

## Extraction of Connected Speech Patterns in English from Literary Texts: An Applied Phonological Study

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استخراج أنماط الكلام المتواصل في اللغة الإنجليزية من النصوص الأدبية : دراسة فونولوجية تطبيقية

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### المخلص

تناولت هذه الدراسة مفهوم الكلام المتواصل في اللغة الإنجليزية، مع التركيز بشكل خاص على عمليات الكلام المتواصل (CSPs). وقد بحثت كيف يختلف النطق الشفوي للغة الإنجليزية عن نطق الكلمات المعزولة نتيجة التعديلات الفونولوجية التي تحدث في الكلام الطبيعي. كما استعرضت الدراسة التصنيفات الرئيسية لعمليات الكلام المتواصل، بما في ذلك الربط، والحذف، والإدخال، والتعديل، والتخفيف، والعمليات المتعددة. حللت الدراسة مقتطفات مختارة من نص أدبي وتم تحديد مختلف العمليات الفونولوجية التي تحدث في سياقات الكلام الأصلي. وقد تم إيلاء اهتمام خاص لـ التماثل الصوتي (التقدمية والتراجعية)، والتنشئة الصوتية، والحذف، والإدخال، وتقليل الحروف المتحركة. وأظهرت التحليلات كيف تسهم هذه العمليات في سيولة اللغة، والإيقاع، والطبيعية في النطق الشفوي للغة الإنجليزية

### Abstract

This study investigated the concept of connected speech in the English language, with a particular focus on Connected Speech Processes (CSPs). It examined how spoken English differed from isolated word pronunciation due to phonological modifications occurring in natural speech. Major classifications of CSPs, including linking, deletion, insertion, modification, reduction, and multiple processes were reviewed in this research. Selected extracts from a literary text were analyzed, and various phonological processes occurring in authentic speech contexts were identified. Special attention was given to assimilation (both regressive and progressive), palatalization, elision, intrusion, and vowel reduction. The analysis indicated how these processes contributed to the fluency, rhythm, and naturalness of spoken English. **Key words:** connected speech. Connected speech processes. Assimilation. Phonological processes. EFL learners. Pronunciation teaching.

### Section One

#### Introduction

##### 1.1 Background of the Study

Language was considered a fundamental means of communication, and pronunciation played a vital role in conveying meaning effectively. In English, speech was not produced as isolated words, but as a continuous flow of sounds known as connected speech. This phenomenon involved a range of phonological processes that modified sounds within and across word boundaries in order to facilitate fluent and natural communication. Connected Speech Processes (CSPs) comprised several types such as linking, assimilation, deletion, insertion, and reduction. These processes occurred due to the tendency of speakers to economize effort and maintain the rhythmic pattern of English as a stress-timed language. According to Marianne Celce-Murcia et al. (2010), pronunciation in connected speech resulted from the interaction between segmental and suprasegmental features. Similarly, David Crystal (2008) stated that connected speech reflected the natural flow of spoken

language, where sounds were influenced by their phonetic environment. In addition, John M. Levis (2015) emphasized that these processes were systematic and essential for achieving fluency rather than being signs of careless speech.

In spite of their significance, connected speech processes were often neglected in English as a Foreign Language (EFL) contexts. Learners were primarily exposed to the citation forms of words instead of their natural spoken forms, resulting in difficulties with listening comprehension and pronunciation.

### 1.2 Problem Statement

EFL learners faced significant challenges in comprehending and producing natural spoken English. These challenges were mainly linked to a lack of understanding of connected speech processes. The absence of explicit instruction on CSPs resulted in gaps between theoretical knowledge of pronunciation and actual spoken performance.

### 1.3 Aim of the Study

This study aimed to identify and analyze the main types of Connected Speech Processes in selected English texts. It also aimed to explain how these processes functioned in natural language use.

### 1.4 Objectives of the Study

The study attempted to achieve the following objectives:

1. To identify the different types of connected speech processes in the selected data.
2. To classify these processes according to an established phonological framework.
3. To analyze how these processes affected pronunciation in connected speech.
4. To highlight the importance of CSPs in improving pronunciation and listening skills for EFL learners.

### 1.5 Research Questions

The study addressed the following questions:

1. What types of connected speech processes were found in the selected text?
2. How did these processes affect pronunciation in connected speech?
3. Which types of CSPs occurred most frequently in the data?

### 1.6 Significance of the Study

This study was significant because it highlighted the role of connected speech processes in natural spoken English. It contributed to improving the understanding of pronunciation beyond isolated word forms. The results were anticipated to assist EFL learners in improving their listening skills and speaking proficiency. In addition, the study offered valuable perspectives for teachers by stressing the importance of incorporating connected speech into pronunciation teaching.

### 1.7 Scope of the Study

This study was limited to the analysis of connected speech processes in selected extracts from a literary text (*The Secret Garden*). It concentrated on particular types of CSPs, comprising linking, assimilation, deletion, insertion, reduction, and multiple processes.

### 1.8 Definition of Terms

- **Connected Speech:** the natural flow of speech in which words are pronounced together rather than in isolation.
- **Assimilation:** a phonological process in which a speech sound changes to become more similar to a neighboring sound in place, manner, or voice.
- **Elision (Deletion):** a phonological process where a sound (vowel or consonant) is omitted to make speech faster and more fluent.
- **Linking:** a phonological process that involves the smooth connection of sounds at word boundaries.
- **Intrusion:** a phonological process that involves the addition of particular sounds between words to facilitate pronunciation.
- **Reduction:** a phonological process in which unstressed vowels are shortened and weakened.

### 1.9 Organization of the Study

This study was organized into five chapters. Chapter One presented the introduction, including the background, problem, aims, and significance. Chapter Two reviewed the relevant literature on connected speech processes. Chapter Three described the methodology of the study. Chapter Four presented the results and discussion. Finally, Chapter Five provided the conclusions.

### Section Two

#### Connected speech in the English language.

##### 2.1 connected speech

In spoken language, continuous sound sequences that create utterances or conversations are referred to as connected speech. The Sanskrit phrase "sandhi-variation," which describes the "placing together" of sounds within and between words, is another name for the tendency of words to "run together" (Celce-Murcia et al., 2010: 163-164). In this sense, Reed and Levis (2015: 159) emphasize the significance of connected speech due to its robust interplay between segmental and suprasegmental aspects, which should be taken into account jointly to comprehend the true functioning of speech. A Dictionary of Linguistics and Phonetics by Crystal provides a comprehensive and lucid explanation of connected speech (2008: 101). As previously mentioned, there is a distinct difference between words pronounced in context and words spoken alone, such as in their citation forms, whose pronunciation is referred to as dictionary pronunciation (Reed and Levis, 2015: 159). According to Underhill (2005: 58), "connected speech is not just the sum of its individual words, just as a word is not just the sum of its individual sounds." In fact, "continuous connected speech consists of a flow of sounds which are modified by a system of simplifications through which phonemes are connected, grouped, and modified" (ibid). "The degree of simplification of sounds depends largely on the speed and context of the utterance, as well as on the characteristics of the speaker" (Underhill, 2005: 59). In everyday conversations, people tend to speak faster connecting the words present in their speech in order to simplify the articulation of adjacent sounds. Careful colloquial speech and fast or informal colloquial speech are traditionally distinguished (Cruttenden, 2014: 305; Underhill, 2005: 59; Reed and Levis, 2015: 159; Levis and Munro 2018 Vol.I:1). The latter occurs in less formal situations where speakers converse more quickly and casually with one another, giving less attention to perfect articulation, whereas the former is mostly utilized in formal settings where speakers prefer to shape utterances more slowly and carefully. According to Reed and Levis (2015: 160), "the more casual and informal the speech register is, the more the citation forms of words may change." Words may differ from citation forms in connected speech in a variety of ways, such as "the word as a whole, e.g. weak forms in an unaccented situation; or a word's accentual pattern, e.g. loss or movement of an accent due to its position in a larger accentual pattern; or the sounds used at word boundaries" (Cruttenden, 2014:305). Since the environment in which sounds occur impacts the many qualities that they take while spoken in an utterance, Celce-Murcia, Brinton, and Goodwin (2010) confirm that variations in pronunciation occur within and between words due to juxtaposition with neighboring sounds."A simple law of economy, whereby the organs of speech, instead of taking a new position for each sound, tend to draw sounds together with the purpose of saving time and energy" is what causes pronunciation changes in connected speech (Clarey and Dixon, 1963 in Celce-Murcia et al., 2010: 164). In fact, a large number of connected speech processes (CSPs) are "the natural result of the various speech organs "cutting corners" as they perform their complex sequence of movements" (Underhill, 2005: 61). According to Hieke (1987 in Reed and Levis, 2015: 160) and Lass (1984 in Reed and Levis 2015: 160), CSPs are the processes that words undergo when their border sounds are blended with neighboring sounds and the changes which conventional word forms undergo due to the temporal and articulatory constraints upon spontaneous, casual speech. According to Pinker (1995 in Reed and Levis, 2015:160), CSPs may be present to varying degrees in all languages as long as actual spoken language is taken into account: However, the stress-timed English is one of the languages that has a fairly substantial number of CSPs. Returning to suprasegmental characteristics, connected speech appears to be crucial for both rhythm and intonation since the many connected speech processes enable a more fluid articulation of sounds, and certain modifications are required to preserve the English prosodic and rhythmic patterns. According to Clark and Yallop (1995 in Reed and Levis, 2015: 161), the primary function of CSPs in English is to promote the regularity of English rhythm by compressing syllables between stressed elements and facilitating their articulation so that regular running speech timing can be maintained. For instance, most CSPs in English are completely acceptable, natural, and a very essential part of speech and not just the result of sloppy speech because closed class words like pronouns, conjunctions, and prepositions are always reduced in unstressed contexts and this is rhythmically necessary (Reed and Levis, 2015: 160). In fact, the truth is that connected speech is commonly used in all registers and styles, but to varying degrees depending on the register and style involved (Brown and Kondo-Brown, 2006: 5), meaning that reduced forms are not limited to certain language registers or styles. Connected speech should therefore be further researched and taught rather than being undervalued. However, research on connected speech in English is inconsistent, as Reed and Levis (2015: 161) confirm: The two primary issues with connected speech are the lack of pertinent research in this linguistic field and the disparate nomenclature used to describe the processes seen in the English language. The classification system created by Alameen and Levis (see Figure 1) has been selected due to its schematic and unambiguous arrangement of CSPs. Furthermore,

due to their simplicity, the terminology employed by the linguists described above may be more appropriate from a didactic standpoint.

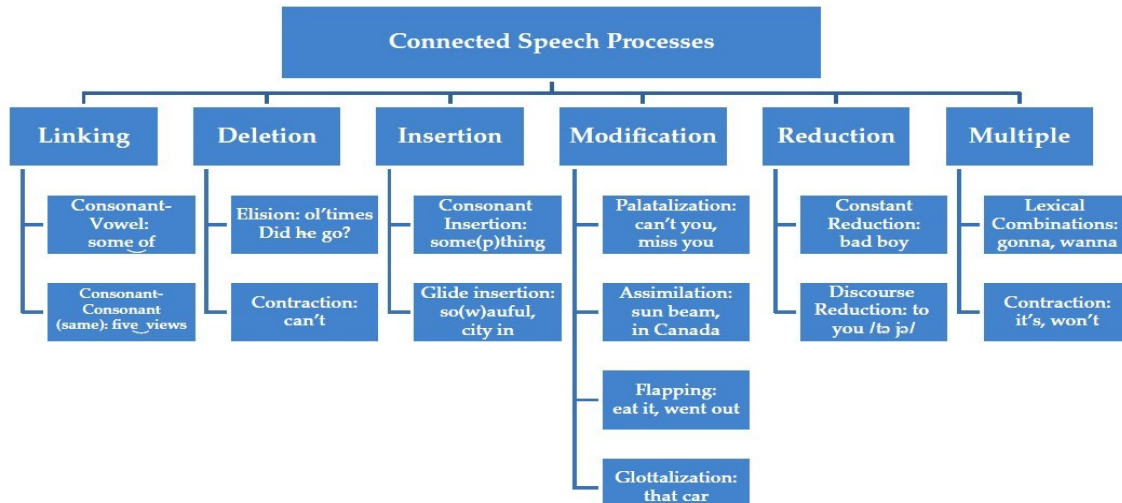


Figure 1: A categorization of Connected Speech Processes (CSPs). Alameen and Levis (Reed and Levis, 2015: 162).

## 2.2 Connected Speech Processes (CSPs).

In the following subsections, the six main categories proposed by Alameen and Levis in Figure 1 will be explained always referring to other classifications and definitions which will integrate the original categorization with further material. For example, according to Celce-Murcia et al. (2010: 163-174), 'the typical reductions in connected speech that occur in the day-to-day spoken discourse of English speakers' include:

- Contractions, blends and reductions: the written and/or oral distortions of word boundaries;
- Linking: the smooth connection of sounds;
- Assimilation: the change in adjacent sounds to resemble each other more closely;
- Dissimilation: the change whereby adjacent sounds become less similar to each other;
- Deletion: the disappearance of a sound;
- Epenthesis: the addition of a sound.

Another example of classification of sounds and simplifications in connected speech can be found in Underhill (2005: 60-68) who covers the following CSPs:

- Assimilation;
- Elision;
- Vowel reduction;
- Strong and weak forms;
- Liaison;
- Contractions;
- Juncture.

The six categories identified by Alameen and Levis will be discussed below.

### 2.2.1 Linking.

Linking, also known as liaison by other researchers (Cruttenden, 2014; Underhill, 2005), is the first category defined by Alameen and Levis (see Figure 1) and refers to the seamless coupling of sounds. This classification states that since this connected speech process only relates to "the connecting of the final sound of one word or syllable to the initial sound of the next," modifications to the word segments are not involved. For instance, the intrusive or inserted /w/, /j/, and /r/ are included in this category by Celce-Murcia et al. (2010: 165-166), Cruttenden (2014: 316), and Underhill (2005: 65).

In order to avoid confusing middle-level English as a Foreign Language (EFL) students, it was decided to categorize these CSPs separately because sound insertion is typically thought to be more difficult than the more seamless and organic sound linking that forms the foundation of connected speech. There are three distinct ways to link without altering the segments:

1. Final consonants > initial vowel sounds (C-V linking);
2. Final consonants > initial consonant sounds (C-C linking);
3. Final vowels > initial vowel sounds (V-V linking).

First, resyllabification (Reed and Levis, 2015: 162), or the "reanalysis which alters the location of syllable boundaries" (Crystal, 2008: 467), is typically what distinguishes C-V linking, particularly when the word or syllable ending in consonant is preceded by another consonant (consonant cluster). As a result, as in *left*/t/ *arm* and *find*/d/ *out*, "the final consonant of the cluster is often pronounced as part of the following syllable" (Celce-Murcia et al., 2010: 167). The consonant "is often produced intervocalically, as if it belonged to both syllables" (Celce-Murcia et al., 2010: 166) when it comes after a vowel, as in *keep* *out* and *dream* *on*. Second, lengthening and first consonant dropping are the two possible results of C-C connecting. According to Celce-Murcia et al. (2010: 167), the former happens "when two identical, or geminate, consonants come together as a result of the juxtaposition of two words" and results in "one single, elongated articulation of the consonant," as in the words "short *time*" (t "t") and "bad *dog*" (d "d"). The latter happens "when a stop consonant is followed by another stop or by an affricate" (ibid.), which makes the connection easier because the first stop is not released, as in *good* *jury* and *big* *church*. Third, V-V linking is distinguished by the uninterrupted pronunciation of the two vowels, such as "be *able*" and "three *eggs*." This final kind of connecting, insertion, is likewise a part of the connected speech process described above. (Underhill, 2005: 66; Cruttenden, 2014:315). In non-rhotic English dialects like normal British English, often known as Received Pronunciation (RP), linking /r/ is crucial. The phonological term "rhotic" (Crystal, 2008: 417) describes how the /r/ sound is pronounced following a vowel in North American, Canadian, Scottish, and Irish English, such as in the words "car" and "brother." Conversely, in England, Wales, New Zealand, Australia, and South Africa, "the letter r in the spelling of a word is not pronounced unless it is followed by a vowel sound" (Underhill, 2005: 66). As a result, it is silent in vehicle crashes but pronounced as a linking /r/ in *car* *engines*. According to Cruttenden (2014: 315-316), in non-rhotic varieties of English, "word-final post-vocalic /r/ as a linking form when the following word begins with a vowel" is introduced. Additionally, "the vowel endings to which a /r/ link may be added are /ɜː, ɑː, ɔː/ and those single or complex vowels which may have a final [ə] /ə, ɪə, ʊə, eə/ "answer it, "four aces, "near it, "secure everything."

### 2.2.2 Deletion.

The terms "deletion," "elision," and "omission" refer to the second group. It "occurs when a sound that would be present in a word spoken in isolation is omitted in connected speech" (Underhill, 2005: 61). According to Celce-Murcia et al. (2010: 172), "sounds disappear or are not clearly articulated in certain contexts" as a "natural result of the speech organs "cutting corners" in connected speech, mainly at word boundaries" (Underhill, 2005: 62). The two most common deletion environments are as follows:

- Loss of /h/ in auxiliaries, determiners, and pronouns in non-initial positions, such as *Did he do his homework?* *Their friends have already departed;* *Ask her;* *Tell him.* (Cruttenden, 2014: 314; Reed and Levis, 2015: 163; Celce-Murcia et al., 2010: 173); -Loss of word-final /t/ and /d/ in clusters of two at a word boundary when the next word, as "the *best* gift," starts with a consonant other than /h, y, w, r/. *I don't know;* *next, please;* *East side;* *old times;* *you and me;* *stand there.* (Underhill, 2008: 61; Reed and Levis, 2015: 163; Cruttenden, 2014: 314-315; Celce-Murcia et al., 2010: 172).

### 2.2.3 Insertion.

The linking CSPs typically include the third category, which is insertion or incursion (Celce-Murcia et al., 2010: 165-166; Cruttenden, 2014: 316 and Underhill, 2005: 65). But while segmental changes "involving modifications that add sounds" (Reed and Levis, 2015: 163) are apparent, insertion deviates from the more conventional linkage, according to Alameen and Levis. The primary distinction is that the intrusive sounds are inserted to better blend words together rather than being a part of the spelling.

The following are the three most added sounds at word boundaries, especially between vowels:

1. Intrusive /r/;
2. Intrusive /w/;
3. Intrusive /j/.

According to Underhill (2005: 66), the term "intrusive /r/ refers to the /r/ sound an English speaker may place between two words if the first ends in /ə/ or /ɔː/ and the next word begins with a vowel sound," as in "the *idea*[r]*of* and I *saw*[r]*it*." Although it is not required, the addition of this consonant is typical of non-rhotic English dialects, but in rhotic accents, where "r" in the spelling is always pronounced, it is quite uncommon (Reed and Levis, 2015: 163; Underhill, 2005: 66). As previously mentioned in the V-V linking section, the final two insertions demonstrate how the semivowels or glides /w/ and /j/ are utilized to unite two vowels across words. Indeed, 'in vocalic junctures where the first

word ends in /i:/, /ɪ/, /i/, /eɪ/, /aɪ/, or /ɔɪ/, a slight [j] may be heard between the two vowels' (Cruttenden, 2014:317), as in *he[j]is* and *my[j]arms*, and 'a linking [w] may be heard between a final /u:/, /əʊ/ and /aʊ/ and a following vowel' (Cruttenden, 2014: 317), as in *you[w]are* and *go[w]off*.

#### 2.2.4 Modification.

According to Alameen and Levis (see Figure 1), "modifications to pronunciation that substitute one phoneme for others (e.g., did you uttered as [dɪdʒu] rather than [dɪdju])" or, less frequently, "modifications that are phonetically (allophonically) but not phonemically distinct (e.g., can you uttered as [kənju] rather than [kənju])" comprise the fourth category (Reed and Levis, 2015: 163). Alameen and Levis claim that the following CSPs are modified:

1. Palatalization;
2. Assimilation;
3. Flapping;
4. Glottalization.

First, according to Crystal (2008: 347), palatalization is a broad term that refers to any articulation including a movement of the tongue towards the hard palate, converting the original location of sound articulation into a palato-alveolar one, i.e. /tʃ/, /dʒ/, /ʃ/, /ʒ/. Normally, it is the sound /j/ that produces the modification of the two neighboring sounds in connected speech. For instance, *did you* turns into /dɪdʒu/, *bless you* -/bleʃu/ and *meet you* -/mi:tʃu/. Palatalization is generally regarded as the most common kind of assimilation, specifically identified as coalescence (Cruttenden, 2014: 313; Underhill, 2005: 61) or coalescent assimilation (Celce-Murcia et al., 2010: 170-171).

The term "coalescence" refers to the process of combining a word's final sound with its subsequent word's initial sound to produce a third sound that combines elements of the two original sounds.

In fact, in palatalization, "the final alveolar consonants /s, z, t, d/ are succeeded by initial palatal /j/" and in light of this context, "these alveolar sounds turn into 'the palatalized fricatives' /ʃ, ʒ/ or 'affricates' /tʃ, dʒ/, in the same order"

| <u>Rule</u>     | <u>example</u>                      |
|-----------------|-------------------------------------|
| /s/+ /j/ = /ʃ/  | this year , nice shoes              |
| /z/+ /j/ = /ʒ/  | does your mother know? Is she good? |
| /t/+ /j/ = /tʃ/ | is that your dog?                   |
| /d/+ /j/ = /dʒ/ | would you mind?                     |

Assimilation, which can be of place, manner, or voice, such as "on point" where the /n/ turns into [m] before the bilabial stop, is the second linked speech process that falls under the modification category, according to Alameen and Levis (Reed and Levis, 2015: 163). As noted by Underhill (2005: 60), "assimilation occurs when a phoneme changes its quality due to the influence of a neighboring sound to become more like the neighboring sound, or even identical to it." In fact, assimilation, a universal characteristic of spoken languages caused by the "various speech organs "cutting corners" as they perform their complex sequence of movements," contains both an assimilating sound and a conditioning sound, with the exception of palatalization, which is coalescent (Underhill, 2005: 61). Both progressive and regressive assimilation occur frequently in English (Celce-Murcia et al., 2010: 168-170; Cruttenden, 2014: 312-313) According to (Katamba:80,81), assimilation is the modifying of a sound to make it more similar to another nearby sound. Assimilation is characterized by more seamless, effortless, and cost-effective transitions between sounds. The present third person singular for verbs and the standard plural ending for nouns are written as (s), although they can actually be spoken as (-s) for pets, (-z) for beds, or even (-iz) for roses. The morpheme's form alternation is phonologically conditioned rather than random.

| <u>Nouns</u>       | <u>Verbs</u>     |
|--------------------|------------------|
| Dog dogs /z/       | love loves /z/   |
| Dock docks /s/     | hate hates /s/   |
| Witch witches /iz/ | wish wishes /iz/ |

The former, also known as perseverative, is distinguished by the conditioning sound that comes before and affects the assimilating sound that follows. The regular past tense /t/ versus /d/ alternation and the regular plural /s/ versus /z/ alternation, in which the last sound of the stem determines the voiced and voiceless form of the suffix, are two examples given by Celce-Murcia et al. (2010: 168).

| <u>-s ending</u> | <u>conditioning sound</u> | <u>assimilated sound</u> |
|------------------|---------------------------|--------------------------|
| Bags             | /g/                       | /z/                      |

|                  |                           |                          |
|------------------|---------------------------|--------------------------|
| Backs            | /k/                       | /s/                      |
| fezzes           | /z/                       | /iz/                     |
| <u>-d ending</u> | <u>conditioning sound</u> | <u>assimilated sound</u> |
| Moved            | /v/                       | /d/                      |
| Fished           | /ʃ/                       | /t/                      |
| Decided          | /d/                       | /id/                     |

The latter is significantly more prevalent in English than the former and is also known as anticipatory assimilation. Since the absorbed sound comes before and is influenced by the conditioning sound, this linked speech process is recognized as regressive. The following are some examples of regressive assimilation (Cruttenden, 2014: 312-313; Celce-Murcia et al., 2010: 168-170).

- /n/ turns into /m/ before bilabials /p, b, m/, e.g. *ten players, ten boys, ten men*;
- /n/ turns into /ŋ/ before velars /k, g/, e.g. *ten cups, ten girls*;
- /v/ turns into /f/ before the voiceless alveolar plosive /t/, e.g. *have to*
- /z/ turns into /s/ before the voiceless alveolar plosive /t/, e.g. *has to*

These examples of regressive assimilation all involve a change in place of articulation or in voicing, which are the most common types according to Celce-Murcia et al. (2010: 170). But there are also "some cases of regressive assimilation with a change in manner of articulation which tend to occur in informal speech." For example, let me be sounded as /lemi/ and give me as /gimi/. The latter two CSP modifications, flapping and glottalization (Reed and Levis, 2015: 163), should first be distinguished based on how frequently they are used in various English dialects. In fact, whereas glottalization is more common in British English, flapping is a phonetic process common to North American, Ulster, Australian, and New Zealand English. Flapping consists in the pronunciation of the voiceless alveolar stop /t/ as an alveolar flap [ɾ], similar to the voiced alveolar stop /d/, especially when placed in an intervocalic environment (Crystal, 2008: 191), e.g. *sit [ɾ] around, went [ɾ] outside and sort [ɾ] of*. Conversely, glottalization is the process of pronouncing the voiceless alveolar stop /t/ as a glottal stop [ʔ], which is a sound produced "while the glottis is closed" and "without the direct involvement of air from the lungs" (Crystal, 2008: 213). E.g. *can t [ʔ] make it, that [ʔ] car and what [ʔ] is it?*. It appears crucial to keep in mind that connected speech does not require these latter two modifying procedures. Nonetheless, they typically indicate extralinguistic details like provenance and help to seamlessly connect sounds in spoken English.

#### 2.2.5 Reduction.

Reduction, which mostly affects English vowels, is the fifth category that Alameen and Levis identified. Vowel reduction is associated both suprasegmentally as a connected speech process and segmentally with unstressed syllables, particularly with "word classes such as one-syllable determiners, pronouns, prepositions and auxiliaries" (Reed and Levis, 2015: 163). It's crucial to keep in mind that vowel reduction is the mechanism that makes it possible for stressed and unstressed syllables to alternate, giving English its distinctive rhythm as a stress-timed language. Instances of vowel reduction can be observed in the following sentences in which the stressed word is marked, while vowel reduction takes place in the other unstressed words: ***I wish** you would tell me, Go out!* and *Did you know that?*. Table 1 shows the difference between the strong, salient form and the weak, reduced form of some function words, indicating how the schwa sound /ə/ is the prevalent one in unstressed syllables.

|     | Strong form | Weak form(s) |
|-----|-------------|--------------|
| and | /ænd/       | /ənd, ən/    |
| at  | /æt/        | /ət/         |
| of  | /ɒv/        | /əv, ə/      |
| you | /ju:/       | /jʊ, jə/     |
| me  | /mi:/       | /mɪ/         |
| she | /ʃi:/       | /ʃɪ/         |

|       |        |              |
|-------|--------|--------------|
| would | /wʊd/  | /wəd, əd/    |
| do    | /du:/  | /dʊ, də/     |
| does  | /dʌz/  | /dəz/        |
| have  | /hæv/  | /həv, əv/    |
| has   | /hæz/  | /həz, əz, z/ |
| can   | /kæn/  | /kən/        |
| must  | /mʌst/ | /məst, məs/  |

Table 1: Strong versus weak forms in some function words.

### 2.2.6 Multiple processes.

Contractions and lexical combinations, or "highly salient lexical chunks that are known for exhibiting multiple CSPs in each lexical combination," are included in Alameen and Levis' last category (see Figure 1) (Reed and Levis, 2015: 163). The first typology is described as follows by Celce-Murcia et al. (2010: 165): The process of blending, which describes any two-word sequence in which word boundaries are blurred, is connected to the more general phenomena of decreased speech in English. Blending usually comprises of blends and contractions. Contractions are word boundaries where a conventionalized written form, as we've, he's, or I'm, indicates the blurring. Conversely, blends are contracted spoken words without a standard written form, such as this's (from this is), who'll (from who will), and there're (from there are). Since all written contractions represent spoken blendings but not all spoken blendings are conventionalized as orthographic contractions, we can claim that contractions constitute a subset of blendings. Since contractions and blendings typically contain two or more CSPs, such as they're, you're, it's, and won't, they can be classified as multiple processes since they "involve not only deletions but modifications such as vowel changes and voicing assimilation" (Reed and Levis, 2015: 163). Because lexical combinations "result from word boundaries blurring together," they are often referred to as phrase reductions (Weinstein, 2001 in Celce-Murcia et al., 2010: 165). A large number of such chunks can be noticed in spoken English, such as *gonna* (from *going to*), *wanna* (from *want to*), *hafta* (from *have to*), *kinda* (from *kind of*), *whatcha/whaddya* (from *what do you/what are you*). As for contractions, various types of CSPs occur together in lexical combination, for example in *gonna* the vowel [o] present in *going* becomes [ʌ], the original sound [ŋ] becomes [n], the function word *to* is subjected to vowel reduction, and the [t] is deleted. Evidently, all the connected speech processes discussed in this chapter tend to co-occur in spoken English. Indeed, the combination of the various types of CSPs is a common characteristic of all languages (Reed and Levis, 2015: 163).

## Section Three

### Methodology

#### 3.1 Introduction

This chapter described the methodology that was followed in conducting the study. It outlined the research design, data source, procedures of data collection, and methods of analysis. It also explained how Connected Speech Processes (CSPs) were identified, classified, and analyzed in the selected data.

#### 3.2 Research Design

This study followed a qualitative descriptive research design. It aimed to analyze the occurrence and patterns of Connected Speech Processes in spoken English as reflected in a selected literary text. The qualitative approach was considered appropriate because the study concentrated on describing and interpreting phonological phenomena rather than measuring them statistically.

#### 3.3 Data Source

The data were selected from literary texts, specially (*The Secret Garden*) novel. The selected extracts demonstrated genuine language use and presented numerous instances of connected speech within context. The texts were chosen because they contained a variety of sentence structures and surrounding phonetic contexts that allowed the identification of distinct types of connected speech processes.

#### 3.4 Data Selection

The data consisted of selected words, phrases, and sentences extracted from the chosen texts. The selection concentrated on instances that demonstrated phonological changes occurring at word boundaries or within connected speech. These instances illustrated assimilation, linking, deletion, insertion, reduction, and multiple processes.

### 3.5 Data Collection Procedures

The data were gathered manually by thoroughly reading the selected texts. Relevant linguistic elements were selected and extracted based on their potential contribution to exhibit Connected Speech Processes. Each selected example was then transcribed phonologically using standard phonetic symbols to highlight the changes occurring in connected speech.

### 3.6 Analytical Framework

The analysis relied on Alameen and Levis classification of Connected Speech Processes. This framework organized CSPs into six major types: linking, deletion, insertion, modification, reduction, and multiple processes. Further references were employed to support the definitions and explanations of each process, based on studies conducted by Celce-Murcia et al., Cruttenden, and Underhill.

### 3.7 Data Analysis Procedures

The data were analyzed qualitatively by examining each example in detail. The analysis involved the following steps:

1. Identifying the phonological form of each word or phrase in isolation.
2. Comparing it with its pronunciation in connected speech.
3. Determining the type of connected speech process involved.
4. Classifying the example according to the adopted framework.
5. Explaining the phonological rule governing the change.

The results were then organized in a table showing the phrase, phonetic transcription, rule, process, and type.

### 3.8 Validity and Reliability

The study's validity was ensured through adherence to well-established phonological theories and widely recognized classifications of connected speech processes. The analysis' consistency was maintained by applying the same criteria and procedures across all data.

Reliability was achieved through systematic analysis and clear categorization of each example. The use of phonetic transcription also increased the accuracy of the analysis.

### 3.9 Limitations of the Study

This study was limited to a qualitative analysis of selected excerpts from a literary text. It did not include spoken recordings or experimental data. Therefore, the findings reflected theoretical and text-based analysis rather than real-time speech production.

## Section Four

### Results and discussion

This section presents the analysis of the data collected from the selected literary text. The focus is on identifying and analyzing connected speech processes, including assimilation, elision, reduction and contraction. The data are presented in the form of short extracts, followed by detailed phonological analysis and discussion.

#### 4.1 presentation of data

##### Chapter one: There is no one left

When Mary Lennox was sent to Misselthwaite Manor to live with her uncle everybody said she was the most disagreeable-looking child ever seen. It was true, too. She had a little thin face and a little thin body, thin light hair and a sour expression.

##### Chapter two: mistress Marry quite contrary

"Why don't you put a heap of stones there and pretend it is a rockery?" he said. "There in the middle," and he leaned over her to point.

##### Chapter six: there was someone crying

The time had come when Mary had forgotten to resent Martha's familiar talk. She had even begun to find it interesting and to be sorry when she stopped or went away. (See appendix A for the full texts)

#### 4.2 Data Analysis

| Phrase | Result | Rule | process | Type |
|--------|--------|------|---------|------|
|--------|--------|------|---------|------|

|                    |                   |                                                                                       |                  |                                         |
|--------------------|-------------------|---------------------------------------------------------------------------------------|------------------|-----------------------------------------|
| When<br>Mary       | wem<br>meə ri     | Final consonant /n/<br>changes into /m/ sound<br>when followed by bilabial<br>sounds. | modific<br>ation | Regressive<br>assimilation of<br>place. |
| Thin<br>body       | θIm<br>bɒdi       | Final consonant /n/<br>changes into /m/ sound<br>when followed by bilabial<br>sounds. | modific<br>ation | Regressive<br>assimilation of<br>place. |
| Rain<br>poured     | reIm<br>pɔ:d      | Final consonant /n/<br>changes into /m/ sound<br>when followed by bilabial<br>sounds. | modific<br>ation | Regressive<br>assimilation of<br>place. |
| Fourteen<br>people | fɔ:ti:m<br>pi:pl  | Final consonant /n/<br>changes into /m/ sound<br>when followed by bilabial<br>sounds. | modific<br>ation | Regressive<br>assimilation of<br>place. |
| Great<br>beauty    | greIp<br>bju:ti   | Final consonant/t/<br>changes into /p/sound<br>when followed by bilabial<br>sounds.   | modification     | Regressive<br>assimilation of<br>place. |
| Hot<br>morning     | hɒp<br>mɔ:nɪŋ     | Final consonant/t/<br>changes into /p/sound<br>when followed by bilabial<br>sounds.   | modific<br>ation | Regressive<br>assimilation of<br>place. |
| Want<br>boys       | wɔ:nɒp<br>bɔɪz    | Final consonant/t/<br>changes into /p/sound<br>when followed by bilabial<br>sounds.   | Modific<br>ation | Regressive<br>assimilation of<br>place. |
| Must<br>keep       | mʌsk<br>ki:p      | Final consonant /t/<br>changes into /k/ sound<br>when followed by velar<br>sounds.    | Modific<br>ation | Regressive<br>assimilation of<br>place. |
| Quite<br>contrary  | Kwaɪk<br>kɒntrəri | Final consonant /t/<br>changes into /k/ sound<br>when followed by velar<br>sounds.    | modific<br>ation | Regressive<br>assimilation of<br>place. |
| Would be           | wʊb<br>bi:        | Final consonant/d/<br>changes into /b/ sound<br>when followed by bilabial<br>sounds.  | modific<br>ation | Regressive<br>assimilation of<br>place. |

|                    |                       |                                                                                                        |              |                                          |
|--------------------|-----------------------|--------------------------------------------------------------------------------------------------------|--------------|------------------------------------------|
| Cried<br>Mary      | kr aɪb<br>meə ri      | Final consonant/d/<br>changes into /b/ sound<br>when followed by bilabial<br>sounds.                   | modification | Regressive<br>assimilation of<br>place.  |
| Had<br>carried     | Hæg<br>kæriɪd         | Final consonant /d/<br>changes into /g/ sound<br>when followed by velar<br>sounds.                     | Modification | Regressive<br>assimilation of<br>place.  |
| Would<br>call      | wʊg<br>kɔ:l           | Final consonant /d/<br>changes into /g/ sound<br>when followed by velar<br>sounds.                     | modification | Regressive<br>assimilation of<br>place.  |
| One<br>cannot      | wʌŋk<br>a:nt          | Final consonant/n/<br>changes into /ŋ/ sound<br><b>when followed by velar<br/>sounds.</b>              | modification | Regressive<br>assimilation of<br>place.  |
| Garden<br>grow     | g a:dn̩<br>grəʊ       | Final consonant/n/<br>changes into /ŋ/ sound<br><b>when followed by velar<br/>sounds.</b>              | modification | Regressive<br>assimilation of<br>place.  |
| Was<br>sent        | w əs<br>sent          | Final weak<br>consonant/z/+ initial<br>strong consonant /s/<br>results in the initial strong<br>sound. | modification | Regressive<br>assimilation of<br>voice.  |
| Would<br>say       | w ʊs<br>seɪ           | Final consonant /d/<br>changes into /s/ when<br>followed by /s/.                                       | modification | Regressive<br>assimilation of<br>manner. |
| In three<br>months | ɪn θri:<br>mʌŋθs      | Final /n/ before<br>dental sounds results in a<br>dental nasal sound / ŋ/                              | modification | Regressive<br>assimilation of<br>manner  |
| Cared              | Keəd                  | Final sound is a<br>vowel (voiced),so (ed)<br>results in /d/.                                          | Modification | Progressive<br>assimilation.             |
| Wanted<br>Handed   | wɔ:ntɪd<br>hændɪ<br>d | Final sounds /d,t/<br>+(ed)results in /ɪd/                                                             | Modification | Progressive<br>assimilation.             |
| Wished<br>Looked   | wɪft<br>lʊkt          | Final sounds /f,k/<br>+(ed) results in /t/.                                                            | modification | Progressive<br>assimilation.             |

|                                     |                                   |                                                                                                  |              |                                           |
|-------------------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------|--------------|-------------------------------------------|
| Names<br>Parties<br>Pigs<br>Clothes | neimz<br>pa:tɪz<br>pɪgz<br>kləʊðz | Final consonants<br>are voiced /m. I.g. ð/ so,<br>(s)is uttered /z/.                             | modification | Progressive<br>assimilation.              |
| Heaps<br>Servants                   | hi:ps<br>sɜ:vənts                 | Final consonants<br>are voiceless /p.t/,so (s)<br>is uttered /s/.                                | modification | Progressive<br>assimilation.              |
| Faces<br>Voices                     | feɪsɪz<br>vɔɪsɪz                  | Final consonant is<br>voiceless fricative /s/so,<br>(es)is uttered/ɪz/                           | modification | Progressive<br>assimilation.              |
| In the                              | ɪn ðə                             | Final consonant is<br>alveolar nasal/n/ and the<br>initial consonant is dental<br>fricative/ð/   | modification | Progressive<br>assimilation of<br>manner. |
| Did this                            | ɪs dɪð ð                          | Final consonant is<br>alveolar plosive/d/ and<br>the initial consonant is<br>dental fricative/ð/ | modification | Progressive<br>assimilation of<br>manner. |
| Got the                             | gɒt ðə                            | Final consonant is<br>alveolar plosive/t/ and<br>the initial consonant is<br>dental fricative/ð/ | modification | Progressive<br>assimilation of<br>manner. |
| Was<br>yellow                       | Wəʒ<br>jeləʊ                      | Final<br>consonant/z/+initial<br>consonant/j/ <b>results in<br/>the fricative /ʒ/.</b>           | modification | palatalization                            |
| Does<br>your mother?                | dəʒ jɒ:                           | Final<br>consonant/z/+initial<br>consonant/j/ <b>results in<br/>the fricative /ʒ/.</b>           | Modification | palatalization                            |
| Because<br>she                      | bɪkɒʒ<br>ʃi:                      | Final<br>consonant/z/+initial<br>consonant/j/ <b>results in<br/>the fricative /ʒ/.</b>           | modification | palatalization                            |
| Let you                             | letʃ ju:                          | Final<br>consonant/t/+initial<br>consonant/ j/ <b>results in<br/>the affricate / tʃ /.</b>       | modification | Palatalization                            |

|            |                |                                                                                                                                        |              |                |
|------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------|
| Last year  | la:stʃ j<br>Iə | Final consonant/t/+initial consonant/ j/ <b>results in the affricate / tʃ /.</b>                                                       | modification | palatalization |
| Don't you  | dəʊtʃ ju:      | Final consonant/t/+initial consonant/ j/ <b>results in the affricate / tʃ /.</b>                                                       | modification | palatalization |
| Six years  | sɪkʃ j<br>Iəz  | Final consonant/s/+initial consonant/ j/ <b>results in the fricative / ʃ /.</b>                                                        | modification | Palatalization |
| Did you    | dɪdʒ ju:       | Final alveolar consonant /d/+initial palatal consonant /j/ <b>results in the affricate /dʒ /.</b>                                      | modification | Palatalization |
| It was     | ɪʔ wəz         | Final consonant/t/ changes into a glottal stop sound /ʔ/ <b>when occurring between a vowel and a consonant or in a final position.</b> | modification | glottalization |
| About nine | əbaʊʔ naɪn     | Final consonant/t/ changes into a glottal stop sound /ʔ/ <b>when occurring between a vowel and a consonant or in a final position.</b> | modification | glottalization |
| Little     | lɪ lɪ          | Final consonant /t/ changes into the sound/ɾ/ when occurring intervocalically.                                                         | modification | flapping       |
| Better     | be ɾə          | Final consonant /t/ changes into the sound/ɾ/ when occurring intervocalically                                                          | modification | Flapping       |
| When Mary  | we--- meəri    | Final consonant + initial one is /m/ results in first consonant dropping and lengthening.                                              | linking      | gemination     |

|                         |                                   |                                                                                                    |               |                       |
|-------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------|---------------|-----------------------|
| Sent to                 | sen---<br>tu:                     | Final consonant +<br>initial one is /t/ results in<br>first consonant dropping<br>and lengthening. | linking       | gemination            |
| Her uncle               | h 3:r ʌ<br>ŋkl                    | Final consonant /r/<br>is uttered because it is<br>followed by a vowel.                            | linking       | Linking/r/            |
| Hair and                | h eər<br>end                      | Final consonant /r/<br>is uttered because it is<br>followed by a vowel.                            | linking       | Linking/r/            |
| Kept out                | kep---<br>taut                    | Final consonant is<br>/t/ and initial one is a<br>vowel.                                           | linking       | CV                    |
| Went<br>away<br>Find it | wen---<br>təweɪ<br>faɪn---<br>dɪt | Final consonant is<br>/t/ and initial one is a<br>vowel.                                           | linking       | CV                    |
| to                      | t u --t ə                         | Long vowel /u:/<br>changes into short form<br>and then reduced into a<br>schwa.                    | reducti<br>on | Vowel weak<br>form    |
| You                     | j u --j ə                         |                                                                                                    |               |                       |
| Was                     | w əz                              | Reducing the short<br>/ɒ/ into a schwa                                                             | reducti<br>on | Weak vowel<br>form    |
| Of                      | əv                                |                                                                                                    |               |                       |
| With her                | wɪð ə                             | The sound /h/ is<br>deleted since it is<br>preceded by a consonant<br>in non-initial position.     | elision       | Contextual<br>elision |
| At him                  | ə t ɪm                            |                                                                                                    |               |                       |
| Always                  | ɔ:w<br>eɪz                        | lateral// is deleted                                                                               | elision       | Contextual<br>elision |

|                                           |                                                             |                                                                                                  |           |                    |
|-------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------|--------------------|
| Of the way                                | <b>ə ð ə</b><br><b>weɪ</b>                                  | The sound /v/ is deleted when followed by a consonant.                                           | elision   | Contextual elision |
| Looked frightened                         | <b>lʊk</b><br><b>fraɪtənd</b>                               | Consonant clusters /k.t.f/ stop+stop +fricative results in the omission of the middle sound /t/. | elision   | Contextual elision |
| In India and                              | <b>ɪndɪər</b><br><b>ənd</b>                                 | Final sound is schwa and the following sound is a vowel.                                         | intrusion | Intrusive /r/      |
| Saw in                                    | <b>sɔːr ɪn</b>                                              | Final sound is long /ɔː/ and the following sound is a vowel.                                     | intrusion | Intrusive /r/      |
| The English                               | <b>ðiː- j -</b><br><b>ɪŋɡlɪʃ</b>                            | Final sound is long /iː/ and the following sound is a vowel.                                     | intrusion | Intrusive /j/      |
| Way also                                  | <b>weɪ- j-</b><br><b>ɔːlsəʊ</b>                             | Final sound is a diphthong /eɪ/ and the following sound is a vowel.                              | intrusion | intrusive /j/      |
| I ever                                    | <b>aɪ- j-</b><br><b>evə</b>                                 | Final sound is a diphthong /aɪ/ and the following sound is a vowel.                              | intrusion | intrusive /j/      |
| To understand                             | <b>tuː-w-</b><br><b>ʌndəst</b><br><b>ænd</b>                | Final sound is long /uː/ and the following sound is a vowel.                                     | intrusion | Intrusive /w/      |
| Go away                                   | <b>ɡəʊ -</b><br><b>w- əweɪ</b>                              | Final sound is a diphthong /əʊ/ and the following sound is a vowel.                              | intrusion | Intrusive /w/      |
| Want to<br>Going to<br>Let me             | <b>wʌnə</b><br><b>ɡʌnə</b><br><b>lemi</b>                   |                                                                                                  | multiple  | blends             |
| Did not<br>Are not<br>Was not<br>Will not | <b>dɪdnt</b><br><b>aːnt</b><br><b>wɒznt</b><br><b>wəʊnt</b> | The short /ɒ/ sound is deleted from the negative particle.                                       | multiple  | contractions       |

The analysis revealed that connected speech processes occurred frequently and systematically in spoken English. The findings showed that:

- **Assimilation** was the most dominant process, especially **regressive assimilation of place**, such as /n/ changing to /m/ before bilabial sounds and /t/ changing before velar sounds.
- **Progressive assimilation** was also observed in grammatical endings like plural (-s) and past tense (-ed).
- **Palatalization** occurred regularly when alveolar sounds were followed by /j/, resulting in sounds such as /tʃ/ and /dʒ/.
- **Linking** facilitated smooth transitions between words, especially consonant-to-vowel (C-V) and linking /r/.
- **Elision (deletion)** appeared in consonant clusters and function words, particularly the loss of /h/, /t/, and /d/.
- **Intrusion** involved the addition of /r/, /j/, and /w/ between vowels to maintain fluency.
- **Reduction** was evident in weak forms of function words, where vowels were reduced to schwa /ə/.
- **Multiple processes** such as contractions and blends combined more than one phonological change in a single structure.

### Discussion

The findings indicated that connected speech processes were not random but followed systematic phonological rules influenced by the surrounding sounds. The dominance of assimilation confirmed that speakers tended to simplify articulation by making sounds more similar to adjacent sounds, thus reducing articulatory effort.

The results also showed that stress-timed rhythm in English played a crucial role in shaping these processes, particularly in vowel reduction and weak forms. This supported previous studies which argued that connected speech maintained rhythmic regularity in spoken English.

Moreover, the occurrence of multiple processes within single utterances demonstrated the complexity of natural speech. This complexity explained why EFL learners often struggled with listening comprehension, as they were typically exposed to citation forms rather than connected speech.

The study also confirmed that teaching connected speech explicitly could bridge the gap between theoretical pronunciation and real-life communication

### Section Five

#### Conclusions

The study concluded that connected speech processes were essential features of natural spoken English and played a major role in achieving fluency and intelligibility. It was found that:

- CSPs systematically modified pronunciation in continuous speech.
- Assimilation was the most frequent and influential process.
- Multiple processes often occurred simultaneously in authentic speech.
- Ignoring connected speech in teaching could lead to poor listening and speaking performance among learners.

The study recommended that connected speech should be integrated into pronunciation teaching, especially in EFL contexts. Future research was suggested to explore the impact of CSP instruction on learners' performance and to investigate variations across different English dialects.

#### Recommendations

1. Since related speech processes are essential to understanding and producing natural speech, it is advised that they be methodically incorporated into phonology and speaking courses.
2. By employing real literary works to demonstrate connected speech patterns in authentic communicative circumstances, language instructors should place an emphasis on practical application.
3. More focus should be placed on developing students' listening abilities, especially in identifying processes like reduction, absorption, connecting, and elision.
4. To give students realistic and context-rich examples of spoken English features, instructional materials should be created based on carefully chosen literary works.
5. To reduce pronunciation issues, connected speech instruction should take into account the impact of learners' first language (L1), particularly Arabic phonological systems.
6. The use of modern technological tools, such as speech analysis software and audio recordings, is highly encouraged to enhance learners' phonological awareness.
7. Further research is recommended to investigate connected speech patterns across different genres and varieties of English, as well as their impact on intelligibility.

8. More emphasis should be placed on intelligibility and effective communication rather than achieving a native-like accent.

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**Appendix A:** selected chapters from –The Secret Garden- novel.

### Chapter one: There Is No One Left

When Mary Lennox was sent to Misselthwaite Manor to live with her uncle everybody said she was the most disagreeable-looking child ever seen. It was true, too. She had a little thin face and a little thin body, thin light hair and a sour expression. Her hair was yellow, and her face was yellow because she had been born in India and had always been ill in one way or another. Her father had held a position under the English Government and had always been busy and ill himself, and her mother had been a great beauty who cared only to go to parties and amuse herself with gay people. She had not wanted a little girl at all, and when Mary was born she handed her over to the care of an Ayah, who was made to understand that if she wished to please the Mem Sahib she must keep the child out of sight as much as possible. So when she was a sickly, fretful, ugly little baby she was kept out of the way, and when she became a sickly, fretful, toddling thing she was kept out of the way also. She never remembered seeing familiarly anything but the dark faces of her Ayah and the other native servants, and as they always obeyed her and gave her her own way in everything, because the Mem Sahib would be angry if she was disturbed by her crying, by the time she was six years old she was as tyrannical and selfish a little pig as ever lived. The young English governess who came to teach her to read and write disliked her so much that she gave up her place in three months, and when other governesses came to try to fill it they always went away in a shorter time than the first one. So if Mary had not chosen to really want to know how to read books she would never have learned her letters at all One frightfully hot morning, when she was about nine years old, she awakened feeling very cross, and she became crosser still when she saw that the servant who stood by her bedside was not her Ayah. "Why did you come?" she said to the strange woman. "I will not let you stay. Send my Ayah to me." The woman looked frightened, but she only stammered that the Ayah could not come and when Mary threw herself into a passion and beat and kicked her, she looked only more frightened and repeated that it was not possible for the Ayah to come to Missie Sahib. There was something mysterious in the air that morning. Nothing was done in its regular order and several of the native servants seemed missing, while those whom Mary saw slunk or hurried about with ashy and scared faces. But no one would tell her anything and her Ayah did not come. She was actually left alone as the morning went on, and at last she wandered out into the garden and began to play by herself under a tree near the veranda. She pretended that she was making a flower-bed, and she stuck big scarlet hibiscus blossoms into little heaps of earth, all the time growing more and more angry and muttering to herself the things she would say and the names she would call Saidie when she returned "Pig! Pig! Daughter of Pigs!" she said, because to call a native a pig is the worst insult of all. She was grinding her teeth and saying this over and over again when she heard her mother come out on the veranda with some one. She was with a fair young man and they stood talking together in low strange voices. Mary knew the fair young

man who looked like a boy. She had heard that he was a very young officer who had just come from England. The child stared at him, but she stared most at her mother. She always did this when she had a chance to see her, because the Mem Sahib--Mary used to call her that oftener than anything else--was such a tall, slim, pretty person and wore such lovely clothes. Her hair was like curly silk and she had a delicate little nose which seemed to be disdainful things, and she had large laughing eyes. All her clothes were thin and floating, and Mary said they were "full of lace." They looked fuller of lace than ever this morning, but her eyes were not laughing at all. They were large and scared and lifted imploringly to the fair boy officer's face. "Is it so very bad? Oh, is it?" Mary heard her say. "Awfully," the young man answered in a trembling voice. "Awfully, Mrs. Lennox. You ought to have gone to the hills two weeks ago." The Mem Sahib wrung her hands. "Oh, I know I ought!" she cried. "I only stayed to go to that silly dinner party. What a fool I was!" At that very moment such a loud sound of wailing broke out from the servants' quarters that she clutched the young man's arm, and Mary stood shivering from head to foot. The wailing grew wilder and wilder. "What is it? What is it?" Mrs. Lennox gasped. "Some one has died," answered the boy officer. "You did not say it had broken out among your servants." "I did not know!" the Mem Sahib cried. "Come with me! Come with me!" and she turned and ran into the house. After that, appalling things happened, and the mysteriousness of the morning was explained to Mary. The cholera had broken out in its most fatal form and people were dying like flies. The Ayah had been taken ill in the night, and it was because she had just died that the servants had wailed in the huts. Before the next day three other servants were dead and others had run away in terror. There was panic on every side, and dying people in all the bungalows. During the confusion and bewilderment of the second day Mary hid herself in the nursery and was forgotten by everyone. Nobody thought of her, nobody wanted her, and strange things happened of which she knew nothing. Mary alternately cried and slept through the hours. She only knew that people were ill and that she heard mysterious and tightening sounds. Once she crept into the dining-room and found it empty, though a partly finished meal was on the table and chairs and plates looked as if they had been hastily pushed back when the diners rose suddenly for some reason. The child ate some fruit and biscuits, and being thirsty she drank a glass of wine which stood nearly filled. It was sweet, and she did not know how strong it was. Very soon it made her intensely drowsy, and she went back to her nursery and shut herself in again, frightened by cries she heard in the huts and by the hurrying sound of feet. The wine made her so sleepy that she could scarcely keep her eyes open and she lay down on her bed and knew nothing more for a long time. Many things happened during the hours in which she slept so heavily, but she was not disturbed by the wails and the sound of things being carried in and out of the bungalow. When she awakened she lay and stared at the wall. The house was perfectly still. She had never known it to be so silent before. She heard neither voices nor footsteps, and wondered if everybody had got well of the cholera and all the trouble was over. She wondered also who would take care of her now her Ayah was dead. There would be a new Ayah, and perhaps she would know some new stories. Mary had been rather tired of the old ones. She did not cry because her nurse had died. She was not an affectionate child and had never cared much for any one. The noise and hurrying about and wailing over the cholera had frightened her, and she had been angry because no one seemed to remember that she was alive. Everyone was too panic-stricken to think of a little girl no one was fond of. When people had the cholera it seemed that they remembered nothing but themselves. But if everyone had got well again, surely someone would remember and come to look for her. But no one came, and as she lay waiting the house seemed to grow more and more silent. She heard something rustling on the matting and when she looked down she saw a little snake gliding along and watching her with eyes like jewels. She was not frightened, because he was a harmless little thing who would not hurt her and he seemed in a hurry to get out of the room. He slipped under the door as she watched him. "How queer and quiet it is," she said. "It sounds as if there were no one in the bungalow but me and the snake. Almost the next minute she heard footsteps in the compound, and then on the veranda. They were men's footsteps, and the men entered the bungalow and talked in low voices. No one went to meet or speak to them and they seemed to open doors and look into rooms. "What desolation!" she heard one voice say. "That pretty, pretty woman! I suppose the child, too. I heard there was a child, though no one ever saw her. Mary was standing in the middle of the nursery when they opened the door a few minutes later. She looked an ugly, cross little thing and was frowning because she was beginning to be hungry and feel disgracefully neglected. The first man who came in was a large officer she had once seen talking to her father. He looked tired and troubled, but when he saw her he was so startled that he almost jumped back. "Barney!" he cried out. "There is a child here! A child alone! In a place like this! Mercy on us, who is she!" "I am Mary Lennox," the little girl said, drawing herself up stiffly. She thought the man was very rude to call her father's bungalow "A place like this!" "I fell asleep when everyone had the cholera and I have only just wakened up. Why does nobody come?" "It is the child no one ever saw!"

exclaimed the man, turning to his companions. "She has actually been forgotten!" "Why was I forgotten?" Mary said, stamping her foot. "Why does nobody come?" The young man whose name was Barney looked at her very sadly. Mary even thought she saw him wink his eyes as if to wink tears away. "Poor little kid!" he said. "There is nobody left to come." It was in that strange and sudden way that Mary found out that she had neither father nor mother left; that they had died and been carried away in the night, and that the few native servants who had not died also had left the house as quickly as they could get out of it, none of them even remembering that there was a Missie Sahib. That was why the place was so quiet. It was true that there was no one in the bungalow but herself and the little rustling snake.

**Chapter two:** mistress Marry quite contrary

"Why don't you put a heap of stones there and pretend it is a rockery?" he said. "There in the middle," and he leaned over her to point. "Go away!" cried Mary. "I don't want boys. Go away!" For a moment Basil looked angry, and then he began to tease. He was always teasing his sisters. He danced round and round her and made faces and sang and laughed.

"Mistress Mary, quite contrary,                      How does your garden grow?

With silver bells, and cockle shells,

And marigolds all in a row."

"She is such a plain child," Mrs. Crawford said pityingly, afterward. "And her mother was such a pretty creature. She had a very pretty manner, too, and Mary has the most unattractive ways I ever saw in a child. The children call her 'Mistress Mary Quite Contrary,' and though it's naughty of them, one can't help understanding it."

**Chapter six:** there was someone crying

The time had come when Mary had forgotten to resent Martha's familiar talk. She had even begun to find it interesting and to be sorry when she stopped or went away. The stories she had been told by her Ayah when she lived in India had been quite unlike those Martha had to tell about the moorland cottage which held fourteen people who lived in four little rooms and never had quite enough to eat. The children seemed to tumble about and amuse themselves like a litter of rough, good-natured collie puppies. Mary was most attracted by the mother and Dickon. When Martha told stories of what "mother" said or did they always sounded comfortable.