʌndeI/
- 63) Wild Cherry, "Play That Funky Music"
 "Play that <u>funky</u> music <u>white</u> boy" /fʌŋkI/ /waIt/

Before starting my examination, I want to make some remarks on the analyses I will undertake. I will compare the original song's lyrics with those of the corresponding Mondegreen one-by-one. This will enable me to come up with an explanation for each single Mondegreen.

First of all, I will compare the phonetic transcriptions of the original song's lyrics and those of the Mondegreen. These are based on the transcription system of the IPA. I have chosen to use the transcription that would be used when the lyrics under question were spoken

rather then sung. As the singer does not have to pronounce the phones exactly the same way as they would be spoken, I will point it out explicitly if this is the case. Only the differences between the two transcriptions are put in *bold*. I will then make use of Soundex as an additional means to check the phonetic similarity between the original song's lyrics and those of the Mondegreen. Some remarks about Soundex: Although the regular Soundex code consists of 4 characters only, I have increased it to up to 12 if needed. If not, I have simply left out the zeros at the end. Encoded are only the *underlined* lyrics; only the differences between the two Soundex codes under question are put in *bold*. The comparisons between the IPA transcriptions and the Soundex codes should then give a clearer account of the phonetic differences and/ or similarity between the original song's lyrics and those of the corresponding Mondegreen. They should show if the original song's lyrics were phonetically ambiguous and if that triggered the mishearing.

After that, I will go on to compare the sonority wave of the original with the one of the corresponding Mondegreen. I want to see in which parts they are similar and in which they differ. I further want to find out if the Mondegreens in question violate the Sonority Principle. Together with the MOP, this shall then give a first picture of the syllable structure of the original in comparison with that of the Mondegreen. In this respect, I want to make some quick remarks about my marking of the sonority waves: If there is no difference between the sonority waves of the original and that of the mishearing, there is only one asterisk to be found for both of them that indicates their coincidence. If the Mondegreen differs from its original, the two differing phones are put in *bold*. The original will keep its asterisk, while the Mondegreen will receive a hash. If there is a phone mistakenly left out in the Mondegreen, it will be indicated by a minus, thus indicating difference and that it is not to be found in the Mondegreen. If there is a mistakenly added phone in the Mondegreen, it will be indicated by a plus, thus indicating difference and that it is added in the Mondegreen. Syllable-boundaries are marked by a bold table frame to the left of the syllable's onsets. Bear in mind that a syllable-boundary does not necessarily have to indicate a word-boundary, as well. These I will further examine by first making use of the MOP, then of the SOSH. Some remarks about the SOSH: The parts under examination are *underlined* but only then put in *bold* if there are differences in syllable- and word-boundaries to be found. Syllable-boundaries are indicated by a full stop (.), word-boundaries by an oblique stroke (/). The Sonority Principle, the MOP and the SOSH should then give a clear account of the differences between the syllable

structure of the original song's lyrics and that of the Mondegreen. Finally, I will make use of the MSS to examine their syllable structures from another, additional point of view. Some remarks about the MSS: Please note that the *capitalized* syllables are stressed and that degrees of stress are not distinguished. As stated before, singers do not have to follow the normal, spoken stress pattern of the words in question as they make use of a modified type of pronunciation in which contractions may be necessitated by the rhythm, or in which stressed syllables may be unstressed and vice versa. Although this is a work of linguistics and does under no circumstances claim to be one of musicology, my stress assignment generally follows that of the song's rhythm. Assigned are furthermore those words that are stressed by the singer, although they would not be stressed by the song's rhythm. In those cases in which the sung stress assignment deviates from the normal, spoken stress pattern, I will point it out explicitly – if it is relevant. It is important to note that there can also be deviations in the stress assignment in the various extracts of the Mondegreens in question. So does Crystal Gayle in "Don't it make my brown eyes blue" not stress "eyes" in the first extract ("and DON't it make my BROWN eyes BLUE"), but in the second ("and DON't it make my BROWN EYES BLUE"). The comparisons between the sonority waves, the MOP, the MSS and the SOSH should then give a clear picture of where and why there are misalignments of syllableand word-boundaries. They should show if syllabification and stress assignment were the reason for the ambiguity that triggered the mishearing.

3.1 Applicability of the PAH

3.1.1 Applicability of the PAH only

- 64) "Gladly, the Cross I'd Bear"
 - a) "Gladly, the Cross I'd bear" (original)
 - b) "Gladly, the cross-eyed bear" (mishearing)

Phonetic transcription	k	ı	o	s	ai	d	b	еə	J	original/
										Mondegreen

As can be seen, the phonetic transcriptions are exactly the same. Consequently, the original song's lyrics and those of the Mondegreen are impossible to distinguish.

The Soundex codes thus consist of exactly the same characters, as well:

- a) "Gladly, the <u>cross I'd bear</u>": C62316 (original)
- b) "Gladly, the <u>cross-eyed bear</u>": C62316 (mishearing)

The sonority waves are also exactly the same:

5			*		*			*		vowels
4		*							*	approximants
3										nasals
2				*						fricatives
1	*					*	*			plosives
Phonetic transcription	k	J	o	s	ai	d	b	еə	J	original/ Mondegreen

If we take a look at the MOP, it can be seen that in both the original and the Mondegreen, the consonants have been placed in the same way and correctly. Syllable- and word-boundaries are exactly the same. The MOP thus cannot give a hint for the explanation of the Mondegreen.

Both the original and the Mondegreen happen to consist of the same amount of syllables: three. This is due to the contraction of *I would* to "*I'd*". Syllable-boundaries are hence assigned equally. Nevertheless, the word-boundary between "*I*" and the clitic "'*d*" is thus erased, just as in the mistaken "*eyed*". The original and the Mondegreen thus consist of the same amount of words, as well: three (compare also examples 66) and 72)).

- a) "Glad.ly/the/<u>cross/**I'**</u> <u>d/bear</u>" (original)
- b) "Glad.ly/the/cross/eved/bear" (mishearing)

The SOSH can therefore not explain the Mondegreen.

As can be seen, the MSS does not give any indication of difference, the stress-assignment is just the same:

- a) "GLADly, the CROSS I'd BEAR" (original)
- b) "GLADly, the CROSS-eyed BEAR" (mishearing)

The MSS can thus not explain the Mondegreen.

Neither the MOP, nor the SOSH, nor the MSS can explain the Mondegreen. As the original song's lyrics are phonetically equal to those of the Mondegreen, phonetic ambiguity is the only reason for the mishearing. Only the PAH can thus explain the Mondegreen.

- 65) U2, "Sunday Bloody Sunday"
 - a) "Sunday, bloody Sunday" (original)
 - b) "Someday, buddy someday" (mishearing)

Phonetic transcription	s	Λ	n	d	eI	b	1	Λ	d	Ι	original
	s	Λ	m	d	eI	b		Λ	d	Ι	Mondegreen

As can be seen, there are two differences in the phonetic transcriptions:

- In the original, the alveolar nasal is used, while in the Mondegreen, it is mistaken for the bilabial nasal: As they both have the same manner of articulation, they are likely to be misheard.
- In the Mondegreen, the alveolar lateral approximant is mistakenly left out. This leaving out can then be seen as a logical result in the listener's attempt to attach meaning: "someday, bloody, someday" does not make as much sense as "someday, buddy, someday".

The Soundex codes are differentiated by one character: the Mondegreen misses the alveolar lateral approximant (4). The difference between the correct alveolar nasal and the mistaken bilabial nasal is not captured:

- a) "Sunday, bloody Sunday": S53143 (original)
- b) "Someday, buddy, someday": S531 3 (mishearing)

The sonority waves also show only one difference: the left out alveolar lateral approximant in the Mondegreen:

5		*			*			*		*	vowels
4			*				-				approximants
3											nasals
2	*										fricatives
1				*		*			*		plosives
Degree of sonority/ phonetic transcription	s	Λ	n	d	eI	b	1	Λ	d	I	original
	s	Λ	m	d	eI	b		Λ	d	Ι	Mondegreen

If we take a look at the MOP, it can be seen that in both the original and the Mondegreen, the consonants have been placed in the same way and correctly. Syllable- and word-boundaries are exactly the same. The MOP thus cannot give a hint for the explanation of the Mondegreen.

Both the original and the Mondegreen happen to consist of the same amount of syllables: six. They also consist of the same amount of words, as well: three. Syllable- and word-boundaries are assigned equally. Thus, there are no mistaken syllable- and word-boundaries:

- a) "Sun. day/bloo.dy/Sun. day" (original)
- b) "Some.day/bud.dy/some.day" (mishearing)

The SOSH can therefore not explain the Mondegreen.

As can be seen, the MSS does not give any indication of difference, the stress-assignment is just the same:

- a) "sunDAY, BLOOdy SUNDAY" (original)

 ("SUNDAY BLOOdy SUNDAY" (in the original's echo))
- b) "sunDAY, BUDdy, SOMEDAY" (mishearing)

Still, there can be seen deviations from the regular stress pattern: "Sunday" and "someday" would be stressed on their first syllable in normal, spoken, speech. These deviations are, however, not relevant here. The MSS can thus not explain the Mondegreen.

Neither the MOP, nor the SOSH, nor the MSS can explain the Mondegreen. As the

original song's lyrics are phonetically similar to those of the Mondegreen, phonetic ambiguity is the only reason for the mishearing. Only the PAH can thus explain the Mondegreen.

- 66) The Four Tops, "Ain't No Woman Like the One I've Got"
 - a) "Ain't no woman like the one I've got" (original)
 - b) "Ain't no woman like the one-eyed God" (mishearing)

Phonetic transcription	W	Λ	n	aI	v	g	a	t	original
	w	Λ	n	aI	d	g	p	d	Mondegreen

As can be seen, there are three differences between the two transcriptions:

- In the original, the voiced labiodental fricative is used, while in the Mondegreen, it is mistaken for the voiced alveolar plosive: This mistaken voiced alveolar plosive normally assimilates to the following voiced velar plosive and thus sounds more like it. If one takes into account that the voiced labiodental fricative is additionally only very slightly pronounced and thus easy to overhear in the first place, it is then likely to assume that the listener mistakenly believes in the voiced alveolar plosive, as he or she is conscious of this assimilation process.
- In the original, the unrounded back open vowel is used, while in the Mondegreen, it is mistaken for the rounded back open vowel: As they both have the same part of the tongue used and the same degree of raising of the tongue, they are very likely to be misheard.
- In the original, the voiceless alveolar plosive is used, while in the Mondegreen, it is mistaken for the voiced alveolar plosive: As they both have the same place and manner of articulation, they are also very likely to be misheard.

The Soundex codes are differentiated by one character: the voiced labiodental fricative (1) is mistakenly replaced by the voiced alveolar plosive (3). The differences between the correct unrounded back open vowel and the mistaken central open (open-mid) vowel, and between the correct voiceless alveolar plosive and the mistaken voiced alveolar plosive are not captured:

- a) "Ain't no woman like the <u>one I've got</u>": O5123 (original)
- b) "Ain't no woman like the <u>one-eyed God</u>": O5323 (mishearing)

There is only one difference between the two sonority waves: the mistaken voiced alveolar plosive for the correct voiced labiodental fricative:

5		*		*			*		vowels
4	*								approximants
3			*						nasals
2					*				fricatives
1					#	*		*	plosives
Degree of sonority/ phonetic transcription	w	Λ	n	aI	v	g	a	t	original
	w	Λ	n	aI	d	g	p	d	Mondegreen

If we take a look at the MOP, it can be seen that in both the original and the Mondegreen, the consonants have been placed in the same way and correctly. Syllable- and word-boundaries are exactly the same. The MOP thus cannot give a hint for the explanation of the Mondegreen.

Both the original and the Mondegreen happen to consist of the same amount of syllables: three. This is due to the contraction of *I have* to "*I've*". Syllable-boundaries are hence assigned equally. Nevertheless, the word-boundary between "*I*" and the clitic "'ve" is thus erased, just as in the mistaken "*eyed*". The original and the Mondegreen thus consist of the same amount of words, as well: three (compare also examples 64) and 72)).

- a) "Ain't/no/wo.man/like/the/<u>one/**I've**</u> /got" (original)
- b) "Ain't/no/wo.man/like/the/one/eved/God" (mishearing)

The SOSH can therefore not explain the Mondegreen.

As can be seen, the MSS does not give any indication of difference, the stress-assignment is just the same:

- a) "'AINT no WOman like the ONE I've GOT" (original)
- b) "AIN'T no WOman like the ONE-eyed GOD" (mishearing)

Still, there can be seen deviations from the regular stress pattern: "one", "got" and "god"

would not be stressed in normal, spoken, speech. These deviations are, however, not relevant here. The MSS can thus not explain the Mondegreen.

Neither the MOP, nor the SOSH, nor the MSS can explain the Mondegreen. It therefore seems as if phonetic ambiguity is the only reason for the mishearing. Only the PAH can thus explain the Mondegreen.

- 67) Jimmy Hendrix, "Purple Haze"
 - a) "Excuse me while I kiss the sky" (original)
 - b) "Excuse me while I kiss this guy" (mishearing)

Phonetic transcription	ð	ə	s	k	aI	original
	ð	I	s	g	aI	Mondegreen

As can be seen, there are two differences in the phonetic transcriptions:

- In the original, the central vowel is used, while in the Mondegreen, it is mistaken for the unrounded front close (close-mid) vowel. Although they do not seem to be phonetically similar at first sight, it is interesting to note that they have also been mistaken in examples 69), 70) and 77).
- In the original, the voiceless velar plosive is used, while in the Mondegreen, it is mistaken for the voiced velar plosive. It has to be mentioned in this respect that the voiceless velar plosive /k/ in "sky" is unaspirated in this case, as it forms part of a complex syllable onset. This then makes it sound much more like the unaspirated voiceless velar plosive /g/. It is therefore much easier to mistakenly hear "this guy" instead of "the sky". (Harley 2003, 90)

The Soundex codes are the same; The differences between the correct central vowel and the mistaken unrounded front close vowel, as well as between the correct voiceless velar plosive and the mistaken voiced velar plosive are not captured:

- a) "Excuse me, while I kiss the sky": K232 ("the sky" T200) (original)
- b) "Excuse me, while I kiss this guy": K232 ("this guy" T200) (mishearing)

The sonority waves are also the same:

5		*			*	vowels
4						approximants
3						nasals
2	*		*			fricatives
1				*		plosives
Degree of sonority/ phonetic transcription	ð	Э	s	k	aI	original
	ð	Ι	s	g	aΙ	Mondegreen

If we take a look at the MOP, it can be seen that there is a difference in the placement of the voiceless alveolar fricative. In the original, it has been put in the second syllable's onset (/skaI/), while in the Mondegreen, it has been put in the first syllable's coda (/ðIs/). According to the MOP, the voiceless alveolar fricative tends to be put in the second syllable's onset rather than the first syllable's coda. The listener, however, mistakenly places it in the first syllable's coda. This then results in the difference between word-boundaries. Consider in this respect also examples 69) and 82). When we consider the sonority wave, it has to be noted that the consonant cluster of the voiceless alveolar fricative and the voiceless velar plosive in the original second syllable's onset should be impossible as the sonority wave does not rise, but fall. Yet, as stated before, the phoneme /s/ behaves in an unusual fashion and the cluster is hence legitimate. The MOP can thus give a first hint for the explanation of the Mondegreen.

Both the original and the Mondegreen happen to consist of the same amount of syllables and words: two. Yet, syllable- and word-boundaries are not assigned equally, as we have already seen:

- a) "Ex.cuse/me/while/I/kiss/the/s ky" (original)
- b) "Ex.cuse/me/while/I/kiss/<u>thi s/guy</u>" (mishearing)

The SOSH cannot explain the Mondegreen. Although it correctly predicts the word-boundary to the left of the (next) syllable's onset, the problem lies in the fact that the syllable-boundaries are aligned differently, and the word-boundaries therefore, as well.

As can be seen, the MSS does not give any indication of difference, the stress-

assignment is just the same:

- a) "eXCUSE ME while i KISS the SKY" (original)
- b) "eXCUSE ME while i KISS this GUY" (mishearing)

The MSS cannot explain the Mondegreen. Although it correctly predicts the word-boundary to the left of the stressed syllable, the problem lies in the fact that the syllable-boundaries are aligned differently, and the word-boundaries therefore, as well.

Although the MOP could explain the misalignment of syllable- and word-boundaries, neither the SOSH, nor the MSS can further explain the Mondegreen. As the original song's lyrics are phonetically similar to those of the Mondegreen, it seems as if phonetic ambiguity is the only reason for the mishearing. Only the PAH can thus explain the Mondegreen.

3.1.2 Applicability of the PAH, the SOSH and the MSS

- 68) The Rascals, "Groovin"
 - a) "Life would be ecstasy, you and me endlessly" (original)
 - b) "Life would be ecstasy, you and me and Leslie" (mishearing)

Phonetic transcription									•
	æ	n	d	1	3	s	1	Ι	Mondegreen

As can be seen, there is only one difference between the transcriptions:

In the original, the unrounded front close-mid vowel is used, while in the Mondegreen, it is mistaken for the front open (or open-mid) vowel: As the unrounded front close-mid vowel and the front open (or open-mid) vowel both have the same degree of raising of the tongue, they are likely to be misheard. As can be seen below, "end" in "endlessly" is furthermore stressed, which makes it sound even more like "and" in "and Leslie".

The Soundex codes are only differentiated by their first letters, (E) for "endlessly" in the original and (A) for "and" in the Mondegreen:

- a) "Life would be ecstasy, you and me endlessly": E53424 (original)
- b) "Life would be ecstasy, you and me and Leslie": A53424 (mishearing)

The sonority wave is the same:

5	*				*			*	vowels
4				*			*		approximants
3		*							nasals
2						*			fricatives
1			*						plosives
Degree of sonority/ phonetic transcription	e	n	d	1	3	s	1	I	original
	æ	n	d	1	ε	s	1	I	Mondegreen

If we take a look at the MOP, it can be seen that in both the original and the Mondegreen, the consonants have been placed in the same way and correctly. Syllable-boundaries are exactly the same, word-boundaries, however, are not. The MOP thus cannot give a hint for the explanation of the Mondegreen.

Both the original and the Mondegreen happen to consist of the same amount of syllables: three. Syllable-boundaries are assigned equally, word-boundaries, however, are not, as we have already seen:

- a) "Life/would/be/ecs.ta.sy/you/and/me/end.less.ly" (original)
- b) "Life/would/be.ecs.ta.sy/you/and/me/and/Les.lie" (mishearing)

It is obvious that the listener mistakenly believes in a word-boundary to the left of /lɛs/, although it is only a syllable-boundary. The listeners thus comes up with the misheard replacement "Leslie". The SOSH can therefore account for a possible explanation for this example, as it predicts that word-boundary to the left of the syllable-onset /lɛs/.

As can be seen, the MSS does not give any indication of difference, the stress-assignment is just the same:

- a) "LIFE would be ECSTASY, YOU and ME END LESSly" (original)
- b) "LIFE would be ECSTASY, YOU and ME AND LESlie" (mishearing)

Still, there can be seen deviations from the regular stress pattern: "endlessly" would be stressed on its first syllable in normal, spoken, speech. Here, the singer assigns another stress on its second syllable. The listener thus mistakenly believes in word-boundary to the left of it and thus comes up with the mistaken "Leslie" which is, in turn, stressed on its first syllable. The MSS can thus explain the Mondegreen.

As the original song's lyrics are phonetically similar to those of the Mondegreen, it seems as if phonetic ambiguity is one reason for the mishearing. The MOP cannot give a hint for the explanation of the Mondegreen. The SOSH and the MSS, however, can. Together with phonetic ambiguity, syllabification and stress assignment are the reasons for the mishearing. The Mondegreen is thus explainable by the PAH, the SOSH and the MSS.

- 69) Elvis Presley, "(You're The) Devil In Disguise"
 - a) "You're the devil in disguise, oh yes you are" (original)
 - b) "You're the devil in the skies, oh yes you are" (mishearing)

Phonetic transcription	d	I	s	g	aI	z	original
	ð	ə	s	k	aΙ	s	Mondegreen

As can be seen, there are four differences between the transcriptions:

- In the original, the voiced alveolar plosive is used, while in the Mondegreen, it is mistaken for the voiced dental fricative. Although they do not seem to be phonetically similar at first sight, it is interesting to note that they have also been mistaken in examples 73) and 76).
- In the original, the unrounded front close (close-mid) vowel is used, while in the Mondegreen, it is mistaken for the central vowel. Although they do not seem to be phonetically similar at first sight, it is interesting to note that they have also been mistaken in examples 67), 70) and 77).
- In the original, the voiced velar plosive is used, while in the Mondegreen, it is mistaken for the voiceless velar plosive: As they both have the same place and manner of

articulation, they are very likely to be misheard. Compare also example 67) for their aspiration: both the voiced and the voiceless velar plosives are unaspirated, which makes them sound much more alike. They are thus more likely to be misheard.

In the original, the voiced alveolar fricative is used, while in the Mondegreen, it is mistaken for the voiceless alveolar fricative: As they both have the same place and manner of articulation, they, too, are very likely to be misheard.

The Soundex codes are hence only distinguished by the first character: the correct D for "disguise" is mistakenly replaced by T for "the". The differences between the correct unrounded front close vowel and the mistaken central vowel, between the correct voiced velar plosive and the mistaken voiceless velar plosive, as well as between the correct voiced alveolar fricative and the mistaken voiceless alveolar fricative are not captured:

- a) "You're the devil in <u>disguise</u>, oh yes you are": **D**220 (original)
- b) "You're the devil in the skies, oh yes you are": T220 (mishearing)

As can be seen, there is just one difference between the two sonority waves: the correct voiceless alveolar plosive is mistakenly replaced by the voiced dental fricative:

5		*			*		vowels
4							approximants
3							nasals
2	#		*			*	fricatives
1	*			*			plosives
Degree of sonority/ phonetic transcription	d	Ι	s	g	aI	Z	original
	ð	Ә	s	k	aI	s	Mondegreen

If we take a look at the MOP, it can be seen that there is a difference in the placement of the voiceless alveolar fricative. In the original, it has been put in the first syllable's coda (/dIs/), while in the Mondegreen, it has been put in the second syllable's onset (/skaIs/). As the MOP states, one should, just as the listener mistakenly in this case, tend to place the voiceless alveolar fricative in the second syllable's onset rather than the first syllable's coda. The listener, in this case mistakenly, falls prey to that. While there is only a syllable-boundary

in "the skies". This then results in the difference between word-boundaries. Consider in this respect also examples 67) and 82). When we consider the sonority wave, it has to be noted that the consonant cluster of the voiceless alveolar fricative and the voiceless velar plosive in the Mondegreen's second syllable's onset should be impossible as the sonority wave does not rise, but falls, which should be impossible. Yet, as stated before, the phoneme /s/ behaves in an unusual fashion and the cluster is hence legitimate. The MOP can thus give a first hint for the explanation of the Mondegreen.

Both the original and the Mondegreen happen to consist of the same amount of syllables: two. Yet, syllable- and word-boundaries are not assigned equally, as we have already seen:

- a) "You're/the/de.vil/in/di s.guise/oh/yes/you/are" (original)
- b) "You're/the/de.vil/in/the/skies /oh/yes/you/are" (mishearing)

The listener mistakenly believes in a word-boundary in between "disguise", although it is only a syllable-boundary. As he or she also mistakenly believes that the syllable-onset is /skais)/ and not /gaiz/, the listeners comes up with the misheard replacement "the skies". The SOSH can therefore account for a possible explanation for this example, as the listener predicts a word-boundary to the left of the syllable-onset /gaiz/. As this is wrong, he or she falls prey to the tendency of putting a word-boundary to the left of a syllable-onset, which is posed by the SOSH.

As can be seen, the assignment of stress gives an indication for the difference in stress between the original and the Mondegreen:

- a) "'YOU'RE the DEvil in di sGUISE, oh YES you ARE" (original)
- b) "YOU'RE the DEvil in the SKIES, oh YES you ARE" (mishearing)

The listener mistakenly believes in a word-boundary to the left of the stressed syllable "guise" of "disguise", although there is only a syllable-boundary; he or she does not consider the fact that the word "disguise" is indeed stressed on its second syllable in normal, spoken, speech, as well. The MSS can thus explain the Mondegreen, as it would, however falsely in

this case, predict this word-boundary.

As the original song's lyrics are phonetically similar to those of the Mondegreen, it seems as if phonetic ambiguity is one reason for the mishearing. The MOP can give a first hint for the explanation of the Mondegreen regarding the misalignment of word-boundaries. The SOSH and the MSS can then further explain the Mondegreen. Together with phonetic ambiguity, syllabification and stress assignment are the reasons for the mishearing. The Mondegreen is thus explainable by the PAH, the SOSH and the MSS.

- 70) Tori Amos, "Silent All these Years"
 - a) "Saved again by the garbage truck" (original)
 - b) "Safety can by the garbage truck" (mishearing)

Phonetic transcription	s	eI	v	d	ə	g	ε	n	original
	s	eI	f	t	Ι	k	ə	n	Mondegreen

As can be seen, there are five differences between the transcriptions:

- In the original, the voiced labiodental fricative is used, while in the Mondegreen, it is mistaken for the voiceless labiodental fricative: As they both have the same place and manner of articulation, they are very likely to be misheard.
- In the original, the voiced alveolar plosive is used, while in the Mondegreen, it is mistaken for the voiceless alveolar plosive: As they both have the same place and manner of articulation, they are also very likely to be misheard.
- In the original, the central vowel is used, while in the Mondegreen, it is mistaken for the unrounded front close (close-mid) vowel. Although they do not seem to be phonetically similar at first sight, it is interesting to note that they have also been mistaken in examples 67), 69) and 77).
- In the original, the voiced velar plosive is used, while in the Mondegreen, it is mistaken for the voiceless velar plosive: As they both have the same place and manner of articulation, they are also very likely to be misheard.
- In the original, the unrounded front open-mid vowel is used, while in the Mondegreen, it is mistaken for the central vowel: As they both have almost the same degree of raising of the tongue, they are likely to be misheard.

The Soundex codes are the same. The differences between the correct voiced labiodental fricative and the mistaken voiceless labiodental fricative, between the correct voiced alveolar plosive and the mistaken voiceless alveolar plosive, between the correct central vowel and the mistaken unrounded front close (close-mid) vowel, between the correct voiced velar plosive and the mistaken voiceless velar plosive, as well as between the correct unrounded front open-mid vowel and the mistaken central vowel are not captured:

- a) "Saved again by the garbage truck": S1325 (original)
- b) "Safety can by the garbage truck": S1325 (mishearing)

5		*			*		*		vowels
4									approximants
3								*	nasals
2	*		*						fricatives
1				*		*			plosives
Degree of sonority/ phonetic transcription	s	eI	V	d	Ð	g	3	n	original
	s	eI	f	t	Ι	k	ə	n	Mondegreen

If we take a look at the MOP, it can be seen that there is a difference in the placement of the voiced alveolar plosive. In the original, it has been put in the first syllable's coda (/seIvd/), while in the Mondegreen, it has been put in the second syllable's onset (/tI/). This then results in the difference between word-boundaries. As the MOP states, one should, just as the listener mistakenly in this case, tend to place the voiced alveolar plosive in the second syllable's onset rather than the first syllable's coda. The listener, in this case mistakenly, falls prey to that. The MOP can thus give a first hint for the explanation of the Mondegreen.

Both the original and the Mondegreen happen to consist of the same amount of syllables and words: three. Yet, syllable- and word-boundaries are not assigned equally, as we have already seen:

- a) "Save d/a.gain/by/the/gar.bage/truck" (original)
- b) "Save.t y/can/ by/the/gar.bage/truck" (mishearing)

The listener mistakenly believes only in a syllable-boundary in between "saved" and "again", although it is a word-boundary. He or she further mistakenly believes in a word-boundary in between "again", although it is only a syllable-boundary. The SOSH can therefore account for a possible explanation for this example, as the listener predicts a word-boundary to the left of the syllable-onset /kən/. As this is wrong, he or she falls prey to the tendency of putting a word-boundary to the left of a syllable-onset, which is posed by the SOSH. Put this way then, the mistaken word- and syllable-boundaries in between "saved" and "again" are the necessary result of the mistaken word-boundary to the left of the syllable-onset /kən/.

As can be seen, the MSS does not give any indication of difference, the stress-assignment is just the same:

- a) "'SAVED aGAIN by the GARbage TRUCK" (original)
- b) "'SAFEty CAN by the GARbage TRUCK" (mishearing)

The listener mistakenly believes in a word-boundary to the left of the stressed syllable "gain" of "again" although there is only a syllable-boundary; he or she does not consider the fact that the word "again" is indeed stressed on its second syllable in normal, spoken, speech. The MSS can therefore explain the Mondegreen as it would, however falsely in this case, predict this word-boundary.

As the original song's lyrics are phonetically similar to those of the Mondegreen, it seems as if phonetic ambiguity is one reason for the mishearing. The MOP can give a first hint for the explanation of the Mondegreen regarding the misalignment of word-boundaries. The SOSH and the MSS can then further explain this misalignment. Together with phonetic ambiguity, syllabification and stress assignment are the reasons for the mishearing. The Mondegreen is thus explainable by the PAH, the SOSH and the MSS.

3.1.3 Applicability of the PAH but Counterevidence to the SOSH

- 71) John Fogerty, "Bad Moon Rising (Live Version)"
 - a) "There's a bad moon on the rise" (original)
 - b) "There's a bathroom on the right" (mishearing)

Phonetic transcription	b	æ	d	m	u:	n	J	aΙ	Z	original
	b	æ	θ	I	u:	m	J	aI	t	Mondegreen

As can be seen, there are four differences between the transcriptions:

- n the original, the voiced alveolar plosive is used, while in the Mondegreen, it is mistaken for the voiceless dental fricative. Although they do not seem to be phonetically similar at first sight, it is interesting to note that they have also been mistaken in example 81).
- In the original, the bilabial nasal is used, while in the Mondegreen, it is mistaken for the alveolar approximant.
- In the original, the alveolar nasal is used, while in the Mondegreen, it is mistaken for the bilabial nasal: As they both have the same manner of articulation, they are likely to be misheard.
- In the original, the voiced alveolar fricative is used, while in the Mondegreen, it is mistaken for the voiceless alveolar plosive.

Please note that the third reproduction of "*There's a bad moon on the rise*" is clearly different from the other three and by far closer to "*There's a bathroom on the right*".

The Soundex codes are differentiated by two characters: The correct bilabial nasal (5) is mistakenly replaced by the alveolar approximant (6), the correct voiced alveolar fricative (2) is mistakenly replaced by the voiceless alveolar plosive (3). The differences between the correct voiced alveolar plosive and the mistaken voiceless dental fricative and between the correct alveolar nasal and the mistaken bilabial nasal are not captured:

- a) "There's a <u>bad moon</u> on the <u>rise</u>": B355, R2 (original)
- b) "There's a <u>bathroom</u> on the <u>right</u>": B365, R3 (mishearing)

As can be seen, there are three differences between the two sonority waves: the correct voiced alveolar plosive is mistakenly replaced by the voiceless dental fricative, the correct voiced bilabial nasal is mistakenly replaced by the alveolar approximant, and the correct voiced alveolar fricative is mistakenly replaced by the voiceless alveolar plosive:

5		*			*			*		vowels
4				#			*			approximants
3				*		*				nasals
2			#						*	fricatives
1	*		*						#	plosives
Degree of sonority/ phonetic transcription	b	æ	d	m	u:	n	J	aI	Z	original
	b	æ	θ	Ţ	u:	m	J	aI	t	Mondegreen

If we take a look at the MOP, it can be seen that in both the original and the Mondegreen, the consonants have been placed in the same way and correctly. Syllable- and word-boundaries are exactly the same. The MOP thus cannot give a hint for the explanation of the Mondegreen.

Both the original and the Mondegreen happen to consist of the same amount of syllables and words: two. Syllable-boundaries are assigned equally, as we have already seen:

- a) "There's/a/<u>bad/moon/</u>on/the/rise" (original)
- b) "There's/a/bath.room/on/the/right" (mishearing)

The listener does not recognize the word-boundary between "bad" and "moon". He or she only recognizes the syllable-boundary and comes thus up with "bathroom". According to the SOSH, however, the listener would tend to that word-boundary and is thus rather in favour of the original than the mishearing. The SOSH can therefore not account for an explanation to the mishearing. As a "bad moon" can also be "on the right", it seems rather unlikely that a mishearing of "on the right" for "on the rise" was the trigger for the mishearing. It seems more probable that the listener really mistook "bad moon" for "bathroom" and then adjusted the "on the rise" to the more meaningful "on the right", as a "bathroom" cannot be "on the rise".

As can be seen, the MSS does not give any indication of difference, the stress-assignment is just the same:

- a) "THEre's a **BAD moon** ON the RISE" (original)
- b) "THEre's a **BATHroom** ON the RIGHT" (mishearing)

Still, there can be seen deviations from the regular stress pattern: "bad" would not be stressed in normal, spoken, speech, while "moon" would be. These deviations are, however, not relevant here. The MSS cannot explain the Mondegreen. Although it correctly predicts the word-boundary to the left of the stressed syllable ("bad"), the problem lies in the fact that the syllable in question ("moon") is unstressed and does therefore not form part of the MSS' argumentation.

As the original song's lyrics are phonetically similar to those of the Mondegreen, it seems as if phonetic ambiguity is one reason for the mishearing. The MOP cannot give a first hint for the explanation of the Mondegreen regarding the misalignment of word-boundaries. While the SOSH favours rather the original than the Mondegreen, the MSS cannot further explain it. Phonetic ambiguity thus seems to be the only reason for the mishearing, especially as the third extract sounds to me much closer to "There's a bathroom on the right" than to "There's a bad moon on the right". Only the PAH can thus explain the Mondegreen.

- 72) Crystal Gayle, "Don't It Make My Brown Eyes Blue"
 - a) "And don't it make my brown eyes blue" (original)
 - b) "And donuts make my brown eyes blue" (mishearing)

Phonetic transcription	æ	n	d	ου	n	t	Ι	t		original
	æ	n	d	ου	n		Λ	t	s	Mondegreen

As can be seen, there are three differences between the transcriptions:

- In the Mondegreen, the voiceless alveolar plosive is mistakenly left out: This is due to the fact that Crystal Gayle does simply not pronounce it.
- In the original, the front close vowel is used, while in the Mondegreen, it is mistaken for the unrounded back open-mid vowel.
- In the Mondegreen, the voiceless alveolar fricative is mistakenly added.

The Soundex codes are only distinguished by the last character: the mistaken addition of the voiceless alveolar fricative. The difference between the correct unrounded front close vowel and the mistaken unrounded back open-mid vowel is not captured. As Crystal Gayle does not pronounce the mistakenly left out voiceless alveolar plosive in the original, I have also not included it in the Soundex code of the original.

- a) "And don't it make my brown eyes blue": D533 (original)
- b) "And donuts make my brown eyes blue": D532 (mishearing)

As can be seen, there are two differences between the two phonetic transcriptions: the mistakenly left out voiceless alveolar plosive in the Mondegreen and the mistakenly added voiceless alveolar fricative in the Mondegreen:

5	*			*			*			vowels
4										approximants
3		*			*					nasals
2									+	fricatives
1			*			-		*		plosives
Degree of sonority/ phonetic transcription	æ	n	d	o	n	t	Ι	t		original
	æ	n	d	o	n		Λ	t	s	Mondegreen

If we take a look at the MOP, it can be seen that there is a difference in the placement of the alveolar nasal. In the original, it has been put in the second syllable's coda (/dont/), while in the Mondegreen, it has been put in the third syllable's onset (/nats/). What plays into that is that Crystal Gayle does not pronounce the voiceless alveolar plosive that follows the alveolar nasal. This then results in the difference between word-boundaries. As the MOP states, one should, just as the listener mistakenly in this case, tend to place the alveolar nasal in the third syllable's onset rather than the second syllable's coda. The listener, in this case mistakenly, falls prey to that. The MOP can thus give a first hint for the explanation of the Mondegreen.

Both the original and the Mondegreen happen to consist of the same amount of syllables: three. This is due to the contraction of *do not* to "*don't*". Syllable-boundaries are hence assigned equally. Nevertheless, the word-boundary between "don" and the clitic "*t*" is thus erased, just as in the mistaken "*eyed*". The original and the Mondegreen thus consist of the same amount of words, as well: three. (Compare also examples 64 and 66))

- a) "And/don't/it/make/my/brown/eyes/blue" (original)
- b) "And/do.nuts/make/my/brown/eyes/blue" (mishearing)

The listener mistakenly assumes a syllable-boundary to the left of /nIt/and consequently turns /nIt/ into /nʌts/. The listener therefore overhears the word-boundary between "don't" and "it", as he or she has turned it into a meaningful unit "donuts" already. The SOSH, which would predict a possible word-boundary to the left of /It/, is not used by the listener. The SOSH is in favour of the original and can thus not come up with an explanation for this example.

As can be seen, the MSS does not give any indication of difference, the stress-assignment is just the same:

- a) "and DON't it make my BROWN eyes BLUE" (original)
 "and DON't it make my BROWN EYES BLUE" (repetition)
- b) "and DOnuts make my BROWN eyes BLUE" (mishearing)

The MSS can thus not explain the Mondegreen.

As the original song's lyrics are phonetically similar to those of the Mondegreen, it seems as if phonetic ambiguity is one reason for the mishearing. Although the MOP could give first hints for the explanation of the Mondegreen regarding the misalignment of word-boundaries, the SOSH favours rather the original than the Mondegreen, while the MSS cannot further explain it. Only the PAH can thus explain the Mondegreen. I believe it to be crucial that the original is ungrammatical, even if colloquial: "don't it" for "doesn't it". I therefore believe that the mishearing is due to the listener's tendency to find a grammatically correct meaning. He or she consequently comes up with the mistaken "donuts".

3.1.4 Application of the PAH but Counterevidence to the SOSH and the MSS

- 73) "Mondegreen"
 - a) "and laid him on the green" (original)
 - b) "and Lady Mondegreen" (mishearing)

Phonetic transcription	1	ei	d	h	i	m	3	n	ð	Э	g	J	i:	n	original
	1	ei	d		i:	m	Э	n	d	Ð	g	I	i:	n	Mondegreen

As can be seen, there are two differences between the transcriptions:

- In the Mondegreen, the voiceless glottal fricative is mistakenly added.
- In the original, the voiced dental fricative is used, while in the Mondegreen, it is mistaken for the voiced alveolar plosive. Although they do not seem to be phonetically similar at first sight, it is interesting to note that they have also been mistaken in examples 69) and 76).

The Soundex codes are the same. The mistakenly added voiceless glottal fricative and the difference between the correct voiced dental fricative and the mistaken voiced alveolar plosive are not captured.

- a) "and <u>laid him on the green</u>": L3553265 (original)
- b) "and <u>Lady Mondegreen</u>": L3553265 (mishearing)

As can be seen, there are two differences between the two sonority waves: the mistakenly left out glottal fricative in the Mondegreen and the correct voiced dental fricative is mistakenly replaced by the voiced alveolar plosive:

5		*			*		*			*			*		vowels
4	*											*			approximants
3						*		*						*	nasals
2				-					#						fricatives
1			*						*		*				plosives
Degree of sonority/ phonetic transcription	1	ei	d	h	i	m	Э	n	ð	ə	g	J	i:	n	original
	1	ei	d		i:	m	Э	n	d	ə	g	J	i:	n	Mondegreen

If we take a look at the MOP, two differences regarding consonant placement can be found: the first of the voiced alveolar plosive and the second of the bilabial nasal. In the original, the voiced alveolar plosive has been put in the first syllable's coda (/leid/), while in

the Mondegreen, it has been put in the second syllable's onset (/di:/). This can also be due to the fact that the following glottal fricative has been mistakenly left out in the Mondegreen. While there is a word-boundary in the original "laid him", the listener mistakenly believes only in a syllable-boundary which results in "Lady". According to the MOP, the voiced alveolar plosive is rather put in the second syllable's onset rather than the first syllable's coda. Thus, the listener, in this case mistakenly, falls prey to that tendency. In the original, the bilabial nasal has been put in the second syllable's coda (/him/), while in the Mondegreen, it has been put in the third syllable's onset (/mɔn/). This can be a consequence of the mistaken syllable-boundary before. According to the MOP, the listener should put the bilabial nasal in the third syllable's onset rather than the second syllable's coda. This is the case in the Mondegreen. Thus, the listener has, in this case mistakenly, fallen prey to that tendency. Thus, the listener's mistaken version should actually be correct – according to the MOP. The MOP can thus give first hints for the explanation of the Mondegreen.

Both the original and the Mondegreen happen to consist of the same amount of syllables: five. Yet, syllable- and word-boundaries are not assigned equally, as we have already seen:

- a) "and/<u>lai d/hi m/on/the/green</u>" (original)
- b) "and/<u>La.d y/Mon.de. green</u>" (mishearing)

Sylvia Wright mistakenly believes in a syllable-boundary in between "laid". She mistakenly believes that the syllable-onset is /di:/, although it really consists of /hi:m/ and although the /d/ belongs yet to the preceding syllable's offset /leid/. Thus, she comes up with the mistaken "Lady" instead of "laid him". Then, she does not recognize the word-boundaries between "him", "on", "the" and "green". She only recognizes the syllable-boundaries and thus comes up with the mistaken "Mondegreen". According to the SOSH, however, the listener would tend to these word-boundaries and is thus rather in favour of the original than the mishearing.

As can be seen, the assignment of stress gives an indication for the difference in stress between the original and the Mondegreen:

- a) "and LAID him ON the GREEN" (original)
- b) "and LA dy MON de GREEN" (mishearing)

There can be seen a decisive deviation from the regular stress pattern: "on" would not be stressed in normal, spoken, speech, but is so here. The MSS thus assumes a word-boundary to the left of it: "him on". This is the case in the original. The problem then lies in the fact that the syllable-boundaries are aligned differently, and the word-boundaries therefore, as well. The listener thus wrongly puts the "m" of "him" to "Mondegreen". After that, there can be seen a decisive deviation from the regular stress pattern: "green" would not be stressed in normal, spoken, speech, but is so here. The MSS would in this case assume a word-boundary to the left of it, as is the case in the original: "the green". Here, Sylvia Wright treats it only as a syllable-boundary, however. She thus comes up with the mistaken "Mondegreen". The MSS can thus not explain the Mondegreen, as it rather predicts the original's word-boundary that is not recognized here.

As the original is phonetically similar to the Mondegreen, it seems as if phonetic ambiguity is one reason for the mishearing. Although the MOP could give first hints for the explanation of the Mondegreen regarding the misalignment of word-boundaries, both the SOSH and the MSS favour rather the original than the Mondegreen. Only the PAH can thus explain the Mondegreen.

- 74) Pink Floyd, "Another Brick In The Wall Part 2 (Live Version)"
 - a) "All in all, you're just another brick in the wall" (original)
 - b) "All in all, you're just another breakin' the law" (mishearing)

Phonetic transcription	b	J	Ι	k	Ι	n	ð	ə	w	ɔ :	1	original
	b	J	eI	k	Ι	ŋ	ð	ə	1	э:		Mondegreen

As can be seen, there are four differences between the transcriptions:

In the original, the unrounded front close vowel is used, while in the Mondegreen, it is mistaken for the diphthong between the unrounded front close-mid vowel and the unrounded front close vowel: As they both have the same part of the tongue used and almost the same degree of raising of the tongue, they are likely to be misheard.

- In the original, the alveolar nasal is used, while in the Mondegreen, it is mistaken for the velar nasal: As they both have the same manner of articulation, they are likely to be misheard.
- In the original, the voiced labial-palatal approximant is used, while in the Mondegreen, it is mistaken for the alveolar lateral approximant: As they both have the same manner of articulation, they are likely to be misheard.
- In the Mondegreen, the alveolar lateral approximant is mistakenly left out.

The Soundex codes are the same. The differences between the correct unrounded front close vowel and the mistaken diphthong between the unrounded front close-mid vowel and the unrounded front close vowel, as well as between the correct alveolar nasal and the mistaken velar nasal are not captured. The difference between the correct voiced labial-palatal approximant and the mistaken alveolar lateral approximant is not captured either. As the alveolar lateral approximant mistakenly replaces the voiced labial-palatal approximant and as the latter is not captured in Soundex (as is not the rounded back open-mid vowel in between, either), but as the same alveolar lateral approximant is found in the original just afterwards, it is not perceivable where it is found:

- a) "All in all, you're just another <u>brick in the wall</u>": B62534 (original)
- b) "All in all, you're just another <u>breakin' the law</u>": B62534 (mishearing)

There is one difference between the sonority waves: the mistakenly left out alveolar lateral approximant in the Mondegreen:

5			*		*			*		*		vowels
4		*							*		-	approximants
3						*						nasals
2							*					fricatives
1	*			*								plosives
Degree of sonority/ phonetic transcription	b	J	Ι	k	Ι	n	ð	ə	W	э:	1	original
	b	ı	eI	k	Ι	ŋ	ð	ə	1	э:		Mondegreen

If we take a look at the MOP, it can be seen that there is a difference in the placement of the voiceless velar plosive. In the original, it has been put in the first syllable's coda (/bɪ Ik/), while in the Mondegreen, it has been put in the second syllable's onset (/kIŋ/). While there is a word-boundary in the original "brick in", the listener mistakenly believes only in a syllable-boundary which results in "breakin'". This then results in the difference between word-boundaries. As the MOP states, one should, just as the listener mistakenly in this case, tend to place the voiceless velar plosive in the second syllable's onset rather than the first syllable's coda. This is the case in the Mondegreen. The listener, in this case mistakenly, falls prey to that. Especially as he or she consequently believes in a word-boundary. The MOP can thus give a first hint for the explanation of the Mondegreen.

Both the original and the Mondegreen happen to consist of the same amount of syllables: four. Yet, syllable- and word-boundaries are not assigned equally, as we have already seen:

- a) "All/in/all/you.re/just/a.nother/<u>bri ck/in /the/wall</u>" (original)
- b) "All/in/all/you.re/just/a.nother/<u>brea.kin</u> /the/law" (mishearing)

The listener mistakenly believes in a syllable-boundary in between "brick". He or she mistakenly believes that the syllable-onset is /kIŋ/, although it really consists of /Iŋ/ only, and although the /k/ belongs yet to the preceding syllable's offset /bxIk/. As a result, the listener erases the word-boundary between "brick" and "in". Therefore, he or she comes up with the contracted "breakin". The SOSH would, however, indicate that possible word-boundary and is thus in favour of the original rather than the Mondegreen. The listener does not recognize it due to his false alignment of /k/.

As can be seen, the assignment of stress gives an indication for difference in stress between the original and the Mondegreen:

- a) "all in ALL, you're just ANOther **BRICK IN** the WALL" (original)
- b) "all in ALL, you're just ANOther **BREAKIN'** the LAW" (mishearing)

There can be seen a decisive deviation from the regular stress pattern: "in" would not be

stressed in normal, spoken, speech, but is so here. The MSS would in this case assume a word-boundary to the left of it, as is the case in the original: "brick in". Here, the listener treats it only as a syllable-boundary, however. He or she thus comes up with the mistaken "breakin'". The MSS can thus not explain the Mondegreen, as it rather predicts the original's word-boundary that is not recognized here.

As the original song's lyrics are phonetically similar to those of the Mondegreen, it seems as if phonetic ambiguity is one reason for the mishearing. Although the MOP could give a first hint for the explanation of the Mondegreen regarding the misalignment of word-boundaries, both the SOSH and the MSS favour rather the original than the Mondegreen. Only the PAH can thus explain the Mondegreen.

3.2 Non-Applicability of the PAH

3.2.1 Non-Applicability of the PAH but Applicability of the SOSH

75) Keane, "Crystal Ball"

- a) "Oh crystal ball" (original)
- b) "Oh Chris de Burgh" (mishearing)

Phonetic transcription	k	J	Ι	s	t	1	b	ɔ:l		original
	k	J	Ι	s	d	ε	b	ð :	g	Mondegreen

As can be seen, there are four differences between the transcriptions:

- In the original, the voiceless alveolar plosive is used, while in the Mondegreen, it is mistaken for the voiced alveolar plosive: As they both have the same place and manner of articulation, they are very likely to be misheard.
- In the original, the alveolar lateral approximant is used, while in the Mondegreen, it is mistaken for the unrounded front open-mid vowel.
- In the original, the rounded back open-mid vowel is used in combination with the alveolar lateral approximant, while in the Mondegreen, it is mistaken for the rhotic unrounded central open-mid vowel.
- In the Mondegreen, the voiced velar plosive is added.

It is thus interesting to note that the alveolar lateral approximant is twice mistaken for an open-mid vowel.

The Soundex codes are differentiated by two characters: in the original, the alveolar lateral approximant is used (4), while in the Mondegreen, it is mistaken for the unrounded front open-mid vowel (-), in the original, the rounded back open-mid vowel is used in combination with the alveolar lateral approximant (4), while in the Mondegreen, it is mistaken for the rhotic unrounded central open-mid vowel and the voiced velar plosive (6). The difference between the voiceless alveolar plosive and the voiced alveolar plosive is not captured:

a) "Oh crystal ball": O2623414 (original)

b) "Oh Chris de Burgh": O2623 16 (mishearing)

There are two differences between the sonority waves: the mistaken unrounded front open-mid vowel for the correct alveolar lateral approximant and the mistakenly added voiced velar plosive:

5			*			#		*			vowels
4		*				*			*		approximants
3											nasals
2				*							fricatives
1	*				*		*			+	plosives
Degree of sonority/ phonetic transcription	k	J	I	S	t	l	b	Э:	1		original
	k	J	Ι	s	d	3	b	3º:	J	g	Mondegreen

If we take a look at the MOP, it can be seen that the problem lies in the ambisyllabic alveolar lateral approximant. This is mistakenly replaced by the unrounded front open-mid vowel. This is due to the fact that the alveolar approximant cannot be part of the syllable's coda as this would violate the sonority principle (/tl/). Although syllable-boundaries are exactly the same, the listener mistakenly adds a word-boundary before the voiced dental plosive that is not there in the original (here, it is only a syllable-boundary, not a word-boundary) and turns the alveolar approximant into the unrounded front open-mid vowel

 $(d\epsilon)$. The MOP can thus give a first hint for the explanation of the Mondegreen.

Both the original and the Mondegreen happen to consist of the same amount of syllables: three. Syllable-boundaries are assigned equally, word-boundaries, however, are not, as we have already seen:

- a) "Oh/crys .tal/ball" (original)
- b) "Oh/chris/de/burgh" (mishearing)

The listener mistakenly believes in a word-boundary to the left of /tl/ in "crystal", although it is only a syllable-boundary. The listeners thus comes up with the misheard replacement "Chris de". The turning of the correct "ball" to the mistaken "Burgh" and then be seen as a result of that, at least to those who know Chris de Burgh. The SOSH can therefore account for a possible explanation for this example, as it predicts that word-boundary to the left of the syllable-onset /tl/.

As can be seen, the MSS does not give any indication of difference, the stress-assignment is just the same:

- a) "OH CRYStal BALL" (original)
- b) "OH CHRIS de BURGH" (mishearing)

The listener mistakenly believes in a word-boundary to the left of the syllable "de", although it is not stressed. The MSS can therefore not explain the Mondegreen, as it does not predict that word-boundary.

Due to the various differences between the phonetic transcriptions and the Soundex codes of the original song's lyrics and those of the Mondegreen, phonetic similarity between the two has to be questioned. The MOP can give a first hint for the explanation of the Mondegreen regarding the misalignment of word-boundaries. The SOSH can then explain this misalignment. The MSS, however, cannot further explain the Mondegreen. Only the SOSH can thus explain the Mondegreen.

- 76) Bob Dylan, "Blowin' In The Wind (Live Version)"
 - a) "The answer my friend, is blowin' in the wind" (original)
 - b) "Dead ants are my friends, they're blowin' in the wind" (mishearing)

Phonetic transcription	ð	i:		æ	n		s	ə	(I)	original
	d	e	d	æ	n	t	s	a:	(I)	Mondegreen

As can be seen, there are five differences between the transcriptions:

- In the original, the voiced dental fricative is used, while in the Mondegreen, it is mistaken for the voiced alveolar plosive. Although they do not seem to be phonetically similar at first sight, it is interesting to note that they have also been mistaken in examples 69) and 73).
- In the original, the unrounded front close vowel is used, while in the Mondegreen, it is mistaken for the unrounded front close-mid vowel: Although they both have the same part of the tongue used and almost the same degree of raising of the tongue, I do not believe that they are generally very likely to be misheard.
- In the Mondegreen, the voiced alveolar plosive is mistakenly added.
- In the Mondegreen, the voiceless alveolar plosive is mistakenly added.
- In the original, the central vowel is used, while in the Mondegreen, it is mistaken for the unrounded front open vowel.
- In the Mondegreen, the voiceless alveolar fricative is mistakenly added.

The Soundex codes are differentiated by four characters: the first letter T for "the" is mistakenly replaced by D for "dead", the voiced alveolar plosive is mistakenly added (3), the voiceless alveolar plosive is mistakenly added (3), the voiceless alveolar fricative is mistakenly added (2). The differences between the correct voiced dental fricative and the mistaken voiced alveolar plosive, between the correct unrounded front close vowel and the mistaken unrounded front close-mid vowel, as well as between the correct central vowel and the mistaken unrounded front open vowel are not captured:

- a) "The answer my friend, is blowin' in the wind": T 5 2651653 (original)
- b) "<u>Dead ants are my friends</u>, they're blowin' in the wind": **D353**26516532 (mishearing)

As can be seen, there are three differences between the sonority waves: the voiced alveolar plosive is mistaken for the correct voiced dental fricative, the voiced alveolar plosive and the voiceless alveolar plosive are mistakenly added:

5		*		*				*		vowels
4									*	approxima nts
3					*					nasals
2	*						*			fricatives
1	#		+			+				plosives
Degree of sonority/ phonetic transcription	ð	i:		æ	n		S	Э	(I)	original
	d	e	d	æ	n	t	s	a:	(I)	Mondegre en

If we take a look at the MOP, it can be seen that there is one difference between the original and the Mondegreen: while there is only a syllable-boundary in the original "answer", the listener mistakenly believes in a word-boundary which results in "ants are". Also, the voiceless alveolar plosive is added. When we consider the sonority wave, it has to be noted that the consonant cluster of the voiceless alveolar plosive and the voiceless alveolar fricative in the Mondegreen's second syllable's coda should be impossible as the sonority wave does not rise, but fall, which should be impossible. Yet, as stated before, the phoneme /s/ behaves in an unusual fashion and the cluster is hence legitimate. Still, according to the MOP, the voiceless alveolar fricative tends to be put in the third syllable's onset rather than the second syllable's coda. The listener, however, mistakenly places it in the second syllable's coda. This then results in the difference between word-boundaries. The MOP can thus give a first hint for the explanation of the Mondegreen.

Both the original and the Mondegreen happen to consist of the same amount of syllables: three. Yet, syllable- and word-boundaries are not assigned equally, as we have already seen:

- a) "the/ an.s er/ my/friend/is /blo.win'/in/the/wind" (original)
- b) "dead/ants/are/my/friend s/they're/blo.win'/in/the/wind" (mishearing)

The listener mistakenly believes in a word-boundary in between "answer", although it is only a syllable-boundary. As he or she also mistakenly believes that the syllable-onset is $\langle a:(x) \rangle$ and not $\langle s \ni (x) \rangle$, the listeners comes up with the misheard replacement "ants are". The SOSH can therefore account for a possible explanation for this example, as the listener predicts a word-boundary to the left of the syllable-onset $\langle a:(x) \rangle$. As this is wrong, he or she falls prey to the tendency of putting a word-boundary to the left of a syllable-onset, which is posed by the SOSH.

As can be seen, the MSS does not give any indication of difference, the stress-assignment is just the same:

- a) "The ANswer my FRIEND, is BLOwin' IN the WIND" (original)
- b) "Dead ANTS are my FRIEND S, they're BLOwin' IN the WIND" (mishearing)

The listener mistakenly believes in a word-boundary to the left of the syllable "are", although it is not stressed. The MSS can therefore not explain the Mondegreen, as it does not predict that word-boundary.

Due to the various differences between the phonetic transcriptions and the Soundex codes of the original song's lyrics and those of the Mondegreen, phonetic similarity between the two has to be questioned. The MOP can give a first hint for the explanation of the Mondegreen regarding the misalignment of word-boundaries. The SOSH can then explain this misalignment. The MSS, however, cannot further explain the Mondegreen. Only the SOSH can thus explain the Mondegreen.

- 77) The Hooters, "Lucy In The Sky With Diamonds"
 - a) "A girl with kaleidoscope eyes" (original)
 - b) "A girl with colitis goes by" (mishearing)

Phonetic transcription	k	ə	1	ai:	d	ə	s	k	∂ ∪		p	ai:	s	original
	k	ə	1	ai:	t	i	s	g	∂ ∪	Z	b	ai:		Mondegreen

As can be seen, there are six differences between the transcriptions:

- in the original, the voiced alveolar plosive is used, while in the Mondegreen, it is mistaken
 for the voiceless alveolar plosive. As they both have the same place and manner of
 articulation, they are very likely to be misheard.
- In the original, the central vowel is used, while in the Mondegreen, it is mistaken for the unrounded front close vowel. Although they do not seem to be phonetically similar at first sight, it is interesting to note that they have also been mistaken in examples 67), 69) and 70).
- In the original, the voiceless velar plosive is used, while in the Mondegreen, it is mistaken
 for the voiced velar plosive: As they both have the same place and manner of articulation,
 they are also very likely to be misheard.
- In the original, the voiceless bilabial plosive is used, while in the Mondegreen, it is mistaken for the voiced bilabial plosive: As they both have the same place and manner of articulation, they are also very likely to be misheard.
- In the Mondegreen, voiceless alveolar fricative is mistakenly added.
- In the Mondegreen, the voiceless alveolar fricative is mistakenly left out.

The Soundex codes are differentiated by three characters: the first letter K for "kaleidoscope" is mistakenly replaced by C for "colitis", the mistakenly added voiced alveolar fricative (2) and the mistakenly left out voiceless alveolar fricative (2). The differences between the correct voiced alveolar plosive and the mistaken voiceless alveolar plosive, between the correct central vowel and the mistaken unrounded front close vowel, between the correct voiceless velar plosive and the mistaken for the voiced velar plosive, between the correct voiceless bilabial plosive and the mistaken voiced bilabial plosive are not captured:

- a) "A girl with <u>kaleidoscope eyes</u>": **K**432 1**2** (original)
- b) "A girl with <u>colitis goes by</u>": C43221 (mishearing)

There are two differences between the sonority waves: the mistakenly added voiced alveolar fricative and the left out voiceless alveolar fricative in the Mondegreen:

5		*		*		*			*			*		vowels
4			*											approximants
3														nasals
2							*			+			-	fricatives
1	*				*			*			*			plosives
Degree of sonority/ phonetic transcription	k	ə	1	ai:	d	ə	s	k	Ə υ		p	ai:	s	original
	k	ə	1	ai:	t	Ι	s	g	∂ ∪	Z	b	ai:		Mondegreen

If we take a look at the MOP, two differences regarding consonant placement can be found: the first of the voiceless alveolar fricative and the second of the bilabial plosive. In the original, the voiceless alveolar fricative has been put in the fourth syllable's onset (/skəup/), while in the Mondegreen, it has been put in the third syllable's coda (/tls/). According to the MOP, the voiceless alveolar fricative tends to be put in the fourth syllable's onset rather than the third syllable's coda. The listener, however, mistakenly places it in the third syllable's coda. While there is only a syllable-boundary in the original "kaleidoscope", the listener mistakenly believes in a word-boundary which results in "colitis goes". This then results in the difference between word-boundaries. When we consider the sonority wave, it has to be noted that the consonant cluster of the voiceless alveolar fricative and the voiceless velar plosive in the original's third syllable's onset should be impossible as the sonority wave does not rise, but falls, which should be impossible. Yet, as stated before, the phoneme /s/ behaves in an unusual fashion and the cluster is hence legitimate. In the original, the bilabial plosive has been put in the fourth syllable's coda (/skəup/), while in the Mondegreen, it has been put in the fifth syllable's onset (of the next syllable; /bai:/). This then results in the difference between word-boundaries. According to the MOP, the listener should put the bilabial plosive in the syllable's onset as is the case in the Mondegreen. Thus, the listener has, in this case mistakenly, fallen prey to that tendency. The MOP can thus give first hints for the explanation of the Mondegreen.

Both the original and the Mondegreen happen to consist of the same amount of syllables: five. Yet, neither syllable-boundaries nor word-boundaries are assigned equally, as we have already seen:

- a) "A/girl/with/ka.lei.dos.co pe/eyes" (original)
- b) "A/girl/with/co.li. tis/ goes/by" (mishearing)

The listener mistakenly believes in two word-boundaries in between "kaleidoscope", although they are only syllable-boundaries. The SOSH can therefore account for a possible explanation for this example, as the listener predicts one word-boundary to the left of the syllable-onset /kəup/. As this is wrong, he or she falls prey to the tendency of putting a word-boundary to the left of a syllable-onset, which is posed by the SOSH. In the case of the second mistaken word-boundary, there is not even a syllable-boundary in the original. The listener mistakenly believes in a syllable-onset /pai:/ and hence in a word-boundary: "goes by". As this is also wrong, he or she falls again prey to the tendency of putting a word-boundary to the left of a syllable-onset, which is posed by the SOSH.

As can be seen, the assignment of stress gives an indication for the difference in stress between the original and the Mondegreen:

- a) "a GIRL with kaLEIdo skope EYES" (original)
- b) "a GIRL with coLItis goes BY" (mishearing)

The listener mistakenly believes in a word-boundary to the left of the syllable "scope" of "kaleidoscope", although there is only a syllable-boundary. He or she also assumes that the "s" still belongs to the preceding word or syllable. "scope" is, however, neither stressed in the song nor in regular speech. Thus, there is no reason for the listener to believe in that word-boundary. The MSS can thus not explain the Mondegreen, as it does not predict that word-boundary.

Due to the various differences between the phonetic transcriptions and the Soundex codes of the original song's lyrics and those of the Mondegreen, phonetic similarity between the two has to be questioned. The MOP can give first hints for the explanation of the Mondegreen regarding the misalignment of word-boundaries. The SOSH can then explain this misalignment. The MSS, however, cannot further explain the Mondegreen. Only the SOSH can thus explain the Mondegreen.

- 78) José Feliciano, "Feliz Navidad"
 - a) "Feliz navidad" (original)
 - b) "Police naughty dog" (mishearing)

Phonetic transcription	f	ә	1	i	θ	n	a	β	I	ð	a	ð	original
	p	ə	1	i:	s	n	ວ:	t	I	d	ວ:	g	Mondegreen

As can be seen, there are seven differences between the transcriptions:

- In the original, the voiceless labiodental fricative is used, while in the Mondegreen, it is mistaken for the voiceless bilabial plosive.
- In the original, the voiceless dental fricative is used, while in the Mondegreen, it is mistaken for the voiceless alveolar fricative.
- In the original, the unrounded front open vowel is used, while in the Mondegreen, it is mistaken for the rounded back open-mid vowel.
- In the original, the voiced bilabial fricative is used, while in the Mondegreen, it is mistaken for the voiceless alveolar plosive.
- In the original, the voiced dental fricative is used, while in the Mondegreen, it is mistaken for the voiced alveolar plosive.
- In the original, the unrounded front open vowel is used, while in the Mondegreen, it is mistaken for the rounded back open-mid vowel.
- In the original, the voiced dental fricative is used, while in the Mondegreen, it is mistaken for the voiced velar plosive.

As can be seen, there are a lot of differences between the two phonetic transcriptions, however still giving almost the same sonority waves. The problem with the Mondegreen is, of course, that is is not an example given by a native speaker; the Mondegreen is in a language other than his or her native language. The bilabial and dental fricatives of the Spanish language do not occur in the same positions in English as they do in Spanish, which makes it admittedly hard for a non-native listener to correctly place them; they are, as can be seen, replaced by plosives in all but one case in which the fricative is replaced by another fricative. The difference between the correct unrounded front open vowel and the mistaken rounded back open-mid vowel is twice not captured.

The Soundex codes are differentiated by three characters. This is due to the fact that

Soundex is only claimed to work for English, but not so for Spanish. Still, I wanted to include this example as the mishearing is in English and as the listener believes in an English song and thus in an English pronunciation. The differences are: the first letter F for "feliz" is mistakenly replaced by P for "police", the voiced bilabial fricative (1) is mistakenly replaced by the voiceless alveolar plosive (3), the voiced dental fricative (3) is mistakenly replaced by the voiced velar plosive(2). The differences between the correct voiceless bilabial fricative and the mistaken voiceless bilabial plosive, between the correct unrounded front open vowel and the mistaken rounded back open-mid vowel (twice) are not captured:

a) "Feliz Navidad": F425133 (original)

b) "Police naughty dog": P425**3**32 (mishearing)

There are five differences between the sonority waves: the voiceless labiodental fricative is mistakenly replaced by the voiceless bilabial plosive, the voiceless dental fricative is mistakenly replaced by the voiceless alveolar fricative, the voiced bilabial fricative is mistakenly replaced by the voiceless alveolar plosive, the voiced dental fricative is mistakenly replaced for the voiced alveolar plosive, the voiced dental fricative is mistakenly replaced by the voiced velar plosive; each time, a fricative is mistakenly replaced by a plosive:

5		*		*			*		*		*		vowels
4			*										approximants
3						*							nasals
2	*				*			*		*		*	fricatives
1	#				#			#		#		#	plosives
Degree of sonority/ phonetic transcription	f	ə	1	i	θ	n	a	β	Ι	ð	a	ð	original
	p	ə	1	i:	s	n	ວ:	t	Ι	d	ɔ :	g	Mondegreen

If we take a look at the MOP, it can be seen that in both the original and the Mondegreen the syllable-boundaries are the same, while the word-boundaries differ: while there are only two syllable-boundaries in the original "navidad", the listener mistakenly believes in one syllable-boundary and one word-boundary which results in the mistaken "naughty dog". This then results in the difference between word-boundaries. The MOP can

thus give a first hint for the explanation of the Mondegreen.

Both the original and the Mondegreen happen to consist of the same amount of syllables: five. Syllable-boundaries are assigned equally, word-boundaries, however, are not, as we have already seen:

- a) "Fe.liz/ na. vi.dad" (original)
- b) "Po.lice/naugh.ty/dog" (mishearing)

The listener mistakenly believes in a word-boundary in between "navidad", although it is only a syllable-boundary. The SOSH can therefore account for a possible explanation for this example, as the listener predicts a word-boundary to the left of the syllable-onset /ðað/. As this is wrong, he or she falls prey to the tendency of putting a word-boundary to the left of a syllable-onset, which is posed by the SOSH.

As can be seen, the MSS does not give any indication of difference, the stress-assignment is just the same:

- a) "Fe LIZ NA vidad" (original)
- b) "PoLICE NAUGHty dog" (mishearing)

The listener mistakenly believes in a word-boundary to the left of the syllable "dad", although it is not stressed. The MSS can thus not explain the Mondegreen, as it does not predict that word-boundary.

Due to the various differences between the phonetic transcriptions and the Soundex codes of the original song's lyrics and those of the Mondegreen, phonetic similarity between the two has to be questioned. Although the MOP could give a first hint for the explanation of the Mondegreen, the SOSH can only give further hints. The MSS cannot further explain it. Only the SOSH can thus explain the Mondegreen. The problem with the Mondegreen really lies in the fact that the song is sung in a language other than the listener's. It should only quickly indicate how non-native speakers come up with *meaningful units* if they cannot attach meaning, not only if they lack grammatical competence or vocabulary in the foreign language, but also and especially if they do not recognize it as such or are completely unfamiliar with it.

3.2.2 Non-Applicability of the PAH and Counterevidence to the SOSH

- 79) Happymen Vs Gala, "Freed From Desire"
 - a) "My lover's got no money, he's got his strong beliefs" (original)
 - b) "My lover's got no money, he's a goddess from Belize" (mishearing)

Phonetic transcription	h	i:	s		g	b	t	h	i	s	s	t	I	3	ŋ	b	e	1	i:	f	s	original
	h	i:	s	a	g	b	d		Ι	s		f	J	b	m	b	ә	1	i:		Z	Mondegreen

As can be seen, there are ten differences between the transcriptions:

- In the Mondegreen, the unrounded back open vowel is mistakenly added.
- In the original, the voiceless alveolar plosive is used, while in the Mondegreen, it is
 mistaken for the voiced alveolar plosive: As they both have the same place and manner of
 articulation, they are very likely to be misheard.
- In the Mondegreen, the voiceless glottal fricative is mistakenly left out.
- In the Mondegreen, the voiceless alveolar fricative is mistakenly left out: Yet, it is very hard to perceive as it is preceded by a voiceless alveolar fricative and as it it thus hard to distinguish if there was one or if there were two of them.
- In the original, the voiceless alveolar plosive is used, while in the Mondegreen, it is mistaken for the voiceless labiodental fricative.
- In the original, the rounded back open-mid vowel is used, while in the Mondegreen, it is mistaken for the rounded back open vowel: As they both have the same part of the tongue used and almost the same degree of raising of the tongue, they are very likely to be misheard.
- In the original, the velar nasal is used, while in the Mondegreen, it is mistaken for the bilabial nasal: As they both have the same manner of articulation, they are likely to be misheard. It also has to be mentioned that the velar nasal normally assimilates to the following voiced bilabial plosive, in the sense that it sounds more like the bilabial nasal that is mistakenly used in the Mondegreen. If one takes into account that the listener might be conscious of this assimilation process, it is understandable why he or she then comes up with "from" rather than "strong".

- In the original, the unrounded front close-mid vowel is used, while in the Mondegreen, it is mistaken for the central vowel.
- In the Mondegreen, the voiceless labiodental fricative is mistakenly left out: This is due to the fact that it is followed by a voiceless alveolar fricative. I even doubt that Gala pronounces it at all.
- In the original, the voiceless alveolar fricative is used, while in the Mondegreen, it is mistaken for the voiced alveolar fricative: As they both have the same place and manner of articulation, they are very likely to be misheard.

The Soundex codes are differentiated by five characters: the voiced velar plosive (2) is not represented in the original, as it is immediately preceded by the voiceless alveolar fricative (2) (while in the Mondegreen the unrounded back open vowel is in between them), the correct voiceless alveolar plosive (3) mistakenly replaced by the voiceless labiodental fricative (1), the voiced velar plosive (2) is mistakenly left out, the voiced bilabial plosive (1) is not represented in the Mondegreen, and the voiceless labiodental fricative (1) is mistakenly left out. The following differences are not captured: the unrounded back open vowel is mistakenly added, the correct voiceless alveolar plosive mistakenly replaced by the voiced alveolar plosive, the voiceless glottal fricative is mistakenly left out, the voiceless alveolar fricative is mistakenly left out (yet very hard to perceive as already preceded by a voiceless alveolar fricative), the correct rounded back open-mid vowel is mistakenly replaced by the bilabial nasal, the correct unrounded front close-mid vowel is mistakenly replaced by the central vowel, the voiceless alveolar fricative mistakenly replaced by the voiced alveolar fricative:

- a) "My lover's got no money, <u>he's got his strong beliefs</u>": H2 32**3**65**21**14**1**2 (original)
- b) "My lover's got no money, he's a goddess from Belize": H2232165 14 2 (mishearing)

As can be seen, there are five differences between the sonority waves: the unrounded back open vowel is mistakenly added, the voiceless glottal fricative is mistakenly left out, the voiceless alveolar plosive is mistakenly replaced by the voiceless labiodental fricative, the voiced velar plosive is mistakenly left out, the voiceless labiodental fricative is mistakenly left out:

5		*		+		*			*					*			*		*			vowels
4													*					*				approximants
3															*							nasals
2	*		*					-		*	-	#								-	*	fricatives
1					*		*					*				*						plosives
Degree of sonority/ phonetic transcription	h	i:	s		g	p	t	h	i	S	S	t	I	3	ŋ	b	e	1	i:	f	s	original
	h	i:	s	α	g	p	d		Ι	s		f	J	p	m	b	ə	1	i:		z	Mondegreen

If we take a look at the MOP, it can be seen that there is are four differences between the original and the Mondegreen: firstly, the unrounded back open vowel is mistakenly added, secondly, the alveolar plosive is placed differently, thirdly voiceless glottal fricative is left out, and fourthly, the voiceless alveolar fricative is mistakenly added out. In the mistaken addition of the unrounded back open vowel, a further syllable and word is mistakenly added: "a". In the original, the alveolar plosive has been put in the second syllable's coda (/gpt/), while in the Mondegreen, it has been put in the fourth syllable's onset (remember that the Mondegreen consists of one more syllable, the unrounded back open vowel, at this stage already; /gpdIs/). While there is a word-boundary in the original "got his", the listener mistakenly believes in a syllable-boundary only which results in "goddess". This then results in the difference between word-boundaries. It is important in this respect that the mistaken overhearing of the glottal fricative adds to that. In the Mondegreen, the voiceless alveolar fricative is mistakenly left out in the Mondegreen. Still, this is very hard to perceive, as it is preceded by another voiceless alveolar fricative. It is thus hard to distinguish whether there was one or of there were two of them. Still, in the original, this additional one has been put in the fourth syllable's onset (/stxong/), while in the Mondegreen, it is missing (both original and Mondegreen put the preceding voiceless alveolar fricative in the syllable's coda (/hIs/-/Is/). When we consider the sonority wave, it has to be noted that the consonant cluster of the voiceless alveolar fricative and the voiceless alveolar plosive in the original's fourth syllable's coda should be impossible as the sonority wave does not rise, but fall, which should be impossible. Yet, as stated before, the phoneme /s/ behaves in an unusual fashion and the cluster is hence legitimate. The MOP can thus give first hints for the explanation of the

Mondegreen.

The original and the Mondegreen do not happen to consist of the same amount of syllables. While the original consists of six, the Mondegreen consists of seven. As they consist of the same amount of words, namely five, syllable- and word-boundaries are not assigned equally, as we have already seen:

- a) "My/lo.ver's/got/no/mo.ney/<u>he's/ got/his/ strong/be.liefs.</u>" (original)
- b) "My/lo.ver's/got/no/mo.ney/<u>he's/a/god.des/from/be.lize</u>" (mishearing)

The listener does not recognize the word-boundary between "got" and "his". He or she only recognizes the syllable-boundary and comes thus up with "goddess". According to the SOSH, however, the listener would tend to that word-boundary and is thus rather in favor of the original than the mishearing. The SOSH can therefore not account for an explanation to the mishearing. It can be said that the overhearing of "a" and the contraction of "got" and "his" to "goddess" result in the mistaken "from Belize", as "goddess strong beliefs" does not make any sense.

As can be seen, the MSS does not give any indication of difference, the stress-assignment is just the same:

- a) "My LOver's got no MOney, he's GOT his STRONG beLIEFSs" (original)
- b) "My LOver's got no MOney, he's a **GODdess** FROM BeLI ZE" (mishearing)

Still, there can be seen a decisive deviation from the regular stress pattern: "got" would not be stressed in normal, spoken, speech. Because of the stress, the listener mistakenly believes in a content word, as is the case with "goddess", which is stressed on its first syllable. Also, as "his" is not stressed, there is no reason for the listener to believe that there should be a word-boundary in between of "got" and "his". He or she thus contracts "got his" to "goddess" and comes up with that content word. The MSS can nevertheless not explain the Mondegreen. The problem lies in the fact that the syllable in question ("his") is unstressed and does therefore not form part of the MSS' argumentation.

Due to the various differences between the phonetic transcriptions and the Soundex codes of the original song's lyrics and those of the Mondegreen, phonetic similarity between

the two has to be questioned. Although the MOP could give first hints for the explanation of the Mondegreen regarding the misalignment of word-boundaries, the SOSH favours rather the original than the Mondegreen, while the MSS cannot further explain it. The Mondegreen is thus unexplainable.

- 80) Carsten Diekmann, "Robert De Niro's Waiting"
 - a) "Watching a film or a face on the wall" (original)
 - b) "Watching a film of a payphone wall" (mishearing)

Phonetic transcription	Э	Ţ	a	f	eI	s	p	n	ð	Э	W	Э	1	original
	p	v	a	p	eI	f	0	n			W	Э	1	Mondegreen

As can be seen, there are seven differences between the transcriptions:

- In the original, the rounded back open-mid vowel is used, while in the Mondegreen, it is mistaken for the rounded back open vowel: As they both have the same part of the tongue used and almost the same degree of raising of the tongue, they are very likely to be misheard.
- In the original, the alveolar approximant is used, while in the Mondegreen, it is mistaken for the voiced labiodental fricative.
- In the original, the voiceless labiodental fricative is used, while in the Mondegreen, it is mistaken for the voiceless bilabial plosive.
- In the original, the voiceless alveolar fricative is used, while in the Mondegreen, it is mistaken for the voiceless labiodental fricative: As they both have the same manner of articulation, they are likely to be misheard.
- In the original, the rounded back open vowel is used, while in the Mondegreen, it is mistaken for the rounded back close-mid vowel.
- In the Mondegreen, the voiced dental fricative is mistakenly left out.
- In the Mondegreen, the central vowel is mistakenly left out.

The Soundex codes are differentiated by three characters:

the correct alveolar approximant (3) is mistakenly replaced by the voiced labiodental fricative (1), the voiced alveolar fricative (2) is mistakenly replaced by the voiceless labiodental fricative (1), and the correct voiced dental fricative is mistakenly left out.

The differences between the correct rounded back open-mid vowel and the mistaken rounded back open vowel, between the correct alveolar approximant and the mistaken voiced labiodental fricative, between the correct voiceless alveolar fricative and the mistaken voiceless labiodental fricative, as well as between the correct rounded back open vowel and the mistaken rounded back close-mid vowel are not captured, as is neither the mistakenly left out correct central vowel:

- a) "Watching a film or a face on the wall": O61 2534 (original)
- b) "Watching a film of a payphone wall": O11 15 4 (mishearing)

As can be seen, there are four differences between the two sonority waves: the correct alveolar approximant is mistakenly replaced by the voiced labiodental fricative, the correct voiceless labiodental fricative is mistakenly replaced by the voiceless bilabial plosive, the correct voiced dental fricative and the correct central vowel are mistakenly left out:

5	*		*		*		*			-		*		vowels
4		*									*		*	approximants
3								*						nasals
2		#		*		*			ı					fricatives
1				#										plosives
Degree of sonority/ phonetic transcription	3	I	a	f	eI	s	B	n	ð	Ð	W	3	1	original
	b	v	a	p	eI	f	o	n			W	Э	1	Mondegreen

If we take a look at the MOP, it can be seen that there is a difference in the placement of the fricative. In the original, it has been put in the third syllable's coda (/skaI/), while in the Mondegreen, it has been put in the fourth syllable's onset (/ðIs/). While there is a word-boundary in the original "face on", the listener mistakenly believes only in a syllable-boundary which results in "payphone". This then results in the difference between word-boundaries. As the MOP states, one should, just as the listener mistakenly in this case, tend to place the fricative in the fourth syllable's onset rather than the third syllable's coda. The listener, in this case mistakenly, falls prey to that. The MOP can thus give first hints for the

explanation of the Mondegreen.

The original and the Mondegreen do neither happen to consist of the same amount of syllables, nor of the same amount of words. While the original consists of six syllables and six words, the Mondegreen consists of five syllables and four words. Syllable- and word-boundaries are thus not assigned equally, as we have already seen:

- a) "Wat.ching/a/film/or/a/fa ce/on/the/wall" (original)
- b) "Wat.ching/a/film/or/a/pay/phon e/wall" (mishearing)

The listener does not recognize the two word-boundaries between the three words "face", "on", and "the". He or she only recognizes one syllable-boundaries and comes thus up with "pay phone". According to the SOSH, however, the listener would tend to these word-boundaries and is thus rather in favour of the original than the mishearing. The SOSH can therefore not account for an explanation to the mishearing.

As can be seen, the MSS does not give any indication of difference, the stress-assignment is just the same:

- a) "WATching a FILM or a FACE on the WALL" (original)
- b) "WATching a FILM or a **PAYphone** WALL" (mishearing)

The MSS cannot explain the Mondegreen. Although it correctly predicts the word-boundary to the left of the stressed syllable ("face"), the problem lies in the fact that the syllables in question ("on", "the") are both unstressed and do therefore not form part of the MSS' argumentation.

Due to the various differences between the phonetic transcriptions and the Soundex codes of the original song's lyrics and those of the Mondegreen, phonetic similarity between the two has to be questioned. Although the MOP could give first hints for the explanation of the Mondegreen regarding the misalignment of word-boundaries, the SOSH favours rather the original than the Mondegreen, while the MSS cannot further explain it. The Mondegreen is thus unexplainable.

3.2.3 Non-Applicability of the PAH and Counterevidence to the SOSH and the MSS

- 81) The Monkees, "The Monkees (Theme From)"
 - a) "We're the young generation and we've got something to say" (original)
 - b) "We're the young generation and we've got Saddam Hussein" (mishearing)

Phonetic transcription	s	Λ	m	θ	I	ŋ	t	u:	s	eI		original
	s	a		d	a	m	h	u	s	eI	n	mishearing

As can be seen, there are eight differences between the transcriptions:

- In the original, the unrounded back open-mid vowel is used, while in the Mondegreen, it is mistaken for the unrounded back open vowel: As they both have the same part of the tongue used and almost the same degree of raising of the tongue, they are very likely to be misheard.
- In the Mondegreen, the bilabial nasal is left out.
- In the original, the voiceless dental fricative is used, while in the Mondegreen, it is mistaken for the voiced alveolar plosive. Although they do not seem to be phonetically similar at first sight, it is interesting to note that they have also been mistaken in example 71).
- In the original, the unrounded front close vowel is used, while in the Mondegreen, it is mistaken for the unrounded back open vowel.
- In the original, the velar nasal is used, while in the Mondegreen, it is mistaken for the bilabial nasal: As they both have the same manner of articulation, they are likely to be misheard.
- In the original, the voiceless alveolar plosive is used, while in the Mondegreen, it is mistaken for the voiceless glottal fricative.
- In the original, the short version of the rounded back close vowel is used, while in the Mondegreen, it is lengthened: As the syllable "the" bears no stress, as can be seen below, this lengthening cannot be perceived, however. That is to say that the Monkees do not lengthen the sound.
- In the Mondegreen, the alveolar nasal is mistakenly added.

The Soundex codes are differentiated by three characters: The voiced bilabial nasal (5)

is mistakenly left out, the correct voiceless alveolar plosive (3) is mistakenly replaced by the glottal fricative, and the alveolar nasal (5) is mistakenly added. Because the correct velar nasal is represented by two letters in orthography (<ng>), it is represented by two characters (52), while its corresponding mistaken bilabial nasal consists of one only (5). The (2) is thus also missing in the Mondegreen. The differences between the correct unrounded back openmid vowel and the mistaken unrounded back open vowel, between the correct voiceless dental fricative and the mistaken voiced alveolar plosive, between the correct unrounded front close vowel and the mistaken unrounded back open vowel, between the correct velar nasal and the mistaken bilabial nasal, as well as between the correct short version of the rounded back close vowel and the mistaken lengthened one are not captured:

- a) "We're the young generation and we've got <u>something to say</u>": S**5**35**23**2 (original)
- b) "We're the young generation and we've got <u>Saddam Hussein</u>": S 35 25 (mishearing)

As can be seen, there are three differences between the sonority waves: the voiced correct bilabial nasal is mistakenly left out, the correct voiceless alveolar plosive is mistakenly replaced by the glottal fricative, and the alveolar nasal is mistakenly added:

5		*			*			*		*		vowels
4												approximants
3			-			*					+	nasals
2	*			*			#		*			fricatives
1							*					plosives
Degree of sonority/ phonetic transcription	s	Λ	m	θ	I	ŋ	t	u:	s	eI		original
	s	a		d	a	m	h	u	s	eI	n	mishearing

If we take a look at the MOP, it can be seen that in both the original and the Mondegreen, the consonants have been placed in the same way and correctly. However, the listener mistakenly believes in a syllable-boundary only, where there is actually a word-boundary: "to say" - "Hussein". The MOP can thus give a first hint for the explanation of the

Mondegreen.

Both the original and the Mondegreen happen to consist of the same amount of syllables: four. Syllable-boundaries are assigned equally, word-boundaries, however, are not, as we have already seen:

- a) "We're/the/young/ge.ne.ra.tion/and/we've/got/some.thing/to/ s ay" (original)
- b) "We're/the/young/ge.ne.ra.tion/and/we've/got/<u>sa</u> <u>d.dam/Hu s.sein</u>" (mishearing)

The listener does not recognize the word-boundary between "to" and "say". He or she only recognizes the syllable-boundary and comes thus up with "Hussein". According to the SOSH, however, the listener would tend to that word-boundary and is thus rather in favour of the original than the mishearing. The SOSH can therefore not account for an explanation to the mishearing. The mishearing of "something" for "Saddam" could then be explained as the consequence of the mishearing of "Hussein" for "to say" and the attempt to make sense of what has come before in the line.

As can be seen, the assignment of stress gives an indication for the difference in stress between the original and the Mondegreen:

- a) "WE're the YOUNG geneRAtion and WE've got SOMEthing to SAY" (original)
- b) "WE're the YOUNG geneRAtion and WE've got SAD dam HusSAIN" (mishearing)

Here, "say" is stressed. The MSS would in this case assume a word-boundary to the left of it, as is the case in the original: "to say". Here, the listener treats it only as a syllable-boundary, however. He or she thus comes up with the mistaken "Hussein". The MSS can thus not explain the Mondegreen, as it rather predicts the original's word-boundary that is not recognized here.

Due to the various differences between the phonetic transcriptions and the Soundex codes of the original song's lyrics and those of the Mondegreen, phonetic similarity between the two has to be questioned. Although the MOP could give first hints for the explanation of the Mondegreen regarding the misalignment of word-boundaries, both the SOSH and the MSS favour rather the original than the Mondegreen. The Mondegreen is thus unexplainable.

3.2.4 Non-Applicability of the PAH, the SOSH, and the MSS

- 82) ABC, "The Look Of Love"
 - a) "There's one thing that turns this grey sky to blue" (original)
 - b) "There's one thing that turns this race car to blue" (mishearing)

Phonetic transcription	g	J	eI	s	k	aI	original
		I	aI	s	k	aı	Mondegreen

As can be seen, there are three differences between the transcriptions:

- In the Mondegreen, the voiced velar plosive is mistakenly left out,
- In the original, the unrounded front close-mid vowel is used, while in the Mondegreen, it is mistaken for the unrounded front open vowel: As they both have the same part of the tongue used, they are likely to be misheard.
- In the original, the diphthong of the unrounded front open vowel with the unrounded front close vowel is used, while in the Mondegreen, it is mistaken for the unrounded back open vowel with the alveolar approximant.

The Soundex codes are differentiated by three characters: as the voiced velar plosive is mistakenly left out, the first letter is not G as in "grey", but R as in "race". Consequently, the (6) for the alveolar approximant is left out (as it is represented in the first letter already). The voiceless alveolar fricative is represented only in the Mondegreen (2). The alveolar approximant is mistakenly added (6):

- a) "There's one thing that turns this <u>grev sky</u> to blue": **G62** (original)
- b) "There's one thing that turns this <u>race car</u> to blue": **R226** (mishearing)

As can be seen, there are just two differences between the two sonority waves: the left out voiced velar plosive and the added alveolar approximant in the Mondegreen:

5			*			*		vowels
4		*					+	approximants
3								nasals
2				*				fricatives
1	-				*			plosives
Degree of sonority/ phonetic transcription	g	I	eI	s	k	aI		original
		ı	aI	s	k	a	1	Mondegreen

If we take a look at the MOP, it can be seen that there is a difference in the placement of the voiceless alveolar fricative. In the original, it has been put in the second syllable's onset (of the next syllable; /skaI/), while in the Mondegreen, it has been put in the first syllable's coda (/ɪaIs/). According to the MOP, the voiceless alveolar fricative tends to be put in the second syllable's onset rather than the first syllable's coda. The listener, however, mistakenly places it in the first syllable's coda. This then results in the difference between word-boundaries. Consider in this respect also examples 67) and 89). When we consider the sonority wave, it has to be noted that the consonant cluster of the voiceless alveolar fricative and the voiceless velar plosive in the original second syllable's coda should be impossible as the sonority wave does not rise, but fall, which should be impossible. Yet, as stated before, the phoneme /s/ behaves in an unusual fashion and the cluster is hence legitimate. The MOP can thus give a first hint for the explanation of the Mondegreen.

Both the original and the Mondegreen happen to consist of the same amount of syllables and words: two. Yet, syllable- and word-boundaries are not assigned equally, as we have already seen:

- a) "There's/one/thing/that/turns/this/grey/s ky/to/blue" (original)
- b) "There's/one/thing/that/turns/this/<u>ra</u> ce/car/to/blue" (mishearing)

The SOSH cannot explain the Mondegreen. Although it correctly predicts the word-boundary to the left of the (next) syllable's onset, the problem lies in the fact that the syllable-boundaries are aligned differently, and the word-boundaries therefore, as well.

As can be seen, the MSS does not give any indication of difference, as the stress-

assignment is just the same:

- a) "there's ONE thing, there's ONE thing that TURNS this GREY SKY TO BLUE" (original)
- b) "there's ONE thing, there's ONE thing that TURNS this RACE CAR TO BLUE" (mishearing)

Still, there can be seen deviations from the regular stress pattern: "grey" would not be stressed in normal, spoken, speech. The listener might therefore believe in a content word like "race". The mistaken "car" might then only be the consequence for the former mishearing. This can have two reasons. The first one is that one automatically thinks of "car" when thinking of "race". The second one is that the voiceless alveolar fricative would have been mistakenly put in the first syllable's coda (/xaIs/), and the listener would have to start a word with [k], hence: "car". Nevertheless, syllable- and word-boundaries are assigned equally. The MSS can thus not explain the Mondegreen.

Due to the various differences between the phonetic transcriptions and the Soundex codes of the original song's lyrics and those of the Mondegreen, phonetic similarity between the two has to be questioned. Although the MOP could give a first hint for the explanation of the Mondegreen, neither the SOSH, nor the MSS can further explain it. The Mondegreen is thus unexplainable.

- 83) Wild Cherry, "Play That Funky Music"
 - a) "Play that funky music white boy" (original)
 - b) "Play that fucking music right boy" (mishearing)

Phonetic transcription	f	Λ	ŋ	k	Ι	w	aI	t	original
	f	Λ	k	I	ŋ	I	aI	t	Mondegreen

As can be seen, there are four differences between the transcriptions:

- In the original, the velar nasal is used, while in the Mondegreen, it is mistaken for the voiceless velar plosive.
- In the original, the voiceless velar plosive is used, while in the Mondegreen, it is mistaken

for the unrounded front close vowel.

 In the original, the unrounded front close vowel is used, while in the Mondegreen, it is mistaken for the velar nasal.

It is interesting to note that although original and Mondegreen consist of the same sounds, these are differently distributed, so that the velar nasal, the voiceless velar plosive and the unrounded front close vowel are mixed up with each other. As the velar nasal and the voiceless velar plosive both have the same place of articulation, they are likely to be misheard. Yet, there is one further difference between the transcriptions:

In the original, the voiced labial-palatal approximant is used, while in the Mondegreen, it
is mistaken for the alveolar approximant: As they both have the same manner of
articulation, they are likely to be misheard.

The Soundex codes are differentiated by four characters. The differences are: The correct first letter W for "white" is mistakenly replaced by R for "right", the velar nasal and the voiceless velar plosive are mistakenly mixed up. As the unrounded front close vowel is not captured by Soundex, it seems as if the correct velar nasal was mistakenly left out, while then mistakenly put in a wrong position. Also, the velar nasal was mistakenly added:

- a) "Play that <u>funky</u> music <u>white</u> boy": F 52 , W300 (original)
- b) "Play that <u>fucking music right boy</u>": F 252, R300 (mishearing)

As can be seen, there are three differences between the two sonority waves: the correct retroflex nasal is mistakenly replaced by the voiceless velar plosive, the voiceless velar plosive is mistakenly replaced by the front close vowel, and the front close vowel is mistakenly replaced by the velar nasal:

5		*		#	*		*		vowels
4						*			approximants
3			*		#				nasals
2	*								fricatives
1			#	*				*	plosives
Degree of sonority/ phonetic transcription	f	Λ	ŋ	k	Ι	W	aI	t	original
	f	Λ	k	I	ŋ	J	aI	t	Mondegreen

If we take a look at the MOP, it can be seen that there is a difference in the placement of the voiceless velar plosive. Still, it is put in the syllables' onsets - according to the MOP. The MOP can thus give a first hint for the explanation of the Mondegreen.

Both the original and the Mondegreen happen to consist of the same amount of syllables and words: two. Yet, syllable-boundaries are not assigned equally, as we have already seen:

- a) "Play/that/<u>fun.ky</u>/ mu.sic/white/boy" (original)
- b) "Play/that/fuc.king/mu.sic/white/boy" (mishearing)

Still, the misalignment of syllable-boundaries has no effect on the alignment of word-boundaries. The SOSH can therefore not explain the Mondegreen.

As can be seen, the MSS does not give any indication of difference, either, the stress-assignment is just the same:

- a) "PLAY that FUNky MUsic WHITE BOY" (original)
- b) "PLAY that FUCking MUusic RIGHT BOY" (mishearing)

The MSS can thus not explain the Mondegreen.

Due to the various differences between the phonetic transcriptions and the Soundex codes of the original song's lyrics and those of the Mondegreen, phonetic similarity between the two has to be questioned. Although the MOP could give a first hint for the explanation of the Mondegreen, neither the SOSH, nor the MSS can further explain it. The Mondegreen is thus unexplainable. The problem seems to lie in the mistaken exchange of [ŋkI] for [kIŋ]. I

can, however not account for a possible explanation for why the listener should come up with such an exchange. It seems as if the singer makes use of various versions in the song. As can be heard in the song and the extracts, the first line seems to be "*Play that funky music, white boy*", while the second sounds more like "*Play that fucking music right*". It seems likely, therefore, that the mishearing is due to this second line. The Mondegreen would then only be its consequence. The Mondegreen thus seems to be the result of phonetic ambiguity, although neither the phonetic transcriptions nor the Soundex codes can give a reasonable explanation.

3.4 Evaluation

Before taking a closer look at the evaluation of the results of the previous chapter, I want to list all examined Mondegreens in a table to be able to give a better overview on these results. Table 2 shows which Mondegreen is explainable by the PAH and/ or the SOSH and/ or the MSS, which cannot be explained by any of these and which poses a counterexample to the SOSH and/ or the MSS.

Table 2: Result Overview

Mishearing	Applicability of the PAH	Applicability of the SOSH	Applicability of the MSS	Non- Applicability of the PAH, the SOSH and the MSS	Counter- evidence to the SOSH	Counter- evidence to the MSS
"Gladly, the Cross I'd Bear"	*					
U2, "Sunday, Bloody Sunday"	*					
The Four Tops, "Ain't No Woman Like the One I've Got"	*					
Jimmy Hendrix, "Purple Haze"	*					
The Rascals, "Groovin"	*	*	*			
Elvis Presley, "You're the Devil in Disguise"	*	*	*			

Tori Amos, "Silent All these Years"	*	*	*			
John Fogerty, "Bad Moon Rising"	*				*	
Crystal Gayle, "Don't It Make My Brown Eyes Blue"	*				*	
"Mondegreen"	*				*	*
Pink Floyd, "Another Brick in the Wall"	*				*	*
Keane, "Crystal Ball"		*				
Bob Dylan, "The Answer My Friend"		*				
The Hooters, "Lucy in the Sky with Diamonds"		*				
José Feliciano, "Feliz Navidad"		*				
Happymen Vs Gala, "Freed From Desire"					*	
Carsten Diekmann, "Robert de Niro's Waiting"					*	
The Monkees, "The Monkees"					*	*
ABC, "The Look of Love"				*		
Wild Cherry, "Play that Funky Music"				*		
Total number	11	7	3	2	7	3
Mishearing	Applicability of the PAH	Applicability of the SOSH	Applicability of the MSS	Non- Applicability of the PAH, the SOSH and the MSS	Counter- evidence to the SOSH	Counter- evidence to the MSS

As can be seen in Table 2 above, only 11 out of the 20 mishearings are explainable by the PAH and therefore triggered by phonetic ambiguity. In the other 9 cases, phonetic

similarity between the original song's lyrics and those of the Mondegreen is at least questionable. It therefore has to be further researched on, if phonetic ambiguity is indeed a necessary condition for mishearing. Of the 11 cases which are triggered by phonetic ambiguity, 3 are also explainable by the SOSH and the MSS. It is interesting to note that the SOSH and the MSS cannot explain one single Mondegreen by itself. Further 4 cases are counterevidence to the SOSH, 2 of these are also counterevidence to the MSS. Of the 9 cases in which phonetic ambiguity is questionable, 2 are not explainable at all. 4 cases are explainable by the SOSH, none are so by the MSS. Further 3 cases are counterevidence to the SOSH, 1 of these is also counterevidence to the MSS.

In total, only 7 out of the 20 mishearings are explainable by the SOSH, while only 3 are also explainable by the MSS. At the same time, 7 cases are counterevidence to the SOSH, 3 of these are also counterevidence to the MSS. In the latter cases, the listener falls prey to the tendency to put a word-boundary to the left of the syllable's onset in the case of the SOSH, or to the left of the stressed syllable in the case of the MSS. As stated above, it is claimed that English listeners do not use syllabification cues to segment speech. That means, SOSH does not apply to English. What is then surprising is the fact that the SOSH explained more Mondegreens (7) than could the MSS (3). Just as many cases are also counterevidence to the SOSH (7), however. I therefore conclude that listeners do indeed not make use of syllabification cues when they listen to songs. If they did, these should have saved them from their mishearings. This is obviously not the case. As just as many cases are explainable by the MSS (3) as are counterevidence to it (3), it is also questionable if listeners make use of stress assignment and if the MSS plays a role when they listen to songs. Because of these results, I hold it highly questionable that syllabification and/ or stress assignment triggered the Mondegreens. Nevertheless, the mishearings obviously took place. What I can then deduce from these results is that in the counterexamples to the SOSH and the MSS, phonetic ambiguity overrides the SOSH and/ or the MSS, if it/ they were used. This then shows that it is indeed a more important factor in the act of mondegreening than any of the two latter.

What then remains to be tackled is how the mishearings in which phonetic ambiguity is questionable are triggered: of these 9 cases, 4 were explainable by the SOSH, 2 were unexplainable, 3 are counterevidence to the SOSH and 1 is counterevidence to the MSS. Again, there are almost as many cases of counterevidence to the SOSH (3) as it could explain (4). That listeners make use of syllabification is thus questionable. As the MSS did not

explain any single one of them and as 1 is counterevidence to it, it is also questionable if listeners make use of stress assignment. Still, as these mishearings took place, they have to have their triggers. These need yet to be further researched on.

4. Conclusion

In this work, I have examined a corpus of 20 self-chosen Mondegreens to find their triggers. I started with a short introduction on the definition and the "birth" of the term Mondegreen. Then I laid out the various theories by which I later examined the Mondegreens one-by-one. In these examinations, I began with an analysis of phonetic similarity between the original song's lyrics and those of the Mondegreen. I did that by a comparison of their IPA transcriptions and of their Soundex codes. This comparison was to prove that the original song's lyrics and those of the Mondegreen are phonetically similar. Those of the original song are thus phonetically ambiguous. After that, I took a look at the possible differences between the syllable structures of the original song's lyrics and those of the Mondegreen. By making use of the Sonority Principle and the MOP, I wanted to get a first insight. I then examined these further by making use of the SOSH. I wanted to find out whether a different alignment of syllable-boundaries between the two was the reason for a mistaken word-boundary and if that then lead to the mishearing. I then examined these alignments of syllable- and wordboundaries further by a comparison of the stress assignment between the original song's lyrics and those of the Mondegreen. For that I made use of the MSS. After that, I presented the results in a table. It showed that phonetic ambiguity of the original song's lyrics has to be a trigger for those mishearings which show a phonetic similarity to the original. Although the SOSH and the MSS could explain some of the examples under consideration, it remains questionable if syllabification and stress assignment are the real triggers, as there can be found as many cases of counterevidence to both the theories as cases in which they can explain the Mondegreens. What triggered the Mondegreens that are phonetically different to their original and which therefore show no indication of phonetic ambiguity, need yet to be further researched on.

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Appendix

Appendix A: IPA Chart

THE INTERNATIONAL PHONETIC ALPHABET (revised to 2005)

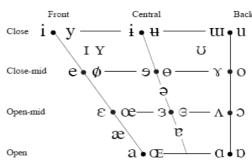
CONSONANT	S (PU	JLMC	ONIC)																	C	2005	5 IPA
	Bila	abial	Labic	dental	Den	ta1	Alve	olar	Posta	lveolar	Retr	oflex	Pal	ata1	Ve	lar	Uv	ular	Phary	ngeal	Glo	tta1
Plosive	p	b					t	d			t	d	С	Ŧ	k	g	q	G			3	
Nasa1		m		nj				n				η		л		ŋ		N				
Trill		В						r										R				
Tap or Flap				\mathbf{V}				ſ				r										
Fricative	ф	β	f	v	θ	ð	S	Z	I	3	ş	Z _L	ç	j	X	γ	χ	R	ħ	ſ	h	ĥ
Lateral fricative							1	łz														
Approximant				υ				I				-Į		j		щ						
Lateral approximant								1				1.		λ		L						

Where symbols appear in pairs, the one to the right represents a voiced consonant. Shaded areas denote articulations judged impossible.

VOWELS

CONSONANTS (NON-PULMONIC)

	Clicks	Voi	ced implosives		Ejectives
0	Bilabial	6	Bilabial	,	Examples:
	Dental	ď	Dental/alveolar	p'	Bilabial
!	(Post)alveolar	£	Palatal	ť'	Dental/alveolar
‡	Palatoalveolar	g	Velar	k'	Velar
	Alveolar lateral	G	Uvular	s'	Alveolar fricative



Where symbols appear in pairs, the one to the right represents a rounded vowel.

OTHER SYMBOLS

Μ	Voiceless labial-velar fricative

Yoiced epiglottal fricative

Epiglottal plosive

J Voiced alveolar lateral flap

 $fj \qquad {\tt Simultaneous} \ \int \ {\tt and} \ \ X$

Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary.

kp ts

DIACRITICS Diacritics may be placed above a symbol with a descender, e.g. $\hat{\vec{\Pi}}$

	ciaires b			, P1.	cea above a sy.			COCCL	,g. - J		
0	Voiceless	ņ	ģ		Breathy voiced	þ	a		Dental	ţ₫	
~	Voiced	Ş	ţ	~	Creaky voiced	ģ	a	L	Apical	ţd	
h	Aspirated	th	dh	*	Linguolabial	ţ	đ	_	Laminal	ţd	
,	More rounded	ş		W	Labialized	t^{w}	d^{w}	~	Nasalized	ẽ	
c	Less rounded	၃		j	Palatalized	t ^j	dj	n	Nasal release	d1	n
+	Advanced	ų		Y	Velarized	ťΥ	\mathbf{d}^{Y}	1	Lateral release	\mathbf{d}^{l}	I
_	Retracted	e		r	Pharyngealized	t٢	d۲	٦	No audible releas	e d	1
••	Centralized	ë		~	Velarized or pha	ryngeal	lized 1				
×	Mid-centralized	ě		_	Raised	ę	Ţ	= vc	oiced alveolar fricat	tive)	
	Syllabic	ņ		т	Lowered	ę	<u>(</u>) = vo	siced bilabial appro	ximant)	
^	Non-syllabic	ĕ		4	Advanced Tongu	ie Root	ę		·		
ı	Rhoticity	ə₁	a	F	Retracted Tongu	e Root	ę				

SUPRASEGMENTALS

- Primary stress
 Secondary stress
 foune ti∫en
- I Long el
- Half-long e' Extra-short ĕ
- Minor (foot) group

 Major (intonation) group
- Syllable break .Ii.ækt
 Linking (absence of a break)

TONES AND WORD ACCENTS LEVEL CONTOUR

é′₀r	T Extra	$\check{e}_{\cdot \text{or}}$	/ Rising
é	High	ê	\ Falling
ē	- Mid	é	1 High
è	_ Low	ě	/ Low rising
è		è	A Rising-
\downarrow	Downstep	1	Global rise
1	Upstep	\checkmark	Global fall

Appendix B: CD-ROM Including Accompanying Sound Files